

• G E N A R T S •

S A P P H I R E • P L U G • I N S

User's Guide

Version 5.0 for
Autodesk Systems Products

MARCH 2010

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Preface

Contact Information

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Introduction

Sapphire Plug-ins version 5 is a package of image processing and synthesis effects for use with Autodesk's Flint, Flame, Inferno, Smoke, Fire, Flare and Burn systems.

It includes 132 "Spark" plug-ins with over 300 total effects. Each effect has many parameters which can be adjusted and animated for an unlimited range of results.

This document corresponds to version 5.0 of 5-mar-2010. For updated information please check www.genarts.com. Also see our Sparks [support page](#) for help with technical issues.



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What's new in version 5.0

New Effects:

1. [TVDamage](#) simulates various artifacts of television broadcast and display such as static, ghosting, interference, and more.
2. [Technicolor2Strip](#) simulates a Technicolor 2-strip film process to give the look of 1930s Technicolor film.
3. [Technicolor3Strip](#) simulates a Technicolor 3-strip film process to give the look of 1935-1955 Technicolor film.
4. [Swish3D](#) dissolves between two input clips while performing 3D moves on each.
5. [TVChannelChange](#) performs a transition by simulating a channel change on an old television set.

6. WipePlasma transitions between two input clips using a moving plasma texture.
7. WipePointalize wipes by adding random polygon brush shapes from one clip onto another.
8. WipeWeave transitions using a texture resembling woven strands.
9. WipeMoire transitions using a pattern of overlapping concentric rings.
10. DissolveLensFlare transitions between two clips using an animated lens flare.
11. DissolveEdgeRays transitions between two clips while applying beams of light from the image edges.
12. DissolveGlint transitions between two clips while applying a star shaped glint effect.
13. DissolveGlintRainbow transitions between two clips while applying a star shaped glint rainbow effect.
14. DissolveDefocus dissolves between two clips while defocusing/focusing each.
15. DissolveTiles transitions between two input clips by shifting tile shaped sections of each.
16. DissolveDistort interpolates between two clips while distorting each using the other as a lens.

New Features and Parameters:

1. All effects use floating point processing for improved image quality and HDR support.
2. Sapphire can now process 16-bit floating point footage.
3. GPU acceleration improves performance for many effects.
4. All threshold controls now go beyond 1 to support HDR.
5. Param limits are widened for ShowBadColors to support HDR.
6. All effects now automatically detect the field status of source clips with On Fields: Auto mode
7. Z Defocus and Z Convolve now have Boost Highlights.
8. Glint and Glare have new Blur, Hue Shift, and Invert Mask parameters.
9. Glow has new Show Threshold, Invert Mask, and Combine parameters.
10. LensFlare has a new Glint Rays Lens.
11. On-screen widgets now have labels for easier identification.
12. Etching has additional angle and frequency controls.

Loading a Spark

To load a Spark, select the "Effects" menu in your Autodesk systems product, hold down the 'Alt' key, and click on any Spark button. Select the "Titles" button and navigate to the sapphire_5 directory. Use the "Proxies" option to view the different Spark proxy images. Select a Spark and the name should now appear on the button. Click again on the button to initialize the Spark. Select the source and destination reels and the Spark interface window should be displayed.

To load a Spark in Batch, select "Spark" in the Add menu of Batch, and then click on "Add." On newer Autodesk versions, drag from the "Spark" button onto the batch tree instead. Navigate to the sapphire_5 directory and choose a Spark. Edit the Spark node to bring up the Spark interface window.

Most Sapphire Sparks include several different effect variations. For example the S_Wipes Spark contains 17 different kinds of Wipe transitions. For these Sparks there is always a popup menu in the upper left hand corner of the "Params" or "Ctrl1" page, which allows selecting between the different effect options.

Multiple versions of some Sparks are provided with different input combinations. For example, Glows takes just a Source input, Glows**Mask** takes Source and Mask inputs, Glows**Comp** takes Source, Back and Matte, and Glows**MaskComp** takes Source, Back, and Mask. Autodesk systems don't allow plug-ins with optional inputs, so this lets you to pick the appropriate version of the plug-in for the input clips you want to provide or not provide.

Some parameters are "shared" across the different effect options within a plug-in. If you modify the value of a shared parameter and then switch to a different effect, you will also see the new value there. Other parameters are not shared and can retain different values between the effect options, even though they may have the same name. The on-line documentation indicates which parameters are shared. The Wipe Amt parameter in S_Wipes is an example of a shared parameter. It is shared because you would probably want the same transition value regardless of the specific wipe pattern selected later.

Resolution options

Every Spark includes a "Res" factor popup menu in the far right just below the "Pan" button. The resolution options allow trading off between result quality and speed. Lower Res factors can be helpful for faster testing of parameter values. The Res factor defaults to FULL. Field processing options will not output useful fields at lower resolutions. If you modify the Res factor, make sure you remember to set it back to FULL for the best quality during final processing!

On Fields options

All Sparks include an On Fields popup button on the right hand edge of the first Control page (except Temporal and FieldTool which do special field processing). This can be useful for processing interlaced video frames. When enabled, the two fields, the odd and even lines of each frame, are assumed to represent different time samples, and are processed independently. When the second field is processed, the values of all animated parameters are found at the current frame + .5. The Res factor should be set to FULL for useful field outputs. Four options for field processing are available:

- AUTO: the scan format is automatically detected, and field rendering is enabled or disabled as necessary.
This is the default
- NO: field rendering is disabled.
- YES, 1DOM: field rendering is enabled with field 1 first in time.
- YES, 2DOM: field rendering is enabled with field 2 first in time.

Redraw modes

Each Spark includes a popup button in the right hand side of each Control page that allows selecting from the following Redraw modes. The default redraw mode is DRAG AUTO RES.

1. Redraw: DRAG AUTO RES. This output is recalculated during the adjustment of any parameter or widget. The resolution is automatically reduced to preserve interactive performance. When the parameter is released, the output is rendered at the resolution given by the Res Factor parameter.
2. Redraw: DRAG. This output is recalculated during the adjustment of any parameter or widget.
3. Redraw: PENUP. The output is recalculated after any parameter is adjusted or a widget is moved.
4. Redraw: PROCESS. Spark rendering is performed only when a Process is performed. Adjustments to the frame number or total frames will also perform a Process of the current frame (in the current Spark API).
5. Redraw: NEVER. Spark rendering is disabled, and black frames are shown instead. This can be used for quickly setting up parameter values and curves without ever taking the time to re-render any result. On-screen widgets can still be used in this mode.

Undo & Load Defaults

Each Spark also includes two buttons in the lower right hand corner of each Control page for undoing previous parameter changes and loading default values for all parameters.

Pushing the Undo button removes changes made to the parameters of the current effect. You can undo as many changes back in time as you want until it signals that there is nothing to undo. Undo can undo a Load Defaults, however it can not currently undo a loaded setup file. Undo records are not remembered when you switch to a different Spark.

Pushing the Load Defaults button returns each parameter value of the current effect to its default setting. If additional parameters exist on the "Params2" or "Ctrl2" page, it will also reset their values. Load Defaults does not change Widget Enables, Res Factors, or Redraw Modes, and it does not change parameter values of other effect options within the same Spark except for the parameters that are shared. It also will not reset the special "AutoTransition" parameters Wipe Amt or Dissolve Amt. The Crop/Help page has its own Load Page Defaults button which sets all the parameters on that page to their

default values.

Cropping

Each Spark includes cropping parameters on the "Crop/Help" or "Ctrl3" page which allow selecting a crop rectangle for processing a subsection of the result. This can be used for faster testing or for comparison of the processed result with the original.

1. Enable Crop. Turns on or off cropping and the crop widget.
2. Crop Widget. Turns on or off the crop screen interface widget for adjusting the crop rectangle. This is normally set by Enable Crop to agree with its state, but it can also be adjusted independently.
3. Surround. Selects the method for filling the areas beyond the crop rectangle, either with a given color or with any of the unprocessed Source inputs.
4. Crop Top, Left, Right, Bottom. Specifies the values for the borders of the crop rectangle. These parameters are most easily adjusted using the Crop Widget.
5. Crop Input. When this option is turned on, the input is cropped before performing the effect. For effects such as Warps, this allows you to distort the shape of the cropped image, or remove unwanted black borders on the input that may otherwise become more visible after they are warped or wrapped. This parameter is not available for all effects.
6. Set Crop Defaults. When pushed, sets the crop rectangle to full frame.

Not all plug-ins render faster when the crop area is reduced. Effects that require processing beyond the crop area, such as the Blurs, Glows, Glints, and Glares, require nearly the same processing whether cropped or not. However, other effects such as RackDefocus, EdgeRays, BlurMotion, Streaks, MathOps and Color Operations, should render faster when the crop area is reduced.

Adding Noise

Each spark has an Add Noise parameter on the Crop/Help parameter page. If this parameter is greater than zero, a corresponding amount of color noise is added to the result. This can be used to reduce banding due to quantization, or create a grainy effect. Set this to 1.0 or slightly higher to enable appropriate debanding for 8bit images.

Colorspace Controls

Each spark has two parameters that control the colorspace: Use Gamma and a LUT popup. The Use Gamma parameter applies a gamma correction before performing the effect, then reverses the gamma correction before displaying the processed frame. This allows linear processing of gamma-corrected images, can help preserve highlights when blurring, and sometimes gives more correct results when compositing.

The LUT popup allows you to select custom LUT files for working in log or other non-linear colorspace. You can add your own options to the popup by installing LUT files in /usr/discreet/sparks/luts, with the names <lut-name>in.lut for the input LUT and <lut-name>out.lut for the corresponding output LUT.

Sparks that take a Mask, Matte or other input clip that is apt to be monochromatic also include a parameter that specifies which input clips should *not* be affected by the Gamma and LUT settings. Those clips are assumed to already be in linear colorspace. For example, the S_GlowMaskComp spark has options for Linear Matte Mask, Linear Matte, Linear Mask, or Gamma/LUT All. The default Linear Matte Mask setting causes the Use Gamma and LUT parameters to only affect the Front and Back clips. The Linear Matte setting causes these colorspace controls to affect the Front, Back and Mask but not the Matte clip, and the Gamma/LUT All setting causes all input clips to be affected.

GPU Acceleration

Many effects can use the GPU to speed up rendering. This requires an NVIDIA graphics card which supports CUDA, such as a Quadro FX 5600 or 5800. If a suitable GPU is found, a GPU Enable button will appear on the Crop/Help parameter page, and the message "GPU Accelerated" will be printed to the shell when the Spark is loaded. GPU acceleration is enabled by default if it's available, but if you experience performance or stability problems, you can turn it off by deselecting the GPU Enable button.

Troubleshooting GPU Problems

If a Spark is unable to render on the GPU, it will automatically fall back to the CPU and continue processing. The text of the GPU Enable button will change to indicate the problem.

No GPU: no CUDA-capable graphics card was found.

GPU Out of Memory: there is not enough memory on the GPU to render this effect

GPU Disable: GPU processing is disabled in the "s_config.text" file.

GPU Error: an error occurred while rendering on the GPU. This may be due to a bug in Sapphire

GPU Rendering on Burn

By default, Burn nodes will ignore the value of the GPU Enable button, and always use the GPU if available. You can override this behavior by changing the value of the "use_gpu_on_burn" setting in the "s_config.text" file.

yes: Burn nodes always use the GPU if available. This is the default.

no: Burn nodes never use the GPU.

button: Burn nodes check the GPU Enable button to decide whether to render on the GPU.

Online documentation

An online "Help" button is accessible via the "Crop/Help" or "Ctrl3" page for each plug-in and gives easy access to HTML documentation via your browser. The "Help" button loads locally installed documentation for the current effect with information about each input and parameter. The "Sapphire Intro" button loads the Sapphire plug-ins introduction page with links to the other documents and example pictures. The "GenArts Web Site" button connects to the home page of GenArts, Inc. if your workstation is on the Internet, for current information and updates.

Complete documentation is also available in PDF format on the Sapphire Plug-ins CDROM in `/CDROM/Sapphire-Users-Guide-Autodesk.pdf`. You can also [download it](#) directly from our website.

Aborting a Spark process

Any Spark process can be aborted by holding down the pointer for a few seconds. Some effects have combinations of parameter settings that can cause unacceptably long process times. This feature provides a way to abort a render mid-frame, so the parameters can then be reset to acceptable values, without waiting for the frame to finish.

Pixel aspect ratios

For some image formats, the digital form of the image is scaled non-uniformly to produce the final viewed picture. For example NTSC resolution is normally 720x486 with an aspect ratio of 1.481. However, the final NTSC picture has an aspect ratio of 1.333. Thus the original digital image is scaled in the horizontal direction by a factor of 0.9 and shapes rendered as circles can end up squashed slightly into ovals. The original pixels are effectively rectangular shaped instead of squares, and have an aspect ratio of $1.48/1.333 = 1.111$.

To compensate for this, all Sapphire Plug-ins pre-stretch or shrink their effect in the vertical direction by the inverse of this *pixel aspect ratio* which is normally read from the meta-data of the input clip. You can override this for *all* effects by changing the value of `force_pixel_aspect_ratio` in the "s_config.text" file. A value of 1.111 is usually right for NTSC resolution, 0.916 is often appropriate for PAL resolution, and 1.0 will always give square pixels.

Most plug-ins also have a parameter for adjusting the relative width or height of the effect, which can be used to stretch the effect as needed on a case by case basis.

The pixel aspect ratio makes no difference for basic pixel processing effects such as MathOps and color processing.

Customizing Sparks

A facility is included with Sapphire Plug-ins that allows users with some programming experience to define and customize new effects. A number of parameters are also available that can be adjusted to customize the behavior of all Sapphire plug-ins. The `load_save_channel_setups` parameter can be enabled to save animation curves in the channel editor between uses of the same Spark. Lookup tables can be specified for more accurate Spark processing of log format images. For additional information on these, or to modify a parameter, open the config file by typing the following command to a unix shell:

```
% jot /usr/discreet/sparks/sapphire_5/s_config.text
```

Updating v4 Setups to v5

Some Spark parameters have changed between Sapphire version 4 and 5, so we have provided an `update_setups` unix command to automatically convert 4.0 (or 4.x) setup files to 5.0 (or 5.x).

```
update_setups [ -backup ] [ -recurse ] file1 [file2 ...]
```

This converts Spark setup files and/or Batch setup files to use Sapphire 5. It can accept multiple file names separated by spaces, and wildcards (*) can be used. It ignores anything that doesn't look like a setup file with Sapphire Plug-ins, so you can use wildcards or directories that include extraneous files. If you convert the Spark setup files for a Batch setup, you must also convert the corresponding .batch file and vice versa. If "sapphire_4.0" is included in the setup file name, `update_setups` will also rename the file to say "5" to allow Batch setup conversions to work properly.

The **-recurse** or **-r** option allows `update_setups` to recurse into directory trees and convert all setup files within that directory (but it does not follow symlinks). It will also cause any sapphire_4.0 setup directories to be renamed to sapphire_4. Use the **-r** flag with care, because it could search and update a large number of files.

The **-backup** or **-b** option causes a 'v4' backup file to be made for each setup file before it is modified. This will not replace existing 'v4' backups, so if you run it twice the backup should still be the original. If you need to access a backup of a Spark setup, you can load the 'v4' setup file directly into Sapphire 4.0. If you need to revert to a backup of a Batch setup, you should rename the 'v4' backup files to their original names. If you are converting many files, it is often better to first backup the entire directory yourself instead.

Example 1: If you want to convert a single setup file for S_Clouds called `TestSetup` which you have stored in `/tmp`, you could open a shell window and type:

```
% cd /usr/discreet/sparks/sapphire_5
% ./update_setups -backup /tmp/TestSetup.S_Clouds
```

This will replace `/tmp/TestSetup.S_Clouds` with a version that uses Sapphire 5. The **-backup** flag causes the original file to be saved first as `/tmp/TestSetup.v4.S_Clouds`.

Example 2: If you want to make a backup copy of your batch directory and then convert all the setups in it to Sapphire 5

format, you could type:

```
% cd /usr/discreet/flare_9.5
% cp -r batch batch-backup
% /usr/discreet/sparks/sapphire_5/update_setups -r batch
```

Example 3: If you want to convert all the setups in an entire project, you could type:

```
% cd /usr/discreet/project/effects
% /usr/discreet/sparks/sapphire_5/update_setups -r your-project
```

This will apply `update_setups` to all files anywhere in the *your-project* directory, and rename any `sapphire_4.0` setup directories and files to `sapphire_5`. Make sure your project directory is somehow backed up first!

Note to system administrators: `update_setups` is a Perl script, and requires Perl 5. If you don't have Perl in `/usr/bin/perl`, you can install it from the SGI OS Foundation CD, in the `oe.sw.gifts_perl` package. You don't need to be root to run the script, but you do need write permission in the setup directory.

Known problems

1. Temporal effects in Batch that access frames other than the single current frame may not process efficiently. It is recommended that you make the input to temporal effects in Batch be a clip or a cached node rather than a tree of other nodes. These effects include `S_Temporal`, `S_FieldTool`, `S_FieldRemove`, and `S_Feedback:TimeAverage`. Also in Batch, the Feedback effects will not work properly if they are upstream of any temporal effect. For Autodesk releases prior to 4.0/7.0 the temporal effects do not work in Batch at all.
2. Only one set of keyframes is kept for a given Spark. Some Sparks contain multiple effect options, and the names of parameters can change when you switch between them. If you set some keyframe values, and then switch to a different effect option in the same Spark, the old keyframes will continue to affect the new parameter values. Sometimes this can give inappropriate values. If this occurs, use Reset All in the channel editor to clear any existing keyframes, and use Load Defaults to set the new parameters to reasonable values.

Acknowledgements

We are grateful to our many customers who have made suggestions and taken time to beta test this software. The software for JpegDamage is based in part on the work of the Independent JPEG Group. The Half-float conversion and Thrust CUDA libraries are provided under open source licenses, reproduced in Appendix A.

Effects

The remainder of this User's Guide contains information about each effect in the Sapphire Plug-ins package. The effects are listed in alphabetical order by effect name.

Each effect's documentation describes the functionality of the effect, its inputs and parameters, and contains an example picture. This same documentation for each effect is also available directly from the Plug-in interface by clicking on the **Help** button while using any effect.

AutoPaint: HairyPaint

In the S_AutoPaint Plugin.

Generates a 'paint-brushed' version of the source clip. Similar to VanGogh but the strokes are aligned perpendicular to the edges within the image.

Inputs:

Source: The clip to be processed.



Parameters:

Frequency: *Default: 64, Range: 1 or greater, Shared.*

The density of brush strokes in the frame. Increase for smaller strokes.

Stroke Length: *Default: 2, Range: any, Shared.*

Determines the length of the brush strokes along the directions of edges in the source clip. If this is negative you can switch from VanGogh to HairyPaint styles and vice versa.

Stroke Align: *Default: 0.2, Range: 0 or greater, Shared.*

Increase to smooth out the directions of the strokes so nearby strokes are more parallel.

Smooth Colors: *Default: 0, Range: 0 or greater, Shared.*

Blurs the source by this amount before generating the brush strokes. Increase to cause the colors of nearby strokes to be more consistent.

Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Jitter Frames: *Integer, Default: 0, Range: 0 or greater, Shared.*

If this is 0, the locations of the strokes will remain the same for every frame processed. If it is 1, the locations of the strokes are re-randomized for each frame. If it is 2, they are re-randomized every second frame, and so on.

Sharpen: *Default: 1, Range: any, Shared.*

The amount of post-process sharpening applied.

Sharpen Width: *Default: 0.1, Range: 0 or greater, Shared.*

The width at which to apply the post-process sharpening filter, relative to the stroke sizes. Higher values affect wider areas from the edges, lower values only affect areas near sharp edges.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[VanGogh](#)

[Pointalize](#)

[Sketch](#)

[SketchBumpy](#)

[Etching](#)

[HalfTone](#)

[HalfToneColor](#)

[Mosaic](#)

[FlysEyeHex](#)

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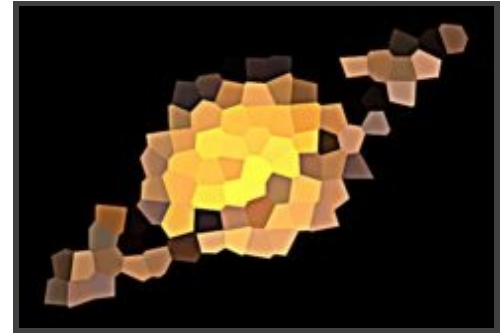
AutoPaint: Pointalize

In the S_AutoPaint Plugin.

Generates a 'paint-brushed' version of the source clip. Similar to VanGogh but the strokes are cellular pointy shapes with no direction.

Inputs:

Source: The clip to be processed.



Parameters:

Frequency: *Default: 64, Range: 1 or greater, Shared.*

The density of brush strokes in the frame. Increase for smaller strokes.

Smooth Colors: *Default: 0, Range: 0 or greater, Shared.*

Blurs the source by this amount before generating the brush strokes. Increase to cause the colors of nearby strokes to be more consistent.

Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Jitter Frames: *Integer, Default: 0, Range: 0 or greater, Shared.*

If this is 0, the locations of the strokes will remain the same for every frame processed. If it is 1, the locations of the strokes are re-randomized for each frame. If it is 2, they are re-randomized every second frame, and so on.

Sharpen: *Default: 1, Range: any, Shared.*

The amount of post-process sharpening applied.

Sharpen Width: *Default: 0.1, Range: 0 or greater, Shared.*

The width at which to apply the post-process sharpening filter, relative to the stroke sizes. Higher values affect wider areas from the edges, lower values only affect areas near sharp edges.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[VanGogh](#)

[HairyPaint](#)

[Sketch](#)

[SketchBumpy](#)

[Etching](#)

[HalfTone](#)

[HalfToneColor](#)

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AutoPaint: Sketch

In the S_AutoPaint Plugin.

Generates a version of the input with a hand drawn sketched look. The results of this effect can depend on the image resolution, so it is recommended to test your final resolution before processing a clip.

Inputs:

Source: The clip to be processed.



Parameters:

Frequency: *Default: 64, Range: 1 or greater, Shared.*

The density of brush strokes in the frame. Increase for smaller strokes.

Stroke Length: *Default: 2, Range: any, Shared.*

Determines the length of the strokes along the directions of edges in the source clip. If this is negative you can switch between Sketch and BumpySketch styles and vice versa.

Stroke Align: *Default: 0.2, Range: 0 or greater, Shared.*

Increase to smooth out the directions of the strokes so nearby strokes are more parallel.

Smooth Colors: *Default: 0, Range: 0 or greater, Shared.*

Blurs the source by this amount before generating the brush strokes. Increase to cause the colors of nearby strokes to be more consistent.

Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Jitter Frames: *Integer, Default: 0, Range: 0 or greater, Shared.*

If this is 0, the locations of the strokes will remain the same for every frame processed. If it is 1, the locations of the strokes are re-randomized for each frame. If it is 2, they are re-randomized every second frame, and so on.

Background Color: *Default rgb: [0.8 0.8 0.8], Shared.*

The color of the background over which the sketched lines are applied.

Line Thickness: *Default: 0.04, Range: 0 or greater, Shared.*

The thickness of the sketched lines.

Line Strength: *Default: 0.3, Range: 0 or greater, Shared.*

The strength of the sketched lines. Increase for brighter lines, decrease for softer lines.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[VanGogh](#)

[HairyPaint](#)

[Pointalize](#)

[SketchBumpy](#)

[HalfTone](#)

[Mosaic](#)

[FlysEyeHex](#)

[EdgeDetect](#)

[JpegDamage](#)

[Sapphire](#)

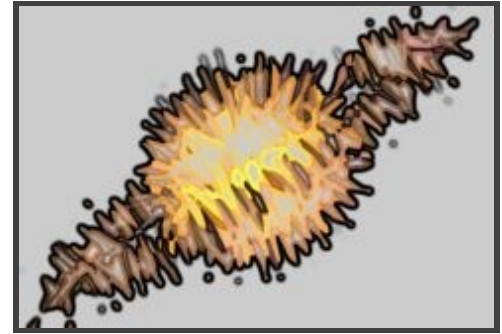
[Plug-ins](#)

[Introduction](#)

AutoPaint: SketchBumpy

In the S_AutoPaint Plugin.

Generates a version of the input with a hand drawn sketched look. Similar to Sketch but the strokes are aligned perpendicular to the edges within the image.



Inputs:

Source: The clip to be processed.

Parameters:

Frequency: *Default: 64, Range: 1 or greater, Shared.*

The density of brush strokes in the frame. Increase for smaller strokes.

Stroke Length: *Default: 2, Range: any, Shared.*

Determines the length of the strokes along the directions of edges in the source clip. If this is negative you can switch between Sketch and BumpySketch styles and vice versa.

Stroke Align: *Default: 0.2, Range: 0 or greater, Shared.*

Increase to smooth out the directions of the strokes so nearby strokes are more parallel.

Smooth Colors: *Default: 0, Range: 0 or greater, Shared.*

Blurs the source by this amount before generating the brush strokes. Increase to cause the colors of nearby strokes to be more consistent.

Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Jitter Frames: *Integer, Default: 0, Range: 0 or greater, Shared.*

If this is 0, the locations of the strokes will remain the same for every frame processed. If it is 1, the locations of the strokes are re-randomized for each frame. If it is 2, they are re-randomized every second frame, and so on.

Background Color: *Default rgb: [0.8 0.8 0.8], Shared.*

The color of the background over which the sketched lines are applied.

Line Thickness: *Default: 0.04, Range: 0 or greater, Shared.*

The thickness of the sketched lines.

Line Strength: *Default: 0.3, Range: 0 or greater, Shared.*

The strength of the sketched lines. Increase for brighter lines, decrease for softer lines.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[VanGogh](#)
[HairyPaint](#)
[Pointalize](#)
[Sketch](#)

[HalfTone](#)
[Mosaic](#)
[FlysEyeHex](#)
[EdgeDetect](#)
[JpegDamage](#)

[Sapphire](#)
[Plug-ins](#)
[Introduction](#)

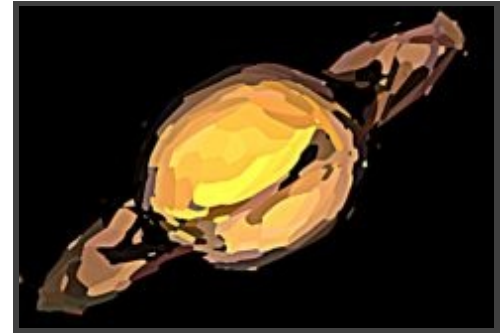
AutoPaint: VanGogh

In the S_AutoPaint Plugin.

Generates a 'paint-brushed' version of the source clip. The paint stroke directions align with the edges found within the image.

Inputs:

Source: The clip to be processed.



Parameters:

Frequency: *Default: 64, Range: 1 or greater, Shared.*

The density of brush strokes in the frame. Increase for smaller strokes.

Stroke Length: *Default: 2, Range: any, Shared.*

Determines the length of the brush strokes along the directions of edges in the source clip. If this is negative you can switch from VanGogh to HairyPaint styles and vice versa.

Stroke Align: *Default: 0.2, Range: 0 or greater, Shared.*

Increase to smooth out the directions of the strokes so nearby strokes are more parallel.

Smooth Colors: *Default: 0, Range: 0 or greater, Shared.*

Blurs the source by this amount before generating the brush strokes. Increase to cause the colors of nearby strokes to be more consistent.

Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Jitter Frames: *Integer, Default: 0, Range: 0 or greater, Shared.*

If this is 0, the locations of the strokes will remain the same for every frame processed. If it is 1, the locations of the strokes are re-randomized for each frame. If it is 2, they are re-randomized every second frame, and so on.

Sharpen: *Default: 1, Range: any, Shared.*

The amount of post-process sharpening applied.

Sharpen Width: *Default: 0.1, Range: 0 or greater, Shared.*

The width at which to apply the post-process sharpening filter, relative to the stroke sizes. Higher values affect wider areas from the edges, lower values only affect areas near sharp edges.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[HairyPaint](#)

[Pointalize](#)

[Sketch](#)

[SketchBumpy](#)

[Etching](#)

[HalfTone](#)

[HalfToneColor](#)

[Mosaic](#)

[FlysEyeHex](#)

[Sharpen](#)

[Sapphire Plug-ins](#)

[Introduction](#)

BandPass

Generates an X-ray-like effect using a band-pass filter. Two blurs are performed with different widths, and the result is the difference scaled and offset by a gray value. Frequencies above and below the cutoffs are attenuated, leaving only the middle band of frequencies.

Inputs:

Source: The clip to be processed.



Parameters:

Blur Amount1: *Default:* 0.1, *Range:* 0 or greater.

The width for the first blur. Sets the low frequency cutoff. This parameter can be adjusted using the Blur Amount1 Widget.

Blur Amount2: *Default:* 0.2, *Range:* 0 or greater.

The width for the second blur. Sets the high frequency cutoff. This parameter can be adjusted using the Blur Amount2 Widget.

Blur Rel: *X & Y, Default:* [1 1], *Range:* 0 or greater.

The relative horizontal and vertical blur widths. Set Blur Rel X to 0 for a vertical-only blur, or set Blur Rel Y to 0 for a horizontal-only blur. This parameter can be adjusted using the Blur Amount1 Widget.

Scale: *Default:* 3, *Range:* any.

Scales the brightness of the result.

Saturation: *Default:* 1, *Range:* any.

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Offset Darks: *Default:* 0.5, *Range:* any.

Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[EdgeDetect](#)

[EdgesInDirection](#)

[EdgeColorize](#)

[Sharpen](#)

[Emboss](#)

[Blur](#)

[Sapphire Plug-ins](#)

[Introduction](#)

BleachBypass

Simulates a film process in which silver is not removed from the negative. The result has increased contrast and reduced color saturation.

Inputs:

Source: The clip to be processed.



Parameters:

Amount: *Default: 1, Range: 0 or greater.*

Controls the intensity of the effect by interpolating between the original source and the result.

Soft Focus: *Default: 0, Range: 0 or greater.*

If positive, a soft focus effect is also applied. Increase for a broader soft focus look.

Sharpen: *Default: 0, Range: any.*

The amount of post-process sharpening applied.

Saturation: *Default: 1, Range: 0 or greater.*

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Scale Lights: *Default: 1, Range: 0 or greater.*

Scales the result by this value. Increase for a brighter result.

Offset Darks: *Default: 0, Range: any.*

Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

Scale Colors: *Default rgb: [1 1 1].*

Scales the color of the result. For example, if it is yellow [1 1 0], the blue of the result will be 0.

Grain Parameters:

Grain Amp: *Default: 0, Range: 0 or greater.*

Scales the amplitude of the film grain that is added to the result. Set this to 0 to disable all grain.

Grain Amp Red: *Default: 0.9, Range: 0 or greater.*

Scales the red grain amplitude.

Grain Amp Green: *Default: 1, Range: 0 or greater.*

Scales the green grain amplitude.

Grain Amp Blue: *Default: 1.6, Range: 0 or greater.*

Scales the blue grain amplitude. Note that grain is added and subtracted from the image, so for example, increasing Grain Amp Blue will amplify both the blue and yellow speckles.

GrainAmpDarks: *Default: 0.2, Range: 0 or greater.*

The relative amount of grain applied to the darkest regions of the image, per channel. This defaults to less than 1.0 because dark areas usually have less grain than midtones.

GrainAmpBrights: *Default: 0, Range: 0 or greater.*

The relative amount of grain applied to the brightest regions of the image, per channel. This defaults to zero because bright areas usually have less grain than midtones. Note that highly saturated colors can be affected by both Grain

Amp Darks and Grain Amp Brights because they are dark in some color channels and bright in others.

Grain Blur: *Default:* 0, *Range:* 0 or greater.

The grain is smoothed by this amount. Increase for coarser grain.

Grain Blur Red: *Default:* 1, *Range:* 0 or greater.

The relative blur amount for the red grain.

Grain Blur Green: *Default:* 0.9, *Range:* 0 or greater.

The relative blur amount for the green grain.

Grain Blur Blue: *Default:* 1.2, *Range:* 0 or greater.

The relative blur amount for the blue grain.

Grain Seed: *Default:* 0, *Range:* 0 or greater.

Initializes the random number generator for the grain generation. The actual seed value is not significant, but different seeds give different grain patterns and the same value should give a repeatable pattern.

Grain Mono: *Check-box, Default:* off.

When enabled, the same grain pattern is used for the red, green, and blue channels. To make truly monochrome grain you should also set Grain Amp Red/Green/Blue equal to each other, make sure Midtone Pos Red/Green/Blue are equal, and if GrainBlur is positive also set Grain Blur Red/Green/Blue equal

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FilmEffect](#)

[FilmDamage](#)

[Solarize](#)

[GrainColor](#)

[GrainMono](#)

[Technicolor2Strip](#)

[Technicolor3Strip](#)

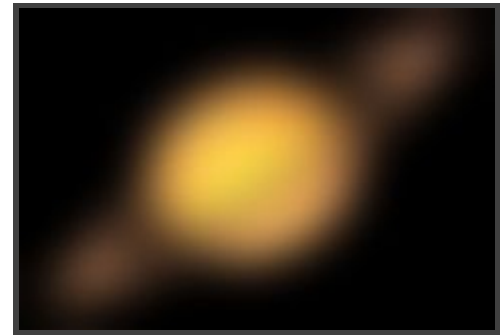
[Sapphire Plug-ins](#)

[Introduction](#)

Blur

In the S_Blurs Plugin.

Blurs the source clip by an arbitrary amount using a gaussian, triangle, or box filter. This effect should render quickly even with very large Width values. Use the Blur Rel X and Y parameters for a more horizontal or vertical blur direction.



Inputs:

Source: The clip to be processed.

Parameters:

Blur Amount: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the width of the blur. This parameter can be adjusted using the Blur Amount Widget.

Blur Rel: *X & Y, Default: [1 1], Range: 0 or greater, Shared.*

The relative horizontal and vertical blur widths. Set Blur Rel X to 0 for a vertical-only blur, or set Blur Rel Y to 0 for a horizontal-only blur. This parameter can be adjusted using the Blur Amount Widget.

Filter: *Popup menu, Default: GAUSS.*

The type of convolution filter to blur with.

BOX: uses a rectangular shaped filter.

TRIANGLE: smoother, uses a pyramid shaped filter.

GAUSS: smoothest, uses a gaussian shaped filter.

Scale Result: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Offset Darks: *Default: 0, Range: any, Shared.*

Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

Subpixel: *Check-box, Default: off, Shared.*

Enables blurring by subpixel amounts. Use this for smoother animation of the Blur Amount or Blur Rel parameters.

Mix With Source: *Default: 0, Range: 0 to 1, Shared.*

Interpolates between the blurred result (0) and the original source (1). 0.1 can give a nice misty effect since it mixes only a little of the source in.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[BlurMonochrome](#)

[BlurMask](#)

[RackDefocus](#)

[Sapphire](#)

[BlurChannels](#)

[DefocusPrism](#)

[Plug-ins](#)

[BlurChroma](#)

[EdgeBlur](#)

[Introduction](#)

[BlurDirectional](#)

[BandPass](#)

[BlurMotion](#)

BlurMask

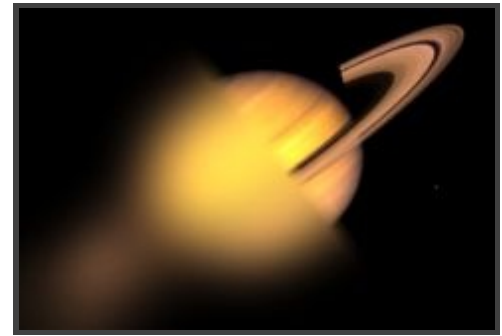
In the S_BlursMask Plugin.

Blurs the source clip by an arbitrary amount using a gaussian, triangle, or box filter. This is similar to Blur, but a Mask input specifies which areas of the source are to be blurred.

Inputs:

Source: The clip to be processed.

Mask: The blur is only performed on regions of the source clip specified by the bright areas of this input. Pixels outside this mask are not blurred, and do not contribute to the resulting blurred pixels within it. Only the red channel of this input is used.



Parameters:

Blur Amount: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the width of the blur. This parameter can be adjusted using the Blur Amount Widget.

Blur Rel: *X & Y, Default: [1 1], Range: 0 or greater, Shared.*

The relative horizontal and vertical blur widths. Set Blur Rel X to 0 for a vertical-only blur, or set Blur Rel Y to 0 for a horizontal-only blur. This parameter can be adjusted using the Blur Amount Widget.

Filter: *Popup menu, Default: GAUSS.*

The type of convolution filter to blur with.

BOX: uses a rectangular shaped filter.

TRIANGLE: smoother, uses a pyramid shaped filter.

GAUSS: smoothest, uses a gaussian shaped filter.

Scale Result: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Offset Darks: *Default: 0, Range: any, Shared.*

Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

Subpixel: *Check-box, Default: off, Shared.*

Enables blurring by subpixel amounts. Use this for smoother animation of the Blur Amount or Blur Rel parameters.

Mix With Source: *Default: 0, Range: 0 to 1, Shared.*

Interpolates between the blurred result (0) and the original source (1). 0.1 can give a nice misty effect since it mixes only a little of the source in.

Invert Mask: *Check-box, Default: off.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[BlurMonochromeMask](#)

[BlurChannelsMask](#)

[BlurChromaMask](#)

[BlurDirectionalMask](#)

[Blur](#)

[RackDefocus](#)

[DefocusPrism](#)

[EdgeBlur](#)

[BandPass](#)

[BlurMotion](#)

[Sapphire](#)

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BlurChannels

In the S_Blurs Plugin.

Blurs each channel of the source clip by an arbitrary amount using a gaussian, triangle, or box filter. This effect should render quickly even with very large Width values. Use the Blur Rel X and Y parameters for a more horizontal or vertical blur direction.



Inputs:

Source: The clip to be processed.

Parameters:

Blur Amount: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the width of the blur for all channels. This parameter can be adjusted using the Blur Amount Widget.

Blur Red: *Default: 0, Range: 0 or greater.*

The blur width of the red channel, relative to Blur Amount. This parameter can be adjusted using the Blur Amount Widget.

Blur Green: *Default: 0.5, Range: 0 or greater.*

The blur width of the green channel, relative to Blur Amount. This parameter can be adjusted using the Blur Amount Widget.

Blur Blue: *Default: 1, Range: 0 or greater.*

The blur width of the blue channel, relative to Blur Amount. This parameter can be adjusted using the Blur Amount Widget.

Blur X: *Default: 1, Range: 0 or greater.*

The relative blur amount in the horizontal direction. If 0, a vertical-only blur is performed. This parameter can be adjusted using the Blur Amount Widget.

Blur Y: *Default: 1, Range: 0 or greater.*

The relative blur amount in the vertical direction. If 0, a horizontal-only blur is performed. This parameter can be adjusted using the Blur Amount Widget.

Filter: *Popup menu, Default: GAUSS.*

The type of convolution filter to blur with.

BOX: uses a rectangular shaped filter.

TRIANGLE: smoother, uses a pyramid shaped filter.

GAUSS: smoothest, uses a gaussian shaped filter.

Scale Result: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Scale Red: *Default: 1, Range: 0 or greater.*

Scales the blurred red channel.

Scale Green: *Default: 1, Range: 0 or greater.*

Scales the blurred green channel.

Scale Blue: *Default: 1, Range: 0 or greater.*

Scales the blurred blue channel.

Subpixel: *Check-box, Default: off, Shared.*

Enables blurring by subpixel amounts. Use this for smoother animation of any of the blur amount parameters.

Offset Darks: *Default: 0, Range: any.*

Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

Offset Red: *Default: 0, Range: any.*

Adds this value to the red channel of the result.

Offset Green: *Default: 0, Range: any.*

Adds this value to the green channel of the result.

Offset Blue: *Default: 0, Range: any.*

Adds this value to the blue channel of the result.

Mix With Source: *Default: 0, Range: 0 to 1.*

Interpolates between the blurred result (0) and the original source (1). 0.1 can give a nice misty effect since it mixes only a little of the source in.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[BlurChannelsMask](#)

[RackDefocus](#)
[Glow](#)

[Sapphire Plug-ins](#)
[Introduction](#)

BlurChannelsMask

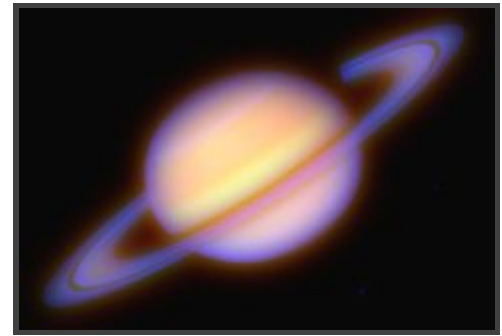
In the S_BlursMask Plugin.

Blurs each channel of the source clip by an arbitrary amount using a gaussian, triangle, or box filter. This is similar to BlurChannels, but a Mask input specifies which areas of the source are to be blurred.

Inputs:

Source: The clip to be processed.

Mask: The blur is only performed on regions of the source clip specified by the bright areas of this input. Pixels outside this mask are not blurred, and do not contribute to the resulting blurred pixels within it. Only the red channel of this input is used.



Parameters:

Blur Amount: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the width of the blur for all channels. This parameter can be adjusted using the Blur Amount Widget.

Blur Red: *Default: 0, Range: 0 or greater.*

The blur width of the red channel, relative to Blur Amount. This parameter can be adjusted using the Blur Amount Widget.

Blur Green: *Default: 0.5, Range: 0 or greater.*

The blur width of the green channel, relative to Blur Amount. This parameter can be adjusted using the Blur Amount Widget.

Blur Blue: *Default: 1, Range: 0 or greater.*

The blur width of the blue channel, relative to Blur Amount. This parameter can be adjusted using the Blur Amount Widget.

Blur X: *Default: 1, Range: 0 or greater.*

The relative blur amount in the horizontal direction. If 0, a vertical-only blur is performed. This parameter can be adjusted using the Blur Amount Widget.

Blur Y: *Default: 1, Range: 0 or greater.*

The relative blur amount in the vertical direction. If 0, a horizontal-only blur is performed. This parameter can be adjusted using the Blur Amount Widget.

Filter: *Popup menu, Default: GAUSS.*

The type of convolution filter to blur with.

BOX: uses a rectangular shaped filter.

TRIANGLE: smoother, uses a pyramid shaped filter.

GAUSS: smoothest, uses a gaussian shaped filter.

Scale Result: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Scale Red: *Default: 1, Range: 0 or greater.*

Scales the blurred red channel.

Scale Green: *Default: 1, Range: 0 or greater.*
Scales the blurred green channel.

Scale Blue: *Default: 1, Range: 0 or greater.*
Scales the blurred blue channel.

Subpixel: *Check-box, Default: off, Shared.*
Enables blurring by subpixel amounts. Use this for smoother animation of any of the blur amount parameters.

Offset Darks: *Default: 0, Range: any.*
Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

Offset Red: *Default: 0, Range: any.*
Adds this value to the red channel of the result.

Offset Green: *Default: 0, Range: any.*
Adds this value to the green channel of the result.

Offset Blue: *Default: 0, Range: any.*
Adds this value to the blue channel of the result.

Mix With Source: *Default: 0, Range: 0 to 1.*
Interpolates between the blurred result (0) and the original source (1). 0.1 can give a nice misty effect since it mixes only a little of the source in.

Invert Mask: *Check-box, Default: off.*
If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[BlurMask](#)

[BlurMonochromeMask](#)

[BlurChromaMask](#)

[BlurDirectionalMask](#)

[BlurChannels](#)

[RackDefocus](#)

[Glow](#)

[Sapphire](#)

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BlurChroma

In the S_Blurs Plugin.

Separates the source into luminance and chrominance components, blurs the chrominance and/or the luminance independently, and recombines them. You can also scale the luma and chroma independently to enhance or remove either.



Inputs:

Source: The clip to be processed.

Parameters:

Blur Chroma: *Default:* 0.5, *Range:* 0 or greater.

The amount to blur the chrominance. This parameter can be adjusted using the Blur Chroma Widget.

Blur Luminance: *Default:* 0, *Range:* 0 or greater.

The amount to blur the luminance. This parameter can be adjusted using the Blur Luma Widget.

Blur Rel: *X & Y, Default:* [1 1], *Range:* 0 or greater.

The relative horizontal and vertical blur widths. Set Blur Rel X to 0 for a vertical-only blur, or set Blur Rel Y to 0 for a horizontal-only blur. This parameter can be adjusted using the Blur Chroma Widget.

Filter: *Popup menu, Default:* GAUSS.

The type of convolution filter to blur with.

BOX: uses a rectangular shaped filter.

TRIANGLE: smoother, uses a pyramid shaped filter.

GAUSS: smoothest, uses a gaussian shaped filter.

Scale Chroma: *Default:* 1, *Range:* 0 or greater.

Scales the chrominance by this amount. Increase for more intense colors, decrease for muted colors.

Scale Luminance: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the result.

Offset Result: *Default:* 0, *Range:* any.

Adds this gray value to the result (or subtracts if negative). 0 has no effect, .5 is middle gray, and 1 is white.

Subpixel: *Check-box, Default:* off, *Shared.*

Enables blurring by subpixel amounts. Use this for smoother animation of the Blur Chroma or Blur Luminance parameters.

Mix With Source: *Default:* 0, *Range:* 0 to 1, *Shared.*

Interpolates between the blurred result (0) and the original source (1). 0.1 can give a nice misty effect since it mixes only a little of the source in.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[BlurChromaMask](#)

[RackDefocus](#)

[Sapphire Plug-ins](#)

[DefocusPrism](#)

[Introduction](#)

[WarpChroma](#)

BlurChromaMask

In the S_BlursMask Plugin.

Separates the source into luminance and chrominance components, blurs the chrominance and/or the luminance independently, and recombines them. Similar to BlurChroma, but a Mask input specifies which areas of the source are to be blurred.



Inputs:

Source: The clip to be processed.

Mask: The blur is only performed on regions of the source clip specified by the bright areas of this input. Pixels outside this mask are not blurred, and do not contribute to the resulting blurred pixels within it. Only the red channel of this input is used.

Parameters:

Blur Chroma: *Default:* 0.5, *Range:* 0 or greater.

The amount to blur the chrominance. This parameter can be adjusted using the Blur Chroma Widget.

Blur Luminance: *Default:* 0, *Range:* 0 or greater.

The amount to blur the luminance. This parameter can be adjusted using the Blur Luma Widget.

Blur Rel: *X & Y, Default:* [1 1], *Range:* 0 or greater.

The relative horizontal and vertical blur widths. Set Blur Rel X to 0 for a vertical-only blur, or set Blur Rel Y to 0 for a horizontal-only blur. This parameter can be adjusted using the Blur Chroma Widget.

Filter: *Popup menu, Default:* GAUSS.

The type of convolution filter to blur with.

BOX: uses a rectangular shaped filter.

TRIANGLE: smoother, uses a pyramid shaped filter.

GAUSS: smoothest, uses a gaussian shaped filter.

Scale Chroma: *Default:* 1, *Range:* 0 or greater.

Scales the chrominance by this amount. Increase for more intense colors, decrease for muted colors.

Scale Luminance: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the result.

Offset Result: *Default:* 0, *Range:* any.

Adds this gray value to the result (or subtracts if negative). 0 has no effect, .5 is middle gray, and 1 is white.

Subpixel: *Check-box, Default:* off, *Shared.*

Enables blurring by subpixel amounts. Use this for smoother animation of the Blur Chroma or Blur Luminance parameters.

Mix With Source: *Default:* 0, *Range:* 0 to 1, *Shared.*

Interpolates between the blurred result (0) and the original source (1). 0.1 can give a nice misty effect since it mixes only a little of the source in.

Invert Mask: *Check-box, Default:* off.

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[BlurMask](#)

[BlurMonochromeMask](#)

[BlurChannelsMask](#)

[BlurDirectionalMask](#)

[BlurChroma](#)

[RackDefocus](#)

[DefocusPrism](#)

[WarpChroma](#)

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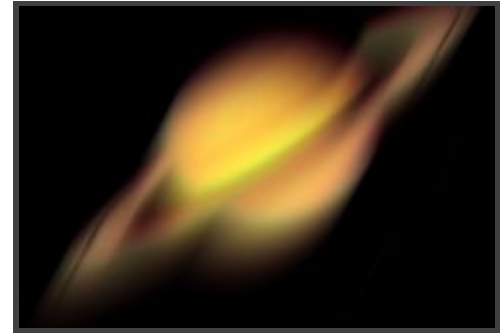
BlurDirectional

In the S_Blurs Plugin.

Blurs the source clip in a given direction using a gaussian, triangle, or box filter. It can also blur each channel by different amounts.

Inputs:

Source: The clip to be processed.



Parameters:

Angle: *Default: 45, Range: any.*

The direction of the blur. An angle of 0 produces a horizontal blur, and an angle of 90 produces a vertical blur. This parameter can be adjusted using the Angle Widget.

Blur Amount: *Default: 0.5, Range: 0 or greater.*

Scales the width of the blur. This parameter can be adjusted using the Blur Amount Widget.

Blur Red: *Default: 1, Range: 0 or greater.*

The blur width of the red channel, relative to Blur Amount.

Blur Green: *Default: 1, Range: 0 or greater.*

The blur width of the green channel, relative to Blur Amount.

Blur Blue: *Default: 1, Range: 0 or greater.*

The blur width of the blue channel, relative to Blur Amount.

Filter: *Popup menu, Default: GAUSS.*

The type of convolution filter to blur with.

BOX: uses a rectangular shaped filter.

TRIANGLE: smoother, uses a pyramid shaped filter.

GAUSS: smoothest, uses a gaussian shaped filter.

Bias: *Default: 0.5, Range: 0 to 1.*

Varies the weight of the pixels along the path of the blur, which gives the appearance of trails or streaks in a single direction. A value of 0.5 weights all pixels evenly. A value of 1 causes the weight to increase toward the direction of the blur, while a value of 0 has the opposite effect.

Shift: *Default: 0, Range: any.*

Shifts the image in the direction of the blur. A negative shift amount shifts the image in the opposite direction.

Shift Red: *Default: 0, Range: any.*

Additional amount to shift the red color channel.

Shift Green: *Default: 0, Range: any.*

Additional amount to shift the green color channel.

Shift Blue: *Default: 0, Range: any.*

Additional amount to shift the blue color channel.

Edge Mode: *Popup menu, Default: REFLECT.*

Determines the behavior when accessing areas outside the source image.

BLACK: Areas outside the source image are treated as black, which can produce dark areas around the edges of the image. Select this for fastest rendering.

REPEAT: Repeats the last pixel outside the border of the image.

REFLECT: Reflects the image outside the border.

Scale Result: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the result.

Offset Darks: *Default:* 0, *Range:* any.

Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

Mix With Source: *Default:* 0, *Range:* 0 to 1.

Interpolates between the blurred result (0) and the original source (1). 0.1 can give a nice misty effect since it mixes only a little of the source in.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Blur](#)

[BlurMonochrome](#)

[BlurChannels](#)

[BlurChroma](#)

[BlurDirectionalMask](#)

[RackDefocus](#)

[DefocusPrism](#)

[EdgeBlur](#)

[BandPass](#)

[BlurMotion](#)

[Sapphire](#)

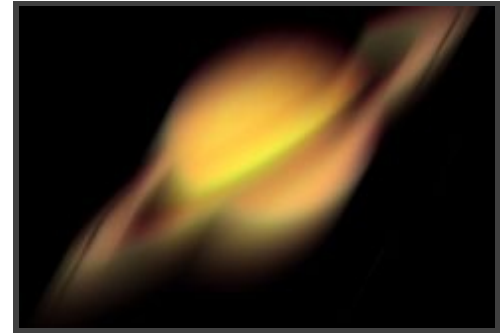
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BlurDirectionalMask

In the S_BlursMask Plugin.

Blurs the source clip in a single direction using a gaussian, triangle, or box filter. It can also blur each channel by different amounts. Similar to BlurDirectional, but a Mask input specifies which areas of the source are to be blurred.



Inputs:

Source: The clip to be processed.

Mask: The blur is only performed on regions of the source clip specified by the bright areas of this input. Pixels outside this mask are not blurred, and do not contribute to the resulting blurred pixels within it. Only the red channel of this input is used.

Parameters:

Angle: *Default:* 45, *Range:* any.

The direction of the blur. An angle of 0 produces a horizontal blur, and an angle of 90 produces a vertical blur. This parameter can be adjusted using the Angle Widget.

Blur Amount: *Default:* 0.5, *Range:* 0 or greater.

Scales the width of the blur. This parameter can be adjusted using the Blur Amount Widget.

Blur Red: *Default:* 1, *Range:* 0 or greater.

The blur width of the red channel, relative to Blur Amount.

Blur Green: *Default:* 1, *Range:* 0 or greater.

The blur width of the green channel, relative to Blur Amount.

Blur Blue: *Default:* 1, *Range:* 0 or greater.

The blur width of the blue channel, relative to Blur Amount.

Filter: *Popup menu, Default:* GAUSS.

The type of convolution filter to blur with.

BOX: uses a rectangular shaped filter.

TRIANGLE: smoother, uses a pyramid shaped filter.

GAUSS: smoothest, uses a gaussian shaped filter.

Bias: *Default:* 0.5, *Range:* 0 to 1.

Varies the weight of the pixels along the path of the blur, which gives the appearance of trails or streaks in a single direction. A value of 0.5 weights all pixels evenly. A value of 1 causes the weight to increase toward the direction of the blur, while a value of 0 has the opposite effect.

Shift: *Default:* 0, *Range:* any.

Shifts the image in the direction of the blur. A negative shift amount shifts the image in the opposite direction.

Shift Red: *Default:* 0, *Range:* any.

Additional amount to shift the red color channel.

Shift Green: *Default:* 0, *Range:* any.

Additional amount to shift the green color channel.

Shift Blue: *Default: 0, Range: any.*
Additional amount to shift the blue color channel.

Edge Mode: *Popup menu, Default: REFLECT.*
Determines the behavior when accessing areas outside the source image.

BLACK: Areas outside the source image are treated as black, which can produce dark areas around the edges of the image. Select this for fastest rendering.

REPEAT: Repeats the last pixel outside the border of the image.

REFLECT: Reflects the image outside the border.

Scale Result: *Default: 1, Range: 0 or greater.*
Scales the brightness of the result.

Offset Darks: *Default: 0, Range: any.*
Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

Mix With Source: *Default: 0, Range: 0 to 1.*
Interpolates between the blurred result (0) and the original source (1). 0.1 can give a nice misty effect since it mixes only a little of the source in.

Invert Mask: *Check-box, Default: off.*
If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[BlurMask](#)

[BlurMonochromeMask](#)

[BlurChannelsMask](#)

[BlurChromaMask](#)

[BlurDirectional](#)

[RackDefocus](#)

[DefocusPrism](#)

[EdgeBlur](#)

[BandPass](#)

[BlurMotion](#)

[Sapphire](#)

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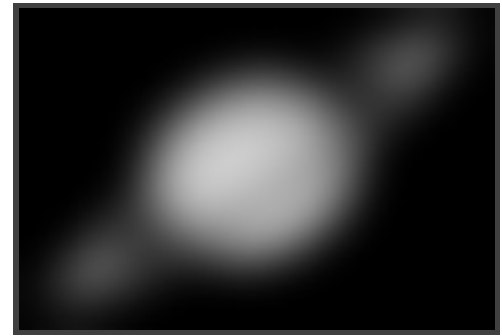
BlurMonochrome

In the S_Blurs Plugin.

Similar to Blur, but first makes the source monochrome, and then blurs the resulting single channel. If you are blurring a monochrome clip, use this option for faster processing.

Inputs:

Source: The clip to be processed.



Parameters:

Blur Amount: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the width of the blur. This parameter can be adjusted using the Blur Amount Widget.

Blur Rel: *X & Y, Default: [1 1], Range: 0 or greater, Shared.*

The relative horizontal and vertical blur widths. Set Blur Rel X to 0 for a vertical-only blur, or set Blur Rel Y to 0 for a horizontal-only blur. This parameter can be adjusted using the Blur Amount Widget.

Filter: *Popup menu, Default: GAUSS.*

The type of convolution filter to blur with.

BOX: uses a rectangular shaped filter.

TRIANGLE: smoother, uses a pyramid shaped filter.

GAUSS: smoothest, uses a gaussian shaped filter.

Scale Result: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Offset Darks: *Default: 0, Range: any, Shared.*

Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

Subpixel: *Check-box, Default: off, Shared.*

Enables blurring by subpixel amounts. Use this for smoother animation of the Blur Amount or Blur Rel parameters.

Mix With Source: *Default: 0, Range: 0 to 1, Shared.*

Interpolates between the blurred result (0) and the original source (1). 0.1 can give a nice misty effect since it mixes only a little of the source in.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Blur](#)

[BlurChannels](#)

[BlurChroma](#)

[BlurDirectional](#)

[BlurMonochromeMask](#)

[RackDefocus](#)

[DefocusPrism](#)

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BlurMonochromeMask

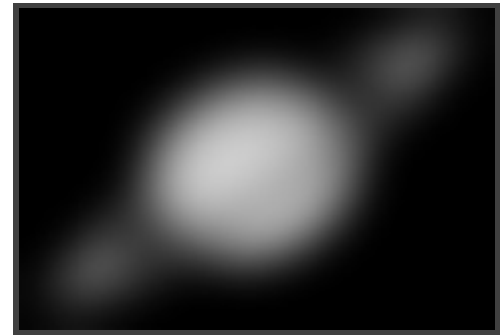
In the S_BlursMask Plugin.

Similar to BlurMask, but first makes the source monochrome and then blurs the resulting single channel (faster), by an arbitrary amount using a gaussian, triangle, or box filter.

Inputs:

Source: The clip to be processed.

Mask: The blur is only performed on regions of the source clip specified by the bright areas of this input. Pixels outside this mask are not blurred, and do not contribute to the resulting blurred pixels within it. Only the red channel of this input is used.



Parameters:

Blur Amount: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the width of the blur. This parameter can be adjusted using the Blur Amount Widget.

Blur Rel: *X & Y, Default: [1 1], Range: 0 or greater, Shared.*

The relative horizontal and vertical blur widths. Set Blur Rel X to 0 for a vertical-only blur, or set Blur Rel Y to 0 for a horizontal-only blur. This parameter can be adjusted using the Blur Amount Widget.

Filter: *Popup menu, Default: GAUSS.*

The type of convolution filter to blur with.

BOX: uses a rectangular shaped filter.

TRIANGLE: smoother, uses a pyramid shaped filter.

GAUSS: smoothest, uses a gaussian shaped filter.

Scale Result: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Offset Darks: *Default: 0, Range: any, Shared.*

Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

Subpixel: *Check-box, Default: off, Shared.*

Enables blurring by subpixel amounts. Use this for smoother animation of the Blur Amount or Blur Rel parameters.

Mix With Source: *Default: 0, Range: 0 to 1, Shared.*

Interpolates between the blurred result (0) and the original source (1). 0.1 can give a nice misty effect since it mixes only a little of the source in.

Invert Mask: *Check-box, Default: off.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[BlurMask](#)

[BlurChannelsMask](#)

[BlurChromaMask](#)

[BlurDirectionalMask](#)

[BlurMonochrome](#)

[RackDefocus](#)

[DefocusPrism](#)

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BlurMotion

Performs a motion blur of the source clip between the specified From and To transformations. This can be used to perform radial zoom blurs, rotate blurs, directional blurs, or any combination of these. The From and To parameters do not refer to time. They describe the two transformations in space that determine the style of blur applied to each frame.

Inputs:

Source: The clip to be processed.



Parameters:

Effect: *Popup menu, Default: Blur Motion.*

Selects between full color or monochrome result.

Blur Motion: blurs all the channels of the source input.

Blur Motion Mono: makes the source monochrome and then blurs the resulting single channel (faster).

From Z Dist: *Default: 1, Range: 0.001 or greater, Shared.*

The 'distance' of the From transformation. This zooms about the Center location when Shift is 0. Increase to zoom out, decrease to zoom in. This parameter can be adjusted using the From Transform Widget.

From Rotate: *Default: 0, Range: any, Shared.*

The rotation angle of the From transformation, in degrees, about the center. This parameter can be adjusted using the From Transform Widget.

From Shift: *X & Y, Default: [0 0], Range: any, Shared.*

The horizontal and vertical translations of the From transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the From Transform Widget.

Exposure Bias: *Default: 0.5, Range: 0 to 1, Shared.*

Determines the variable amount of exposure along the path between the From and To transformations. A value of 0 causes more exposure at the From end, 0.5 causes equal exposure along the path, and 1.0 causes more exposure at the To end. If you have bright spots on a dark background, a 0 value would cause the processed spots to be brighter at the From end and dark at the To end, and a 1.0 value would cause the opposite.

To Z Dist: *Default: 0.8, Range: 0.001 or greater, Shared.*

The 'distance' of the To transformation. Increase to zoom out, or decrease to zoom in. This parameter can be adjusted using the To Transform Widget.

To Rotate: *Default: 0, Range: any, Shared.*

The rotation angle of the To transformation, in degrees, about the center. Note that if the From and To Rotate angles are very different, the interpolation between them will become less accurate. This parameter can be adjusted using the To Transform Widget.

To Shift: *X & Y, Default: [0 0], Range: any, Shared.*

The horizontal and vertical translations of the To transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the To Transform Widget.

Subpixel: *Check-box, Default: on, Shared.*

If enabled, uses a better quality but slightly slower method for performing the blur.

Center: *X & Y, Default: [0 0], Range: any, Shared.*

The center of rotation and zooming, in screen coordinates relative to the center of the frame. The shift values should be zero for this location to make sense. This parameter can be adjusted using the Center Widget.

Wrap: *X & Y, Popup menu, Default: [NO NO].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Scale Result: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Blur Res: *Popup menu, Default: FULL.*

Selects the resolution factor for the motion blur. This is similar to the general 'Res' factor parameter, but does a better job of averaging down to lower resolution and interpolating back up to the result. Higher resolutions give better quality, lower resolutions give faster processing.

FULL: Full resolution is used.

1/2: The motion blurring is performed at half resolution.

1/4: The motion blurring is performed at quarter resolution.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[BlurMotionMask](#)

[BlurMotionCurves](#)

[Sapphire Plug-ins](#)

[Blur](#)

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[WarpChroma](#)

[EdgeRays](#)

BlurMotionMask

Similar to BlurMotion but scales the amount of blur by the Mask input. Performs a motion blur of the source clip between the specified From and To transformations. This can be used to perform radial zoom blurs, rotate blurs, directional blurs, or any combination of these.

Inputs:

Source: The clip to be processed.

Mask: The amount of motion blur is scaled by this input for each destination pixel. Only the red channel of this input is used.



Parameters:

Effect: *Popup menu, Default: Blur Motion Mask.*
Selects between full color or monochrome result.

Blur Motion Mask: blurs all the channels of the source input.

Blur Motion Mono Mask: makes the source monochrome and then blurs the resulting single channel (faster).

From Z Dist: *Default: 1, Range: 0.001 or greater, Shared.*

The 'distance' of the From transformation. This zooms about the Center location when Shift is 0. Increase to zoom out, decrease to zoom in. This parameter can be adjusted using the From Transfm Widget.

From Rotate: *Default: 0, Range: any, Shared.*

The rotation angle of the From transformation, in degrees, about the center. This parameter can be adjusted using the From Transfm Widget.

From Shift: *X & Y, Default: [0 0], Range: any, Shared.*

The horizontal and vertical translations of the From transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the From Transfm Widget.

Exposure Bias: *Default: 0.5, Range: 0 to 1, Shared.*

Determines the variable amount of exposure along the path between the From and To transformations. A value of 0 causes more exposure at the From end, 0.5 causes equal exposure along the path, and 1.0 causes more exposure at the To end. If you have bright spots on a dark background, a 0 value would cause the processed spots to be brighter at the From end and dark at the To end, and a 1.0 value would cause the opposite.

To Z Dist: *Default: 0.8, Range: 0.001 or greater, Shared.*

The 'distance' of the To transformation. Increase to zoom out, or decrease to zoom in. This parameter can be adjusted using the To Transform Widget.

To Rotate: *Default: 0, Range: any, Shared.*

The rotation angle of the To transformation, in degrees, about the center. Note that if the From and To Rotate angles are very different, the interpolation between them will become less accurate. This parameter can be adjusted using the To Transform Widget.

To Shift: *X & Y, Default: [0 0], Range: any, Shared.*

The horizontal and vertical translations of the To transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the To Transform Widget.

Blur Mask: *Default: 0, Range: 0 or greater, Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Subpixel: *Check-box, Default: on, Shared.*

If enabled, uses a better quality but slightly slower method for performing the blur.

Center: *X & Y, Default: [0 0], Range: any, Shared.*

The center of rotation and zooming, in screen coordinates relative to the center of the frame. The shift values should be zero for this location to make sense. This parameter can be adjusted using the Center Widget.

Wrap: *X & Y, Popup menu, Default: [NO NO].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Scale Result: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Blur Res: *Popup menu, Default: FULL.*

Selects the resolution factor for the motion blur. This is similar to the general 'Res' factor parameter, but does a better job of averaging down to lower resolution and interpolating back up to the result. Higher resolutions give better quality, lower resolutions give faster processing.

FULL: Full resolution is used.

1/2: The motion blurring is performed at half resolution.

1/4: The motion blurring is performed at quarter resolution.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[BlurMotion](#)

[BlurMotion](#)

[Sapphire Plug-ins](#)

[BlurMotionCurves](#)

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[EdgeRays](#)

BlurMotionCurves

Performs a motion blur and optionally transforms the source clip using the animated curves of the Z Dist, Rotate and Shift parameters. If these parameters are constant, no motion blur will occur.

Inputs:

Source: The clip to be processed.



Parameters:

Effect: *Popup menu, Default: Transform and Blur.*
Allows disabling of the transformation.

Transform and Blur: transforms the Source as well as blurring.

Blur Only: this can be useful if the motions have already occurred. The curves are used only to apply the corresponding motion blur in place, and no transformation is performed.

Z Dist: *Default: 1, Range: 0.001 or greater, Shared.*

The 'distance' of the image from the camera, about the Center position. The rate of change of this parameter is also used for the motion blur. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. This parameter can be adjusted using the Transform Widget.

Rotate: *Default: 0, Range: any, Shared.*

Rotates the image by this amount in degrees, about the Center. The rate of change of this parameter is also used for the motion blur. Note that for high rotation speeds, the motion blur will become less accurate. This parameter can be adjusted using the Transform Widget.

Shift: *X & Y, Default: [0 0], Range: any, Shared.*

Translates the source image by this amount. The rate of change of this parameter is also used for the motion blur. It is in screen coordinates for easy use with tracker data. This parameter can be adjusted using the Transform Widget.

Center: *X & Y, Default: [0 0], Range: any, Shared.*

The center of rotation and zooming, in screen coordinates relative to the center of the frame. The shift values should be zero for this location to make sense. This parameter can be adjusted using the Center Widget.

Shutter Duration: *Default: 1, Range: 0 or greater, Shared.*

The amount of time, in frames, to apply the motion blur over. Larger values cause more blurring, smaller values cause less. The curves are sampled at plus and minus half of this value.

Shutter Shift: *Default: 0, Range: any, Shared.*

The time-shift in frames of the motion blur. If the Shutter Speed is 1.0 and Shutter Shift is 0, the blur is calculated between the current frame -.5 and +.5. If the Shutter Shift is instead .5 then the motion blur would be calculated between the current frame and the next frame.

Exposure Bias: *Default: 0.5, Range: 0 to 1, Shared.*

Determines the variable amount of exposure along the path between the From and To transformations. A value of 0 causes more exposure at the From end, 0.5 causes equal exposure along the path, and 1.0 causes more exposure at the To end. If you have bright spots on a dark background, a 0 value would cause the processed spots to be brighter at the From end and dark at the To end, and a 1.0 value would cause the opposite.

Scale Result: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Wrap: *X & Y, Popup menu, Default: [NO NO].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Subpixel: *Check-box, Default: on, Shared.*

If enabled, uses a better quality but slightly slower method for performing the blur.

Blur Res: *Popup menu, Default: FULL.*

Selects the resolution factor for the motion blur. This is similar to the general 'Res' factor parameter, but does a better job of averaging down to lower resolution and interpolating back up to the result. Higher resolutions give better quality, lower resolutions give faster processing.

FULL: Full resolution is used.

1/2: The motion blurring is performed at half resolution.

1/4: The motion blurring is performed at quarter resolution.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[BlurMotion](#)

[Blur](#)

[Streaks](#)

[WarpRepeat](#)

[WarpChroma](#)

[EdgeRays](#)

[Sapphire Plug-ins](#)

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Cartoon

In the S_Cartoon Plugin.

Generates a version of the source clip with a cartoon look. Finds the edges in the image and draws new outlines for those edges. Smooths the colors of the areas between the edges, and optionally posterizes the colors into fewer color values.



Inputs:

Source: The clip to be processed.

Parameters:

Posterize Amount: *Default: 0, Range: 0 to 1, Shared.*

If positive, generates a posterized look by limiting the number of colors in the result. Increase this for fewer and larger regions of solid colors. Decrease for more colors and more steps between colors.

Posterize Smooth: *Default: 0.1, Range: 0 to 1, Shared.*

Amount to smooth the edges between color regions when posterizing. Increase this value to reduce aliasing between the colored areas. If set to 1, the areas will be completely smoothed together and no posterize effect will occur.

Posterize Phase: *Default: 0, Range: any, Shared.*

Amount to shift color boundaries when posterizing. Adjust this to fine-tune the location of the edges between the color regions. A phase of 1 is equivalent to 0.

Edge Width: *Default: 0.04, Range: 0 or greater, Shared.*

The width of the outlined edges. Increase for thicker outlines.

Edge Strength: *Default: 2, Range: 0 or greater, Shared.*

Scales the strength of the outlined edges by this amount. Increase for heavier edges.

Edge Threshold: *Default: 0.1, Range: 0 or greater, Shared.*

Subtracts this value from outline image. Increase to remove unwanted noise and minor edges.

Suppress Sm Edg: *Default: 0.5, Range: 0 or greater, Shared.*

Increase this value to remove smaller edges while keeping the larger edges.

Edge Sharpen: *Default: 0, Range: 0 or greater, Shared.*

Amount to sharpen the outlines. Increase this value for sharper sides to the edges.

Smooth: *Default: 0.1, Range: 0 or greater, Shared.*

The amount to blur the colors in the non-edge regions.

Edge Color: *Default rgb: [0 0 0], Shared.*

Outline the edges of the clip in this color.

Tint Lights: *Default rgb: [1 1 1], Shared.*

Scales the result by this color, thus tinting the lighter regions.

Tint Darks: *Default rgb: [0 0 0], Shared.*

Adds this color to the darker regions of the source.

Saturation: *Default: 1, Range: any, Shared.*

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Scale Lights: *Default: 1, Range: 0 or greater, Shared.*
Scales the result by this value. Increase for a brighter result.

Offset Darks: *Default: 0, Range: any, Shared.*
Adds this gray value to the darker regions of the source. This can be negative to increase contrast.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[CartoonPaint](#)
[Posterize](#)
[VanGogh](#)
[HairyPaint](#)
[Pointalize](#)
[Sketch](#)
[SketchBumpy](#)

[Sapphire Plug-ins](#)
[Introduction](#)

CartoonPaint

In the S_Cartoon Plugin.

Auto-generates a version of the source clip with a cartoon paint-brushed look. Finds the edges in the image and draws new outlines for those edges. Replaces the colors of the areas between the edges with paint brush shapes.

Inputs:

Source: The clip to be processed.



Parameters:

Posterize Amount: *Default: 0, Range: 0 to 1, Shared.*

If positive, generates a posterized look by limiting the number of colors in the result. Increase this for fewer and larger regions of solid colors. Decrease for more colors and more steps between colors.

Posterize Smooth: *Default: 0.1, Range: 0 to 1, Shared.*

Amount to smooth the edges between color regions when posterizing. Increase this value to reduce aliasing between the colored areas. If set to 1, the areas will be completely smoothed together and no posterize effect will occur.

Posterize Phase: *Default: 0, Range: any, Shared.*

Amount to shift color boundaries when posterizing. Adjust this to fine-tune the location of the edges between the color regions. A phase of 1 is equivalent to 0.

Frequency: *Default: 64, Range: 1 or greater, Shared.*

The density of brush strokes in the frame. Increase for smaller strokes.

Stroke Length: *Default: 4, Range: any, Shared.*

Determines the length of the brush strokes along the directions of edges in the source clip. If this is negative you can switch from VanGogh to HairyPaint styles and vice versa.

Stroke Align: *Default: 1, Range: 0 or greater, Shared.*

Increase to smooth out the directions of the strokes so nearby strokes are more parallel.

Edge Width: *Default: 0.04, Range: 0 or greater, Shared.*

The width of the outlined edges. Increase for thicker outlines.

Edge Strength: *Default: 2, Range: 0 or greater, Shared.*

Scales the strength of the outlined edges by this amount. Increase for heavier edges.

Edge Threshold: *Default: 0.1, Range: 0 or greater, Shared.*

Subtracts this value from outline image. Increase to remove unwanted noise and minor edges.

Suppress Sm Edg: *Default: 0.5, Range: 0 or greater, Shared.*

Increase this value to remove smaller edges while keeping the larger edges.

Edge Sharpen: *Default: 0, Range: 0 or greater, Shared.*

Amount to sharpen the outlines. Increase this value for sharper sides to the edges.

Smooth Colors: *Default: 0.02, Range: 0 or greater, Shared.*

Blurs the source by this amount before generating the brush strokes. Increase to cause the colors of nearby strokes to be more consistent.

Seed: *Default: 0, Range: 0 or greater, Shared.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Edge Color: *Default rgb: [0 0 0], Shared.*

Outline the edges of the clip in this color.

Tint Lights: *Default rgb: [1 1 1], Shared.*

Scales the result by this color, thus tinting the lighter regions.

Tint Darks: *Default rgb: [0 0 0], Shared.*

Adds this color to the darker regions of the source.

Saturation: *Default: 1, Range: any, Shared.*

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Scale Lights: *Default: 1, Range: 0 or greater, Shared.*

Scales the result by this value. Increase for a brighter result.

Offset Darks: *Default: 0, Range: any, Shared.*

Adds this gray value to the darker regions of the source. This can be negative to increase contrast.

Jitter Frames: *Integer, Default: 0, Range: 0 or greater, Shared.*

If this is 0, the locations of the strokes will remain the same for every frame processed. If it is 1, the locations of the strokes are re-randomized for each frame. If it is 2, they are re-randomized every second frame, and so on.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Cartoon](#)

[Posterize](#)

[VanGogh](#)

[HairyPaint](#)

[Pointalize](#)

[Sketch](#)

[SketchBumpy](#)

[Sapphire Plug-ins](#)

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Clouds

In the S_Clouds Plugin.

Generates a procedural noise texture. Use the Frequency parameter to zoom in and out of the texture. The Shift Speed parameters cause the texture to automatically translate over time.

Inputs:

None



Parameters:

Frequency: *Default: 2, Range: 0.01 or greater.*

The spatial frequency of the clouds. Increase to zoom out, decrease to zoom in. Very high values of Frequency are clamped internally so the grain size is no smaller than a few pixels. If you want even finer grain use S_Grain or S_Clouds:Perspective instead.

Frequency Rel X: *Default: 0.4, Range: 0.01 or greater.*

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Octaves: *Integer, Default: 8, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.234, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Shift Start: *X & Y, Default: [0 0], Range: any, Shared.*

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Shift Speed: *X & Y, Default: [0.5 0], Range: any, Shared.*

Translation speed of the texture. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

Brightness1: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb: [1 1 1], Shared.*

The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between Color0 and Color1.

Color0: *Default rgb: [0 0 0], Shared.*

The color of the 'darker' parts of the texture.

Offset0: *Default: 0, Range: any, Shared.*

Adds this value to color0. Decrease to a negative value for more contrast.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[CloudsPerspective](#)

[CloudsVortex](#)

[CloudsMultColor](#)

[CloudsColorSmooth](#)

[CloudsPsyko](#)

[CloudsComp](#)

[GrainMono](#)

[Sapphire Plug-ins](#)

[Introduction](#)

CloudsComp

In the S_CloudsComp Plugin.

Generates a procedural noise texture, and combines the texture with the background clip.

Inputs:

Back: The clip to combine the clouds image with. This may be ignored if the Combine option is set to Clouds Only, but the output clip will default to the same length as this clip.



Parameters:

Frequency: *Default: 2, Range: 0.01 or greater.*

The spatial frequency of the clouds. Increase to zoom out, decrease to zoom in. Very high values of Frequency are clamped internally so the grain size is no smaller than a few pixels. If you want even finer grain use S_Grain or S_Clouds:Perspective instead.

Frequency Rel X: *Default: 0.4, Range: 0.01 or greater.*

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Octaves: *Integer, Default: 8, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.234, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Shift Start: *X & Y, Default: [0 0], Range: any, Shared.*

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Shift Speed: *X & Y, Default: [0.5 0], Range: any, Shared.*

Translation speed of the texture. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

Brightness1: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb: [1 1 1], Shared.*

The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between Color0 and Color1.

Color0: *Default rgb: [0 0 0], Shared.*

The color of the 'darker' parts of the texture.

Offset0: *Default: 0, Range: any, Shared.*

Adds this value to color0. Decrease to a negative value for more contrast.

Combine: *Popup menu, Default: Screen.*

Determines how the texture is combined with the Background.

Clouds Only: gives only the clouds texture with no Background.

Mult: the texture is multiplied by the Background.

Add: the texture is added to the Background.

Screen: the texture is blended with the Background using a screen operation.

Difference: the result is the difference between the texture and Background.

Overlay: the texture is combined with the Background using an overlay function.

Scale Back: *Default: 1, Range: any, Shared.*

The background brightness is scaled by this value before being combined with the clouds.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[CloudsPerspectiveComp](#)

[CloudsVortexComp](#)

[CloudsMultColorComp](#)

[CloudsColorSmoothComp](#)

[CloudsPsykoComp](#)

[Clouds](#)

[GrainMono](#)

[Sapphire Plug-ins](#)

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CloudsColorSmooth

In the S_Clouds Plugin.

Generates a full color clouds texture. Procedural noise texture is independently generated for each of the red, green, and blue output channels. The Shift Speed parameters cause the texture to automatically translate over time.



Inputs:

None

Parameters:

Frequency: *Default:* 8, *Range:* 0.01 or greater.

The spatial frequency of the clouds. Increase to zoom out, decrease to zoom in. Very high values of Frequency are clamped internally so the grain size is no smaller than a few pixels. If you want even finer grain use S_Grain or S_Clouds:Perspective instead.

Frequency Rel X: *Default:* 0.2, *Range:* 0.01 or greater.

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Octaves: *Integer, Default:* 1, *Range:* 1 to 10.

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default:* 0.6, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Shift Start: *X & Y, Default:* [0 0], *Range:* any, *Shared.*

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Shift Speed: *X & Y, Default:* [0.5 0], *Range:* any, *Shared.*

Translation speed of the texture. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

Brightness: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the result.

Scale Colors: *Default rgb:* [1 1 1].

Scales the color of the result. For example, if it is yellow [1 1 0], the blue of the result will be 0.

Saturation: *Default:* 1, *Range:* 0 or greater.

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Offset: *Default:* 0, *Range:* any.

Adds this gray value to the result (or subtracts if negative). 0 has no effect, .5 is middle gray, and 1 is white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Clouds](#)

[CloudsPerspective](#)

[CloudsVortex](#)

[CloudsMultColor](#)

[CloudsPsyko](#)

[CloudsColorSmoothComp](#)

[GrainColor](#)

[Sapphire Plug-ins](#)

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CloudsColorSmoothComp

In the S_CloudsComp Plugin.

Generates a full color clouds texture, and combines that with a background clip. Procedural noise texture is independently generated for each of the red, green, and blue output channels.



Inputs:

Back: The clip to combine the clouds image with. This may be ignored if the Combine option is set to Clouds Only, but the output clip will default to the same length as this clip.

Parameters:

Frequency: *Default:* 8, *Range:* 0.01 or greater.

The spatial frequency of the clouds. Increase to zoom out, decrease to zoom in. Very high values of Frequency are clamped internally so the grain size is no smaller than a few pixels. If you want even finer grain use S_Grain or S_Clouds:Perspective instead.

Frequency Rel X: *Default:* 0.2, *Range:* 0.01 or greater.

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Octaves: *Integer, Default:* 1, *Range:* 1 to 10.

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default:* 0.6, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Shift Start: *X & Y, Default:* [0 0], *Range:* any, *Shared.*

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Shift Speed: *X & Y, Default:* [0.5 0], *Range:* any, *Shared.*

Translation speed of the texture. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

Brightness: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the result.

Scale Colors: *Default rgb:* [1 1 1].

Scales the color of the result. For example, if it is yellow [1 1 0], the blue of the result will be 0.

Saturation: *Default:* 1, *Range:* 0 or greater.

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Offset: *Default:* 0, *Range:* any.

Adds this gray value to the result (or subtracts if negative). 0 has no effect, .5 is middle gray, and 1 is white.

Combine: *Popup menu, Default:* Screen.

Determines how the texture is combined with the Background.

Clouds Only: gives only the clouds texture with no Background.

Mult: the texture is multiplied by the Background.

Add: the texture is added to the Background.

Screen: the texture is blended with the Background using a screen operation.

Difference: the result is the difference between the texture and Background.

Overlay: the texture is combined with the Background using an overlay function.

Scale Back: *Default: 1, Range: any, Shared.*

The background brightness is scaled by this value before being combined with the clouds.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[CloudsComp](#)

[CloudsPerspectiveComp](#)

[CloudsVortexComp](#)

[CloudsMultColorComp](#)

[CloudsPsykoComp](#)

[CloudsColorSmooth](#)

[GrainColor](#)

[Sapphire Plug-ins](#)

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CloudsMultColor

In the S_Clouds Plugin.

Generates a procedural noise texture like S_Clouds and tints the colors using an additional color noise texture. The Shift Speed parameters cause the texture to automatically translate over time.



Inputs:

None

Parameters:

Frequency: *Default: 2, Range: 0.01 or greater.*

The spatial frequency of the clouds. Increase to zoom out, decrease to zoom in. Very high values of Frequency are clamped internally so the grain size is no smaller than a few pixels. If you want even finer grain use S_Grain or S_Clouds:Perspective instead.

Frequency Rel X: *Default: 0.4, Range: 0.01 or greater.*

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Octaves: *Integer, Default: 8, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.234, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Shift Start: *X & Y, Default: [0 0], Range: any, Shared.*

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Color Amount: *Default: 0.5, Range: 0 or greater.*

The amplitude of the color tinting.

Color Freq: *Default: 1, Range: 0.01 or greater.*

The frequency of the colors. Increase for finer color variation, decrease for softer color changes.

Color Freq Relx: *Default: 0.4, Range: 0.01 or greater.*

The relative horizontal frequency of the colors. Increase to stretch vertically, decrease to stretch horizontally.

Color Octaves: *Integer, Default: 1, Range: 1 to 10.*

The number of octaves of color noise to include. Each octave is twice the frequency and half the amplitude of the previous.

Color Seed: *Default: 0.345, Range: 0 or greater.*

The random number generator seed to use for the color noise. The actual seed value is not significant, but different values give different results.

Shift Speed: *X & Y, Default: [0.5 0], Range: any, Shared.*

Translation speed of the texture. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

Brightness: *Default:* 1, *Range:* 0 or greater.
Scales the brightness of the result.

Color: *Default rgb:* [1 1 1].
Scales the color of the result.

Color Noise Color: *Default rgb:* [1 1 1].
Scales the color of the noise used for tinting.

Offset: *Default:* 0, *Range:* any.
Adds this gray value to the result (or subtracts if negative). 0 has no effect, .5 is middle gray, and 1 is white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Clouds](#)

[CloudsPerspective](#)

[CloudsVortex](#)

[CloudsColorSmooth](#)

[CloudsPsyko](#)

[CloudsMultColorComp](#)

[GrainColor](#)

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CloudsMultColorComp

In the S_CloudsComp Plugin.

Generates a procedural noise texture like S_Clouds and tints the colors using an additional color noise texture, then combines the texture with the background clip.

Inputs:

Back: The clip to combine the clouds image with. This may be ignored if the Combine option is set to Clouds Only, but the output clip will default to the same length as this clip.



Parameters:

Frequency: *Default: 2, Range: 0.01 or greater.*

The spatial frequency of the clouds. Increase to zoom out, decrease to zoom in. Very high values of Frequency are clamped internally so the grain size is no smaller than a few pixels. If you want even finer grain use S_Grain or S_Clouds:Perspective instead.

Frequency Rel X: *Default: 0.4, Range: 0.01 or greater.*

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Octaves: *Integer, Default: 8, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.234, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Shift Start: *X & Y, Default: [0 0], Range: any, Shared.*

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Color Amount: *Default: 0.5, Range: 0 or greater.*

The amplitude of the color tinting.

Color Freq: *Default: 1, Range: 0.01 or greater.*

The frequency of the colors. Increase for finer color variation, decrease for softer color changes.

Color Freq Relx: *Default: 0.4, Range: 0.01 or greater.*

The relative horizontal frequency of the colors. Increase to stretch vertically, decrease to stretch horizontally.

Color Octaves: *Integer, Default: 1, Range: 1 to 10.*

The number of octaves of color noise to include. Each octave is twice the frequency and half the amplitude of the previous.

Color Seed: *Default: 0.345, Range: 0 or greater.*

The random number generator seed to use for the color noise. The actual seed value is not significant, but different values give different results.

Shift Speed: *X & Y, Default: [0.5 0], Range: any, Shared.*

Translation speed of the texture. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and

animate the Shift Start values instead.

Brightness: *Default: 1, Range: 0 or greater.*
Scales the brightness of the result.

Color: *Default rgb: [1 1 1].*
Scales the color of the result.

Color Noise Color: *Default rgb: [1 1 1].*
Scales the color of the noise used for tinting.

Offset: *Default: 0, Range: any.*
Adds this gray value to the result (or subtracts if negative). 0 has no effect, .5 is middle gray, and 1 is white.

Combine: *Popup menu, Default: Screen.*
Determines how the texture is combined with the Background.

Clouds Only: gives only the clouds texture with no Background.

Mult: the texture is multiplied by the Background.

Add: the texture is added to the Background.

Screen: the texture is blended with the Background using a screen operation.

Difference: the result is the difference between the texture and Background.

Overlay: the texture is combined with the Background using an overlay function.

Scale Back: *Default: 1, Range: any, Shared.*
The background brightness is scaled by this value before being combined with the clouds.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[CloudsComp](#)

[CloudsPerspectiveComp](#)

[CloudsVortexComp](#)

[CloudsColorSmoothComp](#)

[CloudsPsykoComp](#)

[CloudsMultColor](#)

[GrainColor](#)

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CloudsPerspective

In the S_Clouds Plugin.

Generates a procedural noise texture transformed onto a 3D plane with perspective. Adjust the Latitude, Swing, and Roll parameters to rotate the image on various axes, each axis, and use the Frequency parameter to zoom in and out of the texture. Shift Speed causes the texture to automatically translate over time.



Inputs:

None

Parameters:

Frequency: *Default: 2, Range: 0.01 or greater.*

The spatial frequency of the texture. Increase to zoom out, decrease to zoom in.

Frequency Rel X: *Default: 0.4, Range: 0.01 or greater.*

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Octaves: *Integer, Default: 6, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.234, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Shift Start: *X & Y, Default: [0 0], Range: any, Shared.*

Translation offset of the clouds in their initial plane.

Z Dist: *Default: 1, Range: any.*

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it.

Latitude: *Default: -35, Range: any.*

Positive latitude tilts the image down and negative tilts it up. Keep latitude in the range of around -35 to 35 degrees to avoid aliasing towards the horizon.

Swing: *Default: 0, Range: any.*

Rotation of the image in degrees in its initial frame.

Roll: *Default: 0, Range: any.*

Tilts the result from side to side, in counter-clockwise degrees.

Tele Lens Width: *Default: 1, Range: 0.2 or greater.*

The amount of lens telescoping. Increase to zoom in with less perspective, decrease for a wider viewing angle with more perspective.

Shift Speed: *X & Y, Default: [0.5 0], Range: any, Shared.*

Translation speed of the texture. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

Brightness1: *Default: 1, Range: 0 or greater, Shared.*
Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb: [1 1 1], Shared.*
The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between Color0 and Color1.

Color0: *Default rgb: [0 0 0], Shared.*
The color of the 'darker' parts of the texture.

Offset0: *Default: 0, Range: any, Shared.*
Adds this value to color0. Decrease to a negative value for more contrast.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Clouds](#)
[CloudsVortex](#)
[CloudsMultColor](#)
[CloudsColorSmooth](#)
[CloudsPsyko](#)

[CloudsPerspectiveComp](#)

[WarpPerspective](#)
[Sapphire Plug-ins](#)
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CloudsPerspectiveComp

In the S_CloudsComp Plugin.

Generates a procedural noise texture transformed onto a 3D plane with perspective, then combines the texture with the background clip.

Inputs:

Back: The clip to combine the texture image with. This may be ignored if the Combine option is set to Texture Only, but the output clip will default to the same length as this clip.



Parameters:

Frequency: *Default: 2, Range: 0.01 or greater.*

The spatial frequency of the texture. Increase to zoom out, decrease to zoom in.

Frequency Rel X: *Default: 0.4, Range: 0.01 or greater.*

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Octaves: *Integer, Default: 6, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.234, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Shift Start: *X & Y, Default: [0 0], Range: any, Shared.*

Translation offset of the clouds in their initial plane.

Z Dist: *Default: 1, Range: any.*

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it.

Latitude: *Default: -35, Range: any.*

Positive latitude tilts the image down and negative tilts it up. Keep latitude in the range of around -35 to 35 degrees to avoid aliasing towards the horizon.

Swing: *Default: 0, Range: any.*

Rotation of the image in degrees in its initial frame.

Roll: *Default: 0, Range: any.*

Tilts the result from side to side, in counter-clockwise degrees.

Tele Lens Width: *Default: 1, Range: 0.2 or greater.*

The amount of lens telescoping. Increase to zoom in with less perspective, decrease for a wider viewing angle with more perspective.

Shift Speed: *X & Y, Default: [0.5 0], Range: any, Shared.*

Translation speed of the texture. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

Brightness1: *Default: 1, Range: 0 or greater, Shared.*
Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb: [1 1 1], Shared.*
The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between Color0 and Color1.

Color0: *Default rgb: [0 0 0], Shared.*
The color of the 'darker' parts of the texture.

Offset0: *Default: 0, Range: any, Shared.*
Adds this value to color0. Decrease to a negative value for more contrast.

Combine: *Popup menu, Default: Screen.*
Determines how the texture is combined with the Background.

Clouds Only: gives only the clouds texture with no Background.

Mult: the texture is multiplied by the Background.

Add: the texture is added to the Background.

Screen: the texture is blended with the Background using a screen operation.

Difference: the result is the difference between the texture and Background.

Overlay: the texture is combined with the Background using an overlay function.

Scale Back: *Default: 1, Range: any, Shared.*
The background brightness is scaled by this value before being combined with the texture.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[CloudsComp](#)

[CloudsVortexComp](#)

[CloudsMultColorComp](#)

[CloudsColorSmoothComp](#)

[CloudsPsykoComp](#)

[CloudsPerspective](#)

[WarpPerspective](#)

[Sapphire Plug-ins](#)

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CloudsPsyko

In the S_Clouds Plugin.

Generates a procedural noise texture, and passes this through a colorizing process. The Shift Speed parameters cause the pattern to automatically translate over time, and Phase Speed causes the colors to rotate over time.

Inputs:

None

Parameters:

Frequency: *Default: 2, Range: 0.01 or greater.*

The spatial frequency of the clouds. Increase to zoom out, decrease to zoom in. Very high values of Frequency are clamped internally so the grain size is no smaller than a few pixels. If you want even finer grain use S_Grain or S_Clouds:Perspective instead.

Frequency Rel X: *Default: 0.4, Range: 0.01 or greater.*

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Octaves: *Integer, Default: 8, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.23, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Shift Start: *X & Y, Default: [0 0], Range: any, Shared.*

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Color Freq: *Default: 4, Range: 0 or greater.*

The frequency of the color pattern. Increase for a busier texture with more cycles through the spectrum.

Freq Red: *Default: 1, Range: 0 or greater.*

The frequency of the red color component. Increase for more cycles in the red channel.

Freq Green: *Default: 1.1, Range: 0 or greater.*

The frequency of the green color component. Increase for more cycles in the green channel.

Freq Blue: *Default: 1.2, Range: 0 or greater.*

The frequency of the blue color component. Increase for more cycles in the blue channel.

Phase Start: *Default: -0.5, Range: any.*

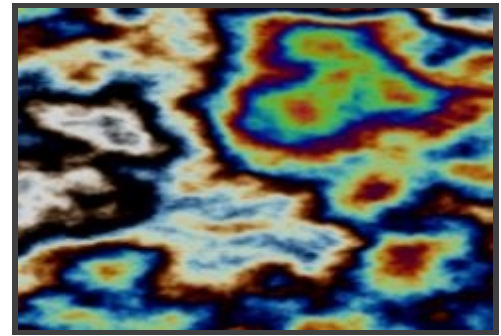
The phase offset of the color patterns.

Shift Speed: *X & Y, Default: [0.5 0], Range: any, Shared.*

Translation speed of the texture. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of the result.



Scale Color: *Default rgb:* [1 1 1].

Scales the color of the result. For example, if it is yellow [1 1 0], the blue of the result will be 0.

Saturation: *Default:* 1, *Range:* 0 or greater.

Scales the strength of the colors. Increase for more intense colors, or decrease for muted colors.

Offset: *Default:* 0, *Range:* any.

Adds this gray value to the result (or subtracts if negative). 0 has no effect, .5 is middle gray, and 1 is white.

Phase Speed: *Default:* 0.3, *Range:* any.

The phase speed of the color patterns. If non-zero, the phase is automatically animated to give the color pattern a boiling look.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Clouds](#)

[CloudsPerspective](#)

[CloudsVortex](#)

[CloudsMultColor](#)

[CloudsColorSmooth](#)

[CloudsPsykoComp](#)

[ZebrafyColor](#)

[PseudoColor](#)

[PsykoBlobs](#)

[PsykoStripes](#)

[Sapphire](#)

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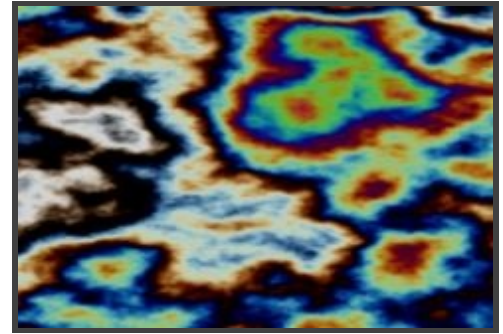
CloudsPsykoComp

In the S_CloudsComp Plugin.

Generates a procedural noise texture, and passes this through a colorizing process, then combines the texture with the background clip.

Inputs:

Back: The clip to combine the clouds image with. This may be ignored if the Combine option is set to Clouds Only, but the output clip will default to the same length as this clip.



Parameters:

Frequency: *Default: 2, Range: 0.01 or greater.*

The spatial frequency of the clouds. Increase to zoom out, decrease to zoom in. Very high values of Frequency are clamped internally so the grain size is no smaller than a few pixels. If you want even finer grain use S_Grain or S_Clouds:Perspective instead.

Frequency Rel X: *Default: 0.4, Range: 0.01 or greater.*

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Octaves: *Integer, Default: 8, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.23, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Shift Start: *X & Y, Default: [0 0], Range: any, Shared.*

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Color Freq: *Default: 4, Range: 0 or greater.*

The frequency of the color pattern. Increase for a busier texture with more cycles through the spectrum.

Freq Red: *Default: 1, Range: 0 or greater.*

The frequency of the red color component. Increase for more cycles in the red channel.

Freq Green: *Default: 1.1, Range: 0 or greater.*

The frequency of the green color component. Increase for more cycles in the green channel.

Freq Blue: *Default: 1.2, Range: 0 or greater.*

The frequency of the blue color component. Increase for more cycles in the blue channel.

Phase Start: *Default: -0.5, Range: any.*

The phase offset of the color patterns.

Shift Speed: *X & Y, Default: [0.5 0], Range: any, Shared.*

Translation speed of the texture. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

Brightness: *Default: 1, Range: 0 or greater.*
Scales the brightness of the result.

Scale Color: *Default rgb: [1 1 1].*
Scales the color of the result. For example, if it is yellow [1 1 0], the blue of the result will be 0.

Saturation: *Default: 1, Range: 0 or greater.*
Scales the strength of the colors. Increase for more intense colors, or decrease for muted colors.

Offset: *Default: 0, Range: any.*
Adds this gray value to the result (or subtracts if negative). 0 has no effect, .5 is middle gray, and 1 is white.

Phase Speed: *Default: 0.3, Range: any.*
The phase speed of the color patterns. If non-zero, the phase is automatically animated to give the color pattern a boiling look.

Combine: *Popup menu, Default: Screen.*
Determines how the texture is combined with the Background.

Clouds Only: gives only the clouds texture with no Background.

Mult: the texture is multiplied by the Background.

Add: the texture is added to the Background.

Screen: the texture is blended with the Background using a screen operation.

Difference: the result is the difference between the texture and Background.

Overlay: the texture is combined with the Background using an overlay function.

Scale Back: *Default: 1, Range: any, Shared.*
The background brightness is scaled by this value before being combined with the clouds.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[CloudsComp](#)

[CloudsPerspectiveComp](#)

[CloudsVortexComp](#)

[CloudsMultColorComp](#)

[CloudsColorSmoothComp](#)

[CloudsPsyko](#)

[ZebraFyColor](#)

[PseudoColor](#)

[PsykoBlobs](#)

[PsykoStripes](#)

[Sapphire](#)

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CloudsVortex

In the S_Clouds Plugin.

Generates a procedural noise texture twisting into a vortex. The Vortex Speed parameter causes the amount of vortex rotation to automatically animate over time.

Inputs:

None

Parameters:

Frequency: *Default: 2, Range: 0.01 or greater.*

The spatial frequency of the texture. Increase to zoom out, decrease to zoom in.

Frequency Rel X: *Default: 1, Range: 0.01 or greater.*

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Octaves: *Integer, Default: 6, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.234, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Center: *X & Y, Default: [0 0], Range: any.*

The center of the vortex, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Vortex Start: *Default: 72, Range: any.*

The amount of vortex rotation, in approximate counter-clockwise degrees at the edge of the frame.

Vortex Speed: *Default: 30, Range: any.*

The speed of the vortex rotation, in approximate degrees per second at the edge of the frame. If non-zero, the vortexing is automatically animated at this rate.

Inner Radius: *Default: 0.04, Range: 0 or greater.*

The radius from the center at which the vortexing is phased in. This can be used to reduce excessive distortion and aliasing at the very center of the vortex.

Angle Offset: *Default: 0, Range: any.*

If non-zero, a rotation is combined with the vortex. Make negative to rotate the inner and outer regions in opposite directions.

Z Dist: *Default: 1, Range: any.*

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it.

Latitude: *Default: 30, Range: any.*

Positive latitude tilts the image down and negative tilts it up. Keep latitude in the range of around -35 to 35 degrees to avoid aliasing towards the horizon.



Brightness1: *Default: 1, Range: 0 or greater, Shared.*
Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb: [1 1 1], Shared.*
The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between Color0 and Color1.

Color0: *Default rgb: [0 0 0], Shared.*
The color of the 'darker' parts of the texture.

Offset0: *Default: 0, Range: any, Shared.*
Adds this value to color0. Decrease to a negative value for more contrast.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Clouds](#)
[CloudsPerspective](#)
[CloudsMultColor](#)
[CloudsColorSmooth](#)
[CloudsPsyko](#)

[CloudsVortexComp](#)

[WarpVortex](#)
[Sapphire Plug-ins](#)
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CloudsVortexComp

In the S_CloudsComp Plugin.

Generates a procedural noise texture twisting into a vortex, then combines the texture with the background clip.

Inputs:

Back: The clip to combine the texture image with. This may be ignored if the Combine option is set to Texture Only, but the output clip will default to the same length as this clip.



Parameters:

Frequency: *Default: 2, Range: 0.01 or greater.*

The spatial frequency of the texture. Increase to zoom out, decrease to zoom in.

Frequency Rel X: *Default: 1, Range: 0.01 or greater.*

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Octaves: *Integer, Default: 6, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.234, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Center: *X & Y, Default: [0 0], Range: any.*

The center of the vortex, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Vortex Start: *Default: 72, Range: any.*

The amount of vortex rotation, in approximate counter-clockwise degrees at the edge of the frame.

Vortex Speed: *Default: 30, Range: any.*

The speed of the vortex rotation, in approximate degrees per second at the edge of the frame. If non-zero, the vortexing is automatically animated at this rate.

Inner Radius: *Default: 0.04, Range: 0 or greater.*

The radius from the center at which the vortexing is phased in. This can be used to reduce excessive distortion and aliasing at the very center of the vortex.

Angle Offset: *Default: 0, Range: any.*

If non-zero, a rotation is combined with the vortex. Make negative to rotate the inner and outer regions in opposite directions.

Z Dist: *Default: 1, Range: any.*

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it.

Latitude: *Default: 30, Range: any.*

Positive latitude tilts the image down and negative tilts it up. Keep latitude in the range of around -35 to 35 degrees to avoid aliasing towards the horizon.

Brightness1: *Default: 1, Range: 0 or greater, Shared.*
Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb: [1 1 1], Shared.*
The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between Color0 and Color1.

Color0: *Default rgb: [0 0 0], Shared.*
The color of the 'darker' parts of the texture.

Offset0: *Default: 0, Range: any, Shared.*
Adds this value to color0. Decrease to a negative value for more contrast.

Combine: *Popup menu, Default: Screen.*
Determines how the texture is combined with the Background.

Clouds Only: gives only the clouds texture with no Background.

Mult: the texture is multiplied by the Background.

Add: the texture is added to the Background.

Screen: the texture is blended with the Background using a screen operation.

Difference: the result is the difference between the texture and Background.

Overlay: the texture is combined with the Background using an overlay function.

Scale Back: *Default: 1, Range: any, Shared.*
The background brightness is scaled by this value before being combined with the texture.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[CloudsComp](#)

[CloudsPerspectiveComp](#)

[CloudsMultColorComp](#)

[CloudsColorSmoothComp](#)

[CloudsPsykoComp](#)

[CloudsVortex](#)

[WarpVortex](#)

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ColorOps: ChannelSwitcher

In the S_ColorOps Plugin.

Reorders the RGB channels of the source clip. Allows mapping any source channel into any output channel, with scaling and offset for each output channel. Use the Red, Green, and Blue popup menus to select the results for each output channel.



Inputs:

Source: The clip to be processed.

Parameters:

Scale Lights R: *Default: 1, Range: any.*

Scales the brightness of the output red channel by this amount.

Scale Lights G: *Default: 1, Range: any.*

Scales the brightness of the output green channel by this amount.

Scale Lights B: *Default: 1, Range: any.*

Scales the brightness of the output blue channel by this amount.

Offset Darks R: *Default: 0, Range: any.*

Adds this value to the darker regions of the red output channel. This can be negative to increase contrast.

Offset Darks G: *Default: 0, Range: any.*

Adds this value to the darker regions of the green output channel. This can be negative to increase contrast.

Offset Darks B: *Default: 0, Range: any.*

Adds this value to the darker regions of the blue output channel. This can be negative to increase contrast.

Red <-: *Popup menu, Default: RED.*

Selects which channel of the source to use as the output red channel.

RED: Use the red input channel as the source for this output channel.

GREEN: Use the green input channel as the source for this output channel.

BLUE: Use the blue input channel as the source for this output channel.

LUMA: Use the input luminance as the source for this output channel.

1: Use a constant 1 value (fully on) as the source for this output channel.

0: Use a constant 0 value (fully off) as the source for this output channel.

Green <-: *Popup menu, Default: GREEN.*

Selects which channel of the source to use as the output green channel.

Blue <-: *Popup menu, Default: BLUE.*

Selects which channel of the source to use as the output blue channel.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[HueSatBright](#)
[Monochrome](#)
[ClampChroma](#)
[PseudoColor](#)
[DuoTone](#)
[TriTone](#)
[QuadTone](#)
[Tint](#)
[Threshold](#)
[Hotspots](#)
[Gamma](#)
[Solarize](#)
[ShowBadColors](#)
[Invert](#)

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ColorOps: ClampChroma

In the S_ColorOps Plugin.

Reduces the chrominance of the input clip if necessary so it is not above a specified maximum. This effect can be used to make 'broadcast safe' colors. It also can be used to scale the chrominance, clamp the luminance, or scale the luminance.



Inputs:

Source: The clip to be processed.

Parameters:

Clamp Chroma: *Default: 0.5, Range: 0 or greater.*

The maximum chrominance value. 1 is fully saturated and 0 is with no color. Source chrominance values below this will not be affected, but those above it will be reduced to it.

Scale Chroma: *Default: 1, Range: 0 or greater.*

Scales the chrominance of all pixels. If this is 1 it will have no effect.

Clamp Luma: *Default: 1, Range: 0 or greater.*

The maximum luminance value. Source pixels brighter than this limit will be reduced to it. Values below it will not be affected. If this is 1 it will have no effect.

Scale Luma: *Default: 1, Range: 0 or greater.*

Scales the brightness of all pixels. If this is 1 it will have no effect.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[HueSatBright](#)

[Monochrome](#)

[PseudoColor](#)

[DuoTone](#)

[TriTone](#)

[QuadTone](#)

[Tint](#)

[Threshold](#)

[Hotspots](#)

[Gamma](#)

[Solarize](#)

[ChannelSwitcher](#)

[ShowBadColors](#)

[Invert](#)

[BlurChroma](#)

[Sapphire](#)

[Plug-ins](#)

[Introduction](#)

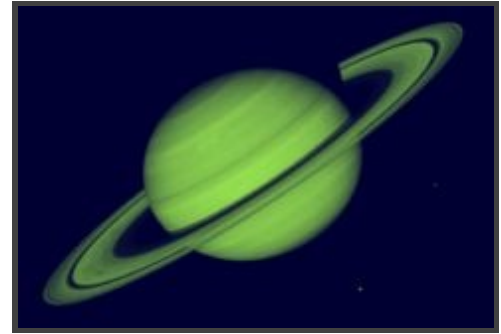
ColorOps: DuoTone

In the S_ColorOps Plugin.

Performs an interpolation between two specified colors using the brightness of the source clip.

Inputs:

Source: The clip to be processed.



Parameters:

Threshold: *Default:* 0.5, *Range:* any.

The source brightness value to use as the mid-point of the color interpolation. This is often a middle gray around 0.5.

Softness: *Default:* 1, *Range:* 0.001 or greater.

The source brightness distance over which to perform the Color0 to Color1 interpolation. Decrease for sharper transitions between the two colors.

Color1: *Default rgb:* [1 0.9 0.8].

The color to use at the brighter source regions.

Color0: *Default rgb:* [0 0 0.2].

The color to use at the darker source regions.

Invert: *Check-box, Default:* off.

If enabled, the resulting texture colors are inverted. This is similar to swapping Color0 and Color1.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[HueSatBright](#)

[Monochrome](#)

[ClampChroma](#)

[PseudoColor](#)

[TriTone](#)

[QuadTone](#)

[Tint](#)

[Threshold](#)

[Hotspots](#)

[Gamma](#)

[Solarize](#)

[ChannelSwitcher](#)

[ShowBadColors](#)

[Invert](#)

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ColorOps: Gamma

In the S_ColorOps Plugin.

Applies a gamma correction to the input clip. The red, green, and blue channels can be adjusted independently. From Gamma just causes the inverse effect of adjusting Gamma.

Inputs:

Source: The clip to be processed.



Parameters:

Gamma: *Default: 1, Range: 0 or greater.*

Values greater than 1.0 make the mid-tones brighter, values less than 1.0 make them darker, 1.0 leaves the input unchanged.

From Gamma: *Default: 1, Range: 0 or greater.*

Divides the Gamma by this value before processing. This can be useful if your image was correct at this gamma, but needs to be adjusted from this to a new gamma.

Scale Lights: *Default: 1, Range: 0 or greater.*

Scales the brightness by this amount after the gamma correction. Increase for a brighter result.

Offset Darks: *Default: 0, Range: any.*

Adds this gray value to the darker regions after the gamma correction. This can be negative to increase contrast.

Gamma Red: *Default: 1, Range: 0.1 or greater.*

Brightens or darkens the red mid-tones.

Gamma Green: *Default: 1, Range: 0.1 or greater.*

Brightens or darkens the green mid-tones.

Gamma Blue: *Default: 1, Range: 0.1 or greater.*

Brightens or darkens the blue mid-tones.

Params2:

Scale Lights R: *Default: 1, Range: 0 or greater.*

Scales the red by this amount after the gamma correction.

Scale Lights G: *Default: 1, Range: 0 or greater.*

Scales the green by this amount after the gamma correction.

Scale Lights B: *Default: 1, Range: 0 or greater.*

Scales the blue by this amount after the gamma correction.

Offset Darks R: *Default: 0, Range: any.*

Adds this red value to the darker red regions after the gamma correction. This can be negative to increase contrast.

Offset Darks G: *Default: 0, Range: any.*

Adds this green value to the darker green regions after the gamma correction. This can be negative to increase contrast.

Offset Darks B: *Default:* 0, *Range:* any.

Adds this blue value to the darker blue regions after the gamma correction. This can be negative to increase contrast.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[HueSatBright](#)

[Monochrome](#)

[ClampChroma](#)

[PseudoColor](#)

[DuoTone](#)

[TriTone](#)

[QuadTone](#)

[Tint](#)

[Threshold](#)

[Hotspots](#)

[Solarize](#)

[ChannelSwitcher](#)

[ShowBadColors](#)

[Invert](#)

[DissolveFilm](#)

[Sapphire](#)

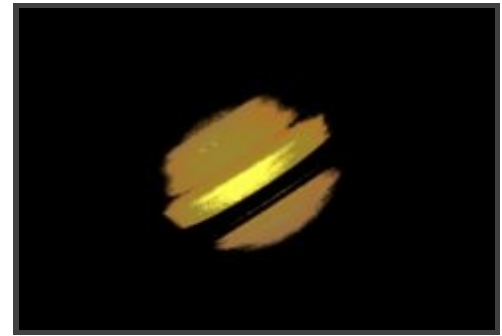
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ColorOps: Hotspots

In the S_ColorOps Plugin.

Generates a hotspot image containing areas of the source clip brighter than a given threshold. The colors of the hotspots should match the original source. This can be used for increasing contrast or finding the bright areas of a clip, but without changing the color saturation or hue of the result.



Inputs:

Source: The clip to be processed.

Parameters:

Blur Input: *Default:* 0, *Range:* 0 or greater.

Allows smaller spots to be smoothed away before the hotspots are determined.

Brightness: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the result.

Saturation: *Default:* 1, *Range:* 0 or greater.

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Threshold: *Default:* 0.7, *Range:* 0 or greater.

Include hotspots at any source areas that are brighter than this value.

Threshold Add Color: *Default rgb:* [0 0 0].

This can be used to raise the threshold on a specific color and thereby reduce the hotspots generated on areas of the source clip containing that color.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[HueSatBright](#)

[Monochrome](#)

[ClampChroma](#)

[PseudoColor](#)

[DuoTone](#)

[TriTone](#)

[QuadTone](#)

[Tint](#)

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[ShowBadColors](#)

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[Plug-ins](#)

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ColorOps: HueSatBright

In the S_ColorOps Plugin.

Adjusts the hue, saturation, brightness, and/or offset of the input clip.

Inputs:

Source: The clip to be processed.



Parameters:

Hue Shift: *Default: 0, Range: any.*

Shifts the hue of the source colors, in revolutions from red to green to blue to red.

Saturation: *Default: 1, Range: any.*

Scales the color saturation of the result. Increase for more intense colors. Set to 0 for monochrome. You can also invert the chroma of the result by making this negative.

Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of the result.

Offset Darks: *Default: 0, Range: any.*

Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

Scale Colors: *Default rgb: [1 1 1].*

Scales the color of the result. For example, if it is yellow [1 1 0], the blue of the result will be 0.

Preserve Luma: *Check-box, Default: off.*

Enable this to preserve the brightness values of the input image after the hue is shifted.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Monochrome](#)

[ClampChroma](#)

[PseudoColor](#)

[DuoTone](#)

[TriTone](#)

[QuadTone](#)

[Tint](#)

[Threshold](#)

[Hotspots](#)

[Gamma](#)

[Solarize](#)

[ChannelSwitcher](#)

[ShowBadColors](#)

[Invert](#)

[Flicker](#)

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ColorOps: Invert

In the S_ColorOps Plugin.

Inverts the RGB channels, luma, and/or chroma of the source clip, and performs some basic color correction on the inverted result.

Inputs:

Source: The clip to be processed.



Parameters:

Scale Lights: *Default: 1, Range: 0 or greater.*
Scales the result by this value. Increase for a brighter result.

Offset Darks: *Default: 0, Range: any.*
Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

Saturation: *Default: 1, Range: any.*
Scales the chroma saturation of the result. If this is zero you will see only color from the tint colors.

Tint Lights: *Default rgb: [1 1 1].*
Scales the result by this color, thus tinting the lighter regions.

Tint Darks: *Default rgb: [0 0 0].*
Adds this color to the darker regions of the result. Set this to a dark red-orange color for a negative-film effect look.

Invert Luma: *Check-box, Default: on.*
Inverts the brightness if this is enabled. Unselect to invert only the chroma.

Invert Chroma: *Check-box, Default: on.*
Inverts the chroma if this is enabled. Unselect to invert only the luma.

Params2:

Invert Red: *Check-box, Default: off.*
Inverts the red channel if this is enabled. If Invert Luma/Chroma are also selected, the red channel is un-inverted.

Invert Green: *Check-box, Default: off.*
Inverts the green channel if this is enabled. If Invert Luma/Chroma are also selected, the green channel is un-inverted.

Invert Blue: *Check-box, Default: off.*
Inverts the blue channel if this is enabled. If Invert Luma/Chroma are also selected, the blue channel is un-inverted.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[HueSatBright](#)
[Monochrome](#)
[ClampChroma](#)

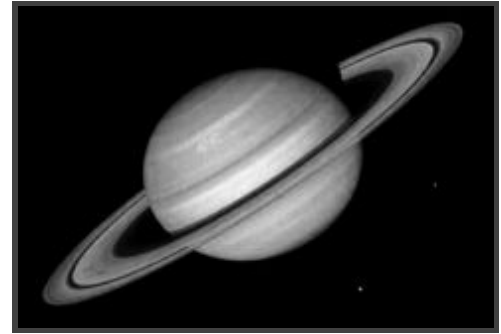
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ColorOps: Monochrome

In the S_ColorOps Plugin.

Generates a monochrome version of the source clip using adjustable weights for the red, green, and blue channels. This can simulate the use of a color filter applied to the lens of a black and white camera. For example, use more red weight to darken blue sky areas of the input. The weights are scaled so they sum to 1 before being used to reduce overall brightness changes when they are adjusted.



Inputs:

Source: The clip to be processed.

Parameters:

Weight Red: *Default:* 0.3, *Range:* any.

The relative contribution of the source's red channel. To simulate a black and white exposure using a red filter, set this to 1 and set the green and blue weights to 0.

Weight Green: *Default:* 0.6, *Range:* any.

The relative contribution of the source's green channel.

Weight Blue: *Default:* 0.2, *Range:* any.

The relative contribution of the source's blue channel

Brightness: *Default:* 1, *Range:* any.

Scales the brightness of the result.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[HueSatBright](#)

[ClampChroma](#)

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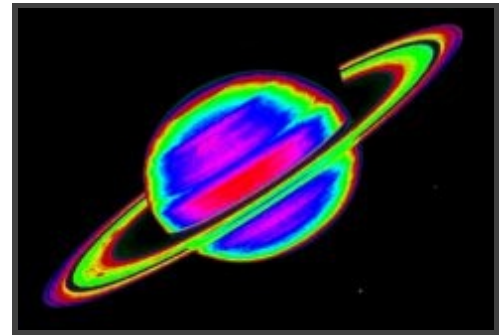
ColorOps: PseudoColor

In the S_ColorOps Plugin.

Colorizes the source image. The hue is calculated from the brightness of the source.

Inputs:

Source: The clip to be processed.



Parameters:

Frequency: *Default: 2, Range: 0 or greater.*

The frequency of the colorization. Increase for more cycles of hue through the spectrum, decrease for fewer.

Hue Shift: *Default: 0, Range: any.*

Shift the color hues by this amount.

Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of the result.

Saturation: *Default: 1, Range: 0 or greater.*

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Scale By Source: *Default: 1, Range: 0 to 1.*

The brightness of the output is scaled down by the original source brightness as this is increased to 1.

Scale By Src Amp: *Default: 1, Range: 0 or greater.*

This amplifies the effect of Scale By Source, so if increased above 1, the middle grays can still retain their full brightness. It has no effect unless Scale By Source is positive.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[HueSatBright](#)

[Monochrome](#)

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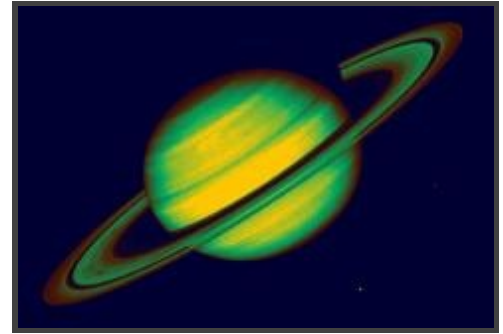
ColorOps: QuadTone

In the S_ColorOps Plugin.

Performs an interpolation between four specified colors using the brightness of the source clip.

Inputs:

Source: The clip to be processed.



Parameters:

Softness: *Default: 1, Range: 0.001 or greater, Shared.*

The softness of the interpolation between the three colors. Use lower values for sharper contours between more solid regions of color.

Softness 01: *Default: 1, Range: 0.001 or greater, Shared.*

Scales the softness of the interpolation between color0 and color1.

Softness 12: *Default: 1, Range: 0.001 or greater, Shared.*

Scales the softness of the interpolation between color1 and color2.

Softness 23: *Default: 1, Range: 0.001 or greater, Shared.*

Scales the softness of the interpolation between color2 and color3.

Color0 At Bright: *Default: 0, Range: any.*

The source brightness value to replace with color0.

Color1 At Bright: *Default: 0.33, Range: any.*

The source brightness value to replace with color1. This value should normally be in between the color0 and color2 At Bright values.

Color0: *Default rgb: [0 0 0].*

The color to use at the darker source regions.

Color1: *Default rgb: [0.33 0.33 0.33].*

The color to use at the dark gray source regions.

Color2: *Default rgb: [0.66 0.66 0.66].*

The color to use at the light gray source regions.

Color3: *Default rgb: [1 1 1].*

The color to use at the brighter source regions.

Color2 At Bright: *Default: 0.66, Range: any.*

The source brightness value to replace with color2. This value should normally be in between the color1 and color3 At Bright values.

Color3 At Bright: *Default: 1, Range: any.*

The source brightness value to replace with color3.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[DuoTone](#)

[TriTone](#)

[Tint](#)

[Sapphire Plug-ins](#)

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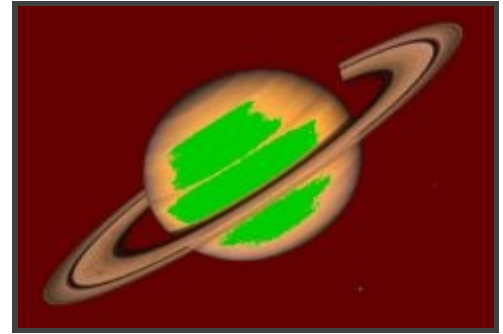
ColorOps: ShowBadColors

In the S_ColorOps Plugin.

Identifies all pixels that fall outside a given color range, and flags them with the same color so they can be seen easily.

Inputs:

Source: The clip to be processed.



Parameters:

Min: *Default:* 0, *Range:* any.

Minimum color value. Pixels where any color channel is less than this value will be marked with Low Color.

Max: *Default:* 1, *Range:* any.

Maximum color value. Pixels where any color channel is greater than this value will be marked with High Color.

Min Luma: *Default:* 0, *Range:* any.

Minimum luminance value. Pixels where the luminance is less than this value will be marked with Low Color.

Max Luma: *Default:* 1, *Range:* any.

Maximum luminance value. Pixels where the luminance is greater than this value will be marked with High Color.

High Color: *Default rgb:* [1 0 0].

Color to mark high pixels with. Any pixel that is above one of the Max parameters will be set to this color.

Low Color: *Default rgb:* [0 0 1].

Color to mark low pixels with. Any pixel that is below one of the Min parameters will be set to this color.

Min Rgb: *Default rgb:* [0 0 0].

Minimum values per color channel. Pixels where any color channel is below the corresponding channel of this parameter will be marked with Low Color.

Max Rgb: *Default rgb:* [1 1 1].

Maximum values per color channel. Pixels where any color channel is above the corresponding channel of this parameter will be marked with High Color.

Min Chroma: *Default:* 0, *Range:* any.

Minimum chrominance value. Pixels where the chroma is less than this value will be marked with Low Color.

Max Chroma: *Default:* 1, *Range:* any.

Maximum chrominance value. Pixels where the chroma is greater than this value will be marked with High Color.

Output Matte: *Check-box, Default:* off.

If enabled, output a matte which is set to white for bad pixels and black otherwise.

Invert Matte: *Check-box, Default:* off.

If enabled, the matte is inverted to show black for bad pixels and white otherwise. Has no effect unless Output Matte is also enabled.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[HueSatBright](#)

[Monochrome](#)

[ClampChroma](#)

[PseudoColor](#)

[DuoTone](#)

[TriTone](#)

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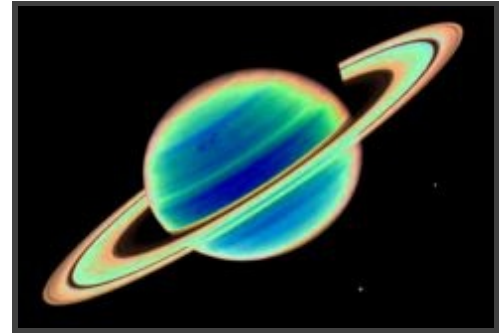
ColorOps: Solarize

In the S_ColorOps Plugin.

Inverts the colors of the input clip that are brighter than the Threshold value, to create a 'solarization' effect.

Inputs:

Source: The clip to be processed.



Parameters:

Threshold: *Default: 0.5, Range: 0 or greater.*

Colors above this value are inverted. If this is 0, all colors are inverted to produce a negative. If this is 1, no colors are inverted and the result should equal the input.

Brightness: *Default: 2, Range: 0 or greater.*

Scales the brightness of the result. Note that if a Threshold of .5 is used, no colors will be more than half the maximum brightness, so the contrast is increased by setting the Brightness to 2.

Offset Darks: *Default: 0, Range: any.*

Adds this gray value to the darker regions after the solarize effect. This can be negative to increase contrast.

Saturation: *Default: 1, Range: any.*

Scales the color saturation of the result. Increase for more intense colors. Set to 0 for monochrome. You can also invert the chroma of the result by making this negative.

Invert: *Check-box, Default: off.*

If enabled, the result is inverted. The invert is applied before the Brightness and Offset are used, so you may need to readjust those parameters when you change the invert option.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[HueSatBright](#)

[Monochrome](#)

[ClampChroma](#)

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ColorOps: Threshold

In the S_ColorOps Plugin.

Sets the color channels of the source clip to full on or full off using a given softness and threshold. This can be used to increase the contrast of each color channel independently.

Inputs:

Source: The clip to be processed.



Parameters:

Softness: *Default:* 0.2, *Range:* 0.001 or greater.

The softness of the transition between full off and on. Increase for smoother transitions, decrease for sharper ones.

Soft Rel Red: *Default:* 1, *Range:* 0 or greater.

The relative softness of the red thresholding.

Soft Rel Green: *Default:* 1, *Range:* 0 or greater.

The relative softness of the red thresholding.

Soft Rel Blue: *Default:* 1, *Range:* 0 or greater.

The relative softness of the red thresholding.

Threshold: *Default:* 0.5, *Range:* 0 or greater.

The source brightness value to use as the mid-point of the thresholding. This is often a middle gray around .5.

Threshold Add Color: *Default rgb:* [0 0 0].

Raises the thresholds on each color channel using this color. It has no effect when black.

Saturation: *Default:* 1, *Range:* 0 or greater.

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[HueSatBright](#)

[Monochrome](#)

[ClampChroma](#)

[PseudoColor](#)

[DuoTone](#)

[TriTone](#)

[QuadTone](#)

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ColorOps: Tint

In the S_ColorOps Plugin.

Tints the dark and light regions of the input clip towards given colors. The dark colors are tinted by the Tint Dark color, and the brighter colors are tinted by the Tint Lights color.

Inputs:

Source: The clip to be processed.



Parameters:

Scale Lights: *Default: 1, Range: 0 or greater.*

Scales the result by this gray value. Increase for a brighter result.

Offset Darks: *Default: 0, Range: any.*

Adds this gray value to the darker regions of the source. This can be negative to increase contrast.

Src Saturation: *Default: 1, Range: 0 or greater.*

Scales the chroma saturation of the source. If this is zero you will see only color from the given tint colors.

Tint Lights: *Default rgb: [1 1 1].*

Scales the result by this color, thus tinting the lighter regions.

Tint Darks: *Default rgb: [0 0 0].*

Adds this color to the darker regions of the source.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[HueSatBright](#)

[Monochrome](#)

[ClampChroma](#)

[PseudoColor](#)

[DuoTone](#)

[TriTone](#)

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ColorOps: TriTone

In the S_ColorOps Plugin.

Performs an interpolation between three specified colors using the brightness of the source clip.

Inputs:

Source: The clip to be processed.



Parameters:

Softness: *Default: 1, Range: 0.001 or greater, Shared.*

The softness of the interpolation between the three colors. Use lower values for sharper contours between more solid regions of color.

Softness 01: *Default: 1, Range: 0.001 or greater, Shared.*

Scales the softness of the interpolation between color0 and color1.

Softness 12: *Default: 1, Range: 0.001 or greater, Shared.*

Scales the softness of the interpolation between color1 and color2.

Color0 At Bright: *Default: 0, Range: any.*

The source brightness value to replace with color0.

Color1 At Bright: *Default: 0.5, Range: any.*

The source brightness value to replace with color1. This value should normally be in between the other two.

Color2 At Bright: *Default: 1, Range: any.*

The source brightness value to replace with color2.

Color0: *Default rgb: [0 0 0].*

The color to use at the darker source regions.

Color1: *Default rgb: [0.5 0.5 0.5].*

The color to use at the mid tone source regions.

Color2: *Default rgb: [1 1 1].*

The color to use at the brighter source regions.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[DuoTone](#)

[QuadTone](#)

[Tint](#)

[Sapphire Plug-ins](#)

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Convolve

Convolves a source image with a kernel. Convolution is a mathematical operator which uses one image, the kernel, as a filter shape for another image (the source). Convolution effectively stamps a copy of the kernel at each point of the source, using the source's brightness at that point. The effect is that a copy of the kernel will appear over all the bright spots of the source. A kernel image shaped like a circle or polygon will give an effect similar to RackDefocus; a kernel image shaped like a starburst can give something like Glare.



Inputs:

Source: The clip to be processed.

Kernel: The filter kernel or shape for the convolution. This should normally be all black around the edges (outside the specified Kernel Crop region), with a non-black central part. A larger shape normally produces blurrier results. Only the part of the kernel within the two Kernel Crop params is considered; the part outside that boundary is ignored.

Parameters:

Kernel Size: *Default:* 1, *Range:* 0 or greater.

Kernel Size resizes the kernel larger or smaller. 1.0 is the original size. This parameter can be adjusted using the Kernel Size/Center Widget.

Size Rel X: *Default:* 1, *Range:* 0 or greater.

Increase to make the kernel fatter or wider without changing its height. Decrease to shrink it horizontally, making it thinner.

Size Rel Y: *Default:* 1, *Range:* 0 or greater.

Increase to make the kernel taller without changing its weight. Decrease to shrink it vertically, making it flatter.

Kernel Center: *X & Y, Default:* [0 0], *Range:* any.

The center point of the kernel; if you think of convolution as repeated stamping of the kernel at each point of the source, the center is where the stamp aligns with the source pixels it's stamped over. If you move the center to the right in the kernel, the whole result image will move to the left, and similarly up and down. This parameter is ignored if AutoCenter is on. It may be helpful to turn on Show Kernel while adjusting this parameter. Note that if Autocenter is off, the center point is always included in the kernel no matter what this param is set to. This parameter can be adjusted using the Kernel Center Widget.

Autocenter: *Check-box, Default:* on.

Automatically finds the center of the kernel image. Turning this on makes the effect ignore the Kernel Center parameter.

Boost Highlights: *Default:* 0, *Range:* 0 or greater, *Shared.*

The amount to increase the luma of the highlights in the source clip. Increase this parameter to blow out the highlights without affecting the darks or mid-tones.

Use Color Kernel: *Check-box, Default:* off.

Use each color channel of the kernel independently. Turn this on if your kernel is not just black and white and you want the colors of the kernel to be used in the convolution. Turn off for fastest rendering.

Autoscale: *Popup menu, Default: Max Channel.*

In convolution, either a larger or brighter kernel will make the result image brighter. The kernel must be auto-scaled or normalized so the result is, on average, as bright as the input. The autoscaling can be done in several ways, each of which is best in certain circumstances. With a monochrome kernel or with Color Kernel turned off, Max Channel, Luma, and Indep Channels all give the same result.

Max Channel: Autoscales the kernel by summing the elements of each channel, and using whichever is brightest as the overall kernel scale factor. This normalizes a dim kernel to full brightness, and generally preserves the color of the kernel, but allows brightness variations in the dimmer channels to show in the result.

Luma: Autoscales the kernel by summing the luminances of each kernel pixel. This method preserves changes in the kernel's hue, but normalizes the luma, so a brighter or darker kernel will have no effect. Use the Scale parameter to adjust the result brightness.

Indep Channels: Independently normalizes each color channel of the kernel. A colored kernel will give a white/gray result with this method. Use this method if your kernel channels are independent of each other (i.e. different things going on in each of R, G, and B) but you want normalized results in each channel.

Count Nonzero: Count how many kernel pixels are nonzero (brighter than black), but otherwise ignore how bright they are. This method is best if you want variations in kernel hue and luma to show up in the result. But blurring the kernel will give a dimmer result, since there will be more nonzero pixels.

Kernel Size: Ignore the pixel *values* entirely; only use the size of the kernel rectangle to auto-scale. Use this if you want all kernel variations to show up in the result, but don't use it if you intend to animate Kernel Crop1 and Crop2, as that would affect the result's brightness.

Kernel Threshold: *Default: 0.001, Range: 0 or greater.*

Any kernel value below this will be treated as black. It's important for the edges of the kernel image to be completely black, or the result will have a grayish cast to it. If your kernel image may have a little noise in the black areas, turn up threshold a little to remove that background noise.

Clamp Below Threshold: *Check-box, Default: on.*

When turned on, values below the threshold are clamped to zero. This usually gives the best result. For certain special cases with partially-negative kernels, turning this off gives you additional flexibility in designing your kernel.

Edge Mode: *X & Y, Popup menu, Default: [BLACK BLACK].*

Determines the behavior when accessing areas outside the source image.

BLACK: Areas outside the source image are treated as black, which can produce dark areas around the edges of the image. Select this for fastest rendering.

REPEAT: Repeats the last pixel outside the border of the image.

REFLECT: Reflects the image outside the border.

Hilite Threshold: *Default: 0.9, Range: 0 or greater, Shared.*

The minimum luma value for highlights. Pixels brighter than this will be brightened according to the Boost Highlights parameter.

Use Gamma: *Default: 1, Range: 0.1 or greater.*

Values above 1 cause highlights in the source clip to keep their brightness after the convolution filter is applied.

Threshold: *Default: 0, Range: 0 or greater.*

Any source value below this will be treated as black. When combining the convolved result with the original, you can increase this value to only convolve bright areas of the source. Typically when using this parameter, you will also set Combine to Screen or Add to get a glare-like effect.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the convolved result generated on areas of the source clip containing that color.

Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of the result.

Mix With Source: *Default: 0, Range: 0 to 1.*

Interpolates between the convolved result (0) and the original source (1). 0.1 can give a nice misty effect since it mixes only a little of the source in.

Combine: *Popup menu, Default: Convolve Only.*

Determines how the convolved image is combined with the original source.

Convolve Only: Only show the convolved image. Use this option for a blur or defocus-like effect

Screen: Screen the convolved image with the original source. Use this option for a glow or glare-like effect.

Add: Add the convolved image to the original source.

Difference: Show the difference between the convolved image and the source.

Show Kernel: *Check-box, Default: off.*

Show the kernel over the result, for easier adjustment of kernel parameters. Turn this off for final rendering.

Params2:

Kernel Crop1 X: *Default: 0, Range: any, Shared.*

With Kernel Crop1 Y, forms upper left corner of the kernel area. Parts of the kernel image outside the rectangle defined by Kernel Crop1 and Kernel Crop2 are assumed to be black. Making this area smaller to avoid processing the kernel's black edges can speed up the convolution somewhat. It may be helpful to turn on Show Kernel while adjusting this parameter. Note that if Autocenter is off, the center point is always included in the kernel no matter what this param is set to.

Kernel Crop1 Y: *Default: 0, Range: any, Shared.*

Upper left Y coord of kernel crop rect.

Kernel Crop2 X: *Default: 1e+04, Range: any, Shared.*

The lower right X corner of the kernel area; see Kernel Crop1.

Kernel Crop2 Y: *Default: 1e+04, Range: any, Shared.*

The lower right Y corner of the kernel area; see Kernel Crop1.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[ConvolveComp](#)

[RackDefocus](#)

[Glare](#)

[Glint](#)

[Sapphire Plug-ins](#)

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ConvolveComp

Convolves front and back images with a kernel, and composites them using a matte. Convolution is a mathematical operator which uses one image, the kernel, as a filter shape for another image (the source). Convolution effectively stamps a copy of the kernel at each point of the source, using the source's brightness at that point. The effect is that a copy of the kernel will appear over all the bright spots of the source. A kernel image shaped like a circle or polygon will give an effect similar to RackDefocusComp; a kernel image shaped like a starburst can give something like GlareComp.



The kernel size can vary between front and back so either or both can be blurred.

Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip. Only the red channel of this input is used.

Kernel: The filter kernel or shape for the convolution. This should normally be all black around the edges (outside the specified Kernel Crop region), with a non-black central part. A larger shape normally produces blurrier results. Only the part of the kernel within the two Kernel Crop params is considered; the part outside that boundary is ignored.

Parameters:

Size Front: *Default:* 1, *Range:* 0 or greater.

Size Front resizes the kernel larger or smaller when convolving the Front clip. 1.0 is the original size. This parameter can be adjusted using the Size Front Widget.

Size Back: *Default:* 0, *Range:* 0 or greater.

Size Back resizes the kernel larger or smaller when convolving the Back clip. This parameter can be adjusted using the Size Back Widget.

Size Rel X: *Default:* 1, *Range:* 0 or greater.

Increase to make the kernel fatter or wider without changing its height. Decrease to shrink it horizontally, making it thinner.

Size Rel Y: *Default:* 1, *Range:* 0 or greater.

Increase to make the kernel taller without changing its weight. Decrease to shrink it vertically, making it flatter.

Kernel Center: *X & Y, Default:* [0 0], *Range:* any.

The center point of the kernel; if you think of convolution as repeated stamping of the kernel at each point of the source, the center is where the stamp aligns with the source pixels it's stamped over. If you move the center to the right in the kernel, the whole result image will move to the left, and similarly up and down. This parameter is ignored if AutoCenter is on. It may be helpful to turn on Show Kernel while adjusting this parameter. Note that if Autocenter is off, the center point is always included in the kernel no matter what this param is set to. This parameter can be adjusted using the Kernel Center Widget.

Autocenter: *Check-box, Default: on.*

Automatically finds the center of the kernel image. Turning this on makes the effect ignore the Kernel Center parameter.

Use Color Kernel: *Check-box, Default: off.*

Use each color channel of the kernel independently. Turn this on if your kernel is not just black and white and you want the colors of the kernel to be used in the convolution. Turn off for fastest rendering.

Autoscale: *Popup menu, Default: Max Channel.*

In convolution, either a larger or brighter kernel will make the result image brighter. The kernel must be auto-scaled or normalized so the result is, on average, as bright as the input. The autoscaling can be done in several ways, each of which is best in certain circumstances. With a monochrome kernel or with Color Kernel turned off, Max Channel, Luma, and Indep Channels all give the same result.

Max Channel: Autoscales the kernel by summing the elements of each channel, and using whichever is brightest as the overall kernel scale factor. This normalizes a dim kernel to full brightness, and generally preserves the color of the kernel, but allows brightness variations in the dimmer channels to show in the result.

Luma: Autoscales the kernel by summing the luminances of each kernel pixel. This method preserves changes in the kernel's hue, but normalizes the luma, so a brighter or darker kernel will have no effect. Use the Scale parameter to adjust the result brightness.

Indep Channels: Independently normalizes each color channel of the kernel. A colored kernel will give a white/gray result with this method. Use this method if your kernel channels are independent of each other (i.e. different things going on in each of R, G, and B) but you want normalized results in each channel.

Count Nonzero: Count how many kernel pixels are nonzero (brighter than black), but otherwise ignore how bright they are. This method is best if you want variations in kernel hue and luma to show up in the result. But blurring the kernel will give a dimmer result, since there will be more nonzero pixels.

Kernel Size: Ignore the pixel *values* entirely; only use the size of the kernel rectangle to auto-scale. Use this if you want all kernel variations to show up in the result, but don't use it if you intend to animate Kernel Crop1 and Crop2, as that would affect the result's brightness.

Combine: *Popup menu, Default: Convolve Only.*

Determines how the front, back, and convolved images are combined.

Convolve Only: Convolve the Front and Back and composite them together. Use this option for a blur or defocus-like effect

Screen: Composite the Front over the convolved back, then screen with the convolved front. Use this option for a glow or glare-like effect.

Add: Composite the Front over the convolved back, then add the convolved front.

Difference: Composite the Front over the convolved back, then show the difference with the convolved front.

Boost Highlights: *Default: 0, Range: 0 or greater, Shared.*

The amount to increase the luma of the highlights in the source clip. Increase this parameter to blow out the highlights without affecting the darks or mid-tones.

Hilite Threshold: *Default: 0.9, Range: 0 or greater, Shared.*

The minimum luma value for highlights. Pixels brighter than this will be brightened according to the Boost Highlights parameter.

Front Threshold: *Default: 0, Range: 0 or greater.*

In the Front clip, any source value below this will be treated as black. When combining the convolved result with the original, you can increase this value to only convolve bright areas of the source. Typically when using this parameter, you will also set Combine to Screen or Add to get a glare-like effect.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the convolved result generated on areas of the source clip containing that color.

Use Gamma: *Default: 1, Range: 0.1 or greater.*

Values above 1 cause highlights in the source clip to keep their brightness after the convolution filter is applied.

Matte Gamma: *Default: 1, Range: 0.1 or greater.*

The gamma value to use for the defocus of the Matte.

Front Brightness: *Default: 1, Range: 0 or greater.*

Scale the brightness of the convolved Front clip.

Front Opacity: *Default: 1, Range: 0 to 1.*

Scale the opacity of the front clip before compositing over the back.

Back Brightness: *Default: 1, Range: 0 or greater.*

Scale the brightness of the convolved Back clip.

Comp Premult: *Check-box, Default: on.*

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Invert Matte: *Check-box, Default: off.*

If enabled, the black and white of the matte are inverted before use.

Show Kernel: *Check-box, Default: off.*

Show the kernel over the result, for easier adjustment of kernel parameters. Turn this off for final rendering.

Params2:

Kernel Crop1 X: *Default: 0, Range: any, Shared.*

With Kernel Crop1 Y, forms upper left corner of the kernel area. Parts of the kernel image outside the rectangle defined by Kernel Crop1 and Kernel Crop2 are assumed to be black. Making this area smaller to avoid processing the kernel's black edges can speed up the convolution somewhat. It may be helpful to turn on Show Kernel while adjusting this parameter. Note that if Autocenter is off, the center point is always included in the kernel no matter what this param is set to.

Kernel Crop1 Y: *Default: 0, Range: any, Shared.*

Upper left Y coord of kernel crop rect.

Kernel Crop2 X: *Default: 1e+04, Range: any, Shared.*

The lower right X corner of the kernel area; see Kernel Crop1.

Kernel Crop2 Y: *Default: 1e+04, Range: any, Shared.*

The lower right Y corner of the kernel area; see Kernel Crop1.

Kernel Threshold: *Default: 0.001, Range: 0 or greater.*

Any kernel value below this will be treated as black. It's important for the edges of the kernel image to be completely black, or the result will have a grayish cast to it. If your kernel image may have a little noise in the black areas, turn up threshold a little to remove that background noise.

Clamp Below Threshold: *Check-box, Default: on.*

When turned on, values below the threshold are clamped to zero. This usually gives the best result. For certain special cases with partially-negative kernels, turning this off gives you additional flexibility in designing your kernel.

Edge Mode: *X & Y, Popup menu, Default: [BLACK BLACK].*

Determines the behavior when accessing areas outside the source image.

BLACK: Areas outside the source image are treated as black, which can produce dark areas around the edges of the image. Select this for fastest rendering.

REPEAT: Repeats the last pixel outside the border of the image.

REFLECT: Reflects the image outside the border.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Convolve](#)

[RackDefocus](#)

[Glare](#)

[Glint](#)

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Deband

Removes banding artifacts from a clip by diffusing pixels across the banded areas, while keeping the original edges intact. To use this effect, first select Show:Edges and adjust the edge threshold until the banding edges just disappear, leaving only the desired real edges. Then select Show:Result to see the result. If you still see some banding, increase Diffuse Threshold and/or Diffuse Radius.



Inputs:

Source: The clip to be processed.

Parameters:

Edge Threshold: *Default: 2, Range: 0 to 255.*

The amount by which adjacent pixels must differ to constitute a real desired edge. A value of 1.0 represents the smallest possible difference at 8 bits. This parameter should be set high enough that none of the bands appear as edges, but low enough that all the real edges are still detected.

Grow Edges: *Default: 0, Range: 0 or greater.*

Amount to grow the detected edges in approximate pixels. Increasing this parameter can prevent diffusion in areas that are near edges, but not on an edge.

Show: *Popup menu, Default: RESULT.*

Selects the type of output.

RESULT: Shows the final result.

EDGES: Shows the edges of the image, where adjacent pixels differ by more than Edge Threshold. Use this mode to help fine-tune the edge detection parameters.

Diffuse Thresh: *Default: 1, Range: 0 or greater.*

The maximum color difference allowed when diffusing pixels. This parameter is automatically scaled by the edge threshold. Increasing it can give better results when there is a gradient within the bands. Decreasing it will reduce diffusion in areas where there are no edges.

Diffuse Radius: *Default: 12, Range: 0 or greater.*

The maximum radius of pixel diffusion, in approximate pixels. A larger value will remove banding more effectively in large areas with uniform colors, while a smaller value will give a better result in areas with many small color regions.

Pre Blur: *Default: 0, Range: 0 or greater.*

Blurs the source before diffusing pixels.

Post Blur: *Default: 0.5, Range: 0 or greater.*

Blurs the result after diffusing pixels. Use this parameter to reduce noisiness in the result.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GrainRemove](#)

[Sapphire](#)

[Plug-ins](#)

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DeinterlaceAuto

Can automatically detect an interlaced pulldown pattern, and deinterlace or reinterlace a clip. To deinterlace, first click the Find Pattern button, and then process the clip to generate a progressive result. To reinterlace back to the original pattern, set the mode to Reinterlace and process the progressive footage. The pattern description should remain the same when deinterlacing or reinterlacing, but if necessary you can re-apply the effect to the original interlaced footage and find the pattern again before reinterlacing, or save and load a setup containing the desired pattern. If the effect fails to find a pattern, move to a frame with plenty of motion and hit Find Pattern again. If the pulldown pattern seems longer than usual, increase the Max Pattern Fields accordingly. Note that the output of this effect may be longer or shorter than the input clip, depending on the pattern.



Inputs:

Source: The clip to be processed.

Parameters:

Effect: *Popup menu, Default: Deinterlace.*

Switches between Deinterlace and Reinterlace modes.

Deinterlace: Convert interlaced source footage into unique progressive frames, using the specified pattern.

Reinterlace: Convert progressive source footage into interlaced frames using the specified pattern.

Find Pattern: *Push-button.*

Clicking on this will search for a pulldown pattern in the source clip, starting at the current frame. This fills in parameter values for the Pattern, Pattern Phase, and optionally the Field Dominance.

Pattern: *Default: 0, Range: 0 or greater, Shared.*

Describes the pulldown pattern found in the clip. This pattern refers to the source clip when deinterlacing, but when reinterlacing it describes the desired pattern to recreate in the destination clip. Thus the pattern should remain the same for deinterlace and reinterlace. The pattern shows how many fields comprise each progressive frame. A pattern of '3 2' indicates a typical 3:2 pulldown pattern. A pattern of just '1' would indicate all fields are unique. A pattern of just '2' indicates normal progressive frames with no interlacing, and causes the result clip to equal the source clip. Negative values in a pattern indicate out-of-order fields that match a previous progressive frame. Note that a problem with Toxik 2008 causes this Pattern string parameter to be invisible to the user.

Pattern Phase: *Integer, Default: 0, Range: any, Shared.*

Shows the field number of the clip where the pattern begins. This parameter is set automatically when the Find Pattern button is clicked.

Field Dominance: *Popup menu, Default: 1.*

The field dominance of the source footage. This is set automatically by Find Pattern if Detect Dominance is enabled.

1: Field 1 occurs first in time, then field 2.

2: Field 2 occurs first in time, then field 1.

Max Pattern Fields: *Integer, Default: 10, Range: 5 to 100.*

The maximum number of fields expected in the repeating pulldown pattern. Decreasing this value will cause it to inspect fewer frames and speed up the pattern finding. Increasing it will allow the detection of longer pulldown patterns.

Detect Dominance: *Check-box, Default: on.*

If enabled, Find Pattern will also automatically set the Field Dominance value. Otherwise Field Dominance can be set manually and will remain as is.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FieldRemove](#)
[FieldTool](#)

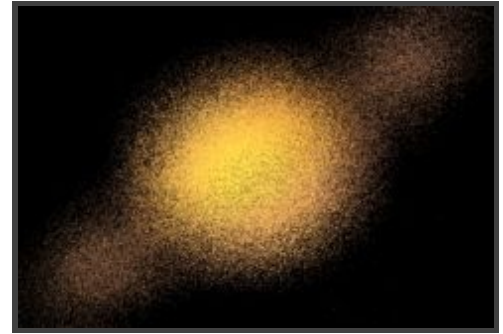
[Sapphire Plug-ins](#)
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Diffuse

Scrambles the pixels of the source input within an area determined by the Diffuse Amount. Use the Blur Rel X and Y parameters for a more horizontal or vertical diffuse direction. The pixelated look of this effect depends on the image resolution, so it is recommended to test your final resolution before processing.

Inputs:

Source: The clip to be processed.



Parameters:

Diffuse Amount: *Default:* 0.1, *Range:* 0 or greater.

The amplitude of the pixel diffusion process. This parameter can be adjusted using the Amount Widget.

Rel Amount: *X & Y, Default:* [1 1], *Range:* 0 or greater.

Scales the relative horizontal and vertical amounts of diffusion. This parameter can be adjusted using the Amount Widget.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[DiffuseMask](#)

[WipeDiffuse](#)

[Sapphire Plug-ins](#)

[DissolveDiffuse](#)

[Introduction](#)

[StaticColor](#)

[GrainColor](#)

[FilmEffect](#)

DiffuseMask

Same as Diffuse but with a Mask input. Scrambles the pixels of the source input within an area determined by the Diffuse Amount.

Inputs:

Source: The clip to be processed.

Mask: Determines which areas of the image receive diffusing pixels. Gray values internally scale the Diffuse Amount parameter rather than simply cross-fading between the effect and the original source. This can allow more continuous results at the mask edges and more detailed control over the diffusion amounts. The mask can be blurred using the Blur Mask parameter. Only the red channel of this input is used.



Parameters:

Diffuse Amount: *Default:* 0.1, *Range:* 0 or greater.

The amplitude of the pixel diffusion process. This parameter can be adjusted using the Amount Widget.

Rel Amount: *X & Y, Default:* [1 1], *Range:* 0 or greater.

Scales the relative horizontal and vertical amounts of diffusion. This parameter can be adjusted using the Amount Widget.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Blur Mask: *Default:* 0, *Range:* 0 or greater.

Blurs the Mask input by this amount before using. This can be used to soften the edges of the mask and provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default:* off.

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Diffuse](#)

[WipeDiffuse](#)

[Sapphire](#)

[DissolveDiffuse](#)

[Plug-ins](#)

[StaticColor](#)

[Introduction](#)

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[FilmEffect](#)

Dissolve

In the S_Dissolves Plugin.

Basic cross fade between two input clips.

Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[DissolveBlur](#)

[DissolveBubble](#)

[DissolveClouds](#)

[DissolveDefocus](#)

[DissolveDiffuse](#)

[DissolveDistort](#)

[DissolveEdgeRays](#)

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[DissolveStatic](#)

[DissolveTiles](#)

[DissolveVortex](#)

[DissolveWaves](#)

[Sapphire Plug-ins](#)

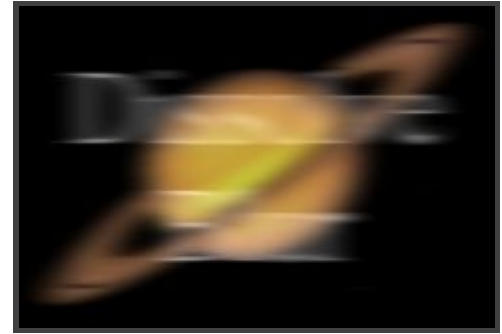
[Introduction](#)



DissolveBlur

In the S_Dissolves Plugin.

Transitions between two input clips while blurring each. The first clip is blurred and faded out while the second clip is unblurred and faded in. The Dissolve Amt parameter should be animated to control the transition speed.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition.

Blur Amount: *Default: 0.5, Range: 0 or greater.*

Scales the width of the blur.

Blur Rel: *X & Y, Default: [1 1], Range: 0 or greater.*

The relative horizontal and vertical blur widths. Set Blur Rel X to 0 for a vertical-only blur, or set Blur Rel Y to 0 for a horizontal-only blur.

Blur Rel From: *Default: 1, Range: 0 or greater.*

Scales the amount of blur applied to the first clip. Set to 0 to fade out with no blur.

Blur Rel To: *Default: 1, Range: 0 or greater.*

Scales the amount of blur applied to the second clip. Set to 0 to fade in with no blur.

Filter: *Popup menu, Default: GAUSS.*

The type of convolution filter to blur with.

BOX: uses a rectangular shaped filter.

TRIANGLE: smoother, uses a pyramid shaped filter.

GAUSS: smoothest, uses a gaussian shaped filter.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Dissolve](#)

[DissolveBubble](#)

[DissolveClouds](#)

[DissolveDefocus](#)

[DissolveDiffuse](#)

[DissolveDistort](#)

[DissolveEdgeRays](#)

[DissolveFilm](#)

[DissolveGlint](#)

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DissolveGlintRainbow
DissolveGlow
DissolveLensFlare
DissolveLuma
DissolvePixelate
DissolvePuddle
DissolveSpeckle
DissolveStatic
DissolveTiles
DissolveVortex
DissolveWaves

DissolveBubble

In the S_Dissolves Plugin.

Transitions between two input clips using a bubble warping function. The first clip is warped away and faded out while the second clip is unwarped into place and faded in. The Dissolve Amt parameter should be animated to control the transition speed.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition. The Slow In and Slow Out parameters, if positive, also adjust the dissolve amount internally for a smoother start and/or end to the transition.

Frequency: *Default: 8, Range: 0.01 or greater.*

The frequency of the bubble warping pattern. Increase for smaller bubbles, decrease for larger.

Frequency Rel Y: *Default: 1, Range: 0.01 or greater.*

The relative vertical frequency of the bubbles. Decrease for taller bubbles, increase for wider ones.

Octaves: *Integer, Default: 1, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.23, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Amplitude: *Default: 1, Range: any.*

Scales the amount of warping distortion.

Rel Amp2: *Default: -1, Range: any.*

The relative amplitude of the second input clip warping distortion. If this is positive instead of negative, the clip will be unwarped from the opposite direction.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source images.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Slow In: *Default: 0.5, Range: 0 or greater.*

If positive, causes the transition to start more gradually.

Slow Out: *Default: 0.5, Range: 0 or greater.*

If positive, causes the transition to end more gradually.

Filter: *Check-box, Default: on.*

The type of convolution filter to blur with.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Dissolve](#)

[DissolveBlur](#)

[DissolveClouds](#)

[DissolveDefocus](#)

[DissolveDiffuse](#)

[DissolveDistort](#)

[DissolveEdgeRays](#)

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DissolveClouds

In the S_Dissolves Plugin.

Transitions from the first clip to the second using a moving cloud texture. The Wipe Amt parameter should be animated to control the transition speed.

Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition.

Frequency: *Default: 2, Range: 0.01 or greater.*

The frequency of the clouds pattern. Increase for more and smaller elements, or decrease for fewer and larger.

Frequency Rel X: *Default: 0.4, Range: 0.01 or greater.*

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Amplitude: *Default: 1, Range: 0 or greater.*

Scales the brightness of the clouds image.

Octaves: *Integer, Default: 8, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.23, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Shift Start: *X & Y, Default: [0 0], Range: any.*

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Shift Speed: *X & Y, Default: [0 0], Range: any.*

Translation speed of the texture. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Dissolve](#)

[DissolveBlur](#)

[DissolveBubble](#)

[DissolveDefocus](#)

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DissolveDiffuse
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DissolvePixelate
DissolvePuddle
DissolveSpeckle
DissolveStatic
DissolveTiles
DissolveVortex
DissolveWaves

DissolveDefocus

In the S_Dissolves Plugin.

Transitions between two input clips while defocusing each. The first clip is defocused and faded out while the second clip is brought into focus and faded in. The Dissolve Amt parameter should be animated to control the transition speed.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition.

Defocus Width: *Default: 1, Range: 0 or greater.*

The width of the defocus.

Rel Height: *Default: 1, Range: 0.01 or greater.*

The relative height of the iris shape. If it is not 1, circles become ellipses, etc.

Defocus Rel From: *Default: 1, Range: 0 or greater.*

Scales the amount of defocus applied to the first clip. Set to 0 to fade out with no defocus.

Defocus Rel To: *Default: 1, Range: 0 or greater.*

Scales the amount of defocus applied to the second clip. Set to 0 to fade in with no defocus.

Roundness: *Default: 0, Range: any.*

Modifies the shape of the simulated camera iris. A value of 1 produces a circle; 0 gives a flat-sided polygon with a number of sides given by the Shape parameter. Less than 0 causes the sides to squeeze inward giving a star shape, while a value greater than 1 causes the corners to squeeze inward, giving a flowery shape. Has no effect if the Shape is set to Circle.

Rotate: *Default: 0, Range: any.*

Rotates the iris shape.

Bokeh: *Default: 0, Range: any.*

Softens the outer edge of the iris shape, which gives a softer look to the defocused highlights. A negative value darkens the center of the iris shape, producing a ring-like defocus shape.

Shape: *Popup menu, Default: Circle.*

Determines the shape of the simulated camera iris.

Circle: round.

3 sides: triangle.

4 sides: square.

5 sides: pentagon.

6 sides: hexagon.

7 sides: etc.

Edge Mode: *Popup menu, Default: Reflect.*

Determines the behavior when accessing areas outside the source image.

Black: Areas outside the source image are treated as black, which can produce dark areas around the edges of the image. Select this for fastest rendering.

Repeat: Repeats the last pixel outside the border of the image.

Reflect: Reflects the image outside the border.

Use Gamma: *Default: 1, Range: 0.1 or greater.*

Values above 1 cause highlights in the source clip to keep their brightness after the defocus is applied.

Boost Highlights: *Default: 0, Range: 0 or greater.*

The amount to increase the luma of the highlights in the source clip. Increase this parameter to blow out the highlights without affecting the darks or mid-tones.

Hilite Threshold: *Default: 0.9, Range: 0 or greater.*

The minimum luma value for highlights. Pixels brighter than this will be brightened according to the Boost Highlights parameter.

Show Shape: *Check-box, Default: off.*

Show the iris shape instead of the defocused image.

Params2:

Lens Noise: *Default: 0, Range: 0 or greater.*

Increase to add noise to the iris shape, dirtying up the defocus a little. Can make the result more realistic. Turn up past 1 for a more stylistic result.

Noise Freq: *Default: 10, Range: 0.01 or greater.*

The frequency of the added noise. Ignored if Lens Noise is zero.

Noise Freq Rel X: *Default: 1, Range: 0.01 or greater.*

The relative horizontal frequency of the added iris noise. Increase to stretch it vertically or decrease to stretch it horizontally.

Noise Seed: *Default: 0.123, Range: 0 or greater.*

The seed value for the added noise. To make the noise appear different on each frame, animate this to be different on each frame. The actual value doesn't matter; only that it's different.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Dissolve](#)

[DissolveBlur](#)

[DissolveBubble](#)

[DissolveClouds](#)

[DissolveDiffuse](#)

[DissolveDistort](#)

[DissolveEdgeRays](#)

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DissolvePixelate
DissolvePuddle
DissolveSpeckle
DissolveStatic
DissolveTiles
DissolveVortex
DissolveWaves

DissolveDiffuse

In the S_Dissolves Plugin.

Transitions between two input clips by scrambling the pixels of the inputs within an area determined by Max Amount. The first clip is diffused away while the second clip is diffused into place. The Dissolve Amt parameter should be animated to control the transition speed. The pixelated look of this effect depends on the image resolution, so it is recommended to test your final resolution before processing.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition.

Max Amount: *Default: 0.2, Range: 0 or greater.*

Scales the magnitudes of the diffusion distances.

Rel Amount: *X & Y, Default: [1 1], Range: 0 or greater.*

Scales the relative horizontal and vertical amounts of diffusion.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source images.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Dissolve](#)

[DissolveBlur](#)

[DissolveBubble](#)

[DissolveClouds](#)

[DissolveDefocus](#)

[DissolveDistort](#)

[DissolveEdgeRays](#)

[DissolveFilm](#)

[DissolveGlint](#)

[DissolveGlintRainbow](#)

[DissolveGlow](#)

[DissolveLensFlare](#)

[DissolveLuma](#)

[DissolvePixelate](#)

[Diffuse](#)

[WipeDiffuse](#)

[Sapphire Plug-ins](#)

[Introduction](#)

DissolvePuddle
DissolveSpeckle
DissolveStatic
DissolveTiles
DissolveVortex
DissolveWaves

DissolveDistort

In the S_Dissolves Plugin.

Transitions between two input clips while distorting each using the gradient of the other. The first clip is warped away and faded out while the second clip is unwarped into place and faded in. The Dissolve Amt parameter should be animated to control the transition speed.

Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition. The Slow In and Slow Out parameters, if positive, also adjust the dissolve amount internally for a smoother start and/or end to the transition.

Amplitude: *Default: 1, Range: any.*

Scales the amount of distortion applied to both input clips. This can also be negative to turn expansions into contractions and vice versa.

Rel Amp From: *Default: 1, Range: any.*

Scales the relative distortion amplitude of the From clip.

Rel Amp To: *Default: -1, Range: any.*

Scales the relative distortion amplitude of the To clip.

Smoothness: *Default: 0.25, Range: 0 or greater.*

Smooths the distortions by this amount. Increase for large scale distortion, decrease for finer detailed distortion.

Rotate Warp Dir: *Default: 0, Range: any.*

Rotates the direction of the distortion. This can cause areas of similar brightness to be twisted instead of just expanded or shrunk.

Wrap: *X & Y, Popup menu, Default: [Reflect Reflect].*

Determines the method for accessing outside the borders of the source images.

No: gives black beyond the borders.

Tile: repeats a copy of the image.

Reflect: repeats a mirrored copy. Edges are often less visible with this method.

Slow In: *Default: 0.5, Range: 0 or greater.*

If positive, causes the transition to start more gradually.

Slow Out: *Default: 0.5, Range: 0 or greater.*

If positive, causes the transition to end more gradually.

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.



See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Dissolve](#)

[DissolveBlur](#)

[DissolveBubble](#)

[DissolveClouds](#)

[DissolveDefocus](#)

[DissolveDiffuse](#)

[DissolveEdgeRays](#)

[DissolveFilm](#)

[DissolveGlint](#)

[DissolveGlintRainbow](#)

[DissolveGlow](#)

[DissolveLensFlare](#)

[DissolveLuma](#)

[DissolvePixelate](#)

[DissolvePuddle](#)

[DissolveSpeckle](#)

[DissolveStatic](#)

[DissolveTiles](#)

[DissolveVortex](#)

[DissolveWaves](#)

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DissolveEdgeRays

In the S_Dissolves Plugin.

Transitions between two input clips using animated edge rays. The clips dissolve into each other, and edge rays are added to the result. The edge rays ramps up and down over the duration of the effect. The edge rays animate by moving the origin of the edge rays across the screen along a line. The Dissolve Amt parameter should be animated to control the transition speed.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition.

Dissolve Speed: *Default: 3, Range: 1 or greater.*

The speed of the dissolve between the From and To clips. When set to 1, the dissolve takes place over the entire duration of the effect. When set higher, the dissolve is shorter, although the edge rays ramp-up and ramp-down still takes the entire duration. Setting this to 10 can make the transition snappier and more like a flash-frame cut.

Rays Center: *X & Y, Default: [0 0], Range: any.*

The location from which the rays beam outwards at the midpoint of the transition.

Center Speed: *Default: 0.2, Range: 0 to 2.*

The speed at which the rays center moves across the screen.

Center Angle: *Default: 0, Range: any.*

The angle at which the rays center moves across the screen.

Rays Length: *Default: 0.75, Range: 0 to 2.*

The maximum length of the rays at the midpoint of the transition.

Rays Shrink: *Default: 0, Range: 0 to 1.*

The fraction by which the length of the rays is reduced at the beginning and end of the transition.

Rays Brightness: *Default: 8, Range: 0 or greater.*

The maximum brightness of the rays at the midpoint of the transition.

Rays Fade: *Default: 1, Range: 0 to 1.*

The fraction by which the rays brightness is reduced at the beginning and end of the transition.

Rays Res: *Popup menu, Default: Full.*

Selects the resolution factor for the rays. Higher resolutions give sharper rays, lower resolutions give smoother rays and faster processing. This 'Res' factor only affects the rays: the background is still combined with the rays at full resolution.

Full: Full resolution is used.

Half: The rays are calculated at half resolution.

Quarter: The rays are calculated at quarter resolution.

Show: *Popup menu, Default: Result.*
Selects between output options.

Result: outputs the rays over the Background.

Edges: outputs only the edge image. This can useful during the adjustment of the edge or shimmer parameters.

Rays Color: *Default rgb: [1 1 1].*
Scales the color of the ray beams.

Source Opacity: *Default: 1, Range: 0 to 1.*
Scales the opacity of the Source input when combined with the rays. This does not affect the generation of the rays themselves.

Rel Outer Bright: *Default: 0, Range: 0 to 1.*
The relative brightness of the outer end of the rays. This is normally near 0 so the rays fade away at their outer ends, but higher values can cause longer looking rays.

Edge Thickness: *Default: 0.03, Range: 0 or greater.*
The thickness of the edges which generate the rays.

Edge Brightness: *Default: 1, Range: 0 or greater.*
Scales the brightness of the edges which generate the rays.

Edge Subpixel: *Check-box, Default: off.*
Enables subpixel Edge Thickness amounts. Turn this on you are animating Edge Thickness or if you want finer control of small values.

Params2:

Shimmer Amp: *Default: 0.5, Range: 0 or greater.*
Modulates the ray source image with this amount of noise texture to give the rays a shimmering look.

Shimmer Freq: *Default: 40, Range: 0.01 or greater.*
The frequency of the shimmer texture. Increase for a finer grained shimmer effect, decrease for larger, softer shimmer. This has no effect unless Shimmer Amp is positive.

Shimmer Shift: *X & Y, Default: [0 0], Range: any.*
Translation of the shimmer texture. This has no effect unless Shimmer Amp is positive.

Shimmer Seed: *Default: 0.123, Range: 0 or greater.*
Used to initialize the random number generator for the shimmer texture. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Shimmer Speed: *X & Y, Default: [0 0], Range: any.*
Translation speed of the shimmer texture. If non-zero, the shimmering is automatically animated to shift at this rate.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Dissolve](#)
[DissolveBlur](#)
[DissolveBubble](#)

[EdgeRays](#)
[Sapphire Plug-ins](#)
[Introduction](#)

DissolveClouds
DissolveDefocus
DissolveDiffuse
DissolveDistort
DissolveFilm
DissolveGlint
DissolveGlintRainbow
DissolveGlow
DissolveLensFlare
DissolveLuma
DissolvePixelate
DissolvePuddle
DissolveSpeckle
DissolveStatic
DissolveTiles
DissolveVortex
DissolveWaves

DissolveFilm

In the S_Dissolves Plugin.

Transitions between two input clips using a film dissolve with selectable gamma. Film dissolve preserves the highlights in the clips longer compared to a regular dissolve. The Dissolve Amt parameter should be animated to control the transition speed.

Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition.

Gamma: *Default: 2, Range: 0.1 or greater.*

The film gamma to use for the dissolve. Higher values preserve more highlights.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Dissolve](#)
[DissolveBlur](#)
[DissolveBubble](#)
[DissolveClouds](#)
[DissolveDefocus](#)
[DissolveDiffuse](#)
[DissolveDistort](#)
[DissolveEdgeRays](#)
[DissolveGlint](#)
[DissolveGlintRainbow](#)
[DissolveGlow](#)
[DissolveLensFlare](#)
[DissolveLuma](#)
[DissolvePixelate](#)
[DissolvePuddle](#)
[DissolveSpeckle](#)
[DissolveStatic](#)
[DissolveTiles](#)
[DissolveVortex](#)
[DissolveWaves](#)

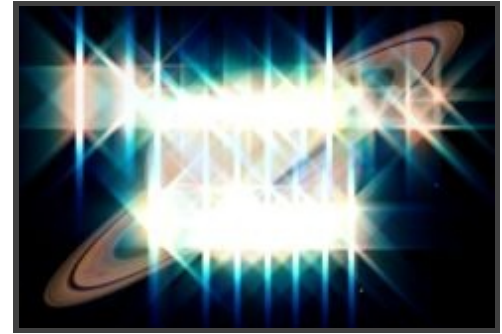
[Sapphire Plug-ins](#)
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DissolveGlint

In the S_Dissolves Plugin.

Transitions between two input clips using a bright glowing glint. The clips dissolve into each other, while each one gets a glint which ramps up and down over the duration of the effect. The Dissolve Amt parameter should be animated to control the transition speed.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition.

Dissolve Speed: *Default: 3, Range: 1 or greater.*

The speed of the dissolve between the From and To clips. When set to 1, the dissolve takes place over the entire duration of the effect. When set higher, the dissolve is shorter, although the glint ramp-up and ramp-down still takes the entire duration. Setting this to 10 can make the transition snappier and more like a flash-frame cut.

Glint Brightness: *Default: 1.5, Range: 0 or greater.*

The maximum brightness of the glint in the middle of the transition.

Glint Threshold: *Default: 0.7, Range: any.*

Glints are generated from locations in the From and To clips there are brighter than this value. A value of 0.9 causes glints at only the brightest spots. A value of 0 causes glints for every non-black area.

Threshold Blur: *Default: 0.1, Range: 0 or greater.*

Increase to smooth out the areas creating dissolves. This can be used to eliminate dissolves generated from small speckles or to simply soften the dissolves. Increasing this may put more highlights below the threshold and darken the resulting dissolves, but you can decrease the Threshold parameter to compensate.

Glint Size: *Default: 2, Range: 0 or greater.*

The maximum size of the glint at the middle of the transition.

Glint Shrink: *Default: 0.8, Range: 0 to 1.*

The fraction by which the glint size is reduced at the beginning and end of the transition.

Brightness X: *Default: 1, Range: 0 or greater.*

Scales the brightness of the horizontal glint rays.

Brightness Y: *Default: 1, Range: 0 or greater.*

Scales the brightness of the vertical glint rays.

Glint Scale Colors: *Default rgb: [1 1 1].*

Scales the color of the glints. The colors and brightnesses of the glints are also affected by the From and To inputs.

Brightness Diag1: *Default: 1, Range: 0 or greater.*

Scales the brightness of the diagonal rays from top right to bottom left.

Brightness Diag2: *Default: 1, Range: 0 or greater.*
Scales the brightness of the diagonal rays from top left to bottom right.

Params2:

Rel From Bright: *Default: 1, Range: 0 or greater.*
Relative brightness of the glint on the outgoing (From) clip.

Rel From Size: *Default: 1, Range: 0 or greater.*
Relative size of the glint on the outgoing (From) clip.

From Threshold: *Default: 0, Range: any.*
Extra threshold to apply to the glint on the outgoing (From) clip.

Rel From Color: *Default rgb: [1 1 1].*
Relative color of the glint on the outgoing (From) clip.

Rel To Color: *Default rgb: [1 1 1].*
Relative color of the glint on the incoming (To) clip.

Rel To Bright: *Default: 1, Range: 0 or greater.*
Relative brightness of the glint on the incoming (To) clip.

Rel To Size: *Default: 1, Range: 0 or greater.*
Relative size of the glint on the incoming (To) clip.

To Threshold: *Default: 0, Range: any.*
Extra threshold to apply to the glint on the incoming (To) clip.

Params3:

Size X: *Default: 1, Range: 0 or greater.*
Scales the length of the horizontal glint rays.

Size Y: *Default: 1, Range: 0 or greater.*
Scales the length of the vertical glint rays.

Size Diag1: *Default: 0.75, Range: 0 or greater.*
Scales the length of the diagonal rays from top right to bottom left.

Size Diag2: *Default: 0.75, Range: 0 or greater.*
Scales the length of the diagonal rays from top left to bottom right.

Size Red: *Default: 0.5, Range: 0 or greater.*
Scales the length of the red component of the rays. If the red, green, and blue sizes are equal the glints will be uniform in color and will match the color of the source clip. If they are not equal, the glint colors can vary along the lengths of the rays.

Size Green: *Default: 1, Range: 0 or greater.*
Scales the length of the green component of the rays.

Size Blue: *Default: 1.5, Range: 0 or greater.*
Scales the length of the blue component of the rays.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Glint](#)

[GlintRainbow](#)

[DissolveGlintRainbow](#)

[Sapphire Plug-ins](#)

[Introduction](#)

DissolveGlintRainbow

In the S_Dissolves Plugin.

Transitions between two input clips using a bright glowing glint. The clips dissolve into each other, while each one gets a glint which ramps up and down over the duration of the effect. The Dissolve Amt parameter should be animated to control the transition speed.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition.

Dissolve Speed: *Default: 3, Range: 1 or greater.*

The speed of the dissolve between the From and To clips. When set to 1, the dissolve takes place over the entire duration of the effect. When set higher, the dissolve is shorter, although the glint ramp-up and ramp-down still takes the entire duration. Setting this to 10 can make the transition snappier and more like a flash-frame cut.

Glint Brightness: *Default: 1.5, Range: 0 or greater.*

The maximum brightness of the glint in the middle of the transition.

Glint Threshold: *Default: 0.7, Range: any.*

Glints are generated from locations in the From and To clips there are brighter than this value. A value of 0.9 causes glints at only the brightest spots. A value of 0 causes glints for every non-black area.

Threshold Blur: *Default: 0.1, Range: 0 or greater.*

Increase to smooth out the areas creating dissolves. This can be used to eliminate dissolves generated from small speckles or to simply soften the dissolves. Increasing this may put more highlights below the threshold and darken the resulting dissolves, but you can decrease the Threshold parameter to compensate.

Glint Size: *Default: 2, Range: 0 or greater.*

The maximum size of the glint at the middle of the transition.

Glint Shrink: *Default: 0.8, Range: 0 to 1.*

The fraction by which the glint size is reduced at the beginning and end of the transition.

Brightness X: *Default: 1, Range: 0 or greater.*

Scales the brightness of the horizontal glint rays.

Brightness Y: *Default: 1, Range: 0 or greater.*

Scales the brightness of the vertical glint rays.

Glint Scale Colors: *Default rgb: [1 1 1].*

Scales the color of the glints. The colors and brightnesses of the glints are also affected by the From and To inputs.

Brightness Diag1: *Default: 1, Range: 0 or greater.*

Scales the brightness of the diagonal rays from top right to bottom left.

Brightness Diag2: *Default: 1, Range: 0 or greater.*
Scales the brightness of the diagonal rays from top left to bottom right.

Params2:

Rel From Bright: *Default: 1, Range: 0 or greater.*
Relative brightness of the glint on the outgoing (From) clip.

Rel From Size: *Default: 1, Range: 0 or greater.*
Relative size of the glint on the outgoing (From) clip.

From Threshold: *Default: 0, Range: any.*
Extra threshold to apply to the glint on the outgoing (From) clip.

Rel From Color: *Default rgb: [1 1 1].*
Relative color of the glint on the outgoing (From) clip.

Rel To Color: *Default rgb: [1 1 1].*
Relative color of the glint on the incoming (To) clip.

Rel To Bright: *Default: 1, Range: 0 or greater.*
Relative brightness of the glint on the incoming (To) clip.

Rel To Size: *Default: 1, Range: 0 or greater.*
Relative size of the glint on the incoming (To) clip.

To Threshold: *Default: 0, Range: any.*
Extra threshold to apply to the glint on the incoming (To) clip.

Params3:

Size X: *Default: 1, Range: 0 or greater.*
Scales the length of the horizontal glint rays.

Size Y: *Default: 1, Range: 0 or greater.*
Scales the length of the vertical glint rays.

Size Diag1: *Default: 0.75, Range: 0 or greater.*
Scales the length of the diagonal rays from top right to bottom left.

Size Diag2: *Default: 0.75, Range: 0 or greater.*
Scales the length of the diagonal rays from top left to bottom right.

Shift Out: *Default: 1, Range: any.*
Shifts the glint rays outwards from their source highlights by this amount relative to the glint size.

Shift Red: *Default: 0.3, Range: any.*
Shifts the red component of the glints in or out relative to the blue. The green is centered between blue and red for a complete spectrum.

Shift Blue: *Default: -0.3, Range: any.*
Shifts the blue component of the glints in or out relative to the red and green. This can be used with Shift Red to adjust the range of hues in the glints.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[DissolveGlint](#)
[Glint](#)
[GlintRainbow](#)

[Sapphire Plug-ins](#)
[Introduction](#)

DissolveGlow

In the S_Dissolves Plugin.

Transitions between two input clips using a bright glowing flash. The clips dissolve into each other, while each one gets a glow which ramps up and down over the duration of the effect. The Dissolve Amt parameter should be animated to control the transition speed.

Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition.

Dissolve Speed: *Default: 3, Range: 1 or greater.*

The speed of the dissolve between the From and To clips. When set to 1, the dissolve takes place over the entire duration of the effect. When set higher, the dissolve is shorter, although the glow ramp-up and ramp-down still takes the entire duration. Setting this to 10 can make the transition snappier and more like a flash-frame cut.

Glow Brightness: *Default: 6, Range: 0 or greater.*

Overall maximum brightness of the glow.

Glow Threshold: *Default: 0.2, Range: any.*

Parts of the source clip that are brighter than this value get glow. A value of 0.9 makes only the brightest spots glow. A value of 0 makes every non-black area glow.

Glow Width: *Default: 0.3, Range: 0 or greater.*

The width of the glow. This and all the width parameters can be adjusted with the Width widget. Note that a zero glow width still enhances the bright areas; set the glow brightness parameter to zero if you want to pass the sources through unchanged.

Width X: *Default: 1, Range: 0 or greater.*

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default: 1, Range: 0 or greater.*

Scales the vertical glow width. Set to 0 for horizontal only.

Glow Color: *Default rgb: [1 1 1].*

Overall color of the glow.

Width Red: *Default: 1, Range: 0 or greater.*

Scales the red glow width. If the red, green, and blue widths are equal, the glows will match the color of the source clip. If they are not equal, the glows will vary in color with distance.

Width Green: *Default: 1.2, Range: 0 or greater.*

Scales the green glow width.

Width Blue: *Default: 1.4, Range: 0 or greater.*

Scales the blue glow width.



Params2:

Rel From Bright: *Default: 1, Range: 0 or greater.*
Relative brightness of the glow on the outgoing (From) clip.

Rel From Width: *Default: 1, Range: 0 or greater.*
Relative width of the glow on the outgoing (From) clip.

From Threshold: *Default: 0, Range: any.*
Extra threshold to apply to the glow on the outgoing (From) clip.

Rel From Color: *Default rgb: [1 1 1].*
Relative color of the glow on the outgoing (From) clip.

Rel To Color: *Default rgb: [1 1 1].*
Relative color of the glow on the incoming (To) clip.

Rel To Bright: *Default: 1, Range: 0 or greater.*
Relative brightness of the glow on the incoming (To) clip.

Rel To Width: *Default: 1, Range: 0 or greater.*
Relative brightness of the glow on the incoming (To) clip.

To Threshold: *Default: 0, Range: any.*
Extra threshold to apply to the glow on the incoming (To) clip.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Dissolve](#)
[DissolveBlur](#)
[DissolveBubble](#)
[DissolveClouds](#)
[DissolveDefocus](#)
[DissolveDiffuse](#)
[DissolveDistort](#)
[DissolveEdgeRays](#)
[DissolveFilm](#)
[DissolveGlint](#)
[DissolveGlintRainbow](#)
[DissolveLensFlare](#)
[DissolveLuma](#)
[DissolvePixelate](#)
[DissolvePuddle](#)
[DissolveSpeckle](#)
[DissolveStatic](#)
[DissolveTiles](#)
[DissolveVortex](#)
[DissolveWaves](#)

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DissolveLensFlare

In the S_Dissolves Plugin.

Transitions between two input clips using an animated lens flare. The clips dissolve into each other, while a lens flare moves along a straight line. The lens flare grows and shrinks over the duration of the effect. The Dissolve Amt parameter should be animated to control the transition speed.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition.

Dissolve Speed: *Default: 3, Range: 1 or greater.*

The speed of the dissolve between the From and To clips. When set to 1, the dissolve takes place over the entire duration of the effect. When set higher, the dissolve is shorter, although the lens flare still changes size and brightness over the entire duration. Setting this to 10 can make the transition snappier and more like a flash-frame cut.

Hotspot Center: *X & Y, Default: [360 243], Range: any.*

The location through which the brightest spot of the flare passes at the center of the transition.

Hotspot Speed: *Default: 1, Range: 0 to 2.*

The speed at which the flare sweeps across the screen. Set this to zero to make the lens flare grow and shrink in place.

Hotspot Angle: *Default: -25, Range: any.*

The angle at which the flare sweeps across the screen.

Pivot: *X & Y, Default: [0 0], Range: any.*

The elements of the flare will be in a line between the Hotspot and the Pivot locations. The Pivot is in screen coordinates relative to the center of the frame.

Rel Heights: *Default: 1, Range: 0 or greater.*

Scales the vertical dimension of all the flare elements, making them elliptical instead of circular. This can also be adjusted using the Scale Widths Widget.

Rays Rotate: *Default: 0, Range: any.*

Rotates the ray elements of the lens flare, if any, in counter-clockwise degrees.

Lens: *Popup menu, Default: 50 300mm Zoom.*

The type of lens flare to apply. Custom lens flare types can also be made, or existing types modified, by editing the "s_lensflares.text" file.

50 300mm Zoom: hotspot with ray cluster, red glow and red ring, and many other elements.

35mm Prime: hotspot with ray cluster, red glow and red ring, and a few other elements.

105mm Prime: hotspot with ray cluster, blue ring, blue glow, and other elements.

Anamorphic 1: horizontal blue rays, diagonal blue ray, red glow and red ring.

Anamorphic 2: horizontal blue rays and red glow.
Anamorphic Blue: horizontal and diagonal blue rays with hexagonal blue/white glow.
Rays Only: ray cluster with no other flare elements.
Rays Only 2: ray cluster like 105mm_prime, but with no other flare elements.
Rays Only 3: ray cluster like anamorphic1, but with no other flare elements.
Simple Hex: four simple red and blue hexagon elements.
Blue Star Burst: many long blue rays with a white-hot center and various reflection elements.
Orange Rays 6: orange star with six rays and other elements.
California Sun: yellow-orange hotspot with long soft double rays and reflection ring.
Space Telescope: four pointed star with halo.
Red Laser: intense red rays.
DVcam Vertical: vertical CCD burnout effect.
White Sun: white cluster of many rays with a rainbow reflection.
Hex Reflections: bright center and rays with many blue-green reflection elements.
Diffraction Star: six pointed white star with rainbow colored rays for a diffraction look.
Diffraction Rays: white star with many rainbow diffraction rays.
Diffraction Rings: multiple rings of textured rainbows around a hotspot.
Chroma Ring: textured rainbow ring that scales with distance between hotspot and pivot.
Chroma Arc: textured rainbow arc that scales with distance between hotspot and pivot.
Chroma Arc 2: double rainbow arcs that scale with distance between hotspot and pivot.
Glint Rays: similar to the default settings of Glint.

Combine: *Popup menu, Default: Screen.*

Determines how the flare image is combined with the Background.

Screen: performs a blend function which can help prevent overly bright results.

Add: causes the flare image to be added to the background.

Flare Brightness: *Default: 8, Range: 0 or greater.*

The maximum brightness of the flare at the center of the transition.

Flare Fade: *Default: 1, Range: 0 to 1.*

The fraction by which the brightness is reduced at the beginning and end of the transition.

Flare Width: *Default: 2.5, Range: 0 or greater.*

The maximum width of the flare at the center of the transition.

Flare Shrink: *Default: 0.5, Range: 0 to 1.*

The fraction by which the flare width is reduced at the beginning and end of the transition.

Tint Bg Whites: *Check-box, Default: off.*

If this is enabled, the chroma of the flare is added only after the result is clamped to the maximum brightness. This allows the color of the flare image to still be visible even over bright white backgrounds. For the majority of backgrounds there will be no observable difference.

Params2:

These parameters allow further adjustment of the hotspot, and enabling of the screen interface widgets.

Gamma: *Default: 1, Range: 0 or greater.*

Increasing gamma brightens the flare, and especially boosts the darker elements.

Saturation: *Default: 1, Range: any.*

Scales the color saturation of the flare elements. Increase for more intense colors. Set to 0 for a monochrome lens flare.

Hue Shift: *Default: 0, Range: any.*

Shifts the hue of the flare, in revolutions from red to green to blue to red.

Blur Flare: *Default: 0, Range: 0 or greater.*

If positive, the flare image is blurred by this amount before being combined with the background.

Color: *Default rgb: [1 1 1].*

Scales the color of all flare elements.

Hotspot Color: *Default rgb: [1 1 1].*

Scales the color of the hotspot elements only.

Other Color: *Default rgb: [1 1 1].*

Scales the color of all flare elements that are NOT at the hotspot location.

Hotspot Bright: *Default: 1, Range: 0 or greater.*

Scales the brightness of the hotspot elements only.

Rays Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of the ray elements only.

Other Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of all flare elements that are NOT at the hotspot location.

Scale Source: *Default: 1, Range: 0 or greater.*

Scales the brightness of the source clip before combining with the flare. If 0, the result will contain only the flare image over black.

Params3:

Rays Num Scale: *Default: 1, Range: 0 or greater.*

Increases or decreases the number of rays.

Rays Length: *Default: 1, Range: 0 or greater.*

Adjusts the length of the rays without changing their thickness, or changing the size of the other flare elements.

Rays Thickness: *Default: 1, Range: 0 or greater.*

Adjusts the thickness of the individual rays within the flare.

Other Width: *Default: 1, Range: 0 or greater.*

Scales the width of all flare elements that are NOT at the hotspot location.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Dissolve](#)

[DissolveBlur](#)

[DissolveBubble](#)

[DissolveClouds](#)

[DissolveDefocus](#)

[DissolveDiffuse](#)

[DissolveDistort](#)

[DissolveEdgeRays](#)

[DissolveFilm](#)

[DissolveGlint](#)

[DissolveGlintRainbow](#)

[DissolveGlow](#)

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DissolvePixelate
DissolvePuddle
DissolveSpeckle
DissolveStatic
DissolveTiles
DissolveVortex
DissolveWaves

DissolveLuma

In the S_Dissolves Plugin.

Transitions between two input clips using a pattern derived from their luminances. One clip often appears to emerge through the other. The Dissolve Amt parameter should be animated to control the transition speed.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition.

Softness: *Default: 0.1, Range: 0 to 1.*

Increase for softer and slower transitions.

Smooth Pattern: *Default: 0, Range: 0 to 1.*

If positive, a blur is applied to the transition pattern. This can reduce noise and give clearer edges to transition lines.

Use Luma Of: *Popup menu, Default: Difference.*

Determines how the transition pattern is generated from the clips' luminance values.

Difference: similar areas transition first, different areas last.

Subtract: areas where the first clip is brighter transition first, and areas where the second clip is brighter transition last.

Mult: areas where both images are bright transition first, and areas where either is dark are last.

Screen: areas where either image is bright transition first, and areas where both are dark transition last.

From: dark areas of the first clip disappear first, bright areas last.

To: bright areas of the second clip appear first, dark areas last.

Invert Pattern: *Check-box, Default: off.*

If enabled, the transition pattern is reversed in time.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Dissolve](#)

[DissolveBlur](#)

[DissolveBubble](#)

[DissolveClouds](#)

[DissolveDefocus](#)

[DissolveDiffuse](#)

[DissolveDistort](#)

[DissolveEdgeRays](#)

[DissolveFilm](#)

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DissolveGlint
DissolveGlintRainbow
DissolveGlow
DissolveLensFlare
DissolvePixelate
DissolvePuddle
DissolveSpeckle
DissolveStatic
DissolveTiles
DissolveVortex
DissolveWaves

DissolvePixelate

In the S_Dissolves Plugin.

Transitions between two input clips by adding blocks of pixels of one clip onto another in a semi-random order. The Wipe Amt parameter should be animated to control the transition speed. Adjust the Edge Width and Chunky parameters for different pixelated patterns.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition.

Pixel Frequency: *Default: 20, Range: 0.1 or greater.*

Increase for smaller and more pixels, decrease for fewer and larger pixels.

Pixel Rel Width: *Default: 1, Range: 0.01 or greater.*

The relative horizontal size of the pixels. Increase for wide pixels, decrease for tall ones.

Seed: *Default: 0.23, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Chunky: *Default: 0, Range: 0 or greater.*

Increase to cause the pixels to be added with a more clustered ordering.

Grad Add: *Default: 0, Range: 0 to 5.*

If positive, a gradient will be added to the timing of the transition pattern so it moves across the screen during the wipe. This parameter can be adjusted using the Wipe Widget if enabled, but the value must be positive to make this widget visible.

Grad Angle: *Default: 0, Range: any.*

The direction of the wipe gradient in counter-clockwise degrees. This will have no effect unless Grad Add is positive. The Wipe Widget also allows adjusting this parameter.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Dissolve](#)

[DissolveBlur](#)

[DissolveBubble](#)

[DissolveClouds](#)

[DissolveDefocus](#)

[DissolveDiffuse](#)

[DissolveDistort](#)

[Mosaic](#)

[WipePixelate](#)

[Sapphire Plug-ins](#)

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DissolveEdgeRays
DissolveFilm
DissolveGlint
DissolveGlintRainbow
DissolveGlow
DissolveLensFlare
DissolveLuma
DissolvePuddle
DissolveSpeckle
DissolveStatic
DissolveTiles
DissolveVortex
DissolveWaves

DissolvePuddle

In the S_Dissolves Plugin.

Transitions between two input clips while warping by a circular pattern of waves. The first clip is warped away and faded out while the second clip is unwarped into place and faded in. The Dissolve Amt parameter should be animated to control the transition speed.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition. The Slow In and Slow Out parameters, if positive, also adjust the dissolve amount internally for a smoother start and/or end to the transition.

Amplitude: *Default: 0.2, Range: any.*

Scales the amount of warping distortion.

Rel Amp2: *Default: -1, Range: any.*

The relative amplitude of the second input clip warping distortion. If this is positive instead of negative, the clip will be unwarped from the opposite direction.

Frequency: *Default: 5, Range: 0.01 or greater.*

The frequency of the puddle pattern. Increase for more and smaller elements, or decrease for fewer and larger.

Rel Height: *Default: 0.75, Range: 0.01 or greater.*

The relative height of the concentric wave pattern.

Rotate Puddle: *Default: 0, Range: any.*

Rotates the puddle pattern by this many counter-clockwise degrees after the Rel Height stretching has been applied. This has no effect when Rel Height is 1.

Inner Radius: *Default: 0, Range: any.*

The distance from the puddle center where the wave distortion is phased in. No waves are generated inside this radius.

Inner Softness: *Default: 0.1, Range: 0.01 or greater.*

The width of the region at the Inner Radius over which the wave distortion is phased in.

Outer Radius: *Default: 1.5, Range: 0 or greater.*

The distance from the puddle center where the wave distortion is phased out. No waves are generated outside this radius.

Outer Softness: *Default: 0.4, Range: 0.01 or greater.*

The width of the region at the Outer Radius over which the wave distortion is phased out.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source images.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Slow In: *Default: 0.5, Range: 0 or greater.*

If positive, causes the transition to start more gradually.

Slow Out: *Default: 0.5, Range: 0 or greater.*

If positive, causes the transition to end more gradually.

Center: *X & Y, Default: [0 0], Range: any.*

The location of the puddle center in screen coordinates relative to the center of the frame. This parameter can be set by enabling and moving the Center Widget. Note that moving the puddle center can also cause the puddle size to change so that the current value of Wipe Amt remains correct.

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Phase Start: *Default: 0, Range: any.*

The phase shift of the waves.

Phase Speed: *Default: 1, Range: any.*

The speed of the waves. If this is positive the waves automatically travel outwards from the center at this rate.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Dissolve](#)

[DissolveBlur](#)

[DissolveBubble](#)

[DissolveClouds](#)

[DissolveDefocus](#)

[DissolveDiffuse](#)

[DissolveDistort](#)

[DissolveEdgeRays](#)

[DissolveFilm](#)

[DissolveGlint](#)

[DissolveGlintRainbow](#)

[DissolveGlow](#)

[DissolveLensFlare](#)

[DissolveLuma](#)

[DissolvePixelate](#)

[DissolveSpeckle](#)

[DissolveStatic](#)

[DissolveTiles](#)

[DissolveVortex](#)

[DissolveWaves](#)

[WarpPuddle](#)

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DissolveSpeckle

In the S_Dissolves Plugin.

Transition between two input clips using a speckled noise pattern. The Dissolve Amt parameter should be animated to control the transition speed.

Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition.

Frequency: *Default: 80, Range: 0.01 or greater.*

The frequency of the speckle pattern. Increase for smaller speckles, decrease for larger.

Frequency Rel Y: *Default: 1, Range: 0.01 or greater.*

The relative vertical frequency of the speckles pattern. Increase for wider speckles, decrease for taller speckles.

Octaves: *Integer, Default: 1, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.23, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Dissolve](#)

[DissolveBlur](#)

[DissolveBubble](#)

[DissolveClouds](#)

[DissolveDefocus](#)

[DissolveDiffuse](#)

[DissolveDistort](#)

[DissolveEdgeRays](#)

[DissolveFilm](#)

[DissolveGlint](#)

[DissolveGlintRainbow](#)

[DissolveGlow](#)

[DissolveLensFlare](#)

[DissolveLuma](#)

[DissolvePixelate](#)

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[Sapphire Plug-ins](#)

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DissolveStatic
DissolveTiles
DissolveVortex
DissolveWaves

DissolveStatic

In the S_Dissolves Plugin.

Transitions between two input clips using random pixel static. The Dissolve Amt parameter should be animated to control the transition speed. The pixelated look of this effect depends on the image resolution, so it is recommended to test your final resolution before processing.

Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Dissolve](#)

[DissolveBlur](#)

[DissolveBubble](#)

[DissolveClouds](#)

[DissolveDefocus](#)

[DissolveDiffuse](#)

[DissolveDistort](#)

[DissolveEdgeRays](#)

[DissolveFilm](#)

[DissolveGlint](#)

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[DissolveGlow](#)

[DissolveLensFlare](#)

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[DissolvePixelate](#)

[DissolvePuddle](#)

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[DissolveTiles](#)

[DissolveVortex](#)

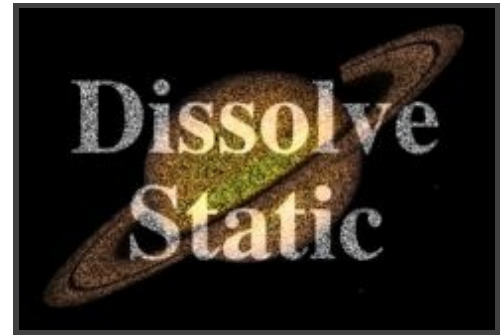
[DissolveWaves](#)

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DissolveTiles

In the S_Dissolves Plugin.

Transitions between two input clips while breaking each up into tiles and scrambling them. The first clip breaks apart and spreads out while the second clip coalesces behind the first. The Dissolve Amt parameter should be animated to control the transition speed.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition. The Slow In and Slow Out parameters, if positive, also adjust the dissolve amount internally for a smoother start and/or end to the transition.

Scramble Speed: *Default: 2, Range: any.*

The amount each input should be scrambled at the edges of the transition. The incoming clip is scrambled by this amount at the beginning of the transition, and the outgoing clip is scrambled by this amount at the end. Setting this to zero will result in no tiling on either clip.

Scramble Rel: *X & Y, Default: [1 1], Range: 0 or greater.*

The relative amounts of horizontal and vertical scrambling.

Scramble From: *Default: 1, Range: any.*

The relative amount of scrambling in the outgoing clip. Set this to zero if the outgoing clip shouldn't be scrambled at all.

Scramble To: *Default: -1, Range: any.*

The relative amount of scrambling in the incoming clip. Set this to zero if the incoming clip shouldn't be scrambled at all.

Tiles: *Default: 10, Range: 1 or greater.*

How many tiles across the image. Increase for many tiny tiles; decrease for a few large ones.

Tile Rel Width: *Default: 1, Range: 0.01 or greater.*

Scales the height of each tile.

Tile Rel Height: *Default: 1, Range: 0 or greater.*

Scales the width of each tile.

Dissolve Delay: *Default: 0.6, Range: 0 to 1.*

The delay before cross-dissolving between the From and To clips. If this is set to 1, the outgoing clip does not fade at all. If set to 0, the outgoing and incoming clips will dissolve smoothly throughout the transition.

Combine: *Popup menu, Default: From Over To.*

By default the outgoing From clip scrambles away, revealing the To clip scrambling in underneath it. Set this to To Over From to have the To clip scramble in on top of the From clip. Adjusting Scramble Rel From and Scramble Rel To along with this can give nice results.

From Over To: Composites the From (outgoing) clip over the To (incoming) clip, which reveals the To clip as the From clip scrambles away. Works well with default settings or with Scramble Rel To set to zero.
To Over From: Composites the To (incoming) clip over the From (outgoing) clip, which scrambles the To clip in over the From clip. Works well with default settings or with Scramble Rel From set to zero.

Slow In: *Default: 0.5, Range: 0 or greater.*
If positive, causes the transition to start more gradually.

Slow Out: *Default: 0.5, Range: 0 or greater.*
If positive, causes the transition to end more gradually.

Rotate Warp Dir: *Default: 0, Range: any.*
Rotates the warping direction by this many degrees. Animate to rotate the tiles around for an interesting effect.

Seed: *Default: 0.5, Range: 0 or greater.*
Used to initialize the random number generator for tiling the clips. The actual seed value is not significant, but different values will give different results.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Dissolve](#)
[DissolveBlur](#)
[DissolveBubble](#)
[DissolveClouds](#)
[DissolveDefocus](#)
[DissolveDiffuse](#)
[DissolveDistort](#)
[DissolveEdgeRays](#)
[DissolveFilm](#)
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[DissolveGlintRainbow](#)
[DissolveGlow](#)
[DissolveLensFlare](#)
[DissolveLuma](#)
[DissolvePixelate](#)
[DissolvePuddle](#)
[DissolveSpeckle](#)
[DissolveStatic](#)
[DissolveVortex](#)
[DissolveWaves](#)

[TileScramble](#)
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DissolveVortex

In the S_Dissolves Plugin.

Transitions between two input clips using a vortex warping function. The first clip is warped away and faded out while the second clip is unwarped into place and faded in. The Dissolve Amt parameter should be animated to control the transition speed.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition. The Slow In and Slow Out parameters, if positive, also adjust the dissolve amount internally for a smoother start and/or end to the transition.

Vortex Amount: *Default: 72, Range: any.*

The amount of vortex rotation, in approximate degrees at the edge of the frame.

Rel Amount2: *Default: -1, Range: any.*

The relative amount of the second clip vortex rotation. If this is positive instead of negative the second clip will be unvortexed from the opposite direction.

Inner Radius: *Default: 0.04, Range: 0 or greater.*

The radius from the center at which the vortexing is phased in. This can be used to reduce excessive distortion and aliasing at the very center of the vortex.

Rotate Amount: *Default: 0, Range: any.*

If non-zero, a rotation is also added to the warping. Make negative to rotate the inner and outer regions in different directions.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source images.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Slow In: *Default: 0.5, Range: 0 or greater.*

If positive, causes the transition to start more gradually.

Slow Out: *Default: 0.5, Range: 0 or greater.*

If positive, causes the transition to end more gradually.

Center: *X & Y, Default: [0 0], Range: any.*

The location of the vortex center in screen coordinates relative to the center of the frame. This parameter can be set by enabling and moving the Center Widget. Note that moving the vortex center can also cause the vortex size to change so that the current value of Wipe Amt remains correct.

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Dissolve](#)

[DissolveBlur](#)

[DissolveBubble](#)

[DissolveClouds](#)

[DissolveDefocus](#)

[DissolveDiffuse](#)

[DissolveDistort](#)

[DissolveEdgeRays](#)

[DissolveFilm](#)

[DissolveGlint](#)

[DissolveGlintRainbow](#)

[DissolveGlow](#)

[DissolveLensFlare](#)

[DissolveLuma](#)

[DissolvePixelate](#)

[DissolvePuddle](#)

[DissolveSpeckle](#)

[DissolveStatic](#)

[DissolveTiles](#)

[DissolveWaves](#)

[WarpVortex](#)

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DissolveWaves

In the S_Dissolves Plugin.

Transitions between two input clips using a waves warping function. The first clip is warped away and faded out while the second clip is unwarped into place and faded in. The Dissolve Amt parameter should be animated to control the transition speed.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition. The Slow In and Slow Out parameters, if positive, also adjust the dissolve amount internally for a smoother start and/or end to the transition.

Frequency: *Default: 3, Range: any.*

The frequency of the waves pattern. Increase for more and smaller elements, or decrease for fewer and larger.

Amplitude: *Default: 0.3, Range: any.*

Scales the amount of warping distortion.

Rel Amp2: *Default: -1, Range: any.*

The relative amplitude of the second input clip warping distortion. If this is positive instead of negative, the clip will be unwarped from the opposite direction.

Angle: *Default: 45, Range: any.*

The rotation of the overall waves pattern used for the wipe, in counter-clockwise degrees.

Displace Angle: *Default: 90, Range: any.*

The warping direction in degrees relative to the angle of the waves. 0 gives compression-expansion waves, and 90 gives side to side waves.

Phase Start: *Default: 0, Range: any.*

The phase shift of the waves. The wave pattern is translated in the direction of Angle by this amount.

Phase Speed: *Default: 0, Range: any.*

The phase speed of the waves. If this is non-zero the wave pattern automatically travels at this rate.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source images.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Slow In: *Default: 0.5, Range: 0 or greater.*

If positive, causes the transition to start more gradually.

Slow Out: *Default: 0.5, Range: 0 or greater.*
If positive, causes the transition to end more gradually.

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Dissolve](#)

[DissolveBlur](#)

[DissolveBubble](#)

[DissolveClouds](#)

[DissolveDefocus](#)

[DissolveDiffuse](#)

[DissolveDistort](#)

[DissolveEdgeRays](#)

[DissolveFilm](#)

[DissolveGlint](#)

[DissolveGlintRainbow](#)

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[DissolveLensFlare](#)

[DissolveLuma](#)

[DissolvePixelate](#)

[DissolvePuddle](#)

[DissolveSpeckle](#)

[DissolveStatic](#)

[DissolveTiles](#)

[DissolveVortex](#)

[WarpWaves](#)

[Sapphire Plug-ins](#)

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Distort

In the S_Distort Plugin.

Warp the source input clip using the gradient of the Lens input clip. This can generate optical glass-like effects as if the source clip were being viewed through an arbitrarily shaped lens. It is best demonstrated when the lens image contains just a few bold shapes or a simple texture.



Inputs:

Source: The clip to be processed.

Lens: Distorts the source using the brightness values of this input clip.

Parameters:

Amount: *Default: 1, Range: any, Shared.*

The severity of the lens distortions. Make negative to invert the direction of the distortions.

Blur Lens: *Default: 0.5, Range: 0 or greater, Shared.*

Smooths out the edges in the lens image by this amount before using it.

Rotate Warp Dir: *Default: 0, Range: any, Shared.*

Rotates the warping direction by this many degrees. If non-zero, this can add some unusual twisting effects to the lens distortion.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Amount Rel: *X & Y, Default: [1 1], Range: any, Shared.*

The relative amounts of horizontal and vertical distortion. This has no effect unless Amount is positive.

Filter: *Check-box, Default: on, Shared.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[DistortBlur](#)

[DistortChroma](#)

[DistortRGB](#)

[DistortFine](#)

[DistortMask](#)

[EmbossDistort](#)

[WarpFishEye](#)

[Sapphire](#)

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DistortMask

In the S_DistortMask Plugin.

Similar to Distort but scales the amount of distortion by the Mask input. Warps the source input clip using the gradient of the Lens input clip. This can generate optical glass-like effects as if the source clip were being viewed through an arbitrarily shaped lens. It is best demonstrated when the lens image contains just a few bold shapes or a simple texture.



Inputs:

Source: The clip to be processed.

Lens: Distorts the source using the brightness values of this input clip.

Mask: The amount of lens distortion is scaled by this input, so the Source is unaffected where the Mask is black. The Mask can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters. Only the red channel of this input is used.

Parameters:

Amount: *Default: 1, Range: any, Shared.*

The severity of the lens distortions. Make negative to invert the direction of the distortions.

Blur Lens: *Default: 0.5, Range: 0 or greater, Shared.*

Smooths out the edges in the lens image by this amount before using it.

Rotate Warp Dir: *Default: 0, Range: any, Shared.*

Rotates the warping direction by this many degrees. If non-zero, this can add some unusual twisting effects to the lens distortion.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Amount Rel: *X & Y, Default: [1 1], Range: any, Shared.*

The relative amounts of horizontal and vertical distortion. This has no effect unless Amount is positive.

Filter: *Check-box, Default: on, Shared.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Blur Mask: *Default: 0, Range: 0 or greater, Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[DistortBlurMask](#)
[DistortChromaMask](#)
[DistortRGBMask](#)
[DistortFineMask](#)

[Distort](#)

[EmbossDistort](#)
[WarpFishEye](#)

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DistortBlur

In the S_Distort Plugin.

Blurs the source input clip in the direction of the gradient of the Lens input clip. It is best demonstrated when the lens image contains just a few simple shapes.



Inputs:

Source: The clip to be processed.

Lens: Distorts the source using the brightness values of this input clip.

Parameters:

Amount: *Default: 1, Range: any, Shared.*

The severity of the lens distortions. Make negative to invert the direction of the distortions.

Blur Lens: *Default: 0.5, Range: 0 or greater, Shared.*

Smooths out the edges in the lens image by this amount before using it.

Rotate Warp Dir: *Default: 0, Range: any, Shared.*

Rotates the blurring direction by this many degrees. If non-zero, this can add some unusual twisting effects to the blurring.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Warp Amount: *Default: 0, Range: any.*

Adds some additional non-blurred lens distortion if non-zero.

Amount Rel: *X & Y, Default: [1 1], Range: any, Shared.*

The relative amounts of horizontal and vertical distortion. This has no effect unless Amount is positive.

Subpixel: *Check-box, Default: on.*

If enabled, uses a better quality but slightly slower method for performing the blur.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Distort](#)

[DistortChroma](#)

[DistortRGB](#)

[DistortFine](#)

[DistortBlurMask](#)

[Blur](#)

[BlurMotion](#)

[Sapphire](#)

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DistortBlurMask

In the S_DistortMask Plugin.

Similar to DistortBlur but scales the amount of blur by the Mask input. Blurs the source input clip in the direction of the gradient of the Distort input clip.

Inputs:

Source: The clip to be processed.

Lens: Distorts the source using the brightness values of this input clip.

Mask: The amount of lens distortion is scaled by this input, so the Source is unaffected where the Mask is black. The Mask can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters. Only the red channel of this input is used.



Parameters:

Amount: *Default: 1, Range: any, Shared.*

The severity of the lens distortions. Make negative to invert the direction of the distortions.

Blur Lens: *Default: 0.5, Range: 0 or greater, Shared.*

Smooths out the edges in the lens image by this amount before using it.

Rotate Warp Dir: *Default: 0, Range: any, Shared.*

Rotates the blurring direction by this many degrees. If non-zero, this can add some unusual twisting effects to the blurring.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Warp Amount: *Default: 0, Range: any.*

Adds some additional non-blurred lens distortion if non-zero.

Amount Rel: *X & Y, Default: [1 1], Range: any, Shared.*

The relative amounts of horizontal and vertical distortion. This has no effect unless Amount is positive.

Subpixel: *Check-box, Default: on.*

If enabled, uses a better quality but slightly slower method for performing the blur.

Blur Mask: *Default: 0, Range: 0 or greater, Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[DistortMask](#)

[DistortChromaMask](#)

[DistortRGBMask](#)

[DistortFineMask](#)

[DistortBlur](#)

[Blur](#)

[BlurMotion](#)

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DistortChroma

In the S_Distort Plugin.

Warp the chrominance of the source input by different amounts using the gradient of the Lens input clip. This can generate optical glass-like effects as if the source clip were being viewed through an arbitrarily shaped or textured prism. It is best demonstrated when the lens image contains just a few simple bold shapes.



Inputs:

Source: The clip to be processed.

Lens: Distorts the source using the brightness values of this input clip.

Parameters:

Amount: *Default: 1, Range: any, Shared.*

The severity of the lens distortions. Make negative to invert the direction of the distortions.

Blur Lens: *Default: 0.5, Range: 0 or greater, Shared.*

Smooths out the edges in the lens image by this amount before using it.

Rotate Warp Dir: *Default: 0, Range: any, Shared.*

Rotates the warping direction by this many degrees. If non-zero, this can add some unusual twisting effects to the lens distortion.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Warp Red: *Default: 0.5, Range: any.*

The magnitude of lens distortion for the red end of the spectrum. Make negative to invert the direction of the red distortions.

Warp Blue: *Default: 1, Range: any.*

The magnitude of lens distortion for the blue end of the spectrum. Make negative to invert the direction of the blue distortions.

Steps: *Integer, Default: 8, Range: 3 to 100.*

The number of color samples along the spectrum to include. More steps give a smoother result, but require more time to process.

Amount Rel: *X & Y, Default: [1 1], Range: any, Shared.*

The relative amounts of horizontal and vertical distortion. This has no effect unless Amount is positive.

Filter: *Check-box, Default: on, Shared.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Params2:

Color1: *Default rgb:* [1 0 0].

The color at the 'red' end of the spectrum.

Color2: *Default rgb:* [0 1 0].

The color in the middle of the spectrum.

Color3: *Default rgb:* [0 0 1].

The color at the 'blue' end of the spectrum.

White Balance: *Check-box, Default:* off.

When enabled, the three colors are adjusted internally so they sum to white. In this case, the colors of unwarped regions are not affected and the average color of the result remains the same.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Distort](#)

[DistortBlur](#)

[DistortRGB](#)

[DistortFine](#)

[DistortChromaMask](#)

[EmbossGlass](#)

[WarpChroma](#)

[Sapphire](#)

[Plug-ins](#)

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DistortChromaMask

In the S_DistortMask Plugin.

Similar to DistortChroma but scales the amount of distortion by the Mask input. Warps the chrominance of the source input by different amounts using the gradient of the Lens input clip. This can generate optical glass-like effects as if the source clip were being viewed through an arbitrarily shaped or textured prism.



Inputs:

Source: The clip to be processed.

Lens: Distorts the source using the brightness values of this input clip.

Mask: The amount of lens distortion is scaled by this input, so the Source is unaffected where the Mask is black. The Mask can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters. Only the red channel of this input is used.

Parameters:

Amount: *Default: 1, Range: any, Shared.*

The severity of the lens distortions. Make negative to invert the direction of the distortions.

Blur Lens: *Default: 0.5, Range: 0 or greater, Shared.*

Smooths out the edges in the lens image by this amount before using it.

Rotate Warp Dir: *Default: 0, Range: any, Shared.*

Rotates the warping direction by this many degrees. If non-zero, this can add some unusual twisting effects to the lens distortion.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Warp Red: *Default: 0.5, Range: any.*

The magnitude of lens distortion for the red end of the spectrum. Make negative to invert the direction of the red distortions.

Warp Blue: *Default: 1, Range: any.*

The magnitude of lens distortion for the blue end of the spectrum. Make negative to invert the direction of the blue distortions.

Steps: *Integer, Default: 8, Range: 3 to 100.*

The number of color samples along the spectrum to include. More steps give a smoother result, but require more time to process.

Amount Rel: *X & Y, Default: [1 1], Range: any, Shared.*

The relative amounts of horizontal and vertical distortion. This has no effect unless Amount is positive.

Filter: *Check-box, Default: on, Shared.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Blur Mask: *Default: 0, Range: 0 or greater, Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Params2:

Color1: *Default rgb: [1 0 0].*

The color at the 'red' end of the spectrum.

Color2: *Default rgb: [0 1 0].*

The color in the middle of the spectrum.

Color3: *Default rgb: [0 0 1].*

The color at the 'blue' end of the spectrum.

White Balance: *Check-box, Default: off.*

When enabled, the three colors are adjusted internally so they sum to white. In this case, the colors of unwarped regions are not affected and the average color of the result remains the same.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[DistortMask](#)

[DistortBlurMask](#)

[DistortRGBMask](#)

[DistortFineMask](#)

[DistortChroma](#)

[EmbossGlass](#)

[WarpChroma](#)

[Sapphire](#)

[Plug-ins](#)

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DistortFine

In the S_Distort Plugin.

Similar to Distort, but reduces the warping amount by a factor of 100. This option is meant to allow subtle expansion or contraction of the source image near the edges of its matte given as the Lens input.

Inputs:

Source: The clip to be processed.

Lens: Distorts the source using the brightness values of this input clip.



Parameters:

Amount: *Default:* 0.1, *Range:* any.

The severity of the lens distortions. Make negative to invert the direction of the distortions.

Blur Lens: *Default:* 0.01, *Range:* 0 or greater.

Smooths out the edges in the lens image by this amount before using it.

Rotate Warp Dir: *Default:* 0, *Range:* any, *Shared*.

Rotates the warping direction by this many degrees. If non-zero, this can add some unusual twisting effects to the lens distortion.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Amount Rel: *X & Y, Default:* [1 1], *Range:* any, *Shared*.

The relative amounts of horizontal and vertical distortion. This has no effect unless Amount is positive.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Distort](#)

[DistortBlur](#)

[DistortChroma](#)

[DistortRGB](#)

[DistortFineMask](#)

[EmbossDistort](#)

[WarpFishEye](#)

[Sapphire](#)

[Plug-ins](#)

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DistortFineMask

In the S_DistortMask Plugin.

Similar to DistortFine but scales the amount of distortion by the Mask input.

Inputs:

Source: The clip to be processed.

Lens: Distorts the source using the brightness values of this input clip.

Mask: The amount of lens distortion is scaled by this input, so the Source is unaffected where the Mask is black. The Mask can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters. Only the red channel of this input is used.



Parameters:

Amount: *Default:* 0.1, *Range:* any.

The severity of the lens distortions. Make negative to invert the direction of the distortions.

Blur Lens: *Default:* 0.01, *Range:* 0 or greater.

Smooths out the edges in the lens image by this amount before using it.

Rotate Warp Dir: *Default:* 0, *Range:* any, *Shared.*

Rotates the warping direction by this many degrees. If non-zero, this can add some unusual twisting effects to the lens distortion.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Amount Rel: *X & Y, Default:* [1 1], *Range:* any, *Shared.*

The relative amounts of horizontal and vertical distortion. This has no effect unless Amount is positive.

Blur Mask: *Default:* 0, *Range:* 0 or greater, *Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[DistortMask](#)

[DistortBlurMask](#)

[DistortFine](#)

[EmbossDistort](#)

[WarpFishEye](#)

[Sapphire](#)

[Plug-ins](#)

DistortChromaMask
DistortRGBMask

Introduction

DistortRGB

In the S_Distort Plugin.

Warp the red, green, and blue color channels of the source input by different amounts using the gradient of the Lens input clip. It is best demonstrated when the lens image contains just a few simple bold shapes.

Inputs:

Source: The clip to be processed.

Lens: Distorts the source using the brightness values of this input clip.



Parameters:

Amount: *Default: 1, Range: any, Shared.*

Scales the magnitude of the lens distortion for all channels. Make negative to invert the direction of the distortions.

Blur Lens: *Default: 0.5, Range: 0 or greater, Shared.*

Smooths out the edges in the lens image by this amount before using it.

Rotate Warp Dir: *Default: 0, Range: any, Shared.*

Rotates the warping direction by this many degrees. If non-zero, this can add some unusual twisting effects to the lens distortion.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Warp Red: *Default: 0.5, Range: any.*

Scales the amount of lens distortion for the red channel. Negate to invert the direction.

Warp Green: *Default: 0.75, Range: any.*

Scales the amount of lens distortion for the green channel. Negate to invert the direction.

Warp Blue: *Default: 1, Range: any.*

Scales the amount of lens distortion for the blue channel. Negate to invert the direction.

Amount Rel: *X & Y, Default: [1 1], Range: any, Shared.*

The relative amounts of horizontal and vertical distortion. This has no effect unless Amount is positive.

Filter: *Check-box, Default: on, Shared.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Distort](#)
[DistortBlur](#)
[DistortChroma](#)
[DistortFine](#)

[DistortRGBMask](#)

[EmbossGlass](#)
[WarpChroma](#)

[Sapphire](#)
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DistortRGBMask

In the S_DistortMask Plugin.

Similar to DistortRGB but scales the amount of distortion by the Mask input. Warps the red, green, and blue color channels of the source input by different amounts using the gradient of the Lens input clip.

Inputs:

Source: The clip to be processed.

Lens: Distorts the source using the brightness values of this input clip.

Mask: The amount of lens distortion is scaled by this input, so the Source is unaffected where the Mask is black. The Mask can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters. Only the red channel of this input is used.



Parameters:

Amount: *Default: 1, Range: any, Shared.*

Scales the magnitude of the lens distortion for all channels. Make negative to invert the direction of the distortions.

Blur Lens: *Default: 0.5, Range: 0 or greater, Shared.*

Smooths out the edges in the lens image by this amount before using it.

Rotate Warp Dir: *Default: 0, Range: any, Shared.*

Rotates the warping direction by this many degrees. If non-zero, this can add some unusual twisting effects to the lens distortion.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Warp Red: *Default: 0.5, Range: any.*

Scales the amount of lens distortion for the red channel. Negate to invert the direction.

Warp Green: *Default: 0.75, Range: any.*

Scales the amount of lens distortion for the green channel. Negate to invert the direction.

Warp Blue: *Default: 1, Range: any.*

Scales the amount of lens distortion for the blue channel. Negate to invert the direction.

Amount Rel: *X & Y, Default: [1 1], Range: any, Shared.*

The relative amounts of horizontal and vertical distortion. This has no effect unless Amount is positive.

Filter: *Check-box, Default: on, Shared.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Blur Mask: *Default: 0, Range: 0 or greater, Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[DistortMask](#)

[DistortRGB](#)

[EmbossGlass](#)

[Sapphire](#)

[DistortBlurMask](#)

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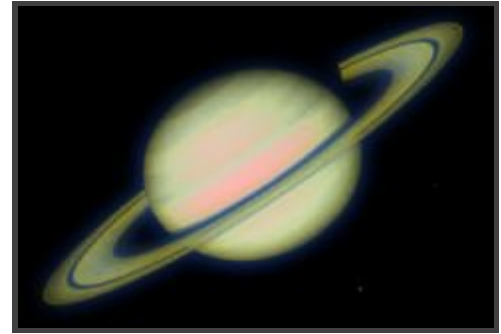
[DistortFineMask](#)

DogVision

Generates a dual color-channel version of the input image, as might be perceived by the limited color vision system of dogs. Humans have three color receptors (for red, green, and blue) while dogs have only two receptors (for yellow and blue).

Inputs:

Source: The clip to be processed.



Parameters:

Channels: *Popup menu, Default: Yellow-Blue.*

Selects which two complementary color channels to use.

Yellow-Blue: the result is made using yellow and blue.

Cyan-Red: the result is made using cyan and red.

Magenta-Green: the result is made using magenta and purple.

Rotate Channels: *Default: 0, Range: any.*

Allows hue shifting the two color channels selected above. Note that when this is non-zero, the channels may no longer match the name selected.

Blur Channel1: *Default: 0, Range: 0 or greater.*

Smooths the first color channel by this amount.

Blur Channel2: *Default: 0, Range: 0 or greater.*

Smooths the second color channel by this amount.

Weight Source R: *Default: 1, Range: any.*

Scales the red of the input clip before processing.

Weight Source G: *Default: 1, Range: any.*

Scales the green of the input clip before processing.

Weight Source B: *Default: 1, Range: any.*

Scales the blue of the input clip before processing.

Mix Original: *Default: 0, Range: any.*

Interpolates between the 2-color result and the original source. Set this to 1 for the original, or use negative values to exaggerate the dog vision effect.

Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of the result.

Offset Darks: *Default: 0, Range: any.*

Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

Saturation: *Default: 1, Range: any.*

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[HueSatBright](#)

[Monochrome](#)

[PseudoColor](#)

[DuoTone](#)

[Tint](#)

[Solarize](#)

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DropShadow

Generates a shadow on the Back clip using the Matte clip, then composites the Front over the Back to give the final result.

Inputs:

Front: foreground clip to composite over the background.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip. Only the red channel of this input is used.



Parameters:

Shift: *X & Y, Default: [10 -10], Range: any.*

The horizontal and vertical offset of the shadow, in pixels. This parameter can be adjusted using the Shift Widget.

Blur: *Default: 0.1, Range: 0 or greater.*

Determines the softness of the shadow.

Color: *Default rgb: [0 0 0].*

The color of the shadow.

Opacity: *Default: 1, Range: 0 or greater.*

The opacity of the shadow, use values near 0 for subtle transparent shadows, or values near 1.0 for stronger shadows.

Front Opacity: *Default: 1, Range: 0 or greater.*

Scales the opacity of the Front input without affecting the shadow. Lowering this can be used to fade out the foreground, or setting it to zero prevents the foreground from being composited over the result at all.

Comp Premult: *Check-box, Default: off.*

Enable this for a better composite if the Foreground pixel colors have been pre-multiplied by their Matte values. This is also known as an 'additive' composite.

Invert Matte: *Check-box, Default: off.*

If enabled, the black and white of the Foreground alpha channel are inverted before use.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Blur](#)

[Sapphire Plug-ins Introduction](#)

EdgeBlur

Finds the edges within the Matte clip, and blurs the Source clip at those edges. Use the Show Edges option to view which areas will receive the blur while adjusting the edge parameters. Then adjust Blur Width to control the amount of blur.

Inputs:

Source: The clip to be processed.

Matte: The clip used to determine the edge locations where the Source should be blurred. Only the brightness value of this clip is used.



Parameters:

Blur Width: *Default:* 0.02, *Range:* 0 or greater.

The width of the blur. This should normally not be much greater than the Edge Width. This parameter can be adjusted using the Blur Width Widget.

Edge Width: *Default:* 0.02, *Range:* 0 or greater.

The width of the edge area to blur within.

Edge Strength: *Default:* 0.5, *Range:* 0 or greater.

The strength of the edges determines the amount of the blurred source that replaces the edges.

Edge Threshold: *Default:* 0, *Range:* 0 or greater.

Determines which edges are blurred. Increase to remove minor edges or speckles.

Show: *Popup menu, Default:* RESULT.

Selects between output options.

RESULT: outputs the Source image with blurred edges.

EDGES: outputs only the edge image. This can useful during the adjustment of the edge parameters.

Subpixel: *Check-box, Default:* off.

Enables blurring by subpixel amounts. Use this for smoother animation of the Blur Width or Edge Width parameters.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Blur](#)

[EdgeFlash](#)

[EdgeDetect](#)

[Sapphire Plug-ins](#)

[Introduction](#)

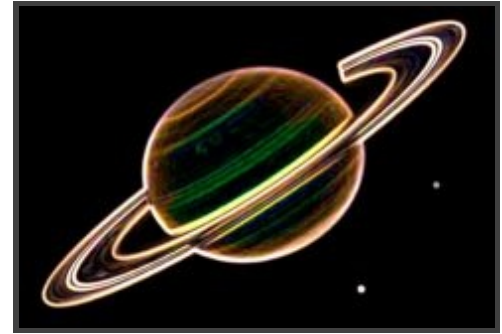
EdgeDetect

In the S_EdgeDetect Plugin.

Finds the edges within the source clip. Increase the Edge Smooth parameter for thicker edges. Select Mono or Chroma mode to show only edges in Luminance or Chroma.

Inputs:

Source: The clip to be processed.



Parameters:

Edge Smooth: *Default: 0, Range: 0 or greater, Shared.*
Increase for thicker and smoother edges.

Weight Red: *Default: 1, Range: 0 or greater, Shared.*
Scale the edges of the red source channel.

Weight Green: *Default: 1, Range: 0 or greater, Shared.*
Scale the edges of the green source channel.

Weight Blue: *Default: 1, Range: 0 or greater, Shared.*
Scale the edges of the blue source channel.

Brightness: *Default: 1, Range: 0 or greater, Shared.*
Scales the brightness of the result.

Saturation: *Default: 1, Range: 0 or greater, Shared.*
Scales the color saturation of the result. Increase for more intense colors. Set to 0 for monochrome.

Threshold: *Default: 0, Range: 0 or greater, Shared.*
Subtracts this value from the result. Increase to remove unwanted noise from minor edges.

Subpixel Smooth: *Check-box, Default: off, Shared.*
Enables smoothing the edges by subpixel amounts. Use this for smoother animation of the Edge Smooth parameter.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[EdgeDetectMono](#)
[EdgeDetectChroma](#)
[EdgesInDirection](#)
[EdgeDetectDouble](#)
[EdgeColorize](#)
[EdgeBlips](#)

[BandPass](#)
[Sharpen](#)
[Emboss](#)

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EdgeDetect: Blips

In the S_EdgeDetect Plugin.

Performs an edge detect on the source image, then finds the intersection of the edges with a rotating beam. The result of this effect can be used to create dots that cycle around the edges of an object, probably for further processing such as with Glint.



Inputs:

Source: The clip to be processed.

Parameters:

Center: *X & Y, Default: [0 0], Range: any.*

The center location of the rotating beam, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Angle Start: *Default: 0, Range: any.*

The initial beam angle.

Angle Speed: *Default: 180, Range: any.*

The speed of beam rotation in degrees per second. For variable beam rotation speed, set this to zero and animate the Angle Start parameter.

Beam Width: *Default: 0.05, Range: 0.001 or greater.*

The width of the rotating beam.

Beam: *Popup menu, Default: 1 Way.*

Selects the type of beam.

1 Way: the beam starts at the Center location and extends outwards in a single direction based on the Angle.

Bidirectional: the beam extends in both directions from the Center location.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Saturation: *Default: 1, Range: 0 or greater, Shared.*

Scales the color saturation of the result. Increase for more intense colors. Set to 0 for monochrome.

Threshold: *Default: 0, Range: 0 or greater, Shared.*

Subtracts this value from the result. Increase to remove unwanted noise from minor edges.

Edge Smooth: *Default: 0, Range: 0 or greater.*

Increase for thicker and smoother edges.

Show: *Popup menu, Default: EDGESxBEAM.*

Selects between output options.

EDGESxBEAM: outputs the edge image intersected with the beam.

EDGES: outputs only the edge image. Use this when adjusting the edge parameters.

BEAM: outputs only the beam images. Use this when adjusting the beam parameters.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[EdgeDetect](#)

[EdgeDetectMono](#)

[EdgeDetectChroma](#)

[EdgesInDirection](#)

[EdgeDetectDouble](#)

[EdgeColorize](#)

[BandPass](#)

[Sharpen](#)

[Emboss](#)

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EdgeDetect: Colorize

In the S_EdgeDetect Plugin.

Assigns different colors to the edges of the source clip depending on their direction. Increase the Edge Smooth parameter for thicker edges.

Inputs:

Source: The clip to be processed.



Parameters:

Edge Smooth: *Default:* 0.2, *Range:* 0 or greater.
Increase for thicker and smoother edges.

Scale: *Default:* 1, *Range:* 0 or greater.
Scales the edge colors by this amount.

Rotate Colors: *Default:* 0, *Range:* any.
Causes the Top, Left, Right, and Bottom colors to be rotated to different edge directions, in counter-clockwise degrees.

Top: *Default rgb:* [1 0.85 0.5].
The color of upwards facing edges.

Left: *Default rgb:* [0.5 0 0].
The color of left facing edges.

Right: *Default rgb:* [0 0.1 0.5].
The color of right facing edges.

Bottom: *Default rgb:* [0.3 0.3 0.3].
The color of downwards facing edges.

Background: *Default rgb:* [0 0 0].
The color to use as a background.

Subpixel Smooth: *Check-box, Default:* off, *Shared.*
Enables smoothing the edges by subpixel amounts. Use this for smoother animation of the Edge Smooth parameter.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[EdgeDetect](#)
[EdgeDetectMono](#)
[EdgeDetectChroma](#)
[EdgesInDirection](#)
[EdgeDetectDouble](#)
[EdgeBlips](#)

[BandPass](#)
[Sharpen](#)
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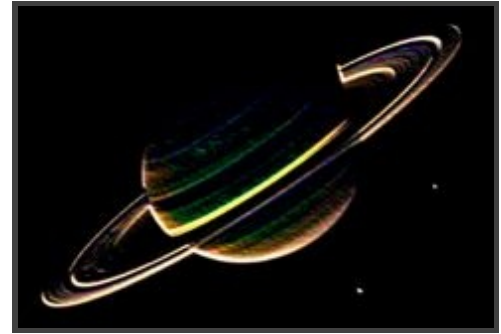
EdgeDetect: InDirection

In the S_EdgeDetect Plugin.

Finds the edges of the source input that are aligned in a specified direction.
Increase the Edge Smooth parameter for thicker edges.

Inputs:

Source: The clip to be processed.



Parameters:

Edge Smooth: *Default: 0, Range: 0 or greater, Shared.*
Increase for thicker and smoother edges.

Direction: *X & Y, Default: [0.5 0.5], Range: any.*
Edges are found which are perpendicular to this direction vector. This parameter can be adjusted using the Direction Widget.

Bidirectional: *Popup YES-NO, Default: No.*
If enabled, edges towards and away from the Direction vector are treated equally.

Scale: *Default: 1, Range: 0 or greater.*
Scales the brightness of the result.

Saturation: *Default: 1, Range: 0 or greater, Shared.*
Scales the color saturation of the result. Increase for more intense colors. Set to 0 for monochrome.

Offset Color: *Default rgb: [0 0 0].*
The color to add to the result. Make this gray to allow the darker side of edges away from the given Direction to also be visible.

Subpixel Smooth: *Check-box, Default: off, Shared.*
Enables smoothing the edges by subpixel amounts. Use this for smoother animation of the Edge Smooth parameter.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[EdgeDetect](#)
[EdgeDetectMono](#)
[EdgeDetectChroma](#)
[EdgeDetectDouble](#)
[EdgeColorize](#)
[EdgeBlips](#)

[BandPass](#)
[Sharpen](#)
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EdgeDetectChroma

In the S_EdgeDetect Plugin.

Similar to EdgeDetect, but luminance edges are ignored, and only the edges in the Source's chrominance are found. This option can sometimes be helpful for use with matte extraction.

Inputs:

Source: The clip to be processed.



Parameters:

Edge Smooth: *Default: 0, Range: 0 or greater, Shared.*
Increase for thicker and smoother edges.

Weight Red: *Default: 1, Range: 0 or greater, Shared.*
Scale the edges of the red source channel.

Weight Green: *Default: 1, Range: 0 or greater, Shared.*
Scale the edges of the green source channel.

Weight Blue: *Default: 1, Range: 0 or greater, Shared.*
Scale the edges of the blue source channel.

Brightness: *Default: 1, Range: 0 or greater, Shared.*
Scales the brightness of the result.

Saturation: *Default: 1, Range: 0 or greater, Shared.*
Scales the color saturation of the result. Increase for more intense colors. Set to 0 for monochrome.

Threshold: *Default: 0, Range: 0 or greater, Shared.*
Subtracts this value from the result. Increase to remove unwanted noise from minor edges.

Subpixel Smooth: *Check-box, Default: off, Shared.*
Enables smoothing the edges by subpixel amounts. Use this for smoother animation of the Edge Smooth parameter.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[EdgeDetect](#)
[EdgeDetectMono](#)
[EdgesInDirection](#)
[EdgeDetectDouble](#)
[EdgeColorize](#)
[EdgeBlips](#)

[BandPass](#)
[Sharpen](#)
[Emboss](#)

[Sapphire Plug-ins](#)
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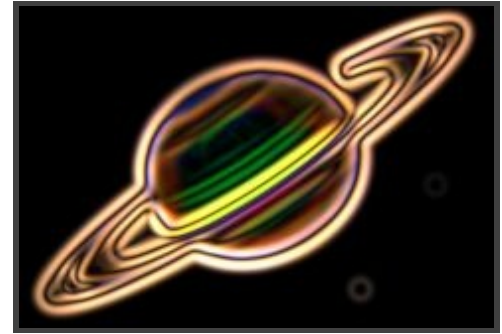
EdgeDetectDouble

In the S_EdgeDetect Plugin.

Performs an edge detect operation twice giving a double stranded edge effect. Increase the Edge Smooth parameters for thicker edges.

Inputs:

Source: The clip to be processed.



Parameters:

Edge Smooth1: *Default: 0.1, Range: 0 or greater.*
Increase for smoother edges for the first edge-detect.

Edge Smooth2: *Default: 0, Range: 0 or greater.*
Increase for smoother edges for the second edge-detect.

Brightness1: *Default: 1, Range: 0 or greater.*
Scales the brightness of the initial edges.

Threshold1: *Default: 0, Range: 0 or greater.*
Subtract this value from the initial edges.

Show: *Popup menu, Default: Result.*
Selects the output option.

Edges1 Only: shows just the first edge-detect. This can be useful for adjusting the Edge1 parameters without performing the second edge-detect.

Result: shows the result of the double edge-detect.

Brightness2: *Default: 1.5, Range: 0 or greater.*
Scales the brightness of the result.

Saturation: *Default: 1, Range: 0 or greater, Shared.*
Scales the color saturation of the result. Increase for more intense colors. Set to 0 for monochrome.

Threshold2: *Default: 0, Range: 0 or greater.*
Subtracts this value from the result. Increase to remove unwanted noise from minor edges.

Subpixel Smooth: *Check-box, Default: off, Shared.*
Enables smoothing the edges by subpixel amounts. Use this for smoother animation of the Edge Smooth parameter.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[EdgeDetect](#)
[EdgeDetectMono](#)
[EdgeDetectChroma](#)
[EdgesInDirection](#)
[EdgeColorize](#)
[EdgeBlips](#)

[BandPass](#)
[Sharpen](#)

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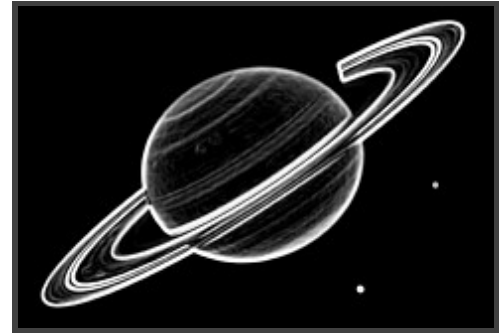
EdgeDetectMono

In the S_EdgeDetect Plugin.

Similar to EdgeDetect, but first makes the source monochrome, and then finds the edges within the resulting single channel (faster).

Inputs:

Source: The clip to be processed.



Parameters:

Edge Smooth: *Default: 0, Range: 0 or greater, Shared.*
Increase for thicker and smoother edges.

Weight Red: *Default: 1, Range: 0 or greater, Shared.*
Scale the edges of the red source channel.

Weight Green: *Default: 1, Range: 0 or greater, Shared.*
Scale the edges of the green source channel.

Weight Blue: *Default: 1, Range: 0 or greater, Shared.*
Scale the edges of the blue source channel.

Brightness: *Default: 1, Range: 0 or greater, Shared.*
Scales the brightness of the result.

Threshold: *Default: 0, Range: 0 or greater, Shared.*
Subtracts this value from the result. Increase to remove unwanted noise from minor edges.

Subpixel Smooth: *Check-box, Default: off, Shared.*
Enables smoothing the edges by subpixel amounts. Use this for smoother animation of the Edge Smooth parameter.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[EdgeDetect](#)
[EdgeDetectChroma](#)
[EdgesInDirection](#)
[EdgeDetectDouble](#)
[EdgeColorize](#)
[EdgeBlips](#)

[BandPass](#)
[Sharpen](#)
[Emboss](#)

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EdgeFlash

Adds a glow from the Front clip onto the Back clip, and vice versa, then composites the Front over the Back. This can be used to make a composite look more natural with light flashing between the layers as if exposed on film together.

Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip. Only the red channel of this input is used.



Parameters:

Front Flash Amp: *Default: 0.8, Range: 0 or greater.*
The amount of flashing from the Front onto the Back.

Back Flash Amp: *Default: 0.8, Range: 0 or greater.*
The amount of flashing from the Back onto the Front.

Flash Width: *Default: 0.1, Range: 0 or greater.*
The width of the flashing. This parameter can be adjusted using the Flash Width Widget.

Output: *Popup menu, Default: COMP.*
Selects between different output options.

FRONT: outputs only the Front clip with flashing from the Back.

BACK: outputs only the Back clip with flashing from the Front.

COMP: flashes both, composites the Front over the Back, and outputs the result.

Comp Premult: *Check-box, Default: off.*
Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Subpixel Widths: *Check-box, Default: off.*
Enables flashing by subpixel amounts. Use this for smoother animation of the flash width.

Invert Matte: *Check-box, Default: off.*
If enabled, the black and white of the matte are inverted before use.

Front Lights: *Default: 1, Range: any.*
Scales the Front input by this value. Increase for a brighter result

Front Darks: *Default: 0, Range: any.*
Adds this gray value to the darker regions of the Front input. This can be negative to increase contrast.

Front Sat: *Default: 1, Range: 0 or greater.*
Scales the color saturation of the Front input. Increase for more intense colors. Set to 0 for monochrome.

Back Lights: *Default: 1, Range: any.*
Scales the Back input by this value. Increase for a brighter result

Back Darks: *Default:* 0, *Range:* any.

Adds this gray value to the darker regions of the Back input. This can be negative to increase contrast.

Back Sat: *Default:* 1, *Range:* 0 or greater.

Scales the color saturation of the Back input. Increase for more intense colors. Set to 0 for monochrome.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Blur](#)

[EdgeBlur](#)

[EdgeDetect](#)

[Glow](#)

[Sapphire Plug-ins](#)

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EdgeRays

Generates beams of light emitting from the edges of an input clip.

Inputs:

EdgeGen: Rays of light are emitted from the edges of this input clip.

Back: The clip to use as background.



Parameters:

Center: *X & Y, Default: [0 0], Range: any.*

The location from which the rays beam outwards. This parameter can be set by enabling and moving the Center Widget.

Rays Length: *Default: 0.2, Range: 1 or less.*

The length of the rays. A length of 1.0 gives rays that continue forever, although they may still fade out as they go. To make the rays look longer you can also increase the Rel Outer Bright parameter. If Rays Length is negative the rays can beam inwards instead of outwards. Note that processing times increase for longer rays. This parameter can be adjusted using the Center Widget.

Rel Outer Bright: *Default: 0, Range: 0 or greater.*

The relative brightness of the outer end of the rays. This is normally near 0 so the rays fade away at their outer ends, but higher values can cause longer looking rays.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background before combining with the edges. If 0, the result will contain only the edge image over black.

Shimmer Amp: *Default: 0.5, Range: 0 or greater.*

Modulates the ray source image with this amount of noise texture to give the rays a shimmering look.

Shimmer Shift: *X & Y, Default: [0 0], Range: any.*

Translation of the shimmer texture. This has no effect unless Shimmer Amp is positive.

Shimmer Speed: *X & Y, Default: [0 0], Range: any.*

Translation speed of the shimmer texture. If non-zero, the shimmering is automatically animated to shift at this rate.

Shimmer Freq: *Default: 40, Range: 0.01 or greater.*

The frequency of the shimmer texture. Increase for a finer grained shimmer effect, decrease for larger, softer shimmer. This has no effect unless Shimmer Amp is positive.

Shimmer Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator for the shimmer texture. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Rays Brightness: *Default: 2, Range: 0 or greater.*

Scales the brightness of the ray beams.

Rays Color: *Default rgb: [1 1 1].*

Scales the color of the ray beams.

Edge Thickness: *Default: 0.03, Range: 0 or greater.*

The thickness of the edges which generate the rays.

Edge Brightness: *Default: 1, Range: 0 or greater.*
Scales the brightness of the edges which generate the rays.

Show: *Popup menu, Default: RESULT.*
Selects between output options.

RESULT: outputs the rays over the Background.

EDGES: outputs only the edge image. This can useful during the adjustment of the edge or shimmer parameters.

RAYS: outputs only the image of rays on a black background.

Rays Res: *Popup menu, Default: FULL.*

Selects the resolution factor for the rays. Higher resolutions give sharper rays, lower resolutions give smoother rays and faster processing. This 'Res' factor only affects the rays: the background is still combined with the rays at full resolution.

FULL: Full resolution is used.

1/2: The rays are calculated at half resolution.

1/4: The rays are calculated at quarter resolution.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[EdgeRaysMsk](#)
[EdgeRaysComp](#)
[EdgeRaysMskCmp](#)

[Rays](#)
[Streaks](#)
[BlurMotion](#)
[WarpChroma](#)
[EdgeDetect](#)
[Glow](#)
[DissolveEdgeRays](#)

[Sapphire Plug-ins](#)
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EdgeRaysComp

Generates beams of light emitting from the edges of an input clip. The rays and the source clip are composited over the background.

Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip.



Parameters:

Center: *X & Y, Default: [0 0], Range: any.*

The location from which the rays beam outwards. This parameter can be adjusted using the Center Widget.

Rays Length: *Default: 0.2, Range: 1 or less.*

The length of the rays. A length of 1.0 gives rays that continue forever, although they may still fade out as they go. To make the rays look longer you can also increase the Rel Outer Bright parameter. If Rays Length is negative the rays can beam inwards instead of outwards. Note that processing times increase for longer rays. This parameter can be adjusted using the Center Widget.

Rel Outer Bright: *Default: 0, Range: 0 or greater.*

The relative brightness of the outer end of the rays. This is normally near 0 so the rays fade away at their outer ends, but higher values can cause longer looking rays.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background before combining with the edges. If 0, the result will contain only the edge image over black.

Source Opacity: *Default: 1, Range: 0 to 1, Shared.*

Scales the opacity of the Source input when combined with the rays. This does not affect the generation of the rays themselves.

Shimmer Amp: *Default: 0.5, Range: 0 or greater.*

Modulates the ray source image with this amount of noise texture to give the rays a shimmering look.

Shimmer Shift: *X & Y, Default: [0 0], Range: any.*

Translation of the shimmer texture. This has no effect unless Shimmer Amp is positive.

Shimmer Speed: *X & Y, Default: [0 0], Range: any.*

Translation speed of the shimmer texture. If non-zero, the shimmering is automatically animated to shift at this rate.

Shimmer Freq: *Default: 40, Range: 0.01 or greater.*

The frequency of the shimmer texture. Increase for a finer grained shimmer effect, decrease for larger, softer shimmer. This has no effect unless Shimmer Amp is positive.

Shimmer Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator for the shimmer texture. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Rays Brightness: *Default: 2, Range: 0 or greater.*

Scales the brightness of the ray beams.

Rays Color: *Default rgb: [1 1 1].*

Scales the color of the ray beams.

Edge Thickness: *Default: 0.03, Range: 0 or greater.*

The thickness of the edges which generate the rays.

Edge Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of the edges which generate the rays.

Show: *Popup menu, Default: RESULT.*

Selects between output options.

RESULT: outputs the rays over the Background.

EDGES: outputs only the edge image. This can useful during the adjustment of the edge or shimmer parameters.

RAYS: outputs only the image of rays on a black background.

Rays Res: *Popup menu, Default: FULL.*

Selects the resolution factor for the rays. Higher resolutions give sharper rays, lower resolutions give smoother rays and faster processing. This 'Res' factor only affects the rays: the background is still combined with the rays at full resolution.

FULL: Full resolution is used.

1/2: The rays are calculated at half resolution.

1/4: The rays are calculated at quarter resolution.

Params2:

Rays Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the rays.

Rays From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate rays from the edges of the source's alpha channel instead of its RGB channels. This will typically reduce the rays generated from internal edges. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[EdgeRays](#)

[EdgeRaysMsk](#)

[EdgeRaysMskCmp](#)

[Rays](#)

[Streaks](#)

[BlurMotion](#)

[WarpChroma](#)

[EdgeDetect](#)

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EdgeRaysMskCmp

Generates beams of light emitting from the edges of an input clip. The ray colors are scaled by the Mask input. The rays and the source clip are composited over the background.

Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip.

Mask: The ray colors are scaled by this input. The mask can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters. The Effect option selects whether color or brightness values of the Mask are used.



Parameters:

Effect: *Popup menu, Default: Edge Rays Mono Mask.*

Determines whether color values or just brightness values of the Mask input are used to scale the rays.

Edge Rays Mono Mask: uses the Mask input to scale the brightness of the rays.

Edge Rays Color Mask: uses a color Mask input to scale the colors of the rays.

Center: *X & Y, Default: [0 0], Range: any.*

The location from which the rays beam outwards. This parameter can be adjusted using the Center Widget.

Rays Length: *Default: 0.2, Range: 1 or less.*

The length of the rays. A length of 1.0 gives rays that continue forever, although they may still fade out as they go. To make the rays look longer you can also increase the Rel Outer Bright parameter. If Rays Length is negative the rays can beam inwards instead of outwards. Note that processing times increase for longer rays. This parameter can be adjusted using the Center Widget.

Rel Outer Bright: *Default: 0, Range: 0 or greater.*

The relative brightness of the outer end of the rays. This is normally near 0 so the rays fade away at their outer ends, but higher values can cause longer looking rays.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background before combining with the edges. If 0, the result will contain only the edge image over black.

Source Opacity: *Default: 1, Range: 0 to 1, Shared.*

Scales the opacity of the Source input when combined with the rays. This does not affect the generation of the rays themselves.

Shimmer Amp: *Default: 0.5, Range: 0 or greater.*

Modulates the ray source image with this amount of noise texture to give the rays a shimmering look.

Shimmer Shift: *X & Y, Default: [0 0], Range: any.*

Translation of the shimmer texture. This has no effect unless Shimmer Amp is positive.

Shimmer Speed: *X & Y, Default: [0 0], Range: any.*

Translation speed of the shimmer texture. If non-zero, the shimmering is automatically animated to shift at this rate.

Shimmer Freq: *Default: 40, Range: 0.01 or greater.*

The frequency of the shimmer texture. Increase for a finer grained shimmer effect, decrease for larger, softer shimmer. This has no effect unless Shimmer Amp is positive.

Shimmer Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator for the shimmer texture. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Rays Brightness: *Default: 2, Range: 0 or greater.*

Scales the brightness of the ray beams.

Rays Color: *Default rgb: [1 1 1].*

Scales the color of the ray beams.

Edge Thickness: *Default: 0.03, Range: 0 or greater.*

The thickness of the edges which generate the rays.

Edge Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of the edges which generate the rays.

Show: *Popup menu, Default: RESULT.*

Selects between output options.

RESULT: outputs the rays over the Background.

EDGES: outputs only the edge image. This can be useful during the adjustment of the edge or shimmer parameters.

RAYS: outputs only the image of rays on a black background.

Invert Mask: *Check-box, Default: off.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Blur Mask: *Default: 0, Range: 0 or greater.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Rays Res: *Popup menu, Default: FULL.*

Selects the resolution factor for the rays. Higher resolutions give sharper rays, lower resolutions give smoother rays and faster processing. This 'Res' factor only affects the rays: the background is still combined with the rays at full resolution.

FULL: Full resolution is used.

1/2: The rays are calculated at half resolution.

1/4: The rays are calculated at quarter resolution.

Params2:

Rays Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the rays.

Rays From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate rays from the edges of the source's alpha channel instead of its RGB channels. This will typically reduce the rays generated from internal edges. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[EdgeRays](#)
[EdgeRaysMsk](#)
[EdgeRaysComp](#)

[Rays](#)
[Streaks](#)
[BlurMotion](#)
[WarpChroma](#)
[EdgeDetect](#)
[Glow](#)
[DissolveEdgeRays](#)

[Sapphire Plug-ins](#)
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EdgeRaysMsk

Generates beams of light emitting from the edges of an input clip. The ray colors are scaled by the Mask input.

Inputs:

EdgeGen: Rays of light are emitted from the edges of this input clip.

Back: The clip to use as background.

Mask: The ray colors are scaled by this input. The mask can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters. The Effect option selects whether color or brightness values of the Mask are used.



Parameters:

Effect: *Popup menu, Default: Edge Rays Mono Mask.*

Determines whether color values or just brightness values of the Mask input are used to scale the rays.

Edge Rays Mono Mask: uses the Mask input to scale the brightness of the rays.

Edge Rays Color Mask: uses a color Mask input to scale the colors of the rays.

Center: *X & Y, Default: [0 0], Range: any.*

The location from which the rays beam outwards. This parameter can be adjusted using the Center Widget.

Rays Length: *Default: 0.2, Range: 1 or less.*

The length of the rays. A length of 1.0 gives rays that continue forever, although they may still fade out as they go. To make the rays look longer you can also increase the Rel Outer Bright parameter. If Rays Length is negative the rays can beam inwards instead of outwards. Note that processing times increase for longer rays. This parameter can be adjusted using the Center Widget.

Rel Outer Bright: *Default: 0, Range: 0 or greater.*

The relative brightness of the outer end of the rays. This is normally near 0 so the rays fade away at their outer ends, but higher values can cause longer looking rays.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background before combining with the edges. If 0, the result will contain only the edge image over black.

Shimmer Amp: *Default: 0.5, Range: 0 or greater.*

Modulates the ray source image with this amount of noise texture to give the rays a shimmering look.

Shimmer Shift: *X & Y, Default: [0 0], Range: any.*

Translation of the shimmer texture. This has no effect unless Shimmer Amp is positive.

Shimmer Speed: *X & Y, Default: [0 0], Range: any.*

Translation speed of the shimmer texture. If non-zero, the shimmering is automatically animated to shift at this rate.

Shimmer Freq: *Default: 40, Range: 0.01 or greater.*

The frequency of the shimmer texture. Increase for a finer grained shimmer effect, decrease for larger, softer shimmer. This has no effect unless Shimmer Amp is positive.

Shimmer Seed: *Default:* 0.123, *Range:* 0 or greater.

Used to initialize the random number generator for the shimmer texture. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Rays Brightness: *Default:* 2, *Range:* 0 or greater.

Scales the brightness of the ray beams.

Rays Color: *Default rgb:* [1 1 1].

Scales the color of the ray beams.

Edge Thickness: *Default:* 0.03, *Range:* 0 or greater.

The thickness of the edges which generate the rays.

Edge Brightness: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the edges which generate the rays.

Show: *Popup menu, Default:* RESULT.

Selects between output options.

RESULT: outputs the rays over the Background.

EDGES: outputs only the edge image. This can be useful during the adjustment of the edge or shimmer parameters.

RAYS: outputs only the image of rays on a black background.

Invert Mask: *Check-box, Default:* off.

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Blur Mask: *Default:* 0, *Range:* 0 or greater.

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Rays Res: *Popup menu, Default:* FULL.

Selects the resolution factor for the rays. Higher resolutions give sharper rays, lower resolutions give smoother rays and faster processing. This 'Res' factor only affects the rays: the background is still combined with the rays at full resolution.

FULL: Full resolution is used.

1/2: The rays are calculated at half resolution.

1/4: The rays are calculated at quarter resolution.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[EdgeRays](#)

[EdgeRaysComp](#)

[EdgeRaysMskCmp](#)

[Rays](#)

[Streaks](#)

[BlurMotion](#)

[WarpChroma](#)

[EdgeDetect](#)

[Glow](#)

[DissolveEdgeRays](#)

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Emboss

In the S_Emboss Plugin.

Embosses the Source clip using the brightness of the Bumps input as a relief map. Increase the Bumps Smooth parameter for bolder bumps, and adjust the Light Dir to illuminate the bumps from different angles.

Inputs:

Source: The clip to be processed.

Bumps: The bump map for the emboss. Only the luminance of this input is used.



Parameters:

Light Dir: *X & Y, Default: [0.3 0.3], Range: any, Shared.*

The direction vector for the light source. Surface shading is calculated using light from this direction shining onto the Bumps input. This parameter can be adjusted using the Light Dir Widget.

Bumps Scale: *Default: 1, Range: any, Shared.*

Scales the amplitude of the bump map.

Bumps Threshold: *Default: 0, Range: 0 or greater, Shared.*

This value is subtracted from the Bumps input before it is used.

Bumps Smooth: *Default: 0, Range: 0 or greater.*

If positive, the Bumps input is blurred by this amount before being used. Increase for a softer emboss effect.

Subpixel Smooth: *Check-box, Default: off, Shared.*

If enabled, the amount of pre-smoothing of the Bumps input is performed at subpixel accuracy. It can be helpful if Bumps Smooth is very small or is being animated. This parameter has no effect unless Bumps Smooth is positive.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Light Color: *Default rgb: [1 1 1], Shared.*

The color of the light source that creates the embossed result.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[EmbossShiny](#)
[EmbossDistort](#)
[EmbossGlass](#)

[EmbossMask](#)

[Distort](#)
[EdgesInDirection](#)

[Sapphire](#)
[Plug-ins](#)
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EmbossMask

In the S_EmbossMask Plugin.

Embosses the Source clip using the brightness of the Bumps input as a relief map. Similar to Emboss, but only applies the effect to areas specified by a Mask input.

Inputs:

Source: The clip to be processed.

Bumps: The bump map for the emboss. Only the luminance of this input is used.

Mask: The emboss is applied only at the areas specified by this input. Only the red channel of this input is used. This input can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters.



Parameters:

Light Dir: *X & Y, Default: [0.3 0.3], Range: any, Shared.*

The direction vector for the light source. Surface shading is calculated using light from this direction shining onto the Bumps input. This parameter can be adjusted using the Light Dir Widget.

Bumps Scale: *Default: 1, Range: any, Shared.*

Scales the amplitude of the bump map.

Bumps Threshold: *Default: 0, Range: 0 or greater, Shared.*

This value is subtracted from the Bumps input before it is used.

Bumps Smooth: *Default: 0, Range: 0 or greater.*

If positive, the Bumps input is blurred by this amount before being used. Increase for a softer emboss effect.

Subpixel Smooth: *Check-box, Default: off, Shared.*

If enabled, the amount of pre-smoothing of the Bumps input is performed at subpixel accuracy. It can be helpful if Bumps Smooth is very small or is being animated. This parameter has no effect unless Bumps Smooth is positive.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Light Color: *Default rgb: [1 1 1], Shared.*

The color of the light source that creates the embossed result.

Blur Mask: *Default: 0, Range: 0 or greater, Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[EmbossShinyMask](#)
[EmbossDistortMask](#)
[EmbossGlassMask](#)

[Emboss](#)

[Distort](#)
[EdgesInDirection](#)

[Sapphire](#)
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EmbossDistort

In the S_Emboss Plugin.

Embosses and warps the Source clip using the Bumps input as a relief map and also distorts the result using the Bumps as a 'lens' image. Increase the Bumps Smooth parameter for bolder bumps, and adjust the Light Dir to illuminate the bumps from different angles.



Inputs:

Source: The clip to be processed.

Bumps: The bump map and lens source for the emboss.

Parameters:

Light Dir: *X & Y, Default: [0.3 0.3], Range: any, Shared.*

The direction vector for the light source. Surface shading is calculated using light from this direction shining onto the Bumps input. This parameter can be adjusted using the Light Dir Widget.

Bumps Scale: *Default: 1, Range: any, Shared.*

Scales the amplitude of the bump map.

Bumps Threshold: *Default: 0, Range: 0 or greater, Shared.*

This value is subtracted from the Bumps input before it is used.

Bumps Smooth: *Default: 0.1, Range: 0 or greater.*

If positive, the Bumps input is blurred by this amount before being used. Increase for a softer emboss effect.

Subpixel Smooth: *Check-box, Default: off, Shared.*

If enabled, the amount of pre-smoothing of the Bumps input is performed at subpixel accuracy. It can be helpful if Bumps Smooth is very small or is being animated. This parameter has no effect unless Bumps Smooth is positive.

Hilite Brightnss: *Default: 0.5, Range: 0 or greater.*

Scales the brightness of the specular highlights.

Hilite Size: *Default: 0.5, Range: 0.1 or greater.*

Adjusts the size of the specular highlights.

Lens Amount: *Default: 1, Range: any.*

The severity of the lens warping distortion. Make negative to invert the direction of the distortions.

Filter: *Check-box, Default: on, Shared.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Light Color: *Default rgb: [1 1 1], Shared.*

The color of the light source that creates the embossed result.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Emboss](#)

[EmbossShiny](#)

[EmbossGlass](#)

[EmbossDistortMask](#)

[Distort](#)

[Sapphire Plug-ins](#)

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EmbossDistortMask

In the S_EmbossMask Plugin.

Embosses and warps the Source clip using the Bumps input as a relief map and lens image. Similar to EmbossDistort, but only applies the effect to areas specified by a Mask input.

Inputs:

Source: The clip to be processed.

Bumps: The bump map and lens source for the emboss.

Mask: The emboss is applied only at the areas specified by this input. Only the red channel of this input is used. This input can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters.



Parameters:

Light Dir: *X & Y, Default: [0.3 0.3], Range: any, Shared.*

The direction vector for the light source. Surface shading is calculated using light from this direction shining onto the Bumps input. This parameter can be adjusted using the Light Dir Widget.

Bumps Scale: *Default: 1, Range: any, Shared.*

Scales the amplitude of the bump map.

Bumps Threshold: *Default: 0, Range: 0 or greater, Shared.*

This value is subtracted from the Bumps input before it is used.

Bumps Smooth: *Default: 0.1, Range: 0 or greater.*

If positive, the Bumps input is blurred by this amount before being used. Increase for a softer emboss effect.

Subpixel Smooth: *Check-box, Default: off, Shared.*

If enabled, the amount of pre-smoothing of the Bumps input is performed at subpixel accuracy. It can be helpful if Bumps Smooth is very small or is being animated. This parameter has no effect unless Bumps Smooth is positive.

Hilite Brightnss: *Default: 0.5, Range: 0 or greater.*

Scales the brightness of the specular highlights.

Hilite Size: *Default: 0.5, Range: 0.1 or greater.*

Adjusts the size of the specular highlights.

Lens Amount: *Default: 1, Range: any.*

The severity of the lens warping distortion. Make negative to invert the direction of the distortions.

Filter: *Check-box, Default: on, Shared.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Light Color: *Default rgb: [1 1 1], Shared.*

The color of the light source that creates the embossed result.

Blur Mask: *Default: 0, Range: 0 or greater, Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[EmbossMask](#)

[EmbossShinyMask](#)

[EmbossGlassMask](#)

[EmbossDistort](#)

[Distort](#)

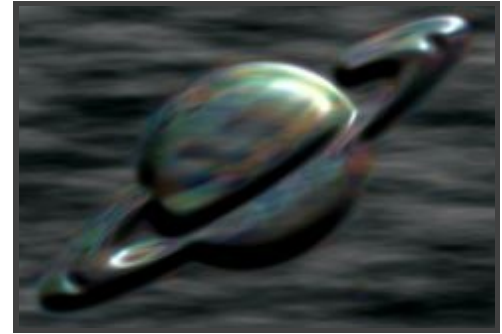
[Sapphire Plug-ins](#)

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EmbossGlass

In the S_Emboss Plugin.

The Source is embossed and warped using the Bumps input as a relief map and lens image. A chrominance distortion is also performed, separating the spectrum for a 'prismatic' look. Increase the Bumps Smooth parameter for bolder bumps, and adjust the Light Dir to illuminate the bumps from different angles.



Inputs:

Source: The clip to be processed.

Bumps: The bump map and lens source for the emboss.

Parameters:

Light Dir: *X & Y, Default: [0.3 0.3], Range: any, Shared.*

The direction vector for the light source. Surface shading is calculated using light from this direction shining onto the Bumps input. This parameter can be adjusted using the Light Dir Widget.

Bumps Scale: *Default: 1, Range: any, Shared.*

Scales the amplitude of the bump map.

Bumps Threshold: *Default: 0, Range: 0 or greater, Shared.*

This value is subtracted from the Bumps input before it is used.

Bumps Smooth: *Default: 0.1, Range: 0 or greater.*

If positive, the Bumps input is blurred by this amount before being used. Increase for a softer emboss effect.

Subpixel Smooth: *Check-box, Default: off, Shared.*

If enabled, the amount of pre-smoothing of the Bumps input is performed at subpixel accuracy. It can be helpful if Bumps Smooth is very small or is being animated. This parameter has no effect unless Bumps Smooth is positive.

Hilite Brightnss: *Default: 0.5, Range: 0 or greater.*

Scales the brightness of the specular highlights.

Hilite Size: *Default: 0.5, Range: 0.1 or greater.*

Adjusts the size of the specular highlights.

Lens Amount: *Default: 1, Range: any.*

The severity of the lens warping distortion. Make negative to invert the direction of the distortions.

Warp Red: *Default: 0.5, Range: any.*

The magnitude of lens distortion for the red end of the spectrum. Make negative to invert the direction of the red distortions.

Warp Blue: *Default: 1, Range: any.*

The magnitude of lens distortion for the blue end of the spectrum. Make negative to invert the direction of the blue distortions.

Steps: *Integer, Default: 5, Range: 3 to 100.*

The number of color samples along the spectrum to include. More steps give a smoother result, but require more time to process.

Filter: *Check-box, Default: on, Shared.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Light Color: *Default rgb: [1 1 1], Shared.*

The color of the light source that creates the embossed result.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Emboss](#)

[EmbossShiny](#)

[EmbossDistort](#)

[EmbossGlassMask](#)

[DistortChroma](#)

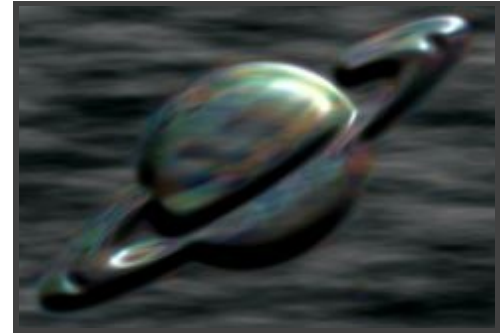
[Sapphire Plug-ins](#)

[Introduction](#)

EmbossGlassMask

In the S_EmbossMask Plugin.

The Source is embossed and warped using the Bumps input as a relief map and lens image. A chrominance distortion is also performed, separating the spectrum for a 'prism' look. Similar to EmbossGlass, but only applies the effect to areas specified by a Mask input.



Inputs:

Source: The clip to be processed.

Bumps: The bump map and lens source for the emboss.

Mask: The emboss is applied only at the areas specified by this input. Only the red channel of this input is used. This input can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters.

Parameters:

Light Dir: *X & Y, Default: [0.3 0.3], Range: any, Shared.*

The direction vector for the light source. Surface shading is calculated using light from this direction shining onto the Bumps input. This parameter can be adjusted using the Light Dir Widget.

Bumps Scale: *Default: 1, Range: any, Shared.*

Scales the amplitude of the bump map.

Bumps Threshold: *Default: 0, Range: 0 or greater, Shared.*

This value is subtracted from the Bumps input before it is used.

Bumps Smooth: *Default: 0.1, Range: 0 or greater.*

If positive, the Bumps input is blurred by this amount before being used. Increase for a softer emboss effect.

Subpixel Smooth: *Check-box, Default: off, Shared.*

If enabled, the amount of pre-smoothing of the Bumps input is performed at subpixel accuracy. It can be helpful if Bumps Smooth is very small or is being animated. This parameter has no effect unless Bumps Smooth is positive.

Hilite Brightnss: *Default: 0.5, Range: 0 or greater.*

Scales the brightness of the specular highlights.

Hilite Size: *Default: 0.5, Range: 0.1 or greater.*

Adjusts the size of the specular highlights.

Lens Amount: *Default: 1, Range: any.*

The severity of the lens warping distortion. Make negative to invert the direction of the distortions.

Warp Red: *Default: 0.5, Range: any.*

The magnitude of lens distortion for the red end of the spectrum. Make negative to invert the direction of the red distortions.

Warp Blue: *Default: 1, Range: any.*

The magnitude of lens distortion for the blue end of the spectrum. Make negative to invert the direction of the blue distortions.

Steps: *Integer, Default: 5, Range: 3 to 100.*

The number of color samples along the spectrum to include. More steps give a smoother result, but require more time to process.

Filter: *Check-box, Default: on, Shared.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Light Color: *Default rgb: [1 1 1], Shared.*

The color of the light source that creates the embossed result.

Blur Mask: *Default: 0, Range: 0 or greater, Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[EmbossMask](#)

[EmbossShinyMask](#)

[EmbossDistortMask](#)

[EmbossGlass](#)

[DistortChroma](#)

[Sapphire Plug-ins](#)

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EmbossShiny

In the S_Emboss Plugin.

Embosses the Source clip using the Bumps input as a relief map. A lighting model is used which includes highlights from specular reflections. Increase the Bumps Smooth parameter for bolder bumps, and adjust the Light Dir to illuminate the bumps from different angles.



Inputs:

Source: The clip to be processed.

Bumps: The bump map for the emboss. Only the luminance of this input is used.

Parameters:

Light Dir: *X & Y, Default: [0.3 0.3], Range: any, Shared.*

The direction vector for the light source. Surface shading is calculated using light from this direction shining onto the Bumps input. This parameter can be adjusted using the Light Dir Widget.

Bumps Scale: *Default: 1, Range: any, Shared.*

Scales the amplitude of the bump map.

Bumps Threshold: *Default: 0, Range: 0 or greater, Shared.*

This value is subtracted from the Bumps input before it is used.

Bumps Smooth: *Default: 0.01, Range: 0 or greater.*

If positive, the Bumps input is blurred by this amount before being used. Increase for a softer emboss effect.

Subpixel Smooth: *Check-box, Default: off, Shared.*

If enabled, the amount of pre-smoothing of the Bumps input is performed at subpixel accuracy. It can be helpful if Bumps Smooth is very small or is being animated. This parameter has no effect unless Bumps Smooth is positive.

Hilite Brightnss: *Default: 0.8, Range: 0 or greater.*

Scales the brightness of the specular highlights.

Hilite Size: *Default: 0.5, Range: 0.1 or greater.*

Adjusts the size of the specular highlights.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Light Color: *Default rgb: [1 1 1], Shared.*

The color of the light source that creates the embossed result.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Emboss](#)

[EmbossDistort](#)

[EmbossGlass](#)

[EmbossShinyMask](#)

[TextureNoiseEmboss](#)

[Sapphire Plug-ins](#)

[Introduction](#)

EmbossShinyMask

In the S_EmbossMask Plugin.

Embosses the Source clip using the Bumps input as a relief map. A lighting model is used which includes highlights from specular reflections. Similar to EmbossShiny, but only applies the effect to areas specified by a Mask input.

Inputs:

Source: The clip to be processed.

Bumps: The bump map for the emboss. Only the luminance of this input is used.

Mask: The emboss is applied only at the areas specified by this input. Only the red channel of this input is used. This input can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters.

Parameters:

Light Dir: *X & Y, Default: [0.3 0.3], Range: any, Shared.*

The direction vector for the light source. Surface shading is calculated using light from this direction shining onto the Bumps input. This parameter can be adjusted using the Light Dir Widget.

Bumps Scale: *Default: 1, Range: any, Shared.*

Scales the amplitude of the bump map.

Bumps Threshold: *Default: 0, Range: 0 or greater, Shared.*

This value is subtracted from the Bumps input before it is used.

Bumps Smooth: *Default: 0.01, Range: 0 or greater.*

If positive, the Bumps input is blurred by this amount before being used. Increase for a softer emboss effect.

Subpixel Smooth: *Check-box, Default: off, Shared.*

If enabled, the amount of pre-smoothing of the Bumps input is performed at subpixel accuracy. It can be helpful if Bumps Smooth is very small or is being animated. This parameter has no effect unless Bumps Smooth is positive.

Hilite Brightnss: *Default: 0.8, Range: 0 or greater.*

Scales the brightness of the specular highlights.

Hilite Size: *Default: 0.5, Range: 0.1 or greater.*

Adjusts the size of the specular highlights.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Light Color: *Default rgb: [1 1 1], Shared.*

The color of the light source that creates the embossed result.

Blur Mask: *Default: 0, Range: 0 or greater, Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.



Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[EmbossMask](#)

[EmbossDistortMask](#)

[EmbossGlassMask](#)

[EmbossShiny](#)

[TextureNoiseEmboss](#)

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Feedback

In the S_Feedback Plugin.

The previous frames of the input clip are transformed and combined with the current frame to give a variety of effects inspired by video feedback. The output of each processed frame is stored and then combined with the next frame. The feedback is reinitialized whenever any non-consecutive frame is processed: either the first frame, reprocessing a given frame, or jumping to another frame. You must process multiple frames of a clip in a row to observe the effect.



Inputs:

Source: The clip to be processed.

Parameters:

Fade: *Default: 0.8, Range: 0 or greater, Shared.*

For each frame, the previous output is scaled by this amount before it is combined with the new input frame. Normally this value should be less than 1.0 which causes previous frames to fade out over time. A value of 1.0 causes no fading, and values greater than 1.0 cause previous frames to become brighter over time.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all frames.

Blur Amount: *Default: 0, Range: 0 or greater.*

The previous frames are blurred by this amount for each new frame. This has no effect unless it is positive.

Diffuse Amount: *Default: 0, Range: 0 or greater.*

The previous frames are passed through a pixel-diffusion process of this magnitude, for each new frame. This has no effect unless it is positive.

Amount Rel: *X & Y, Default: [1 1], Range: 0 or greater.*

The relative amounts of horizontal and vertical blurring and/or diffusing. This has no effect unless Blur Amount or Diffuse Amount are positive.

Combine: *Popup menu, Default: Ave.*

Selects the method for combining previous frames with the current frame.

Ave: The current frame is averaged with the previous output, smearing moving objects out over time. The output is scaled by Fade and the input is scaled by 1.0-Fade for a weighted average, so Fade must be less than 1.0 for this to work properly. Unlike the other combine options, Ave should never affect the brightness of stationary objects in the clip.

Max: The colors of the current frame and previous frames are combined with a maximum function. This makes the output frame at least as bright as the current frame, and will make brighter 'trails' for example if you have bright objects moving on a dark background.

Screen: The colors of the current frame and previous frames are combined with a blend function. This can be used to accumulate the colors of a moving clip. However, non-black regions will become brighter with each frame.

Add: The colors of the current frame and previous frames are added. This can also be used to accumulate the colors of a moving clip, with the non-black regions becoming brighter at each frame.

Min: The colors of the current frame and previous frames are combined with a minimum function. This makes the output frame no brighter than the current frame, and will often fade quickly to a black frame.

Fade Color: *Default rgb: [1 1 1], Shared.*

For each frame, the previous output is scaled by this color before it is combined with the new input frame. This is similar to Fade but affects the colors of the previous frames instead of just the brightness.

Color: *Default rgb: [1 1 1], Shared.*

Scales the color of all frames. Set this color to the complement of Fade Color to offset overly colored trails.

Center: *X & Y, Default: [0 0], Range: any.*

The center position for rotation and scaling, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Z Dist: *Default: 0.95, Range: 0.001 or greater.*

For each new frame, the 'distance' of the previous frames is scaled by this amount. This causes zooming during the feedback process. Values greater than 1.0 zoom out and make the previous frames smaller, and values less than 1.0 zoom in and enlarge them. This parameter can be adjusted using the Transform Widget.

Rotate: *Default: 3, Range: any.*

For each new frame, the amount of rotation in degrees to apply to the previous frames. This parameter can be adjusted using the Transform Widget.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the previous frames' colors, for each new frame.

Shift: *X & Y, Default: [0 0], Range: any.*

Shifts the previous frames by this amount for each new frame. If this is non-zero the Center location is less meaningful. This parameter can be adjusted using the Shift Widget.

Wrap: *X & Y, Popup menu, Default: [NO NO].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Trails](#)

[TrailsDiffuse](#)

[FeedbackDistort](#)

[TimeAverage](#)

[NearestColor](#)

[FeedbackBubble](#)

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FeedbackMatte

In the S_FeedbackMatte Plugin.

Creates a variety of effects similar to the Feedback effect, but the current frame is composited over the previous frames using a Matte input. For each new frame, the previous frames are transformed before the current frame is composited over them. The feedback is reinitialized whenever any non-consecutive frame is processed, either the first frame, reprocessing a given frame, or jumping to another frame. You must process multiple frames of a clip in a row to observe the effect.



Inputs:

Source: The clip to be processed.

Matte: The opacity values for the Source clip. Areas of the new Source frames are composited over the previous frames where this Matte input is white.

Parameters:

Fade: *Default:* 0.8, *Range:* 0 or greater, *Shared*.

For each frame, the previous output is scaled by this amount before it is combined with the new input frame. Normally this value should be less than 1.0 which causes previous frames to fade out over time. A value of 1.0 causes no fading, and values greater than 1.0 cause previous frames to become brighter over time.

Brightness: *Default:* 1, *Range:* 0 or greater, *Shared*.

Scales the brightness of all frames.

Blur Amount: *Default:* 0, *Range:* 0 or greater.

The previous frames are blurred by this amount for each new frame. This has no effect unless it is positive.

Diffuse Amount: *Default:* 0, *Range:* 0 or greater.

The previous frames are passed through a pixel-diffusion process of this magnitude, for each new frame. This has no effect unless it is positive.

Amount Rel: *X & Y, Default:* [1 1], *Range:* 0 or greater.

The relative amounts of horizontal and vertical blurring and/or diffusing. This has no effect unless Blur Amount or Diffuse Amount are positive.

Comp Premult: *Check-box, Default:* off, *Shared*.

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Fade Color: *Default rgb:* [1 1 1], *Shared*.

For each frame, the previous output is scaled by this color before it is combined with the new input frame. This is similar to Fade but affects the colors of the previous frames instead of just the brightness.

Color: *Default rgb:* [1 1 1], *Shared*.

Scales the color of all frames. Set this color to the complement of Fade Color to offset overly colored trails.

Center: *X & Y, Default:* [0 0], *Range:* any.

The center position for rotation and scaling, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Z Dist: *Default: 1.05, Range: 0.001 or greater.*

For each new frame, the 'distance' of the previous frames is scaled by this amount. This causes zooming during the feedback process. Values greater than 1.0 zoom out and make the previous frames smaller, and values less than 1.0 zoom in and enlarge them. This parameter can be adjusted using the Transform Widget.

Rotate: *Default: 3, Range: any.*

For each new frame, the amount of rotation in degrees to apply to the previous frames. This parameter can be adjusted using the Transform Widget.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the previous frames' colors, for each new frame.

Shift: *X & Y, Default: [0 0], Range: any.*

Shifts the previous frames by this amount for each new frame. If this is non-zero the Center location is less meaningful. This parameter can be adjusted using the Shift Widget.

Wrap: *X & Y, Popup menu, Default: [NO NO].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Output Matte: *Check-box, Default: off, Shared.*

If enabled, the processed Matte channel is output instead of the regular output, for potential use in future composites onto other backgrounds.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TrailsMatte](#)

[TrailsDiffuseMatte](#)

[FeedbackBubbleMatte](#)

[FeedbackDistortMatte](#)

[Feedback](#)

[WarpRepeat](#)

[WarpChroma](#)

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Feedback: NearestColor

In the S_Feedback Plugin.

Collects pixel colors from the input clip's frames that are closest to the given Match Color. This can create, for example, a background-only image from a clip with objects moving over a blue or green-screen background. It can also be used to accumulate the color of a moving object over a non-colored background. The collected colors are reinitialized whenever any non-consecutive frame is processed, either the first frame, reprocessing a given frame, or jumping to another frame. You must process multiple frames of a clip in a row to observe the effect.



Inputs:

Source: The clip to be processed.

Parameters:

Chroma Weight: *Default: 1, Range: 0 or greater.*

The amount of influence hue has on the color matching. If this is 0, the pixels with the closest brightness to Match Color will be kept; if it is 2, the hue will have more influence and the brightness will have less.

Match Color: *Default rgb: [0 0 1].*

Pixel colors are kept that are 'nearest' to this color.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Feedback](#)

[Trails](#)

[TrailsDiffuse](#)

[FeedbackDistort](#)

[TimeAverage](#)

[FeedbackBubble](#)

[WarpRepeat](#)

[WarpChroma](#)

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Feedback: TimeAverage

In the S_Feedback Plugin.

Each output frame is the average of multiple input frames: from the current frame, back to a given number of previous frames. This is similar to the Trails effect, except all frames within the range are weighted equally instead of fading out, so the end points of the trails are abrupt. Each frame contributes only $1/n$ of the total brightness, so fast-moving objects against a dark background may seem dim.



The average is reinitialized whenever any non-consecutive frame is processed: either the first frame, reprocessing a given frame, or jumping to another frame. You must process multiple frames of a clip in a row to observe the effect.

Inputs:

Source: The input to process. In Batch, it is recommended that this input be a clip of frames rather than another node.

Parameters:

Ave Over Frames: *Integer, Default: 10, Range: 1 or greater.*

The number of previous frames to average over, including the current frame. For correct results, this parameter should not be animated.

Brightness: *Default: 1, Range: 0 or greater.*

Scales the output brightness.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Feedback](#)

[Trails](#)

[TrailsDiffuse](#)

[FeedbackDistort](#)

[NearestColor](#)

[FeedbackBubble](#)

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Feedback: Trails

In the S_Feedback Plugin.

The previous frames of the input clip are combined with the current frame to give a variety of 'time trails' effects. The output of each processed frame is stored and then combined with the next frame. The trails are reinitialized whenever any non-consecutive frame is processed, either the first frame, reprocessing a given frame, or jumping to another frame. You must process multiple frames of a clip in a row to observe the effect.



Inputs:

Source: The clip to be processed.

Parameters:

Fade: *Default:* 0.8, *Range:* 0 or greater, *Shared*.

For each frame, the previous output is scaled by this amount before it is combined with the new input frame. Normally this value should be less than 1.0 which causes previous frames to fade out over time. A value of 1.0 causes no fading, and values greater than 1.0 cause previous frames to become brighter over time.

Brightness: *Default:* 1, *Range:* 0 or greater, *Shared*.

Scales the brightness of all frames.

Blur Amount: *Default:* 0, *Range:* 0 or greater.

The previous frames are blurred by this amount for each new frame. This has no effect unless it is positive.

Blur Rel: *X & Y, Default:* [1 1], *Range:* 0 or greater.

The relative horizontal and vertical amounts of the blurring. This has no effect unless Blur Amount is positive.

Combine: *Popup menu, Default:* Ave.

Selects the method for combining previous frames with the current frame.

Ave: The current frame is averaged with the previous output, smearing moving objects out over time. The output is scaled by Fade and the input is scaled by 1.0-Fade for a weighted average, so Fade must be less than 1.0 for this to work properly. Unlike the other combine options, Ave should never affect the brightness of stationary objects in the clip.

Max: The colors of the current frame and previous frames are combined with a maximum function. This makes the output frame at least as bright as the current frame, and will make brighter 'trails' for example if you have bright objects moving on a dark background.

Screen: The colors of the current frame and previous frames are combined with a blend function. This can be used to accumulate the colors of a moving clip. However, non-black regions will become brighter with each frame.

Add: The colors of the current frame and previous frames are added. This can also be used to accumulate the colors of a moving clip, with the non-black regions becoming brighter at each frame.

Min: The colors of the current frame and previous frames are combined with a minimum function. This makes the output frame no brighter than the current frame, and will often fade quickly to a black frame.

Fade Color: *Default rgb: [1 1 1], Shared.*

For each frame, the previous output is scaled by this color before it is combined with the new input frame. This is similar to Fade but affects the colors of the previous frames instead of just the brightness.

Color: *Default rgb: [1 1 1], Shared.*

Scales the color of all frames. Set this color to the complement of Fade Color to offset overly colored trails.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the previous frames' colors, for each new frame.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Feedback](#)

[TrailsDiffuse](#)

[FeedbackDistort](#)

[TimeAverage](#)

[NearestColor](#)

[FeedbackBubble](#)

[TrailsMatte](#)

[WarpRepeat](#)

[WarpChroma](#)

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Feedback: TrailsMatte

In the S_FeedbackMatte Plugin.

Similar to the Trails effect, but the current frame is composited over the previous frames using a Matte input, to give a variety of 'time trails' effects. The output of each processed frame is stored and then combined with the next frame. The trails are reinitialized whenever any non-consecutive frame is processed, either the first frame, reprocessing a given frame, or jumping to another frame. You must process multiple frames of a clip in a row to observe the effect.



Inputs:

Source: The clip to be processed.

Matte: The opacity values for the Source clip. Areas of the new Source frames are composited over the previous frames where this Matte input is white.

Parameters:

Fade: *Default: 0.8, Range: 0 or greater, Shared.*

For each frame, the previous output is scaled by this amount before it is combined with the new input frame. Normally this value should be less than 1.0 which causes previous frames to fade out over time. A value of 1.0 causes no fading, and values greater than 1.0 cause previous frames to become brighter over time.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all frames.

Blur Amount: *Default: 0, Range: 0 or greater.*

The previous frames are blurred by this amount for each new frame. This has no effect unless it is positive.

Blur Rel: *X & Y, Default: [1 1], Range: 0 or greater.*

The relative horizontal and vertical amounts of the blurring. This has no effect unless Blur Amount is positive.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Fade Color: *Default rgb: [1 1 1], Shared.*

For each frame, the previous output is scaled by this color before it is combined with the new input frame. This is similar to Fade but affects the colors of the previous frames instead of just the brightness.

Color: *Default rgb: [1 1 1], Shared.*

Scales the color of all frames. Set this color to the complement of Fade Color to offset overly colored trails.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the previous frames' colors, for each new frame.

Output Matte: *Check-box, Default: off, Shared.*

If enabled, the processed Matte channel is output instead of the regular output, for potential use in future composites onto other backgrounds.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FeedbackMatte](#)

[TrailsDiffuseMatte](#)

[FeedbackBubbleMatte](#)

[FeedbackDistortMatte](#)

[Trails](#)

[WarpRepeat](#)

[WarpChroma](#)

[Sapphire](#)

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Feedback: TrailsDiffuse

In the S_Feedback Plugin.

The previous frames of the input clip are processed with a pixel diffusion process and then combined with the current frame. The output of each processed frame is stored and then combined with the next frame. The trails are reinitialized whenever a non-consecutive frame is processed, either the first frame, reprocessing a given frame, or jumping to another frame. You must process multiple frames of a clip in a row to observe the effect.



Inputs:

Source: The clip to be processed.

Parameters:

Fade: *Default:* 0.8, *Range:* 0 or greater, *Shared*.

For each frame, the previous output is scaled by this amount before it is combined with the new input frame. Normally this value should be less than 1.0 which causes previous frames to fade out over time. A value of 1.0 causes no fading, and values greater than 1.0 cause previous frames to become brighter over time.

Brightness: *Default:* 1, *Range:* 0 or greater, *Shared*.

Scales the brightness of all frames.

Diffuse Amount: *Default:* 0.05, *Range:* 0 or greater.

The previous frames are passed through a pixel-diffusion process of this magnitude, for each new frame. This has no effect unless it is positive.

Diffuse Rel: *X & Y, Default:* [1 1], *Range:* 0 or greater.

The relative horizontal and vertical amounts of the pixel diffusion process. This has no effect unless Diffuse Amount is positive.

Combine: *Popup menu, Default:* Ave.

Selects the method for combining previous frames with the current frame.

Ave: The current frame is averaged with the previous output, smearing moving objects out over time. The output is scaled by Fade and the input is scaled by 1.0-Fade for a weighted average, so Fade must be less than 1.0 for this to work properly. Unlike the other combine options, Ave should never affect the brightness of stationary objects in the clip.

Max: The colors of the current frame and previous frames are combined with a maximum function. This makes the output frame at least as bright as the current frame, and will make brighter 'trails' for example if you have bright objects moving on a dark background.

Screen: The colors of the current frame and previous frames are combined with a blend function. This can be used to accumulate the colors of a moving clip. However, non-black regions will become brighter with each frame.

Add: The colors of the current frame and previous frames are added. This can also be used to accumulate the colors of a moving clip, with the non-black regions becoming brighter at each frame.

Min: The colors of the current frame and previous frames are combined with a minimum function. This makes the output frame no brighter than the current frame, and will often fade quickly to a black frame.

Fade Color: *Default rgb: [1 1 1], Shared.*

For each frame, the previous output is scaled by this color before it is combined with the new input frame. This is similar to Fade but affects the colors of the previous frames instead of just the brightness.

Color: *Default rgb: [1 1 1], Shared.*

Scales the color of all frames. Set this color to the complement of Fade Color to offset overly colored trails.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the previous frames' colors, for each new frame.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Feedback](#)

[Trails](#)

[FeedbackDistort](#)

[TimeAverage](#)

[NearestColor](#)

[FeedbackBubble](#)

[TrailsDiffuseMatte](#)

[WarpRepeat](#)

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Feedback: TrailsDiffuseMatte

In the S_FeedbackMatte Plugin.

Similar to TrailsDiffuse, but the current current frame is composited over the previous frames using a Matte input. The previous frames of the input clip are processed with a pixel diffusion process and then combined with the current frame. The output of each processed frame is stored and then combined with the next frame. The trails are reinitialized whenever any non-consecutive frame is processed, either the first frame, reprocessing a given frame, or jumping to another frame. You must process multiple frames of a clip in a row to observe the effect.



Inputs:

Source: The clip to be processed.

Matte: The opacity values for the Source clip. Areas of the new Source frames are composited over the previous frames where this Matte input is white.

Parameters:

Fade: *Default:* 0.8, *Range:* 0 or greater, *Shared*.

For each frame, the previous output is scaled by this amount before it is combined with the new input frame. Normally this value should be less than 1.0 which causes previous frames to fade out over time. A value of 1.0 causes no fading, and values greater than 1.0 cause previous frames to become brighter over time.

Brightness: *Default:* 1, *Range:* 0 or greater, *Shared*.

Scales the brightness of all frames.

Diffuse Amount: *Default:* 0.05, *Range:* 0 or greater.

The previous frames are passed through a pixel-diffusion process of this magnitude, for each new frame. This has no effect unless it is positive.

Diffuse Rel: *X & Y, Default:* [1 1], *Range:* 0 or greater.

The relative horizontal and vertical amounts of the pixel diffusion process. This has no effect unless Diffuse Amount is positive.

Comp Premult: *Check-box, Default:* off, *Shared*.

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Fade Color: *Default rgb:* [1 1 1], *Shared*.

For each frame, the previous output is scaled by this color before it is combined with the new input frame. This is similar to Fade but affects the colors of the previous frames instead of just the brightness.

Color: *Default rgb:* [1 1 1], *Shared*.

Scales the color of all frames. Set this color to the complement of Fade Color to offset overly colored trails.

Hue Shift: *Default:* 0, *Range:* any, *Shared*.

Shifts the hue of the previous frames' colors, for each new frame.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Output Matte: *Check-box, Default: off, Shared.*

If enabled, the processed Matte channel is output instead of the regular output, for potential use in future composites onto other backgrounds.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FeedbackMatte](#)

[TrailsDiffuse](#)

[WarpRepeat](#)

[Sapphire](#)

[TrailsMatte](#)

[WarpChroma](#)

[Plug-ins](#)

[FeedbackBubbleMatte](#)

[Introduction](#)

[FeedbackDistortMatte](#)

FeedbackBubble

In the S_Feedback Plugin.

The previous frames of the input clip are distorted by a solid noise pattern, transformed, and combined with the current frame to give a variety of possible effects. The output of each processed frame is stored and then combined with the next frame. The feedback is reinitialized whenever any non-consecutive frame is processed, either the first frame, reprocessing a given frame, or jumping to another frame. You must process multiple frames of a clip in a row to observe the effect.



Inputs:

Source: The clip to be processed.

Parameters:

Fade: *Default:* 0.8, *Range:* 0 or greater, *Shared*.

For each frame, the previous output is scaled by this amount before it is combined with the new input frame. Normally this value should be less than 1.0 which causes previous frames to fade out over time. A value of 1.0 causes no fading, and values greater than 1.0 cause previous frames to become brighter over time.

Brightness: *Default:* 1, *Range:* 0 or greater, *Shared*.

Scales the brightness of all frames.

Blur Amount: *Default:* 0, *Range:* 0 or greater.

The previous frames are blurred by this amount for each new frame. This has no effect unless it is positive.

Diffuse Amount: *Default:* 0, *Range:* 0 or greater.

The previous frames are passed through a pixel-diffusion process of this magnitude, for each new frame. This has no effect unless it is positive.

Amount Rel: *X & Y, Default:* [1 1], *Range:* 0 or greater.

The relative amounts of horizontal and vertical blurring and/or diffusing. This has no effect unless Blur Amount or Diffuse Amount are positive.

Combine: *Popup menu, Default:* Ave.

Selects the method for combining previous frames with the current frame.

Ave: The current frame is averaged with the previous output, smearing moving objects out over time. The output is scaled by Fade and the input is scaled by 1.0-Fade for a weighted average, so Fade must be less than 1.0 for this to work properly. Unlike the other combine options, Ave should never affect the brightness of stationary objects in the clip.

Max: The colors of the current frame and previous frames are combined with a maximum function. This makes the output frame at least as bright as the current frame, and will make brighter 'trails' for example if you have bright objects moving on a dark background.

Screen: The colors of the current frame and previous frames are combined with a blend function. This can be used to accumulate the colors of a moving clip. However, non-black regions will become brighter with each frame.

Add: The colors of the current frame and previous frames are added. This can also be used to accumulate the colors of a moving clip, with the non-black regions becoming brighter at each frame.

Min: The colors of the current frame and previous frames are combined with a minimum function. This makes the output frame no brighter than the current frame, and will often fade quickly to a black frame.

Fade Color: *Default rgb: [1 1 1], Shared.*

For each frame, the previous output is scaled by this color before it is combined with the new input frame. This is similar to Fade but affects the colors of the previous frames instead of just the brightness.

Color: *Default rgb: [1 1 1], Shared.*

Scales the color of all frames. Set this color to the complement of Fade Color to offset overly colored trails.

Center: *X & Y, Default: [0 0], Range: any.*

The center position for rotation and scaling, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Z Dist: *Default: 0.95, Range: 0.001 or greater.*

For each new frame, the 'distance' of the previous frames is scaled by this amount. This causes zooming during the feedback process. Values greater than 1.0 zoom out and make the previous frames smaller, and values less than 1.0 zoom in and enlarge them. This parameter can be adjusted using the Transform Widget.

Rotate: *Default: 0, Range: any.*

For each new frame, the amount of rotation in degrees to apply to the previous frames. This parameter can be adjusted using the Transform Widget.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the previous frames' colors, for each new frame.

Shift: *X & Y, Default: [0 0], Range: any.*

Shifts the previous frames by this amount for each new frame. If this is non-zero the Center location is less meaningful. This parameter can be adjusted using the Shift Widget.

Wrap: *X & Y, Popup menu, Default: [NO NO].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Params2:

Bubble Amount: *Default: 0.05, Range: any.*

The amplitude of the noise pattern used to create the distortion.

Bubble Freq: *Default: 64, Range: 0.01 or greater.*

The spatial frequency of the initial noise pattern. Increase to zoom out, decrease to zoom in.

Freq Rel X: *Default: 1, Range: 0.01 or greater.*

The relative horizontal frequency of the noise pattern. Increase to stretch it vertically or decrease to stretch it horizontally.

Bubble Octaves: *Integer, Default: 1, Range: 1 or greater.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Bubble Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator for the noise pattern. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Bubble Shift: *X & Y, Default: [0 0], Range: 0 or greater.*

The horizontal and vertical translation of the noise pattern.

Shift Speed: *X & Y, Default: [0 25], Range: 0 or greater.*

Translation speed of the result. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Feedback](#)

[Trails](#)

[TrailsDiffuse](#)

[FeedbackDistort](#)

[TimeAverage](#)

[NearestColor](#)

[FeedbackBubbleMatte](#)

[WarpRepeat](#)

[WarpChroma](#)

[Sapphire](#)

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FeedbackBubbleMatte

In the S_FeedbackMatte Plugin.

Similar to the FeedbackBubble effect, but the current frame is composited over the previous frames using a Matte input. For each new frame, the previous frames are transformed before the current frame is composited over them. The feedback is reinitialized whenever any non-consecutive frame is processed, either the first frame, reprocessing a given frame, or jumping to another frame. You must process multiple frames of a clip in a row to observe the effect.



Inputs:

Source: The clip to be processed.

Matte: The opacity values for the Source clip. Areas of the new Source frames are composited over the previous frames where this Matte input is white.

Parameters:

Fade: *Default:* 0.8, *Range:* 0 or greater, *Shared*.

For each frame, the previous output is scaled by this amount before it is combined with the new input frame. Normally this value should be less than 1.0 which causes previous frames to fade out over time. A value of 1.0 causes no fading, and values greater than 1.0 cause previous frames to become brighter over time.

Brightness: *Default:* 1, *Range:* 0 or greater, *Shared*.

Scales the brightness of all frames.

Blur Amount: *Default:* 0, *Range:* 0 or greater.

The previous frames are blurred by this amount for each new frame. This has no effect unless it is positive.

Diffuse Amount: *Default:* 0, *Range:* 0 or greater.

The previous frames are passed through a pixel-diffusion process of this magnitude, for each new frame. This has no effect unless it is positive.

Amount Rel: *X & Y, Default:* [1 1], *Range:* 0 or greater.

The relative amounts of horizontal and vertical blurring and/or diffusing. This has no effect unless Blur Amount or Diffuse Amount are positive.

Comp Premult: *Check-box, Default:* off, *Shared*.

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Fade Color: *Default rgb:* [1 1 1], *Shared*.

For each frame, the previous output is scaled by this color before it is combined with the new input frame. This is similar to Fade but affects the colors of the previous frames instead of just the brightness.

Color: *Default rgb:* [1 1 1], *Shared*.

Scales the color of all frames. Set this color to the complement of Fade Color to offset overly colored trails.

Center: *X & Y, Default:* [0 0], *Range:* any.

The center position for rotation and scaling, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Z Dist: *Default: 0.95, Range: 0.001 or greater.*

For each new frame, the 'distance' of the previous frames is scaled by this amount. This causes zooming during the feedback process. Values greater than 1.0 zoom out and make the previous frames smaller, and values less than 1.0 zoom in and enlarge them. This parameter can be adjusted using the Transform Widget.

Rotate: *Default: 0, Range: any.*

For each new frame, the amount of rotation in degrees to apply to the previous frames. This parameter can be adjusted using the Transform Widget.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the previous frames' colors, for each new frame.

Shift: *X & Y, Default: [0 0], Range: any.*

Shifts the previous frames by this amount for each new frame. If this is non-zero the Center location is less meaningful. This parameter can be adjusted using the Shift Widget.

Wrap: *X & Y, Popup menu, Default: [NO NO].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Output Matte: *Check-box, Default: off, Shared.*

If enabled, the processed Matte channel is output instead of the regular output, for potential use in future composites onto other backgrounds.

Params2:

Bubble Amount: *Default: 0.05, Range: any.*

The amplitude of the noise pattern used to create the distortion.

Bubble Freq: *Default: 16, Range: 0.01 or greater.*

The spatial frequency of the initial noise pattern. Increase to zoom out, decrease to zoom in.

Freq Rel X: *Default: 1, Range: 0.01 or greater.*

The relative horizontal frequency of the noise pattern. Increase to stretch it vertically or decrease to stretch it horizontally.

Bubble Shift: *X & Y, Default: [0 0], Range: 0 or greater.*

The horizontal and vertical translation of the noise pattern.

Shift Speed: *X & Y, Default: [0 25], Range: 0 or greater.*

Translation speed of the result. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

Bubble Octaves: *Integer, Default: 1, Range: 1 or greater.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Bubble Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator for the noise pattern. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FeedbackMatte](#)

[TrailsMatte](#)

[TrailsDiffuseMatte](#)

[FeedbackDistortMatte](#)

[FeedbackBubble](#)

[WarpRepeat](#)

[WarpChroma](#)

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FeedbackDistort

The previous frames of the input clip are distorted by the gradient of a given Lens input clip and combined with the current frame to give a variety of possible effects. The output of each processed frame is stored and then combined with the next frame. The feedback is reinitialized whenever any non-consecutive frame is processed, either the first frame, reprocessing a given frame, or jumping to another frame. You must process multiple frames of a clip in a row to observe the effect.



Inputs:

Source: The clip to be processed.

Lens: Distorts the previous frames using the brightness values of this input clip.

Parameters:

Fade: *Default:* 0.8, *Range:* 0 or greater, *Shared*.

For each frame, the previous output is scaled by this amount before it is combined with the new input frame. Normally this value should be less than 1.0 which causes previous frames to fade out over time. A value of 1.0 causes no fading, and values greater than 1.0 cause previous frames to become brighter over time.

Brightness: *Default:* 1, *Range:* 0 or greater, *Shared*.

Scales the brightness of all frames.

Distort Amount: *Default:* 0.1, *Range:* any.

The severity of the feedback distortions. Make negative to invert the direction of the distortions.

Rotate Distort: *Default:* 90, *Range:* any.

Rotates the distortion direction by this many degrees. If non-zero, this can create some twisting distortions.

Blur Lens: *Default:* 0.1, *Range:* 0 or greater.

Smooths the lens image by this amount before using it. Increase this for smoother more continuous feedback directions.

Combine: *Popup menu, Default:* Ave.

Selects the method for combining previous frames with the current frame.

Ave: The current frame is averaged with the previous output, smearing moving objects out over time. The output is scaled by Fade and the input is scaled by 1.0-Fade for a weighted average, so Fade must be less than 1.0 for this to work properly. Unlike the other combine options, Ave should never affect the brightness of stationary objects in the clip.

Max: The colors of the current frame and previous frames are combined with a maximum function. This makes the output frame at least as bright as the current frame, and will make brighter 'trails' for example if you have bright objects moving on a dark background.

Screen: The colors of the current frame and previous frames are combined with a blend function. This can be used to accumulate the colors of a moving clip. However, non-black regions will become brighter with each frame.

Add: The colors of the current frame and previous frames are added. This can also be used to accumulate the colors of a moving clip, with the non-black regions becoming brighter at each frame.

Min: The colors of the current frame and previous frames are combined with a minimum function. This makes the output frame no brighter than the current frame, and will often fade quickly to a black frame.

Fade Color: *Default rgb: [1 1 1], Shared.*

For each frame, the previous output is scaled by this color before it is combined with the new input frame. This is similar to Fade but affects the colors of the previous frames instead of just the brightness.

Color: *Default rgb: [1 1 1], Shared.*

Scales the color of all frames. Set this color to the complement of Fade Color to offset overly colored trails.

Center: *X & Y, Default: [0 0], Range: any.*

The center position for rotation and scaling, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Z Dist: *Default: 1, Range: 0.001 or greater.*

For each new frame, the 'distance' of the previous frames is scaled by this amount. This causes zooming during the feedback process. Values greater than 1.0 zoom out and make the previous frames smaller, and values less than 1.0 zoom in and enlarge them. This parameter can be adjusted using the Transform Widget.

Rotate: *Default: 0, Range: any.*

For each new frame, the amount of rotation in degrees to apply to the previous frames. This parameter can be adjusted using the Transform Widget.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the previous frames' colors, for each new frame.

Shift: *X & Y, Default: [0 0], Range: any.*

Shifts the previous frames by this amount for each new frame. If this is non-zero the Center location is less meaningful. This parameter can be adjusted using the Shift Widget.

Wrap: *X & Y, Popup menu, Default: [NO NO].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Blur Amount: *Default: 0, Range: 0 or greater.*

The previous frames are blurred by this amount for each new frame. This has no effect unless it is positive.

Diffuse Amount: *Default: 0, Range: 0 or greater.*

The previous frames are passed through a pixel-diffusion process of this magnitude, for each new frame. This has no effect unless it is positive.

Amount Rel: *X & Y, Default: [1 1], Range: 0 or greater.*

The relative amounts of horizontal and vertical blurring and/or diffusing. This has no effect unless Blur Amount or Diffuse Amount are positive.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Feedback
Trails](#)

[FeedbackDistortMatte](#)

[WarpRepeat
WarpChroma](#)

[Sapphire
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TrailsDiffuse
TimeAverage
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FeedbackDistortMatte

Similar to the FeedbackDistort effect, but the current frame is composited over the previous frames using a Matte input. For each new frame, the previous frames are transformed before the current frame is composited over them. The feedback is reinitialized whenever any non-consecutive frame is processed, either the first frame, reprocessing a given frame, or jumping to another frame. You must process multiple frames of a clip in a row to observe the effect.



Inputs:

Source: The clip to be processed.

Lens: Distorts the previous frames using the brightness values of this input clip.

Matte: The opacity values for the Source clip. Areas of the new Source frames are composited over the previous frames where this Matte input is white.

Parameters:

Fade: *Default: 0.8, Range: 0 or greater, Shared.*

For each frame, the previous output is scaled by this amount before it is combined with the new input frame. Normally this value should be less than 1.0 which causes previous frames to fade out over time. A value of 1.0 causes no fading, and values greater than 1.0 cause previous frames to become brighter over time.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all frames.

Distort Amount: *Default: 0.1, Range: any.*

The severity of the feedback distortions. Make negative to invert the direction of the distortions.

Rotate Distort: *Default: 90, Range: any.*

Rotates the distortion direction by this many degrees. If non-zero, this can create some twisting distortions.

Blur Lens: *Default: 0.1, Range: 0 or greater.*

Smooths the lens image by this amount before using it. Increase this for smoother more continuous feedback directions.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Output Matte: *Check-box, Default: off, Shared.*

If enabled, the processed Matte channel is output instead of the regular output, for potential use in future composites onto other backgrounds.

Fade Color: *Default rgb: [1 1 1], Shared.*

For each frame, the previous output is scaled by this color before it is combined with the new input frame. This is similar to Fade but affects the colors of the previous frames instead of just the brightness.

Color: *Default rgb: [1 1 1], Shared.*

Scales the color of all frames. Set this color to the complement of Fade Color to offset overly colored trails.

Center: *X & Y, Default: [0 0], Range: any.*

The center position for rotation and scaling, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Z Dist: *Default: 1, Range: 0.001 or greater.*

For each new frame, the 'distance' of the previous frames is scaled by this amount. This causes zooming during the feedback process. Values greater than 1.0 zoom out and make the previous frames smaller, and values less than 1.0 zoom in and enlarge them. This parameter can be adjusted using the Transform Widget.

Rotate: *Default: 0, Range: any.*

For each new frame, the amount of rotation in degrees to apply to the previous frames. This parameter can be adjusted using the Transform Widget.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the previous frames' colors, for each new frame.

Shift: *X & Y, Default: [0 0], Range: any.*

Shifts the previous frames by this amount for each new frame. If this is non-zero the Center location is less meaningful. This parameter can be adjusted using the Shift Widget.

Wrap: *X & Y, Popup menu, Default: [NO NO].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Blur Amount: *Default: 0, Range: 0 or greater.*

The previous frames are blurred by this amount for each new frame. This has no effect unless it is positive.

Diffuse Amount: *Default: 0, Range: 0 or greater.*

The previous frames are passed through a pixel-diffusion process of this magnitude, for each new frame. This has no effect unless it is positive.

Amount Rel: *X & Y, Default: [1 1], Range: 0 or greater.*

The relative amounts of horizontal and vertical blurring and/or diffusing. This has no effect unless Blur Amount or Diffuse Amount are positive.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FeedbackMatte](#)

[TrailsMatte](#)

[TrailsDiffuseMatte](#)

[FeedbackBubbleMatte](#)

[FeedbackDistort](#)

[WarpRepeat](#)

[WarpChroma](#)

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FieldRemove

In the S_FieldRemove Plugin.

Adaptively removes video field interlacing artifacts from areas with motion, without blurring the stationary parts of the image. Unlike FieldRemove:Deinterlace and FieldRemove:NTSCtoFilm, this does not change the speed of the clip. A 'Motion Matte' is generated internally and the moving areas are deinterlaced with the usual loss of vertical resolution, but the stationary areas are not deinterlaced and should remain sharp.



Inputs:

Source: The clip to be processed.

Parameters:

Scale Mo Matte: *Default: 4, Range: 0 or greater, Shared.*

Increase to remove more field artifacts, or decrease to remove fewer and keep the image sharper.

Threshold Matte: *Default: 0.05, Range: 0 or greater, Shared.*

This value is subtracted from the Motion Matte and can be increased to reduce unwanted deinterlacing due just to noise.

Blur Mo Matte: *Default: 0.1, Range: 0 or greater, Shared.*

Determines how much the Motion Matte is smoothed out to avoid sharp transitions between the interlaced and deinterlaced areas.

Show: *Popup menu, Default: Result.*

Selects the output option.

Result: output the deinterlaced result normally.

MotionMatte: this allows viewing the Motion Matte itself, and can be helpful when adjusting the other parameters above.

Use Field: *Popup menu, Default: 1.*

Selects which field to preserve in areas with field artifacts.

1: keeps field 1.

2: keeps field 2.

Merge: Uses the average of both fields.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[NTSCtoFilm](#)

[Deinterlace](#)

[DeinterlaceAuto](#)

[FieldTool](#)

[GetFrame](#)

[DeinterlaceAuto](#)

[Sapphire Plug-ins](#)

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FieldRemove: Deinterlace

In the S_FieldRemove Plugin.

Deinterlaces video fields into frames while maintaining sharp results in still areas of the frame. This doubles the number of frames for a 1/2 speed result, so you should normally set your output frame number to twice the input clip length. A 'Motion Matte' is generated internally and the moving areas are deinterlaced with the usual loss of vertical resolution, but the stationary areas of the image are not deinterlaced and should remain sharp.



Inputs:

Source: The clip to remove flicker from.

Parameters:

Scale Mo Matte: *Default: 4, Range: 0 or greater, Shared.*

Increase to remove more field artifacts, or decrease to remove fewer and keep the image sharper.

Threshold Matte: *Default: 0.05, Range: 0 or greater, Shared.*

This value is subtracted from the Motion Matte and can be increased to reduce unwanted deinterlacing due just to noise.

Blur Mo Matte: *Default: 0.1, Range: 0 or greater, Shared.*

Determines how much the Motion Matte is smoothed out to avoid sharp transitions between the interlaced and deinterlaced areas.

Show: *Popup menu, Default: Result.*

Selects the output option.

Result: output the deinterlaced result normally.

MotionMatte: this allows viewing the Motion Matte itself, and can be helpful when adjusting the other parameters above.

Field Dominance: *Popup menu, Default: 1.*

Selects the ordering of the output fields.

1: field 1 is first in time.

2: field 2 is first in time.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FieldRemove](#)

[NTSCtoFilm](#)

[DeinterlaceAuto](#)

[FieldTool](#)

[GetFrame](#)

[DeinterlaceAuto](#)

[Sapphire Plug-ins](#)

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FieldRemove: NTSCtoFilm

In the S_FieldRemove Plugin.

Adaptively removes video field interlacing artifacts from areas with motion, without blurring the stationary parts of the image. At the same time this converts the frame rate from 30 to 24, so you should normally set your output frame number to 4/5 of your input clip length. A 'Motion Matte' is generated internally and the moving areas are deinterlaced with the usual loss of vertical resolution, but the stationary areas of the image are not deinterlaced and should remain sharp.



Inputs:

Source: The input to process. In Batch, it is recommended that this input be a clip of frames rather than another node.

Parameters:

Scale Mo Matte: *Default: 4, Range: 0 or greater, Shared.*

Increase to remove more field artifacts, or decrease to remove fewer and keep the image sharper.

Threshold Matte: *Default: 0.05, Range: 0 or greater, Shared.*

This value is subtracted from the Motion Matte and can be increased to reduce unwanted deinterlacing due just to noise.

Blur Mo Matte: *Default: 0.1, Range: 0 or greater, Shared.*

Determines how much the Motion Matte is smoothed out to avoid sharp transitions between the interlaced and deinterlaced areas.

Show: *Popup menu, Default: Result.*

Selects the output option.

Result: output the deinterlaced result normally.

MotionMatte: this allows viewing the Motion Matte itself, and can be helpful when adjusting the other parameters above.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FieldRemove](#)

[Deinterlace](#)

[DeinterlaceAuto](#)

[FieldTool](#)

[GetFrame](#)

[DeinterlaceAuto](#)

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FieldTool

Allows arbitrary field reordering of a Source clip. The parameters define a pattern that maps Source fields to Dest fields; this pattern is repeated for each set of Frame Cycle numbers. The overall speed is altered if DestFrameCycle is not equal to SourceFrameCycle.

For example a '2-3 pulldown' transferring every 4 frames of film to 5 frames of video can be performed by setting DestFrameCycle to 5, SourceFrameCycle to 4, and the Dfld<-Sfld parameters as follows: 1 2 3 4 3 6 5 8 7 8 . In this case odd fields are mapped to odd, and even to even, even though the field numbers are out of order, because this gives better vertical resolution and the source film frames have both fields at the same time sample.

It may help to draw a picture of the source frames and fields on the left and the dest frames and fields on the right, with lines between them. FieldTool can represent any such pattern where each dest field comes from exactly one source field, but any source may go to multiple dests.

To use this tool, you should think of both input and output as being composed of fields, even for media such as film that are frame-based.

Inputs:

Source: The clip to access fields from.

Parameters:

Dest Frame Cycle: *Popup menu, Default: 1.*

The number of frames in the Destination clip over which the field pattern is repeated. There are two destination fields for each frame in this cycle.

Dfld 1<-Sfld: *Integer, Default: 1, Range: -1 or greater, Shared.*

The 1st destination field (1st field of frame 1) gets this source field number.

Dfld 2<-Sfld: *Integer, Default: 2, Range: 0 or greater, Shared.*

The 2nd destination field (2nd field of frame 1) gets this source field number.

Dfld 3<-Sfld: *Integer, Default: 3, Range: 1 or greater, Shared.*

The 3rd destination field (1st field of frame 2) gets this source field number.

Dfld 4<-Sfld: *Integer, Default: 4, Range: 1 or greater, Shared.*

The 4th destination field (2nd field of frame 2) gets this source field number.

Dfld 5<-Sfld: *Integer, Default: 5, Range: 1 or greater, Shared.*

The 5th destination field (1st field of frame 3) gets this source field number.

Dfld 6<-Sfld: *Integer, Default: 6, Range: 1 or greater, Shared.*

The 6th destination field (2nd field of frame 3) gets this source field number.

Etc. for each destination field...

SourceFrameCycle: *Integer, Default: 3, Range: 1 or greater.*

The number of frames in the Source clip over which the field pattern is repeated. This defaults to the current setting of DestFrameCycle. There are 2 source fields for each frame in this cycle. If this is greater than DestFrameCycle the result will be faster than the source clip; if it is less than DestFrameCycle the result will be slower than the source



clip.

Rev Field Mode: *Popup menu, Default: Ave.*

Selects the method used when an even field is copied to an odd field or vice versa. This has no effect if the source and destination fields are both even or both odd.

Ave: The average of 1 pixel up and 1 pixel down is used. This avoids vertical shifting of the image but causes slight vertical blurring.

Up1: The image is shifted up one pixel. This option can cause vertical jitter unless all the fields are reversed, but it avoids vertical blurring.

Down1: The image is shifted down one pixel. This option can also cause vertical jitter unless all fields are reversed, but it avoids vertical blurring.

Field Dominance: *Popup menu, Default: 1.*

Selects the field order for both Source and Dest.

1: Field 1 occurs first in time, then field 2.

2: Field 2 occurs first in time, then field 1.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[DeinterlaceAuto](#)

[FieldRemove](#)

[GetFrame](#)

[Sapphire Plug-ins](#)

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FilmDamage

Simulates damaged film with many options, including dust, hairs, stains, scratches, defocusing, flicker, and shake. Each option has a master control and a set of detailed controls for adjusting the look of that type of damage.

Inputs:

Source: The clip to be processed.



Parameters:

Stains: *Default: 0.2, Range: 0 or greater.*

The number of stains on each frame. A fractional value is treated as the probability of a single stain appearing on any given frame.

Scratches: *Integer, Default: 5, Range: 0 or greater.*

Controls the number of scratches on each frame, on average.

Saturation: *Default: 1, Range: 0 or greater.*

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Scale Lights: *Default: 1, Range: 0 or greater.*

Scales the result by this gray value. Increase for a brighter result.

Offset Darks: *Default: 0, Range: any.*

Adds this gray value to the darker regions of the source. This can be negative to increase contrast.

Dust: *Default: 30, Range: 0 or greater.*

The average number of dust pieces on each frame. A fractional value is treated as the probability of a single dust speck appearing on any given frame.

Hairs: *Default: 2, Range: 0 or greater.*

Number of hairs stuck in the projector gate.

Grain Amp: *Default: 0.1, Range: 0 or greater.*

Scales the amplitude of the film grain that is added to the result. Set this to 0 to disable all grain.

Grain Blur: *Default: 0, Range: 0 or greater.*

The grain is smoothed by this amount. Increase for coarser grain.

Grain Hold: *Popup menu, Default: Frame.*

Indicates how often a new grain pattern should be generated. You will probably only notice a difference between these options if Grain Blur is positive to make the grain size larger than one pixel.

Field: holds the grain pattern for one field.

Frame: holds the grain pattern for one frame (2 fields).

3:2 Pulldown at 0: holds the grain in a 3:2 pulldown pattern with the first pulldown frame at 0. These options are appropriate if your clip was created at 24 fps but is now in 30 fps pulldown form. They will not make sense if your clip is 24P. A 3:2 pulldown pattern repeats every 5 frames, so if frame 1:00:23 is the first frame with field artifacts after three normal frames, then you should specify 3 as the first pulldown frame.

3:2 Pulldown at 1: holds the grain in a 3:2 pulldown pattern with the first pulldown frame at 1.

3:2 Pulldown at 2: holds the grain in a 3:2 pulldown pattern with the first pulldown frame at 2.

3:2 Pulldown at 3: holds the grain in a 3:2 pulldown pattern with the first pulldown frame at 3.

3:2 Pulldown at 4: holds the grain in a 3:2 pulldown pattern with the first pulldown frame at 4.

Shake Amp: *Default:* 0, *Range:* 0 or greater.
Amount of vertical shaking to add.

Seed: *Default:* 0, *Range:* 0 or greater.
Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Vignette Dark: *Default:* 0.1, *Range:* 0 to 1.
Vignetting is darkening of the image towards the corners and sides of the image. This parameter controls how much the outer corners of the screen should be darkened (vignetted). 0 gives no vignetting, 1 gives maximum darkening.

Vign Radius: *Default:* 1, *Range:* 0 or greater.
Distance from the center to apply the vignette.

Vign Edge Soft: *Default:* 0.5, *Range:* 0 or greater.
The width of the vignette's soft edge. Larger values give softer, less visible edges.

Vign Rel Height: *Default:* 0.75, *Range:* 0.1 or greater.
Controls the aspect ratio of the vignette ellipse. This should normally be set to the aspect ratio of the image, e.g. .75 for NTSC.

Flicker: *Default:* 0.2, *Range:* 0 or greater.
Scales the colors of the source clip by different amounts over time for a flickering effect. The pattern of flickering can be random, a periodic wave, or a combination of the two.

Defocus: *Default:* 0, *Range:* 0 or greater.
Blurs the source clip by different amounts over time to simulate focus problems in the projector. The pattern of defocus can be random, a periodic wave, or a combination of the two.

Params2:

Stain Color: *Default rgb:* [0.125 0.06 0].
The base color for stains. The color of each stain will vary slightly from this value.

Dust Color: *Default rgb:* [0 0 0].
The base color for dust. The color of each piece of dust will vary slightly from this value.

Stain Details Parameters:

Vary Stains: *Default:* 0.2, *Range:* 0 or greater.
Amount to vary the stain density from frame to frame.

Stain Negative: *Default:* 0, *Range:* 0 to 1.
Relative density of stains on the negative versus the print. Set to 1 to stain only the negative, or 0 to stain only the print.

Stain Size: *Default:* 1, *Range:* 0 or greater.
Scales the width and height of stains.

Stain Opacity: *Default:* 0.5, *Range:* 0 to 1.
Scales the opacity of the stains.

Dust Details Parameters:

Vary Dust: *Default:* 0.2, *Range:* 0 or greater.
Amount to vary the dust density from frame to frame.

Dust Negative: *Default:* 0, *Range:* 0 to 1.

Relative density of dust on the negative versus the print. Set to 1 to apply dust only to the negative, or 0 to apply dust only to the print.

Dust Size: *Default:* 1, *Range:* 0 or greater.

Scales the width and height of dust.

Dust Opacity: *Default:* 0.8, *Range:* 0 to 1.

Scales the opacity of the dust.

Tint Lights: *Default rgb:* [1 1 1].

Scales the result by this color, thus tinting the lighter regions.

Tint Darks: *Default rgb:* [0 0 0].

Adds this color to the darker regions of the source.

Shake Details Parameters:

Shake Frequency: *Default:* 1, *Range:* 0 or greater.

Scales the frequency of the shaking. Increase for faster shaking with more frequent hops and changes in direction.

Shake Always: *Default:* 0.5, *Range:* 0 to 1.

Controls how often shaking occurs. If set to 1, the clip shakes constantly. If set to 0, the clip never shakes. Values in between cause the clip to shake some of the time, and to stay still at other times.

Shake Border: *Default:* 0.1, *Range:* 0 or greater.

Size of the black bar in between frames (the unexposed part of the film).

Motion Blur: *Default:* 0.2, *Range:* 0 or greater.

Blurs the result proportionally to the amount of shaking.

Shake Jumpiness: *Default:* 1, *Range:* 0 or greater.

Amount of large-scale, jumpy shaking.

Scratches Details Parameters:

White Scratches: *Default:* 0.1, *Range:* 0 to 1.

Relative number of white and black scratches. Set to 1 to make all scratches white, or 0 to make all scratches black.

Black Scratch Len: *Default:* 10, *Range:* 0 or greater.

The length of the black scratches in frames, on average.

White Scratch Len: *Default:* 2, *Range:* 0 or greater.

The length of the white scratches in frames, on average.

Scratch Width: *Default:* 0.15, *Range:* 0 or greater.

Width of the average scratch, in approximate NTSC-sized pixels.

Vary Width: *Default:* 1, *Range:* 0 to 1.

If this is 0 all the scratches will be the same width. Increase to let each scratch have its own width.

Scratch Opacity: *Default:* 1, *Range:* 0 to 1.

Maximum opacity of the scratches. Setting this to 0 will fade the scratches out.

Gaps: *Default:* 0.28, *Range:* 0 to 1.

Like real analog scratches, the dust particle creating the scratch sometimes rolls around and the scratch 'skips'. This controls how much that happens.

Gaps Freq: *Default: 120, Range: 0 or greater.*

How often do the scratch gaps occur.

Scratch Rough: *Default: 1, Range: 0 or greater.*

Amount to roughen the edges of each scratch to simulate the random character of a real scratch.

Area Center: *Default: 0, Range: any.*

The center coordinate of the area of the screen covered by the scratches. 0 is in the middle of the screen, -1 is the left edge, and 1 is the right edge.

Area Width: *Default: 1, Range: 0 or greater.*

The width of the area of the screen covered by scratches. 1 means the scratches cover the full screen area. To get scratches only in one strip, adjust area width smaller.

Weave Amount: *Default: 1, Range: 0 or greater.*

How much does each scratch weave around on the screen, on average. This is in frame-widths, so 1.0 will let a scratch wander all over the screen. If set to zero, the scratches will all be straight vertical.

Weave Frequency: *Default: 0.1, Range: 0.01 or greater.*

How fast do the scratches weave around on the screen, in cycles per frame. Normally less than one.

Hair Details Parameters:

Hair Persistence: *Default: 3, Range: 0.1 or greater.*

Controls the length of time that hairs persist, and the frequency with which new hairs appear. Increase this value for long-lived hairs, and decrease it to get new hairs more often.

Hair Wiggle Amp: *Default: 0.1, Range: 0 or greater.*

Controls the amount of random movement and stretching that each hair exhibits.

Hair Wiggle Freq: *Default: 1, Range: 0 or greater.*

Controls the frequency of the hair wiggle.

Hair Size: *Default: 1, Range: 0 or greater.*

Scales the width and height of the hairs.

Hair Opacity: *Default: 1, Range: 0 to 1.*

Scales the opacity of the hairs.

Vary Hair Size: *Default: 1, Range: 0 or greater.*

Amount to vary the size from one hair to the next.

Flicker Parameters:

Flicker Amp: *Default: 1, Range: 0 or greater.*

The amplitude of random brightness flickering.

Flicker Freq: *Default: 10, Range: 0 or greater.*

The frequency of the random flickering. Increase for more variation between frames. Decrease for slower flickering.

Defocus Parameters:

Defocus Amp: *Default: 1, Range: 0 or greater.*

The amplitude of defocusing that changes randomly over time.

Defocus Freq: *Default: 10, Range: 0 or greater.*

Scales the frequency of the random defocus. Increase for more variation between frames. Decrease for slower defocus changes over time.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FilmEffect](#)

[BleachBypass](#)

[Technicolor2Strip](#)

[Vignette](#)

[Flicker](#)

[JpegDamage](#)

[ScanLines](#)

[FlickerRemove](#)

[FlickerMatch](#)

[Shake](#)

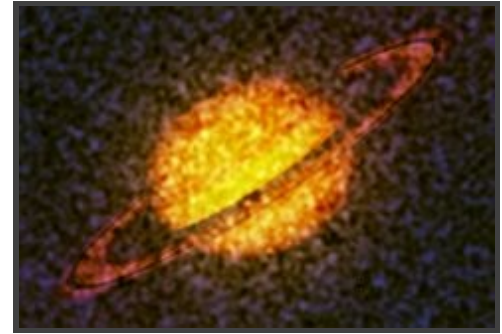
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FilmEffect

Provides a physically accurate model of film exposure and processing to make your video footage look like it was shot on film. It can remove field artifacts, perform color correction for specific film types, add film grain, and apply glow or soft focus effects. The color correction and grain can be selectively disabled using the Scale CC and Grain Amp parameters.



Inputs:

Source: The clip to be processed.

Parameters:

Neg Film: *Popup menu, Default: Kodak 5245.*

Selects the negative film stock.

None: Ignore any effect of negative film. This is not normally useful unless you also select None for the print film to disable both.

Kodak 5245: Eastman EXR 50D, low speed, daylight balanced, very fine grain.

Kodak 5246: Kodak VISION 250D, higher contrast, medium speed, daylight balanced, fine grain.

Kodak 5248: Eastman EXR 100T, medium speed, tungsten light balanced, very fine grain.

Kodak 5274: Kodak VISION 200T, medium speed, tungsten light balanced, fine grain.

Kodak 5277: Kodak VISION 320T, lower contrast, medium speed, tungsten light balanced, medium-fine grain.

Kodak 5279: Kodak VISION 500T, high speed, tungsten light balanced, somewhat grainy.

Kodak 5284: Kodak VISION Expression 500T, lower contrast, high speed, tungsten light balanced, medium grain.

Kodak 5289: Kodak VISION 800T, very fast, tungsten light balanced, grainy.

Kodak 5293: Eastman EXR 200T, reduced contrast, tungsten light balanced, medium grain.

Kodak 5298: Eastman EXR 500T, high speed, tungsten light balanced, grainy.

K SFX200T: Special effects film, medium grain.

Kodak 5217: Kodak Vision2 200T, tungsten light balanced, fine grain.

Kodak 5218: Kodak Vision2 500T, tungsten light balanced, fine grain.

Print Film: *Popup menu, Default: Kodak 2383.*

Selects the print film stock.

None: Ignore any effect of the print film. This causes the negative to be output directly. If the negative film is also set to None, the color correction and grain are disabled.

Kodak 2383: Kodak VISION Color Print Film, rich blacks.

Kodak 2393: Kodak VISION Premier Color Print Film, rich blacks, some grain.

Kodak 2395: Kodak VISION Color Teleprint Film, low contrast.

Kodak 5386: Eastman EXR Color Print Film (discontinued by Kodak, replaced by 2383).

Kodak 5285 Rev: Ektachrome 100D Reversal film, daylight balanced, high contrast and grainy. Note that the negative film is ignored when using reversal film.

Kodak 7270 Rev: Kodachrome 40 Movie Film, tungsten balanced reversal film, high contrast and somewhat grainy. Note that the negative film is ignored when using reversal film.

Scale CC: *Default: 1, Range: 0 or greater.*

Scales the amount of color correction performed due to the film types, gamma values, and exposure values. Set to 0 to disable color correction. If you increase this above 1.0 it exaggerates the color correction, which normally increases the contrast.

Input Gamma: *Default: 2.2, Range: 0.1 or greater.*

The gamma that your original clip was shot for. For video this is normally 2.2; for synthetic computer graphics it

may be less.

Output Gamma: *Default: 2.2, Range: 0.1 or greater.*

The intended viewing gamma of the output.

Blur Input: *Default: 0, Range: 0 or greater.*

The input is smoothed by this amount. This can be used to remove video noise or compression artifacts before processing.

Neg Exposure: *Default: 0, Range: any.*

Adjusts the simulated exposure of the negative film, in stops. Increase for over-exposed and brighter.

Print Exposure: *Default: 0, Range: any.*

Adjusts the simulated exposure of the print film, in stops. Increase for over-exposed and darker.

Print Lights R: *Default: 25, Range: 0 or greater.*

Adjusts the red exposure of the print film, in printer light points. 1 light point is 1/12 stop. Increase to over-expose red and give a more cyan result.

Print Lights G: *Default: 25, Range: 0 or greater.*

Adjusts the green exposure of the print film, in printer light points. 1 light point is 1/12 stop. Increase to over-expose green and give a more magenta result.

Print Lights B: *Default: 25, Range: 0 or greater.*

Adjusts the blue exposure of the print film, in printer light points. 1 light point is 1/12 stop. Increase to over-expose blue and give a more yellow result.

Scale Brights: *Default: 1, Range: 0 or greater.*

Scales the bright areas of the final result after the other color correction, glow, and grain are applied. (This parameter is not affected by Scale CC.)

Offset Darks: *Default: 0, Range: any.*

Adds this gray value to the darker regions of the final result after the other color correction, glow, and grain are applied. This can be negative to increase contrast. (This parameter is not affected by Scale CC.)

Grain Amp: *Default: 1, Range: 0 or greater.*

Scales the amplitude of the film grain that is added to the result. Set this to 0 to disable all grain.

Grain Blur: *Default: 0, Range: 0 or greater.*

The grain is smoothed by this amount. Increase for coarser grain.

Grain Hold: *Popup menu, Default: Frame.*

Indicates how often a new grain pattern should be generated. You will probably only notice a difference between these options if Grain Blur is positive to make the grain size larger than one pixel.

Field: holds the grain pattern for one field.

Frame: holds the grain pattern for one frame (2 fields).

3:2 Pulldown at 0: holds the grain in a 3:2 pulldown pattern with the first pulldown frame at 0. These options are appropriate if your clip was created at 24 fps but is now in 30 fps pulldown form. They will not make sense if your clip is 24P. A 3:2 pulldown pattern repeats every 5 frames, so if frame 1:00:23 is the first frame with field artifacts after three normal frames, then you should specify 3 as the first pulldown frame.

3:2 Pulldown at 1: holds the grain in a 3:2 pulldown pattern with the first pulldown frame at 1.

3:2 Pulldown at 2: holds the grain in a 3:2 pulldown pattern with the first pulldown frame at 2.

3:2 Pulldown at 3: holds the grain in a 3:2 pulldown pattern with the first pulldown frame at 3.

3:2 Pulldown at 4: holds the grain in a 3:2 pulldown pattern with the first pulldown frame at 4.

Glow Brightness: *Default: 0, Range: 0 or greater.*

If positive, the image is combined with a blurred version of itself to give a glowing look. Increase for a brighter glow.

Glow Soft Focus: *Default: 0, Range: 0 to 1.*

If positive, the image is mixed with a blurred version of itself to give a soft focus look. The effect of this parameter is similar to Glow Brightness, but this does not brighten the overall result. Increase this to mix in more of the blurred version and less of the original. If this is 1 and Glow Brightness is 0 you will get only the blurred version.

Glow Width: *Default: 0.5, Range: 0 or greater.*

The width of the blur used by the glow and/or soft focus.

Fields: *Popup menu, Default: As Is.*

Allows removing field artifacts from the input clip. This is useful if you want the clip to look like it was shot on frames instead of fields. You can show a single field, merge the two together, or simulate a 3:2 pulldown stutter pattern.

As Is: leaves the fields unchanged.

Keep Lower Only: shows the lower field only, removes the upper field.

Keep Upper Only: shows the upper field only, removes the lower field.

Merge Fields: blends both fields together to remove interlacing artifacts.

3:2 Stutter at 0: Simulates a temporal stutter effect as if the clip had been transferred from 24P to NSTC video using 3:2 pulldown, with the first pulldown frame at 0. If you are using this option with non-zero Grain Blur, you may want to also set Grain Hold to the corresponding value.

3:2 Stutter at 1: Simulates a 3:2 pulldown effect with the first pulldown frame at 1.

3:2 Stutter at 2: Simulates a 3:2 pulldown effect with the first pulldown frame at 2.

3:2 Stutter at 3: Simulates a 3:2 pulldown effect with the first pulldown frame at 3.

3:2 Stutter at 4: Simulates a 3:2 pulldown effect with the first pulldown frame at 4.

Field Dominance: *Popup menu, Default: 1.*

Specifies which field should come first in time when simulating 3:2 pulldown patterns. This is only used if a 3:2 stutter option is selected in the Fields and/or the Grain Hold options.

1: Field 1 occurs first in time, then field 2.

2: Field 2 occurs first in time, then field 1.

Params2:

Grain Amp Darks: *Default: 0.2, Range: 0 or greater.*

The relative amount of grain applied to the darkest regions of the image, per channel. This defaults to less than 1.0 because dark areas usually have less grain than midtones.

GrainAmpBrights: *Default: 0, Range: 0 or greater.*

The relative amount of grain applied to the brightest regions of the image, per channel. This defaults to zero because bright areas usually have less grain than midtones. Note that highly saturated colors can be affected by both Grain Amp Darks and Grain Amp Brights because they are dark in some color channels and bright in others.

Midtone Pos R: *Default: 0.5, Range: 0 to 1.*

The position of the midtones in the red channel that will normally receive the maximum amount of grain. The red grain amplitude is interpolated from Grain Amp Darks at black, up to 1.0 at this midtone position, then down to Grain Amp Brights at white. This whole curve is then scaled by the Grain Amp Red parameter.

Midtone Pos G: *Default: 0.5, Range: 0 to 1.*

The position of the midtones in the green channel that will normally receive the maximum amount of grain. The green grain amplitude is interpolated from Grain Amp Darks at black, up to 1.0 at this midtone position, then down to Grain Amp Brights at white. This whole curve is then scaled by the Grain Amp Green parameter.

Midtone Pos B: *Default: 0.5, Range: 0 to 1.*

The position of the midtones in the blue channel that will normally receive the maximum amount of grain. The blue

grain amplitude is interpolated from Grain Amp Darks at black, up to 1.0 at this midtone position, then down to Grain Amp Brights at white. This whole curve is then scaled by the Grain Amp Blue parameter.

Grain Amp Red: *Default:* 0.9, *Range:* 0 or greater.
Scales the red grain amplitude.

Grain Amp Green: *Default:* 1, *Range:* 0 or greater.
Scales the green grain amplitude.

Grain Amp Blue: *Default:* 1.6, *Range:* 0 or greater.
Scales the blue grain amplitude. Note that grain is added and subtracted from the image, so for example, increasing Grain Amp Blue will amplify both the blue and yellow speckles.

Grain Mono: *Check-box, Default:* off.

When enabled, the same grain pattern is used for the red, green, and blue channels. To make truly monochrome grain you should also set Grain Amp Red/Green/Blue equal to each other, make sure Midtone Pos Red/Green/Blue are equal, and if GrainBlur is positive also set Grain Blur Red/Green/Blue equal

Grain Seed: *Default:* 0.123, *Range:* 0 or greater.

Initializes the random number generator for the grain generation. The actual seed value is not significant, but different seeds give different grain patterns and the same value should give a repeatable pattern.

Grain Blur Red: *Default:* 1, *Range:* 0 or greater.
The relative blur amount for the red grain.

Grain Blur Green: *Default:* 0.9, *Range:* 0 or greater.
The relative blur amount for the green grain.

Grain Blur Blue: *Default:* 1.2, *Range:* 0 or greater.
The relative blur amount for the blue grain.

Glow Width Red: *Default:* 1, *Range:* 0 or greater.
The relative glow width for the red channel.

Glow Width Green: *Default:* 1, *Range:* 0 or greater.
The relative glow width for the green channel.

Glow Width Blue: *Default:* 1, *Range:* 0 or greater.
The relative glow width for the blue channel.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FilmDamage](#)

[FieldRemove](#)

[BleachBypass](#)

[Technicolor2Strip](#)

[GrainMono](#)

[GrainColor](#)

[StaticMono](#)

[StaticColor](#)

[Diffuse](#)

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Flicker

Scales the colors of the source clip by different amounts over time for a flickering effect. The pattern of flickering can be random, a periodic wave, or a combination of the two.

Inputs:

Source: The clip to be processed.



Parameters:

Amplitude: *Default: 0.2, Range: 0 or greater.*

Scales the amplitude of all flickering.

Rand Freq: *Default: 30, Range: 0 or greater.*

The frequency of the random flickering. Increase for more variation between frames. Decrease for slower flickering.

Red Amp: *Default: 1, Range: 0 or greater.*

Scales the amount of flicker applied to the red channel.

Blue Amp: *Default: 1, Range: 0 or greater.*

Scales the amount of flicker applied to the blue channel.

Green Amp: *Default: 1, Range: 0 or greater.*

Scales the amount of flicker applied to the green channel.

Rand Luma Amp: *Default: 1, Range: 0 or greater.*

The amplitude of smooth but random flickering affecting the brightness.

Wave Amp: *Default: 0, Range: 0 or greater.*

The amplitude of periodic wave flickering.

Wave Freq: *Default: 5, Range: 0 or greater.*

The frequency of the wave flickering. Increase for faster flickering, decrease for slower. This has no effect if Wave Amp is 0.

Wave G Phase: *Default: 0, Range: 0 or greater.*

Shifts the wave pattern in time, for the green channel.

Wave B Phase: *Default: 0, Range: 0 or greater.*

Shifts the wave pattern in time, for the blue channel.

Wave R Phase: *Default: 0, Range: 0 or greater.*

Shifts the wave pattern in time, for the red channel.

Rand Color Amp: *Default: 0, Range: 0 or greater.*

The amplitude of random flickering affecting the color channels independently.

Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of the result.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FlickerRemove](#)

[FlickerMatch](#)

[Shake](#)

[HueSatBright](#)

[Sapphire](#)

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FlickerMatch

In the S_FlickerMatch Plugin.

Adds flicker to the Source clip using the flicker from a second Match clip. For example, a clip can be brightened in synchrony with a flashing light in another clip. To use this effect, first position the rectangle over an area of the Match clip which has brightness changes you want to copy. A middle or light gray area is best for this. Then select a frame where you want the Source brightness unchanged, and hit the Set Match Level button. When other frames are processed, the Source brightness will be scaled by the average Match brightness within the rectangle, relative to the Match Level.



Inputs:

Source: The clip to add flicker to.

Match: The clip to copy flicker from.

Parameters:

Rect Center: *X & Y, Integer, Default: [0 0], Range: any, Shared.*

The center of the rectangle which is used to measure the flicker, in screen coordinates. This parameter can be adjusted using the Rect Widget.

Rect Size: *X & Y, Integer, Default: [600 400], Range: any, Shared.*

The size in pixels of the rectangle used to measure the flicker. This parameter can be adjusted using the Rect Widget.

Set Match Level: *Push-button.*

Pressing this button sets the Match Level parameter to the average Match clip brightness in the rectangle at the current frame. It causes the output to equal the Source at this frame. (This will not work properly when in 'Redraw:Never' mode.)

Match Level: *Default: 0.5, Range: 0.01 or greater.*

The average Match brightness in the rectangle for which the Source input is unchanged.

Measured Flicker: *Default: 0, Range: 0 or greater.*

When processing, this parameter is automatically adjusted to record the amount of flicker at each frame. You can copy the keyframes to a parameter in other effect in order to match the flicker in a different clip, or adjust the brightness on certain frames. Changing this parameter manually has no effect.

Params2:

Center Shift: *X & Y, Integer, Default: [0 0], Range: any, Shared.*

These values are added to the Rect Center, and are meant to help when using data from the Tracker.

Negate Shift: *Check-box, Default: off, Shared.*

If enabled, the Center Shift is subtracted from the Center instead of added.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FlickerMatchColor](#)

[FlickerRemove](#)

[Sapphire Plug-ins](#)

[FlickerRemoveColor](#)

[Introduction](#)

[FlickerRemoveMatte](#)

[FlickerRmMatteColor](#)

[FlickerMatchMatte](#)

[FlickerMchMatteColor](#)

[Flicker](#)

FlickerMatchMatte

In the S_FlickerMchMatte Plugin.

Adds flicker to the Source clip using the flicker from a second Match clip, in the areas specified by a Matte. To use this effect, select a frame where you want the Source brightness unchanged, and hit the Set Match Level button. When other frames are processed, the Source brightness will be scaled by the average Match brightness within the Matte, relative to the Match Level.



Inputs:

Source: The clip to add flicker to.

Match: The clip to copy flicker from.

Matte: The white of this clip specifies which Source areas to measure the flicker from. It can be inverted with the Invert Matte parameter.

Parameters:

Set Match Level: *Push-button.*

Pressing this button sets the Match Level parameter to the average Match clip brightness within the Matte at the current frame. It causes the output to equal the Source at this frame. (This will not work properly when in 'Redraw:Never' mode.)

Match Level: *Default: 0.5, Range: 0.01 or greater.*

The average Match brightness in the Matte for which the Source input is unchanged.

Invert Matte: *Check-box, Default: off, Shared.*

If enabled, the black and white of the matte are inverted before use.

Measured Flicker: *Default: 0, Range: 0 or greater.*

When processing, this parameter is automatically adjusted to record the amount of flicker at each frame. You can copy the keyframes to a parameter in other effect in order to match the flicker in a different clip, or adjust the brightness on certain frames. Changing this parameter manually has no effect.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FlickerMchMatteColor](#)

[FlickerRemove](#)

[Sapphire Plug-ins](#)

[FlickerRemoveColor](#)

[Introduction](#)

[FlickerRemoveMatte](#)

[FlickerRmMatteColor](#)

[FlickerMatch](#)

[FlickerMatchColor](#)

[Flicker](#)

FlickerMatchColor

In the S_FlickerMatch Plugin.

Adds color changes to the Source clip using the color changes from a second Match clip. Similar to FlickerMatch but the process is applied to each color channel. To use this effect, first position the rectangle over an area of the Match clip which has color changes you want to copy. A middle or light gray area is best for this. Then select a frame for which you want the Source color unchanged, and hit the Set Match Level button. When you process other frames, the Source colors will be scaled by the average Match color within the rectangle, relative to the Match Color.



Inputs:

Source: The clip to add color changes to.

Match: The clip to copy color changes from.

Parameters:

Rect Center: *X & Y, Integer, Default: [0 0], Range: any, Shared.*

The center of the rectangle which is used to measure the flicker, in screen coordinates. This parameter can be adjusted using the Rect Widget.

Rect Size: *X & Y, Integer, Default: [600 400], Range: any, Shared.*

The size in pixels of the rectangle used to measure the flicker. This parameter can be adjusted using the Rect Widget.

Set Match Color: *Push-button.*

Pressing this button sets the Match Color parameter to the average Match clip color in the rectangle at the current frame. It causes the output to equal the Source at this frame. (This will not work properly when in 'Redraw:Never' mode.)

Match Color: *Default rgb: [0.5 0.5 0.5].*

The average Match color in the rectangle for which the Source input is unchanged.

Measured Flicker R: *Default: 0, Range: 0 or greater.*

When processing, this parameter is automatically adjusted to record the amount of flicker in the red color channel at each frame. You can copy the keyframes to a parameter in other effect in order to match the flicker in a different clip, or adjust the brightness on certain frames. Changing this parameter manually has no effect.

Measured Flicker G: *Default: 0, Range: 0 or greater.*

When processing, this parameter is automatically adjusted to record the amount of flicker in the green color channel at each frame. You can copy the keyframes to a parameter in other effect in order to match the flicker in a different clip, or adjust the brightness on certain frames. Changing this parameter manually has no effect.

Measured Flicker B: *Default: 0, Range: 0 or greater.*

When processing, this parameter is automatically adjusted to record the amount of flicker in the blue color channel at each frame. You can copy the keyframes to a parameter in other effect in order to match the flicker in a different clip, or adjust the brightness on certain frames. Changing this parameter manually has no effect.

Params2:

Center Shift: *X & Y, Integer, Default: [0 0], Range: any, Shared.*

These values are added to the Rect Center, and are meant to help when using data from the Tracker.

Negate Shift: *Check-box, Default: off, Shared.*

If enabled, the Center Shift is subtracted from the Center instead of added.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FlickerMatch](#)

[FlickerRemove](#)

[Sapphire Plug-ins](#)

[FlickerRemoveColor](#)

[Introduction](#)

[FlickerRemoveMatte](#)

[FlickerRmMatteColor](#)

[FlickerMatchMatte](#)

[FlickerMchMatteColor](#)

[Flicker](#)

FlickerMchMatteColor

In the S_FlickerMchMatte Plugin.

Adds color changes to the Source clip using the color changes from a second Match clip, in the areas specified by a Matte. To use this effect, select a frame where you want the Source color unchanged, and hit the Set Match Color button. When other frames are processed, the Source color will be scaled by the average Match color within the Matte, relative to the Match Color.



Inputs:

Source: The clip to add flicker to.

Match: The clip to copy flicker from.

Matte: The white of this clip specifies which Source areas to measure the flicker from. It can be inverted with the Invert Matte parameter.

Parameters:

Set Match Color: *Push-button.*

Pressing this button sets the Match Color parameter to the average Match clip color within the Matte at the current frame. It causes the output to equal the Source at this frame. (This will not work properly when in 'Redraw:Never' mode.)

Match Color: *Default rgb: [0.5 0.5 0.5].*

The average Match color in the Matte for which the Source input is unchanged.

Invert Matte: *Check-box, Default: off, Shared.*

If enabled, the black and white of the matte are inverted before use.

Measured Flicker R: *Default: 0, Range: 0 or greater.*

When processing, this parameter is automatically adjusted to record the amount of flicker in the red color channel at each frame. You can copy the keyframes to a parameter in other effect in order to match the flicker in a different clip, or adjust the brightness on certain frames. Changing this parameter manually has no effect.

Measured Flicker G: *Default: 0, Range: 0 or greater.*

When processing, this parameter is automatically adjusted to record the amount of flicker in the green color channel at each frame. You can copy the keyframes to a parameter in other effect in order to match the flicker in a different clip, or adjust the brightness on certain frames. Changing this parameter manually has no effect.

Measured Flicker B: *Default: 0, Range: 0 or greater.*

When processing, this parameter is automatically adjusted to record the amount of flicker in the blue color channel at each frame. You can copy the keyframes to a parameter in other effect in order to match the flicker in a different clip, or adjust the brightness on certain frames. Changing this parameter manually has no effect.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FlickerMatchMatte](#)

[FlickerRemove](#)

[Sapphire Plug-ins](#)

[FlickerRemoveColor](#)

[Introduction](#)

[FlickerRemoveMatte](#)

[FlickerRmMatteColor](#)

[FlickerMatch](#)

[FlickerMatchColor](#)

[Flicker](#)

FlickerRemove

In the S_FlickerRemove Plugin.

Removes temporal flickering from the Source clip. For example, old footage with uneven exposure times can be smoothed out with this effect. To use this effect, first position the rectangle over an area where the average brightness should remain constant. A middle or light gray area is best for this. Then select a Source frame that has the desired brightness within the rectangle, and hit the Set Hold Level button. When other frames are processed, their brightness will be scaled so the average brightness within the rectangle is equal to the Hold Level. You can keyframe different Hold Level values over time to account for desirable brightness changes.



Inputs:

Source: The clip to remove flicker from.

Parameters:

Rect Center: *X & Y, Integer, Default: [0 0], Range: any, Shared.*

The center of the rectangle which is used to measure the flicker, in screen coordinates. This parameter can be adjusted using the Rect Widget.

Rect Size: *X & Y, Integer, Default: [600 400], Range: any, Shared.*

The size in pixels of the rectangle used to measure the flicker. This parameter can be adjusted using the Rect Widget.

Set Hold Level: *Push-button.*

Pressing this button sets the Hold Level parameter to the average Source brightness in the rectangle at the current frame. It causes the output to equal the Source at this frame. (This will not work properly when in 'Redraw:Never' mode.)

Hold Level: *Default: 0.5, Range: 0.01 or greater.*

The requested average output brightness for the area within the rectangle.

Measured Flicker: *Default: 0, Range: 0 or greater.*

When processing, this parameter is automatically adjusted to record the amount of flicker at each frame. You can copy the keyframes to a parameter in other effect in order to match the flicker in a different clip, or adjust the brightness on certain frames. Changing this parameter manually has no effect.

Params2:

Center Shift: *X & Y, Integer, Default: [0 0], Range: any, Shared.*

These values are added to the Rect Center, and are meant to help when using data from the Tracker.

Negate Shift: *Check-box, Default: off, Shared.*

If enabled, the Center Shift is subtracted from the Center instead of added.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FlickerRemoveColor](#)

[FlickerRemoveMatte](#)

[Sapphire Plug-ins](#)

[FlickerRmMatteColor](#)

[Introduction](#)

[FlickerMatch](#)

[FlickerMatchColor](#)

[FlickerMatchMatte](#)

[FlickerMchMatteColor](#)

[Flicker](#)

FlickerRemoveMatte

In the S_FlickerRmMatte Plugin.

Removes temporal flickering from the Source clip using a Matte clip to specify the area where the average brightness should remain constant. To use this effect, select a Source frame that has the desired brightness within the Matte, and hit the Set Hold Level button. When other frames are processed, their brightness will be scaled so the average brightness within the Matte is equal to the Hold Level. You can keyframe different Hold Level values over time to account for desirable brightness changes.



Inputs:

Source: The clip to remove flicker from.

Matte: The white of this clip specifies which Source areas to measure the flicker from. It can be inverted with the Invert Matte parameter.

Parameters:

Set Hold Level: *Push-button.*

Pressing this button sets the Hold Level parameter to the average Source brightness within the Matte at the current frame. It causes the output to equal the Source at this frame. (This will not work properly when in 'Redraw:Never' mode.)

Hold Level: *Default: 0.5, Range: 0.01 or greater.*

The requested average output brightness for the area within the Matte.

Invert Matte: *Check-box, Default: off, Shared.*

If enabled, the black and white of the matte are inverted before use.

Measured Flicker: *Default: 0, Range: 0 or greater.*

When processing, this parameter is automatically adjusted to record the amount of flicker at each frame. You can copy the keyframes to a parameter in other effect in order to match the flicker in a different clip, or adjust the brightness on certain frames. Changing this parameter manually has no effect.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FlickerRmMatteColor](#)

[FlickerRemove](#)

[Sapphire Plug-ins](#)

[FlickerRemoveColor](#)

[Introduction](#)

[FlickerMatch](#)

[FlickerMatchColor](#)

[FlickerMatchMatte](#)

[FlickerMchMatteColor](#)

[Flicker](#)

FlickerRemoveColor

In the S_FlickerRemove Plugin.

Removes temporal color changes from the Source clip. Similar to FlickerRemove but the process is applied to each color channel. To use this effect, first position the rectangle over an area where the average color should remain constant. A middle or light gray area is best for this. Then select a Source frame that has the desired color within the rectangle, and hit the Set Hold Color button. When other frames are processed, their colors will be scaled so the average color within the rectangle is equal to the Hold Color.



Inputs:

Source: The clip to remove color changes from.

Parameters:

Rect Center: *X & Y, Integer, Default: [0 0], Range: any, Shared.*

The center of the rectangle which is used to measure the flicker, in screen coordinates. This parameter can be adjusted using the Rect Widget.

Rect Size: *X & Y, Integer, Default: [600 400], Range: any, Shared.*

The size in pixels of the rectangle used to measure the flicker. This parameter can be adjusted using the Rect Widget.

Set Hold Color: *Push-button.*

Pressing this button sets the Hold Color parameter to the average Source color in the rectangle at the current frame. It causes the output to equal the Source at this frame. (This will not work properly when in 'Redraw:Never' mode.)

Hold Color: *Default rgb: [0.5 0.5 0.5].*

The requested average output color for the area within the rectangle.

Measured Flicker R: *Default: 0, Range: 0 or greater.*

When processing, this parameter is automatically adjusted to record the amount of flicker in the red color channel at each frame. You can copy the keyframes to a parameter in other effect in order to match the flicker in a different clip, or adjust the brightness on certain frames. Changing this parameter manually has no effect.

Measured Flicker G: *Default: 0, Range: 0 or greater.*

When processing, this parameter is automatically adjusted to record the amount of flicker in the green color channel at each frame. You can copy the keyframes to a parameter in other effect in order to match the flicker in a different clip, or adjust the brightness on certain frames. Changing this parameter manually has no effect.

Measured Flicker B: *Default: 0, Range: 0 or greater.*

When processing, this parameter is automatically adjusted to record the amount of flicker in the blue color channel at each frame. You can copy the keyframes to a parameter in other effect in order to match the flicker in a different clip, or adjust the brightness on certain frames. Changing this parameter manually has no effect.

Params2:

Center Shift: *X & Y, Integer, Default: [0 0], Range: any, Shared.*

These values are added to the Rect Center, and are meant to help when using data from the Tracker.

Negate Shift: *Check-box, Default: off, Shared.*

If enabled, the Center Shift is subtracted from the Center instead of added.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FlickerRemove](#)

[FlickerRemoveMatte](#)

[Sapphire Plug-ins](#)

[FlickerRmMatteColor](#)

[Introduction](#)

[FlickerMatch](#)

[FlickerMatchColor](#)

[FlickerMatchMatte](#)

[FlickerMchMatteColor](#)

[Flicker](#)

FlickerRmMatteColor

In the S_FlickerRmMatte Plugin.

Removes temporal color changes from the Source clip using a Matte clip to specify the area where the average color should remain constant. To use this effect, select a Source frame that has the desired color within the Matte, and hit the Set Hold Color button. When other frames are processed, their color will be scaled so the average color within the Matte is equal to the Hold Color.



Inputs:

Source: The clip to remove color changes from.

Matte: The white of this clip specifies which Source areas to measure the flicker from. It can be inverted with the Invert Matte parameter.

Parameters:

Set Hold Color: *Push-button.*

Pressing this button sets the Hold Color parameter to the average Source color within the Matte at the current frame. It causes the output to equal the Source at this frame. (This will not work properly when in 'Redraw:Never' mode.)

Hold Color: *Default rgb: [0.5 0.5 0.5].*

The requested average output color for the area within the Matte.

Invert Matte: *Check-box, Default: off, Shared.*

If enabled, the black and white of the matte are inverted before use.

Measured Flicker R: *Default: 0, Range: 0 or greater.*

When processing, this parameter is automatically adjusted to record the amount of flicker in the red color channel at each frame. You can copy the keyframes to a parameter in other effect in order to match the flicker in a different clip, or adjust the brightness on certain frames. Changing this parameter manually has no effect.

Measured Flicker G: *Default: 0, Range: 0 or greater.*

When processing, this parameter is automatically adjusted to record the amount of flicker in the green color channel at each frame. You can copy the keyframes to a parameter in other effect in order to match the flicker in a different clip, or adjust the brightness on certain frames. Changing this parameter manually has no effect.

Measured Flicker B: *Default: 0, Range: 0 or greater.*

When processing, this parameter is automatically adjusted to record the amount of flicker in the blue color channel at each frame. You can copy the keyframes to a parameter in other effect in order to match the flicker in a different clip, or adjust the brightness on certain frames. Changing this parameter manually has no effect.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FlickerRemoveMatte](#)

[FlickerRemove](#)
[FlickerRemoveColor](#)
[FlickerMatch](#)
[FlickerMatchColor](#)

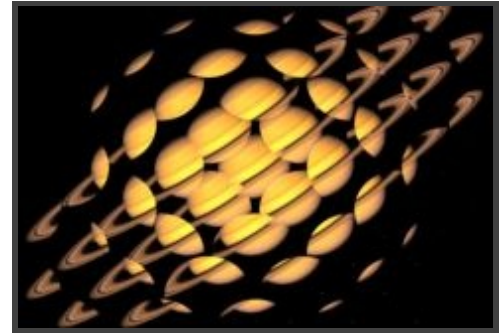
[Sapphire Plug-ins](#)
[Introduction](#)

FlickerMatchMatte
FlickerMchMatteColor
Flicker

FlysEyeCircles

In the S_FlysEye Plugin.

Breaks the image into circle shaped tiles and transforms the image within each shape, to create a fly's eye view effect. The Overlap options allow the circles to be combined in different ways where they overlap. The 'Inside' parameters transform the Source image before it is tiled into the pattern, and the 'Tile' parameters transform the entire fly's eye pattern.



Inputs:

Source: The clip to be processed.

Parameters:

Tile Frequency: *Default: 12, Range: 0.1 or greater, Shared.*

The frequency of the tile pattern, increase for more smaller tiles. This parameter can be adjusted using the Tile Freq Widget.

Tile Rel Height: *Default: 1, Range: 0.01 or greater, Shared.*

The relative height of the tile shapes, increase for taller tiles.

Tile Shift: *X & Y, Default: [0 0], Range: any, Shared.*

Translates the tile pattern. This parameter can be adjusted using the Tile Shift Widget.

Circle Radius: *Default: 1, Range: 0 to 1.*

The radius of the circles relative to each other. If this is less than 1.0 you will get empty spaces between the circles. The color of these empty spaces will be either black or white depending on the combine mode.

Edge Softness: *Default: 0, Range: 0 to 1.*

The softness of the edges of the circles. If this is increased, it may also be necessary to lower the Circle Radius to avoid rectangular artifacts where the soft edges overlap.

Inside Zdist: *Default: 2, Range: 0 or greater, Shared.*

Determines the zoom factor of the image inside each tile. Values greater than 1 zoom out, values less than 1 zoom in. If this is 1, Inside Rotate is 0, and Overall Zdist is 1, the result should be the same as the input image.

Inside Rotate: *Default: 0, Range: any, Shared.*

The rotation angle of the image inside each tile, in degrees.

Overall Zdist: *Default: 1, Range: any, Shared.*

Creates an overall zooming effect by making each tile look toward or away from the image center. Decrease to zoom in, increase to zoom out. When 0 all tiles should contain identical images.

Wrap: *Popup menu, Default: REFLECT.*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Filter: *Check-box, Default: on, Shared.*

If enabled, the Source image is resampled using pixel averaging. This removes aliasing and gives a higher quality result especially when Inside Zdist is large. It may not be necessary if your input image is smooth or Inside Zdist is small.

Overlap: *Popup menu, Default: Ave.*

Determines the method used to combine the overlapping regions of the circles.

Ave: uses a weighted average across the overlapping region for a smooth transition.

Screen: uses a screen operation.

Max: uses the lighter.

Min: uses the darker.

Mult: uses a multiply operation.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FlysEyeHex](#)

[FlysEyeRect](#)

[Mosaic](#)

[HalfTone](#)

[ScanLines](#)

[JpegDamage](#)

[VanGogh](#)

[Sapphire](#)

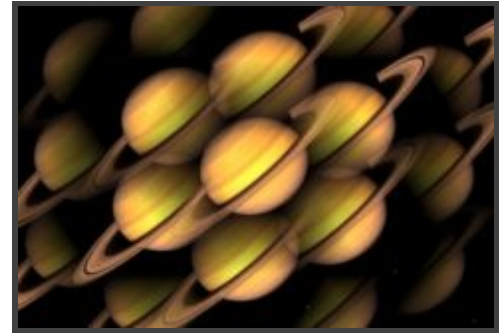
[Plug-ins](#)

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FlysEyeHex

In the S_FlysEye Plugin.

Breaks the image into hexagon shaped tiles and transforms the image within each shape, to create a fly's eye view effect. Increase Edge Softness for a smoother overlap between the tiles. The 'Inside' parameters transform the Source image before it is tiled into the pattern, and the 'Tile' parameters transform the entire fly's eye pattern.



Inputs:

Source: The clip to be processed.

Parameters:

Tile Frequency: *Default: 12, Range: 0.1 or greater, Shared.*

The frequency of the tile pattern, increase for more smaller tiles. This parameter can be adjusted using the Tile Freq Widget.

Tile Rel Height: *Default: 1, Range: 0.01 or greater, Shared.*

The relative height of the tile shapes, increase for taller tiles.

Tile Shift: *X & Y, Default: [0 0], Range: any, Shared.*

Translates the tile pattern. This parameter can be adjusted using the Tile Shift Widget.

Tile Rotate: *Default: 0, Range: any.*

The rotation angle of the tile pattern, in degrees.

Edge Softness: *Default: 0, Range: 0 to 1.*

The softness of the edges between the tile shapes. Increase for smoother blending between the shapes.

Inside Zdist: *Default: 2, Range: 0 or greater, Shared.*

Determines the zoom factor of the image inside each tile. Values greater than 1 zoom out, values less than 1 zoom in. If this is 1, Inside Rotate is 0, and Overall Zdist is 1, the result should be the same as the input image.

Inside Rotate: *Default: 0, Range: any, Shared.*

The rotation angle of the image inside each tile, in degrees.

Overall Zdist: *Default: 1, Range: any, Shared.*

Creates an overall zooming effect by making each tile look toward or away from the image center. Decrease to zoom in, increase to zoom out. When 0 all tiles should contain identical images.

Wrap: *Popup menu, Default: REFLECT.*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Filter: *Check-box, Default: on, Shared.*

If enabled, the Source image is resampled using pixel averaging. This removes aliasing and gives a higher quality result especially when Inside Zdist is large. It may not be necessary if your input image is smooth or Inside Zdist is small.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FlysEyeRect](#)
[FlysEyeCircles](#)

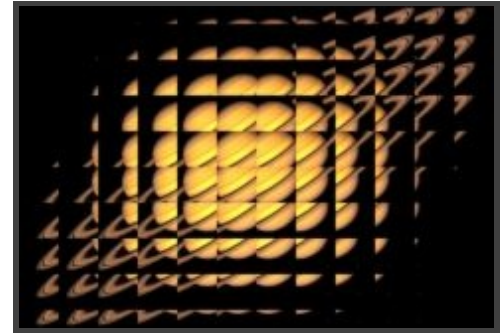
[Mosaic](#)
[HalfTone](#)
[ScanLines](#)
[JpegDamage](#)
[VanGogh](#)

[Sapphire](#)
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FlysEyeRect

In the S_FlysEye Plugin.

Breaks the image into rectangle shaped tiles and transforms the image within each shape, to create a fly's eye view effect. The 'Inside' parameters transform the Source image before it is tiled into the pattern, and the 'Tile' parameters transform the entire fly's eye pattern.



Inputs:

Source: The clip to be processed.

Parameters:

Tile Frequency: *Default: 12, Range: 0.1 or greater, Shared.*

The frequency of the tile pattern, increase for more smaller tiles. This parameter can be adjusted using the Tile Freq Widget.

Tile Rel Height: *Default: 1, Range: 0.01 or greater, Shared.*

The relative height of the tile shapes, increase for taller tiles.

Tile Shift: *X & Y, Default: [0 0], Range: any, Shared.*

Translates the tile pattern. This parameter can be adjusted using the Tile Shift Widget.

Inside Zdist: *Default: 2, Range: 0 or greater, Shared.*

Determines the zoom factor of the image inside each tile. Values greater than 1 zoom out, values less than 1 zoom in. If this is 1, Inside Rotate is 0, and Overall Zdist is 1, the result should be the same as the input image.

Inside Rotate: *Default: 0, Range: any, Shared.*

The rotation angle of the image inside each tile, in degrees.

Overall Zdist: *Default: 1, Range: any, Shared.*

Creates an overall zooming effect by making each tile look toward or away from the image center. Decrease to zoom in, increase to zoom out. When 0 all tiles should contain identical images.

Wrap: *Popup menu, Default: REFLECT.*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Filter: *Check-box, Default: on, Shared.*

If enabled, the Source image is resampled using pixel averaging. This removes aliasing and gives a higher quality result especially when Inside Zdist is large. It may not be necessary if your input image is smooth or Inside Zdist is small.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FlysEyeHex](#)

[FlysEyeCircles](#)

[Mosaic](#)

[HalfTone](#)

[Sapphire](#)

[Plug-ins](#)

ScanLines

IpegDamage

VanGogh

Introduction

Glare

Generates rainbow halos and/or glint-like rays at locations where the Source clip is brighter than the threshold. Glares are best observed on dark images with a few bright spots.

For even more customization of the glare shapes, use the Convolve plug-in, which lets you use your custom-designed shape from a clip.

Inputs:

Source: The input clip that determines the glare locations and colors. This clip is also used as the background and the glares are layered back onto it.



Parameters:

Type: *Popup menu, Default: Rainbow Rays.*

The style of glare to apply. Custom glare types can also be made, or existing types modified, by editing the "s_glare.text" file.

Rainbow Rays: rays with rainbow.

Rainbow Rays 2: rays with larger rainbow.

Rays 60: cluster of 60 rays.

Rays 20: cluster of 20 rays.

Rays 16: cluster of 16 rays.

Rays 12 Rand: 12 rays with random orientations.

Rays 6: cluster of 6 rays.

Rays 4: cluster of 4 rays.

Rays 4 Ring: 4 rays with ring and glow.

Rays Multi: several clusters of rays together.

Rainbow Only: rainbow.

Rainbow 2 Only: larger rainbow.

Rainbow Double: 2 rainbows.

Round Coin: simple solid circle.

Glint Rays: similar to the default settings of Glint.

Rainbow Rays 3: a cross with a spray of rays and a textured rainbow ring.

Streaky Rainbow: rainbow ring with radial texture.

CCD Saturation: bright vertical white line, simulating digital camera CCD saturation or overdrive.

Convolve: *Check-box, Default: off.*

Determines the method for applying the glares to the Background.

Size: *Default: 1, Range: 0 or greater.*

Scales the size of the glares. This parameter can be adjusted using the Size Widget.

Rel Height: *Default: 1, Range: 0 or greater.*

Scales the vertical dimension of the glares, making them elliptical instead of circular.

Rotate: *Default: 0, Range: any.*

Rotates the ray elements of the glares, if any, in degrees.

Scale Source: *Default: 1, Range: 0 or greater.*

Scales the brightness of the Source input when combined with the glares. This does not affect the generation of the glares themselves.

Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of all the glares.

Saturation: *Default: 1, Range: any.*

Scales the color saturation of the glare elements. Increase for more intense colors. Set to 0 for monochrome glares.

Rays Num Scale: *Default: 1, Range: 0 or greater.*

Increases or decreases the number of rays.

Rays Length: *Default: 1, Range: 0 or greater.*

Adjusts the length of the rays without changing their thickness.

Rays Thickness: *Default: 1, Range: 0 or greater.*

Adjusts the thickness of the individual rays.

Scale Colors: *Default rgb: [1 1 1].*

Scales the color of the glares. The colors and brightnesses of the glares are also affected by the Source input.

Threshold: *Default: 0.8, Range: 0 or greater.*

Glares are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glares at only the brightest spots. A value of 0 causes glares for every non-black area.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the glares generated on areas of the source clip containing that color.

Threshold Blur: *Default: 0, Range: 0 or greater.*

Increase to smooth out the areas creating glares. This can be used to eliminate glares generated from small speckles or to simply soften the glares. Increasing this may put more highlights below the threshold and darken the resulting glares, but you can decrease the Threshold parameter to compensate.

Glare Res: *Popup menu, Default: FULL.*

Selects the resolution factor for the glares. Higher resolutions give sharper glares, lower resolutions give smoother glares and faster processing. This 'Res' factor only affects the glares: the background is still combined with the glares at full resolution.

FULL: Full resolution is used.

1/2: The glares are calculated at half resolution.

1/4: The glares are calculated at quarter resolution.

Params2:

Blur Glare: *Default: 0, Range: 0 or greater, Shared.*

The glare is blurred by this amount before being combined with the background.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the glare, in revolutions from red to green to blue to red.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlareMask](#)

[GlareComp](#)

[GlareMaskCmp](#)

[Glint](#)

[Glow](#)

[LensFlare](#)

[Convolve](#)

[Sapphire](#)

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GlareComp

Generates rainbow halos and/or glint-like rays at locations where the Source clip is brighter than the threshold, and combines them with the Back input clip. This is similar to Glare but here the glare source and background can be different clips.

Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glares with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.



Parameters:

Type: *Popup menu, Default: Rainbow Rays.*

The style of glare to apply. Custom glare types can also be made, or existing types modified, by editing the "s_glares.text" file.

Rainbow Rays: rays with rainbow.

Rainbow Rays 2: rays with larger rainbow.

Rays 60: cluster of 60 rays.

Rays 20: cluster of 20 rays.

Rays 16: cluster of 16 rays.

Rays 12 Rand: 12 rays with random orientations.

Rays 6: cluster of 6 rays.

Rays 4: cluster of 4 rays.

Rays 4 Ring: 4 rays with ring and glow.

Rays Multi: several clusters of rays together.

Rainbow Only: rainbow.

Rainbow 2 Only: larger rainbow.

Rainbow Double: 2 rainbows.

Round Coin: simple solid circle.

Glint Rays: similar to the default settings of Glint.

Rainbow Rays 3: a cross with a spray of rays and a textured rainbow ring.

Streaky Rainbow: rainbow ring with radial texture.

CCD Saturation: bright vertical white line, simulating digital camera CCD saturation or overdrive.

Convolve: *Check-box, Default: off.*

Determines the method for applying the glares to the Background.

Size: *Default: 1, Range: 0 or greater.*

Scales the size of the glares. This parameter can be adjusted using the Size Widget.

Rel Height: *Default: 1, Range: 0 or greater.*

Scales the vertical dimension of the glares, making them elliptical instead of circular.

Rotate: *Default: 0, Range: any.*

Rotates the ray elements of the glares, if any, in degrees.

Source Opacity: *Default: 1, Range: 0 or greater.*

Scales the opacity of the Source input when combined with the glares. This does not affect the generation of the glares themselves.

Scale Back: *Default: 1, Range: 0 to 1.*

Scales the brightness of the background. This parameter only has an effect if the background input is provided, and is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of all the glares.

Saturation: *Default: 1, Range: any.*

Scales the color saturation of the glare elements. Increase for more intense colors. Set to 0 for monochrome glares.

Rays Num Scale: *Default: 1, Range: 0 or greater.*

Increases or decreases the number of rays.

Rays Length: *Default: 1, Range: 0 or greater.*

Adjusts the length of the rays without changing their thickness.

Rays Thickness: *Default: 1, Range: 0 or greater.*

Adjusts the thickness of the individual rays.

Glare Under Src: *Default: 0, Range: 0 to 1.*

Set to 1 to composite the Source input over the glares.

Glare From Matte: *Default: 0, Range: 0 to 1.*

Set to 1 to generate glares from the alpha channel of the source input instead of the RGB channels. In this case the glares will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Scale Colors: *Default rgb: [1 1 1].*

Scales the color of the glares. The colors and brightnesses of the glares are also affected by the Source input.

Threshold: *Default: 0.8, Range: 0 or greater.*

Glares are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glares at only the brightest spots. A value of 0 causes glares for every non-black area.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the glares generated on areas of the source clip containing that color.

Threshold Blur: *Default: 0, Range: 0 or greater.*

Increase to smooth out the areas creating glares. This can be used to eliminate glares generated from small speckles or to simply soften the glares. Increasing this may put more highlights below the threshold and darken the resulting glares, but you can decrease the Threshold parameter to compensate.

Glare Res: *Popup menu, Default: FULL.*

Selects the resolution factor for the glares. Higher resolutions give sharper glares, lower resolutions give smoother glares and faster processing. This 'Res' factor only affects the glares: the background is still combined with the glares at full resolution.

FULL: Full resolution is used.

1/2: The glares are calculated at half resolution.

1/4: The glares are calculated at quarter resolution.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Params2:

Blur Glare: *Default:* 0, *Range:* 0 or greater, *Shared*.

The glare is blurred by this amount before being combined with the background.

Hue Shift: *Default:* 0, *Range:* any, *Shared*.

Shifts the hue of the glare, in revolutions from red to green to blue to red.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Glare](#)

[GlareMask](#)

[GlareMaskCmp](#)

[Glint](#)

[Glow](#)

[LensFlare](#)

[Convolve](#)

[Sapphire](#)

[Plug-ins](#)

[Introduction](#)

GlareMaskCmp

Generates rainbow halos and/or glint-like rays at locations where the Source clip is brighter than the threshold. Each glare's color is scaled by the color of the Mask input, and then the glares are combined with the Back input clip. This is similar to Glare, but here a Mask input is provided, and also the glint source and background can be different clips.

Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glares with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.

Mask: The source glare colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glares. A color Mask can be used to selectively adjust the glare colors in different regions. The Mask is applied to the source before the glares are generated so it will not clip the resulting glares.

Parameters:

Type: *Popup menu, Default: Rainbow Rays.*

The style of glare to apply. Custom glare types can also be made, or existing types modified, by editing the "s_glares.text" file.

Rainbow Rays: rays with rainbow.

Rainbow Rays 2: rays with larger rainbow.

Rays 60: cluster of 60 rays.

Rays 20: cluster of 20 rays.

Rays 16: cluster of 16 rays.

Rays 12 Rand: 12 rays with random orientations.

Rays 6: cluster of 6 rays.

Rays 4: cluster of 4 rays.

Rays 4 Ring: 4 rays with ring and glow.

Rays Multi: several clusters of rays together.

Rainbow Only: rainbow.

Rainbow 2 Only: larger rainbow.

Rainbow Double: 2 rainbows.

Round Coin: simple solid circle.

Glint Rays: similar to the default settings of Glint.

Rainbow Rays 3: a cross with a spray of rays and a textured rainbow ring.

Streaky Rainbow: rainbow ring with radial texture.

CCD Saturation: bright vertical white line, simulating digital camera CCD saturation or overdrive.

Convolve: *Check-box, Default: off.*

Determines the method for applying the glares to the Background.

Size: *Default: 1, Range: 0 or greater.*

Scales the size of the glares. This parameter can be adjusted using the Size Widget.



Rel Height: *Default: 1, Range: 0 or greater.*

Scales the vertical dimension of the glares, making them elliptical instead of circular.

Rotate: *Default: 0, Range: any.*

Rotates the ray elements of the glares, if any, in degrees.

Source Opacity: *Default: 1, Range: 0 or greater.*

Scales the opacity of the Source input when combined with the glares. This does not affect the generation of the glares themselves.

Scale Back: *Default: 1, Range: 0 to 1.*

Scales the brightness of the background. This parameter only has an effect if the background input is provided, and is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of all the glares.

Saturation: *Default: 1, Range: any.*

Scales the color saturation of the glare elements. Increase for more intense colors. Set to 0 for monochrome glares.

Rays Num Scale: *Default: 1, Range: 0 or greater.*

Increases or decreases the number of rays.

Rays Length: *Default: 1, Range: 0 or greater.*

Adjusts the length of the rays without changing their thickness.

Rays Thickness: *Default: 1, Range: 0 or greater.*

Adjusts the thickness of the individual rays.

Glare Under Src: *Default: 0, Range: 0 to 1.*

Set to 1 to composite the Source input over the glares.

Glare From Matte: *Default: 0, Range: 0 to 1.*

Set to 1 to generate glares from the alpha channel of the source input instead of the RGB channels. In this case the glares will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Scale Colors: *Default rgb: [1 1 1].*

Scales the color of the glares. The colors and brightnesses of the glares are also affected by the Source input.

Threshold: *Default: 0.8, Range: 0 or greater.*

Glares are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glares at only the brightest spots. A value of 0 causes glares for every non-black area.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the glares generated on areas of the source clip containing that color.

Threshold Blur: *Default: 0, Range: 0 or greater.*

Increase to smooth out the areas creating glares. This can be used to eliminate glares generated from small speckles or to simply soften the glares. Increasing this may put more highlights below the threshold and darken the resulting glares, but you can decrease the Threshold parameter to compensate.

Glare Res: *Popup menu, Default: FULL.*

Selects the resolution factor for the glares. Higher resolutions give sharper glares, lower resolutions give smoother glares and faster processing. This 'Res' factor only affects the glares: the background is still combined with the glares at full resolution.

FULL: Full resolution is used.
1/2: The glares are calculated at half resolution.
1/4: The glares are calculated at quarter resolution.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Invert Mask: *Check-box, Default: off.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Params2:

Blur Glare: *Default: 0, Range: 0 or greater, Shared.*

The glare is blurred by this amount before being combined with the background.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the glare, in revolutions from red to green to blue to red.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

Glare	Glint	Sapphire
GlareMask	Glow	Plug-ins
GlareComp	LensFlare	Introduction
	Convolve	

GlareMask

Generates rainbow halos and/or glint-like rays at locations where the Source clip is brighter than the threshold. Each glare's color is scaled by the color of the Mask input, and then the glares are combined with the Source image. Glares are best observed on dark images with a few bright spots.

Inputs:

Source: The input clip that determines the glare locations and colors. This clip is also used as the background and the glares are layered back onto it.

Mask: The source glare colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glares. A color Mask can be used to selectively adjust the glare colors in different regions. The Mask is applied to the source before the glares are generated so it will not clip the resulting glares.



Parameters:

Type: *Popup menu, Default: Rainbow Rays.*

The style of glare to apply. Custom glare types can also be made, or existing types modified, by editing the "s_glares.text" file.

Rainbow Rays: rays with rainbow.

Rainbow Rays 2: rays with larger rainbow.

Rays 60: cluster of 60 rays.

Rays 20: cluster of 20 rays.

Rays 16: cluster of 16 rays.

Rays 12 Rand: 12 rays with random orientations.

Rays 6: cluster of 6 rays.

Rays 4: cluster of 4 rays.

Rays 4 Ring: 4 rays with ring and glow.

Rays Multi: several clusters of rays together.

Rainbow Only: rainbow.

Rainbow 2 Only: larger rainbow.

Rainbow Double: 2 rainbows.

Round Coin: simple solid circle.

Glint Rays: similar to the default settings of Glint.

Rainbow Rays 3: a cross with a spray of rays and a textured rainbow ring.

Streaky Rainbow: rainbow ring with radial texture.

CCD Saturation: bright vertical white line, simulating digital camera CCD saturation or overdrive.

Convolve: *Check-box, Default: off.*

Determines the method for applying the glares to the Background.

Size: *Default: 1, Range: 0 or greater.*

Scales the size of the glares. This parameter can be adjusted using the Size Widget.

Rel Height: *Default: 1, Range: 0 or greater.*

Scales the vertical dimension of the glares, making them elliptical instead of circular.

Rotate: *Default: 0, Range: any.*

Rotates the ray elements of the glares, if any, in degrees.

Scale Source: *Default: 1, Range: 0 or greater.*

Scales the brightness of the Source input when combined with the glares. This does not affect the generation of the glares themselves.

Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of all the glares.

Saturation: *Default: 1, Range: any.*

Scales the color saturation of the glare elements. Increase for more intense colors. Set to 0 for monochrome glares.

Rays Num Scale: *Default: 1, Range: 0 or greater.*

Increases or decreases the number of rays.

Rays Length: *Default: 1, Range: 0 or greater.*

Adjusts the length of the rays without changing their thickness.

Rays Thickness: *Default: 1, Range: 0 or greater.*

Adjusts the thickness of the individual rays.

Scale Colors: *Default rgb: [1 1 1].*

Scales the color of the glares. The colors and brightnesses of the glares are also affected by the Source input.

Threshold: *Default: 0.8, Range: 0 or greater.*

Glares are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glares at only the brightest spots. A value of 0 causes glares for every non-black area.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the glares generated on areas of the source clip containing that color.

Threshold Blur: *Default: 0, Range: 0 or greater.*

Increase to smooth out the areas creating glares. This can be used to eliminate glares generated from small speckles or to simply soften the glares. Increasing this may put more highlights below the threshold and darken the resulting glares, but you can decrease the Threshold parameter to compensate.

Glare Res: *Popup menu, Default: FULL.*

Selects the resolution factor for the glares. Higher resolutions give sharper glares, lower resolutions give smoother glares and faster processing. This 'Res' factor only affects the glares: the background is still combined with the glares at full resolution.

FULL: Full resolution is used.

1/2: The glares are calculated at half resolution.

1/4: The glares are calculated at quarter resolution.

Invert Mask: *Check-box, Default: off.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Params2:

Blur Glare: *Default: 0, Range: 0 or greater, Shared.*

The glare is blurred by this amount before being combined with the background.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the glare, in revolutions from red to green to blue to red.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Glare](#)

[GlareComp](#)

[GlareMaskCmp](#)

[Glint](#)

[Glow](#)

[LensFlare](#)

[Convolve](#)

[Sapphire](#)

[Plug-ins](#)

[Introduction](#)

Glint

In the S_Glint Plugin.

Generates star shaped glints at locations where the Source clip is brighter than the threshold, and combines the glints with the Source image. Glints are best observed on dark images with a few bright spots.

Inputs:

Source: The input clip that determines the glint locations and colors. This clip is also used as the background and the glints are layered back onto it.



Parameters:

Size: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of all glint rays. This and all the size parameters can be adjusted using the Size Widget. Note that a zero glint size still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Size X: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the horizontal glint rays.

Size Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the vertical glint rays.

Size Diag1: *Default: 0.75, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top right to bottom left.

Size Diag2: *Default: 0.75, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top left to bottom right.

Size Red: *Default: 1, Range: 0 or greater.*

Scales the length of the red component of the rays. If the red, green, and blue sizes are equal the glints will be uniform in color and will match the color of the source clip. If they are not equal, the glint colors can vary along the lengths of the rays.

Size Green: *Default: 2, Range: 0 or greater.*

Scales the length of the green component of the rays.

Size Blue: *Default: 3, Range: 0 or greater.*

Scales the length of the blue component of the rays.

Blur Glint: *Default: 0, Range: 0 or greater, Shared.*

The glints are blurred by this amount before being combined with the background.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the glint, in revolutions from red to green to blue to red.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all the glints.

Scale Colors: *Default rgb: [1 1 1], Shared.*

Scales the color of the glints. The colors and brightnesses of the glints are also affected by the Source input.

Threshold Add Color: *Default rgb: [0 0 0], Shared.*

This can be used to raise the threshold on a specific color and thereby reduce the glints generated on areas of the source clip containing that color.

Threshold: *Default: 0.7, Range: 0 or greater, Shared.*

Glints are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glints at only the brightest spots. A value of 0 causes glints for every non-black area.

Threshold Blur: *Default: 0.1, Range: 0 or greater, Shared.*

Increase to smooth out the areas creating glints. This can be used to eliminate glints generated from small speckles or to simply soften the glints. Increasing this may put more highlights below the threshold and darken the resulting glints, but you can decrease the Threshold parameter to compensate.

Scale Source: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the Source input when combined with the glints. This does not affect the generation of the glints themselves.

Params2:

Brightness X: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the horizontal glint rays.

Brightness Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the vertical glint rays.

Brightness Diag1: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top right to bottom left.

Brightness Diag2: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top left to bottom right.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlintRainbow](#)
[DissolveGlint](#)

[GlintMask](#)
[GlintComp](#)
[GlintMaskComp](#)

[Glare](#)
[Sparkles](#)
[Glow](#)

[Sapphire](#)
[Plug-ins](#)
[Introduction](#)

GlintComp

In the S_GlintComp Plugin.

Generates star shaped glints at locations where the Source clip is brighter than the threshold, and combines the glints with the Back input clip. This is similar to Glint, but here the glint source and background can be different clips.



Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glints with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.

Parameters:

Size: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of all glint rays. This and all the size parameters can be adjusted using the Size Widget. Note that a zero glint size still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Size X: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the horizontal glint rays.

Size Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the vertical glint rays.

Size Diag1: *Default: 0.75, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top right to bottom left.

Size Diag2: *Default: 0.75, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top left to bottom right.

Size Red: *Default: 1, Range: 0 or greater.*

Scales the length of the red component of the rays. If the red, green, and blue sizes are equal the glints will be uniform in color and will match the color of the source clip. If they are not equal, the glint colors can vary along the lengths of the rays.

Size Green: *Default: 2, Range: 0 or greater.*

Scales the length of the green component of the rays.

Size Blue: *Default: 3, Range: 0 or greater.*

Scales the length of the blue component of the rays.

Blur Glint: *Default: 0, Range: 0 or greater, Shared.*

The glints are blurred by this amount before being combined with the background.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the glint, in revolutions from red to green to blue to red.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all the glints.

Scale Colors: *Default rgb: [1 1 1], Shared.*

Scales the color of the glints. The colors and brightnesses of the glints are also affected by the Source input.

Threshold Add Color: *Default rgb: [0 0 0], Shared.*

This can be used to raise the threshold on a specific color and thereby reduce the glints generated on areas of the source clip containing that color.

Threshold: *Default: 0.7, Range: 0 or greater, Shared.*

Glints are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glints at only the brightest spots. A value of 0 causes glints for every non-black area.

Threshold Blur: *Default: 0.1, Range: 0 or greater, Shared.*

Increase to smooth out the areas creating glints. This can be used to eliminate glints generated from small speckles or to simply soften the glints. Increasing this may put more highlights below the threshold and darken the resulting glints, but you can decrease the Threshold parameter to compensate.

Source Opacity: *Default: 1, Range: 0 or greater, Shared.*

Scales the opacity of the Source input when combined with the glints. This does not affect the generation of the glints themselves.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background. This parameter only has an effect if the background input is provided, and is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Params2:

Brightness X: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the horizontal glint rays.

Brightness Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the vertical glint rays.

Brightness Diag1: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top right to bottom left.

Brightness Diag2: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top left to bottom right.

Glint Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the glints.

Glint From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate glints from the alpha channel of the source input instead of the RGB channels. In this case the glints will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlintRainbowComp](#)

[Glint](#)

[Glare](#)

[Sapphire](#)

[GlintMask](#)

[Sparkles](#)

[Plug-ins](#)

GlintMaskComp

In the S_GlintMaskCmp Plugin.

Generates star shaped glints at locations where the Source clip is brighter than the threshold. The colors of the glints are scaled by a Mask input, and then combined with the Back input clip. This is similar to Glint, but here a Mask input is provided, and also the glint source and background can be different clips.



Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glints with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.

Mask: The source glint colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glints. A color Mask can be used to selectively adjust the glint colors in different regions. The Mask is applied to the source before the glints are generated so it will not clip the resulting glints.

Parameters:

Size: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of all glint rays. This and all the size parameters can be adjusted using the Size Widget. Note that a zero glint size still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Size X: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the horizontal glint rays.

Size Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the vertical glint rays.

Size Diag1: *Default: 0.75, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top right to bottom left.

Size Diag2: *Default: 0.75, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top left to bottom right.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Size Red: *Default: 1, Range: 0 or greater.*

Scales the length of the red component of the rays. If the red, green, and blue sizes are equal the glints will be uniform in color and will match the color of the source clip. If they are not equal, the glint colors can vary along the lengths of the rays.

Size Green: *Default: 2, Range: 0 or greater.*

Scales the length of the green component of the rays.

Size Blue: *Default: 3, Range: 0 or greater.*
Scales the length of the blue component of the rays.

Blur Glint: *Default: 0, Range: 0 or greater, Shared.*
The glints are blurred by this amount before being combined with the background.

Hue Shift: *Default: 0, Range: any, Shared.*
Shifts the hue of the glint, in revolutions from red to green to blue to red.

Brightness: *Default: 1, Range: 0 or greater, Shared.*
Scales the brightness of all the glints.

Scale Colors: *Default rgb: [1 1 1], Shared.*
Scales the color of the glints. The colors and brightnesses of the glints are also affected by the Source input.

Threshold Add Color: *Default rgb: [0 0 0], Shared.*
This can be used to raise the threshold on a specific color and thereby reduce the glints generated on areas of the source clip containing that color.

Threshold: *Default: 0.7, Range: 0 or greater, Shared.*
Glints are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glints at only the brightest spots. A value of 0 causes glints for every non-black area.

Threshold Blur: *Default: 0.1, Range: 0 or greater, Shared.*
Increase to smooth out the areas creating glints. This can be used to eliminate glints generated from small speckles or to simply soften the glints. Increasing this may put more highlights below the threshold and darken the resulting glints, but you can decrease the Threshold parameter to compensate.

Source Opacity: *Default: 1, Range: 0 or greater, Shared.*
Scales the opacity of the Source input when combined with the glints. This does not affect the generation of the glints themselves.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*
Scales the brightness of the background. This parameter only has an effect if the background input is provided, and is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Params2:

Brightness X: *Default: 1, Range: 0 or greater, Shared.*
Scales the brightness of the horizontal glint rays.

Brightness Y: *Default: 1, Range: 0 or greater, Shared.*
Scales the brightness of the vertical glint rays.

Brightness Diag1: *Default: 1, Range: 0 or greater, Shared.*
Scales the brightness of the diagonal rays from top right to bottom left.

Brightness Diag2: *Default: 1, Range: 0 or greater, Shared.*
Scales the brightness of the diagonal rays from top left to bottom right.

Glint Under Src: *Default: 0, Range: 0 to 1, Shared.*
Set to 1 to composite the Source input over the glints.

Glint From Matte: *Default: 0, Range: 0 to 1, Shared.*
Set to 1 to generate glints from the alpha channel of the source input instead of the RGB channels. In this case the glints will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlintRainbowMaskComp](#)

[Glint](#)

[Glare](#)

[Sapphire](#)

[GlintMask](#)

[Sparkles](#)

[Plug-ins](#)

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GlintMask

In the S_GlintMask Plugin.

Generates star shaped glints at locations where the Source clip is brighter than the threshold. The colors of the glints are scaled by a Mask input, and then combined with the Source image. Glints are best observed on dark images with a few bright spots.

Inputs:

Source: The input clip that determines the glint locations and colors. This clip is also used as the background and the glints are layered back onto it.

Mask: The source glint colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glints. A color Mask can be used to selectively adjust the glint colors in different regions. The Mask is applied to the source before the glints are generated so it will not clip the resulting glints.

Parameters:

Size: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of all glint rays. This and all the size parameters can be adjusted using the Size Widget. Note that a zero glint size still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Size X: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the horizontal glint rays.

Size Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the vertical glint rays.

Size Diag1: *Default: 0.75, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top right to bottom left.

Size Diag2: *Default: 0.75, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top left to bottom right.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Size Red: *Default: 1, Range: 0 or greater.*

Scales the length of the red component of the rays. If the red, green, and blue sizes are equal the glints will be uniform in color and will match the color of the source clip. If they are not equal, the glint colors can vary along the lengths of the rays.

Size Green: *Default: 2, Range: 0 or greater.*

Scales the length of the green component of the rays.

Size Blue: *Default: 3, Range: 0 or greater.*

Scales the length of the blue component of the rays.



Blur Glint: *Default: 0, Range: 0 or greater, Shared.*

The glints are blurred by this amount before being combined with the background.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the glint, in revolutions from red to green to blue to red.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all the glints.

Scale Colors: *Default rgb: [1 1 1], Shared.*

Scales the color of the glints. The colors and brightnesses of the glints are also affected by the Source input.

Threshold Add Color: *Default rgb: [0 0 0], Shared.*

This can be used to raise the threshold on a specific color and thereby reduce the glints generated on areas of the source clip containing that color.

Threshold: *Default: 0.7, Range: 0 or greater, Shared.*

Glints are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glints at only the brightest spots. A value of 0 causes glints for every non-black area.

Threshold Blur: *Default: 0.1, Range: 0 or greater, Shared.*

Increase to smooth out the areas creating glints. This can be used to eliminate glints generated from small speckles or to simply soften the glints. Increasing this may put more highlights below the threshold and darken the resulting glints, but you can decrease the Threshold parameter to compensate.

Scale Source: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the Source input when combined with the glints. This does not affect the generation of the glints themselves.

Params2:

Brightness X: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the horizontal glint rays.

Brightness Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the vertical glint rays.

Brightness Diag1: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top right to bottom left.

Brightness Diag2: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top left to bottom right.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlintRainbowMask](#)

[Glint](#)

[Glare](#)

[Sapphire](#)

[GlintComp](#)

[Sparkles](#)

[Plug-ins](#)

[GlintMaskComp](#)

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GlintRainbow

In the S_Glint Plugin.

Generates star shaped rainbow colored glints at locations where the Source clip is brighter than the threshold, and combines the glints with the Source image. Glints are best observed on dark images with a few bright spots.

Inputs:

Source: The input clip that determines the glint locations and colors. This clip is also used as the background and the glints are layered back onto it.



Parameters:

Size: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of all glint rays. This and all the size parameters can be adjusted using the Size Widget. Note that a zero glint size still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Size X: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the horizontal glint rays.

Size Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the vertical glint rays.

Size Diag1: *Default: 0.75, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top right to bottom left.

Size Diag2: *Default: 0.75, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top left to bottom right.

Shift Blue: *Default: 0.75, Range: 0 or greater.*

Shifts the blue component of the glints in or out relative to the red and green. This can be used with Shift Red to adjust the range of hues in the glints.

Shift Red: *Default: 1.5, Range: 0 or greater.*

Shifts the red component of the glints in or out relative to the blue. The green is centered between blue and red for a complete spectrum.

Shift Out: *Default: 0, Range: any.*

Shifts the glint rays outwards from their source highlights by this amount relative to the glint size.

Blur Glint: *Default: 0, Range: 0 or greater, Shared.*

The glints are blurred by this amount before being combined with the background.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the glint, in revolutions from red to green to blue to red.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all the glints.

Scale Colors: *Default rgb: [1 1 1], Shared.*

Scales the color of the glints. The colors and brightnesses of the glints are also affected by the Source input.

Threshold Add Color: *Default rgb: [0 0 0], Shared.*

This can be used to raise the threshold on a specific color and thereby reduce the glints generated on areas of the source clip containing that color.

Threshold: *Default: 0.7, Range: 0 or greater, Shared.*

Glints are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glints at only the brightest spots. A value of 0 causes glints for every non-black area.

Threshold Blur: *Default: 0.1, Range: 0 or greater, Shared.*

Increase to smooth out the areas creating glints. This can be used to eliminate glints generated from small speckles or to simply soften the glints. Increasing this may put more highlights below the threshold and darken the resulting glints, but you can decrease the Threshold parameter to compensate.

Scale Source: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the Source input when combined with the glints. This does not affect the generation of the glints themselves.

Params2:

Brightness X: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the horizontal glint rays.

Brightness Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the vertical glint rays.

Brightness Diag1: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top right to bottom left.

Brightness Diag2: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top left to bottom right.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Glint](#)

[DissolveGlint](#)

[GlintRainbowMask](#)

[GlintRainbowComp](#)

[GlintRainbowMaskComp](#)

[Glare](#)

[Sparkles](#)

[Glow](#)

[Sapphire](#)

[Plug-ins](#)

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GlintRainbowComp

In the S_GlintComp Plugin.

Generates star shaped rainbow colored glints at locations where the Source clip is brighter than the threshold, and combines the glints with the Back input clip. This is similar to GlintRainbow but here the glint source and background can be different clips.



Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glints with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.

Parameters:

Size: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of all glint rays. This and all the size parameters can be adjusted using the Size Widget. Note that a zero glint size still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Size X: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the horizontal glint rays.

Size Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the vertical glint rays.

Size Diag1: *Default: 0.75, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top right to bottom left.

Size Diag2: *Default: 0.75, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top left to bottom right.

Shift Blue: *Default: 0.75, Range: 0 or greater.*

Shifts the blue component of the glints in or out relative to the red and green. This can be used with Shift Red to adjust the range of hues in the glints.

Shift Red: *Default: 1.5, Range: 0 or greater.*

Shifts the red component of the glints in or out relative to the blue. The green is centered between blue and red for a complete spectrum.

Shift Out: *Default: 0, Range: any.*

Shifts the glint rays outwards from their source highlights by this amount relative to the glint size.

Blur Glint: *Default: 0, Range: 0 or greater, Shared.*

The glints are blurred by this amount before being combined with the background.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the glint, in revolutions from red to green to blue to red.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all the glints.

Scale Colors: *Default rgb: [1 1 1], Shared.*

Scales the color of the glints. The colors and brightnesses of the glints are also affected by the Source input.

Threshold Add Color: *Default rgb: [0 0 0], Shared.*

This can be used to raise the threshold on a specific color and thereby reduce the glints generated on areas of the source clip containing that color.

Threshold: *Default: 0.7, Range: 0 or greater, Shared.*

Glints are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glints at only the brightest spots. A value of 0 causes glints for every non-black area.

Threshold Blur: *Default: 0.1, Range: 0 or greater, Shared.*

Increase to smooth out the areas creating glints. This can be used to eliminate glints generated from small speckles or to simply soften the glints. Increasing this may put more highlights below the threshold and darken the resulting glints, but you can decrease the Threshold parameter to compensate.

Source Opacity: *Default: 1, Range: 0 or greater, Shared.*

Scales the opacity of the Source input when combined with the glints. This does not affect the generation of the glints themselves.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background. This parameter only has an effect if the background input is provided, and is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Params2:

Brightness X: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the horizontal glint rays.

Brightness Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the vertical glint rays.

Brightness Diag1: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top right to bottom left.

Brightness Diag2: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top left to bottom right.

Glint Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the glints.

Glint From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate glints from the alpha channel of the source input instead of the RGB channels. In this case the glints will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlintComp](#)

[GlintRainbow](#)

[Glare](#)

[Sapphire](#)

[GlintRainbowMask](#)

[Sparkles](#)

[Plug-ins](#)

GlntRainbowMaskComp

In the S_GlntMaskCmp Plugin.

Generates star shaped rainbow colored glints at locations where the Source clip is brighter than the threshold. The colors of the glints are scaled by a Mask input, and then combined with the Back input clip. This is similar to GlntRainbow, but here a Mask input is provided, and also the glint source and background can be different clips.



Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glints with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.

Mask: The source glint colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glints. A color Mask can be used to selectively adjust the glint colors in different regions. The Mask is applied to the source before the glints are generated so it will not clip the resulting glints.

Parameters:

Size: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of all glint rays. This and all the size parameters can be adjusted using the Size Widget. Note that a zero glint size still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Size X: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the horizontal glint rays.

Size Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the vertical glint rays.

Size Diag1: *Default: 0.75, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top right to bottom left.

Size Diag2: *Default: 0.75, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top left to bottom right.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Shift Blue: *Default: 0.75, Range: 0 or greater, Shared.*

Shifts the blue component of the glints in or out relative to the red and green. This can be used with Shift Red to adjust the range of hues in the glints.

Shift Red: *Default: 1.5, Range: 0 or greater, Shared.*

Shifts the red component of the glints in or out relative to the blue. The green is centered between blue and red for a complete spectrum.

Shift Out: *Default: 0, Range: any, Shared.*

Shifts the glint rays outwards from their source highlights by this amount relative to the glint size.

Blur Glint: *Default: 0, Range: 0 or greater, Shared.*

The glints are blurred by this amount before being combined with the background.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the glint, in revolutions from red to green to blue to red.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all the glints.

Scale Colors: *Default rgb: [1 1 1], Shared.*

Scales the color of the glints. The colors and brightnesses of the glints are also affected by the Source input.

Threshold Add Color: *Default rgb: [0 0 0], Shared.*

This can be used to raise the threshold on a specific color and thereby reduce the glints generated on areas of the source clip containing that color.

Threshold: *Default: 0.7, Range: 0 or greater, Shared.*

Glints are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glints at only the brightest spots. A value of 0 causes glints for every non-black area.

Threshold Blur: *Default: 0.1, Range: 0 or greater, Shared.*

Increase to smooth out the areas creating glints. This can be used to eliminate glints generated from small speckles or to simply soften the glints. Increasing this may put more highlights below the threshold and darken the resulting glints, but you can decrease the Threshold parameter to compensate.

Source Opacity: *Default: 1, Range: 0 or greater, Shared.*

Scales the opacity of the Source input when combined with the glints. This does not affect the generation of the glints themselves.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background. This parameter only has an effect if the background input is provided, and is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Params2:

Brightness X: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the horizontal glint rays.

Brightness Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the vertical glint rays.

Brightness Diag1: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top right to bottom left.

Brightness Diag2: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top left to bottom right.

Glint Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the glints.

Glint From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate glints from the alpha channel of the source input instead of the RGB channels. In this case the glints will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlintMaskComp](#)

[GlintRainbow](#)

[Glare](#)

[Sapphire](#)

[GlintRainbowMask](#)

[Sparkles](#)

[Plug-ins](#)

[GlintRainbowComp](#)

[Glow](#)

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GlintRainbowMask

In the S_GlintMask Plugin.

Generates star shaped rainbow colored glints at locations where the Source clip is brighter than the threshold. The colors of the glints are scaled by a Mask input, and then combined with the Source image. Glints are best observed on dark images with a few bright spots.



Inputs:

Source: The input clip that determines the glint locations and colors. This clip is also used as the background and the glints are layered back onto it.

Mask: The source glint colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glints. A color Mask can be used to selectively adjust the glint colors in different regions. The Mask is applied to the source before the glints are generated so it will not clip the resulting glints.

Parameters:

Size: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of all glint rays. This and all the size parameters can be adjusted using the Size Widget. Note that a zero glint size still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Size X: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the horizontal glint rays.

Size Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the vertical glint rays.

Size Diag1: *Default: 0.75, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top right to bottom left.

Size Diag2: *Default: 0.75, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top left to bottom right.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Shift Blue: *Default: 0.75, Range: 0 or greater, Shared.*

Shifts the blue component of the glints in or out relative to the red and green. This can be used with Shift Red to adjust the range of hues in the glints.

Shift Red: *Default: 1.5, Range: 0 or greater, Shared.*

Shifts the red component of the glints in or out relative to the blue. The green is centered between blue and red for a complete spectrum.

Shift Out: *Default: 0, Range: any, Shared.*

Shifts the glint rays outwards from their source highlights by this amount relative to the glint size.

Blur Glint: *Default: 0, Range: 0 or greater, Shared.*

The glints are blurred by this amount before being combined with the background.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the glint, in revolutions from red to green to blue to red.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all the glints.

Scale Colors: *Default rgb: [1 1 1], Shared.*

Scales the color of the glints. The colors and brightnesses of the glints are also affected by the Source input.

Threshold Add Color: *Default rgb: [0 0 0], Shared.*

This can be used to raise the threshold on a specific color and thereby reduce the glints generated on areas of the source clip containing that color.

Threshold: *Default: 0.7, Range: 0 or greater, Shared.*

Glints are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glints at only the brightest spots. A value of 0 causes glints for every non-black area.

Threshold Blur: *Default: 0.1, Range: 0 or greater, Shared.*

Increase to smooth out the areas creating glints. This can be used to eliminate glints generated from small speckles or to simply soften the glints. Increasing this may put more highlights below the threshold and darken the resulting glints, but you can decrease the Threshold parameter to compensate.

Scale Source: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the Source input when combined with the glints. This does not affect the generation of the glints themselves.

Params2:

Brightness X: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the horizontal glint rays.

Brightness Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the vertical glint rays.

Brightness Diag1: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top right to bottom left.

Brightness Diag2: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top left to bottom right.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlintMask](#)

[GlintRainbow](#)

[Glare](#)

[Sapphire](#)

[GlintRainbowComp](#)

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Glow

In the S_Glows Plugin.

Areas of the source clip that are brighter than the given threshold are glowed and then combined with the source clip.

Inputs:

Source: The input clip that determines the glow locations and colors. This clip is also used as the background and the glows are layered back onto it.



Parameters:

Width: *Default:* 0.3, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Width Red: *Default:* 1, *Range:* 0 or greater.

Scales the red glow width. If the red, green, and blue widths are equal, the glows will match the color of the source clip. If they are not equal, the glows will vary in color with distance.

Width Green: *Default:* 1.2, *Range:* 0 or greater.

Scales the green glow width.

Width Blue: *Default:* 1.4, *Range:* 0 or greater.

Scales the blue glow width.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Width X: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default:* 1, *Range:* 0 or greater.

Scales the vertical glow width. Set to 0 for horizontal only.

Brightness: *Default:* 2, *Range:* 0 or greater.

Scales the brightness of all the glows.

Color: *Default rgb:* [1 1 1].

Scales the color of the glows. The colors and brightnesses of the glows are also affected by the Source input.

Threshold Add Color: *Default rgb:* [0 0 0].

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default:* 0, *Range:* 0 or greater.

Glows are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glows at only the brightest spots. A value of 0 causes glows for every non-black area.

Scale Source: *Default:* 1, *Range:* 0 to 1, *Shared.*

Scales the brightness of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Eclipse With Bg: *Default: 0, Range: 0 to 1, Shared.*

If this is set to 1, the background is subtracted from the glow and gives an eclipsed shadow effect.

Params2:

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowDist](#)

[GlowRainbow](#)

[GlowAura](#)

[GlowRings](#)

[GlowDarks](#)

[GlowOrthicon](#)

[GlowEdges](#)

[GlowNoise](#)

[GlowMask](#)

[GlowComp](#)

[GlowMaskComp](#)

[Glint](#)

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GlowComp

In the S_GlowsComp Plugin.

Areas of the source clip that are brighter than the given threshold are blurred and combined with the background clip. This is similar to Glow, but here the source and background can be different clips.



Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glows with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.

Parameters:

Width: *Default:* 0.3, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Width Red: *Default:* 1, *Range:* 0 or greater.

Scales the red glow width. If the red, green, and blue widths are equal, the glows will match the color of the source clip. If they are not equal, the glows will vary in color with distance.

Width Green: *Default:* 1.2, *Range:* 0 or greater.

Scales the green glow width.

Width Blue: *Default:* 1.4, *Range:* 0 or greater.

Scales the blue glow width.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Width X: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default:* 1, *Range:* 0 or greater.

Scales the vertical glow width. Set to 0 for horizontal only.

Brightness: *Default:* 2, *Range:* 0 or greater.

Scales the brightness of all the glows.

Color: *Default rgb:* [1 1 1].

Scales the color of the glows. The colors and brightnesses of the glows are also affected by the Source input.

Threshold Add Color: *Default rgb:* [0 0 0].

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default:* 0, *Range:* 0 or greater.

Glows are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glows at only the brightest spots. A value of 0 causes glows for every non-black area.

Source Opacity: *Default: 1, Range: 0 to 1, Shared.*

Scales the opacity of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background. This parameter only has an effect if the background input is provided, and is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Params2:

Glow Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the glows.

Glow From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate glows from the alpha channel of the source input instead of the RGB channels. In this case the glows will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Light Back: *Default: 0, Range: 0 to 1, Shared.*

Increase this to give a look of the glow casting light onto the background image. To see this more clearly you can also lower the Scale Background parameter or raise the Brightness parameter.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowDistComp](#)

[GlowRainbowComp](#)

[GlowAuraComp](#)

[GlowRingsComp](#)

[GlowDarksComp](#)

[GlowOrthiconComp](#)

[GlowEdgesComp](#)

[GlowNoiseComp](#)

[Glow](#)

[GlowMask](#)

[GlowMaskComp](#)

[Glint](#)

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GlowMaskComp

In the S_GlowsMaskCmp Plugin.

Areas of the source clip that are brighter than the given threshold are blurred and then combined with the background clip. This is similar to Glow, but here the glow colors are scaled by the Mask input, and also the source and background can be different clips.

Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glows with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.

Mask: The source glow colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glows. A color Mask can be used to selectively adjust the glow colors in different regions. The Mask is applied to the source before the glows are generated so it will not clip the resulting glows.

Parameters:

Width: *Default:* 0.3, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Width Red: *Default:* 1, *Range:* 0 or greater.

Scales the red glow width. If the red, green, and blue widths are equal, the glows will match the color of the source clip. If they are not equal, the glows will vary in color with distance.

Width Green: *Default:* 1.2, *Range:* 0 or greater.

Scales the green glow width.

Width Blue: *Default:* 1.4, *Range:* 0 or greater.

Scales the blue glow width.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Width X: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default:* 1, *Range:* 0 or greater.

Scales the vertical glow width. Set to 0 for horizontal only.

Brightness: *Default:* 2, *Range:* 0 or greater.

Scales the brightness of all the glows.



Color: *Default rgb: [1 1 1].*

Scales the color of the glows. The colors and brightnesses of the glows are also affected by the Source input.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default: 0, Range: 0 or greater.*

Glows are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glows at only the brightest spots. A value of 0 causes glows for every non-black area.

Source Opacity: *Default: 1, Range: 0 to 1, Shared.*

Scales the opacity of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background. This parameter only has an effect if the background input is provided, and is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Params2:

Glow Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the glows.

Glow From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate glows from the alpha channel of the source input instead of the RGB channels. In this case the glows will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Light Back: *Default: 0, Range: 0 to 1, Shared.*

Increase this to give a look of the glow casting light onto the background image. To see this more clearly you can also lower the Scale Background parameter or raise the Brightness parameter.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowDistMaskComp](#)

[GlowRainbowMaskComp](#)

[GlowAuraMaskComp](#)

[GlowRingsMaskComp](#)

[GlowDarksMaskComp](#)

[GlowOrthiconMaskComp](#)

[GlowEdgesMaskComp](#)

[GlowNoiseMaskComp](#)

[Glow](#)

[GlowMask](#)

[GlowComp](#)

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GlowMask

In the S_GlowsMask Plugin.

Areas of the source clip that are brighter than the given threshold are blurred and then combined with the source clip. This is similar to Glow but here the glow colors are also scaled by the Mask input.

Inputs:

Source: The input clip that determines the glow locations and colors. This clip is also used as the background and the glows are layered back onto it.

Mask: The source glow colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glows. A color Mask can be used to selectively adjust the glow colors in different regions. The Mask is applied to the source before the glows are generated so it will not clip the resulting glows.



Parameters:

Width: *Default:* 0.3, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Width Red: *Default:* 1, *Range:* 0 or greater.

Scales the red glow width. If the red, green, and blue widths are equal, the glows will match the color of the source clip. If they are not equal, the glows will vary in color with distance.

Width Green: *Default:* 1.2, *Range:* 0 or greater.

Scales the green glow width.

Width Blue: *Default:* 1.4, *Range:* 0 or greater.

Scales the blue glow width.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Width X: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default:* 1, *Range:* 0 or greater.

Scales the vertical glow width. Set to 0 for horizontal only.

Brightness: *Default:* 2, *Range:* 0 or greater.

Scales the brightness of all the glows.

Color: *Default rgb:* [1 1 1].

Scales the color of the glows. The colors and brightnesses of the glows are also affected by the Source input.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default: 0, Range: 0 or greater.*

Glow is generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glows at only the brightest spots. A value of 0 causes glows for every non-black area.

Scale Source: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Eclipse With Bg: *Default: 0, Range: 0 to 1, Shared.*

If this is set to 1, the background is subtracted from the glow and gives an eclipsed shadow effect.

Params2:

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowDistMask](#)

[GlowRainbowMask](#)

[GlowAuraMask](#)

[GlowRingsMask](#)

[GlowDarksMask](#)

[GlowOrthiconMask](#)

[GlowEdgesMask](#)

[GlowNoiseMask](#)

[Glow](#)

[GlowComp](#)

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GlowAura

In the S_Glows Plugin.

Generates radial colored aura lines following the gradient of the source clip, and then combines these with the source clip.

Inputs:

Source: The input clip that determines the glow locations and directions.



Parameters:

Width: *Default:* 0.5, *Range:* 0 or greater.

Scales the glow distance. This parameter can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Frequency: *Default:* 8, *Range:* 0 or greater.

The frequency of the color pattern. Increase for more cycles through the spectrum.

Frequency Red: *Default:* 1, *Range:* 0 or greater.

Scales the red frequency.

Frequency Green: *Default:* 1, *Range:* 0 or greater.

Scales the green frequency.

Frequency Blue: *Default:* 1, *Range:* 0 or greater.

Scales the blue frequency.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Phase: *Default:* 0, *Range:* any.

Shifts the color pattern.

Phase Speed: *Default:* 1, *Range:* any.

If non-zero, the color phase is automatically animated at this speed, causing the color pattern to flow over time.

Phase Red: *Default:* 0.2, *Range:* any.

Shifts the red phase.

Phase Green: *Default:* 0.1, *Range:* any.

Shifts the green phase.

Phase Blue: *Default:* 0, *Range:* any.

Shifts the blue phase.

Twist: *Default:* 1, *Range:* any.

Adjusts the spiral direction of the radial lines.

Brightness: *Default:* 0.8, *Range:* 0 or greater.

Scales the brightness of the glows.

Color: *Default rgb:* [1 1 1].

Scales the color of the glows.

Threshold: *Default rgb: [0 0 0].*

Glow will be generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glows at only the brightest spots. A value of 0 causes glows on every non-black area.

Outer Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of the glows at further distances from the source.

Glow Saturation: *Default: 1, Range: 0 or greater.*

Scales the saturation of the glow colors. Increase for more intense colors. Set to 0 for monochrome.

Scale Source: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Eclipse With Bg: *Default: 0, Range: 0 to 1, Shared.*

If this is set to 1, the background is subtracted from the glow and gives an eclipsed shadow effect.

Params2:

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Glow](#)

[GlowDist](#)

[GlowRainbow](#)

[GlowRings](#)

[GlowDarks](#)

[GlowOrthicon](#)

[GlowEdges](#)

[GlowNoise](#)

[GlowAuraMask](#)

[GlowAuraComp](#)

[GlowAuraMaskComp](#)

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GlowAuraComp

In the S_GlowsComp Plugin.

Generates radial colored aura lines following the gradient of the source clip. This is similar to GlowAura, but here the source and background can be different clips.

Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glows with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.

Parameters:

Width: *Default:* 0.5, *Range:* 0 or greater.

Scales the glow distance. This parameter can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Frequency: *Default:* 8, *Range:* 0 or greater.

The frequency of the color pattern. Increase for more cycles through the spectrum.

Frequency Red: *Default:* 1, *Range:* 0 or greater.

Scales the red frequency.

Frequency Green: *Default:* 1, *Range:* 0 or greater.

Scales the green frequency.

Frequency Blue: *Default:* 1, *Range:* 0 or greater.

Scales the blue frequency.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Phase: *Default:* 0, *Range:* any.

Shifts the color pattern.

Phase Speed: *Default:* 1, *Range:* any.

If non-zero, the color phase is automatically animated at this speed, causing the color pattern to flow over time.

Phase Red: *Default:* 0.2, *Range:* any.

Shifts the red phase.

Phase Green: *Default:* 0.1, *Range:* any.

Shifts the green phase.

Phase Blue: *Default:* 0, *Range:* any.

Shifts the blue phase.

Twist: *Default:* 1, *Range:* any.

Adjusts the spiral direction of the radial lines.



Brightness: *Default: 0.8, Range: 0 or greater.*

Scales the brightness of the glows.

Color: *Default rgb: [1 1 1].*

Scales the color of the glows.

Threshold: *Default rgb: [0 0 0].*

Glows will be generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glows at only the brightest spots. A value of 0 causes glows on every non-black area.

Outer Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of the glows at further distances from the source.

Glow Saturation: *Default: 1, Range: 0 or greater.*

Scales the saturation of the glow colors. Increase for more intense colors. Set to 0 for monochrome.

Source Opacity: *Default: 1, Range: 0 to 1, Shared.*

Scales the opacity of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background. This parameter only has an effect if the background input is provided, and is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Params2:

Glow Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the glows.

Glow From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate glows from the alpha channel of the source input instead of the RGB channels. In this case the glows will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Light Back: *Default: 0, Range: 0 to 1, Shared.*

Increase this to give a look of the glow casting light onto the background image. To see this more clearly you can also lower the Scale Background parameter or raise the Brightness parameter.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowComp](#)

[GlowDistComp](#)

[GlowRainbowComp](#)

[GlowRingsComp](#)

[GlowDarksComp](#)

[GlowOrthiconComp](#)

[GlowEdgesComp](#)

[GlowNoiseComp](#)

[GlowAura](#)

[GlowAuraMask](#)

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GlowAuraMaskComp

In the S_GlowsMaskCmp Plugin.

Generates radial colored aura lines following the gradient of the source clip. This is similar to GlowAura but here the glow colors are also scaled by the Mask input, and also the source and background can be different clips.



Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glows with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.

Mask: The source glow colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glows. A color Mask can be used to selectively adjust the glow colors in different regions. The Mask is applied to the source before the glows are generated so it will not clip the resulting glows.

Parameters:

Width: *Default:* 0.5, *Range:* 0 or greater.

Scales the glow distance. This parameter can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Frequency: *Default:* 8, *Range:* 0 or greater.

The frequency of the color pattern. Increase for more cycles through the spectrum.

Frequency Red: *Default:* 1, *Range:* 0 or greater.

Scales the red frequency.

Frequency Green: *Default:* 1, *Range:* 0 or greater.

Scales the green frequency.

Frequency Blue: *Default:* 1, *Range:* 0 or greater.

Scales the blue frequency.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Phase: *Default:* 0, *Range:* any.

Shifts the color pattern.

Phase Speed: *Default:* 1, *Range:* any.

If non-zero, the color phase is automatically animated at this speed, causing the color pattern to flow over time.

Phase Red: *Default: 0.2, Range: any.*

Shifts the red phase.

Phase Green: *Default: 0.1, Range: any.*

Shifts the green phase.

Phase Blue: *Default: 0, Range: any.*

Shifts the blue phase.

Twist: *Default: 1, Range: any.*

Adjusts the spiral direction of the radial lines.

Brightness: *Default: 0.8, Range: 0 or greater.*

Scales the brightness of the glows.

Color: *Default rgb: [1 1 1].*

Scales the color of the glows.

Threshold: *Default rgb: [0 0 0].*

Glows will be generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glows at only the brightest spots. A value of 0 causes glows on every non-black area.

Outer Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of the glows at further distances from the source.

Glow Saturation: *Default: 1, Range: 0 or greater.*

Scales the saturation of the glow colors. Increase for more intense colors. Set to 0 for monochrome.

Source Opacity: *Default: 1, Range: 0 to 1, Shared.*

Scales the opacity of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background. This parameter only has an effect if the background input is provided, and is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Params2:

Glow Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the glows.

Glow From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate glows from the alpha channel of the source input instead of the RGB channels. In this case the glows will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Light Back: *Default: 0, Range: 0 to 1, Shared.*

Increase this to give a look of the glow casting light onto the background image. To see this more clearly you can also lower the Scale Background parameter or raise the Brightness parameter.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowMaskComp](#)

[GlowDistMaskComp](#)

[GlowRainbowMaskComp](#)

[GlowRingsMaskComp](#)

[GlowDarksMaskComp](#)

[GlowOrthiconMaskComp](#)

[GlowEdgesMaskComp](#)

[GlowNoiseMaskComp](#)

[GlowAura](#)

[GlowAuraMask](#)

[GlowAuraComp](#)

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[PsykoStripes](#)

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GlowAuraMask

In the S_GlowsMask Plugin.

Generates radial colored aura lines following the gradient of the source clip. This is similar to GlowAura but here the glow colors are also scaled by the Mask input.

Inputs:

Source: The input clip that determines the glow locations and directions.

Mask: The source glow colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glows. A color Mask can be used to selectively adjust the glow colors in different regions. The Mask is applied to the source before the glows are generated so it will not clip the resulting glows.



Parameters:

Width: *Default:* 0.5, *Range:* 0 or greater.

Scales the glow distance. This parameter can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Frequency: *Default:* 8, *Range:* 0 or greater.

The frequency of the color pattern. Increase for more cycles through the spectrum.

Frequency Red: *Default:* 1, *Range:* 0 or greater.

Scales the red frequency.

Frequency Green: *Default:* 1, *Range:* 0 or greater.

Scales the green frequency.

Frequency Blue: *Default:* 1, *Range:* 0 or greater.

Scales the blue frequency.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Phase: *Default:* 0, *Range:* any.

Shifts the color pattern.

Phase Speed: *Default:* 1, *Range:* any.

If non-zero, the color phase is automatically animated at this speed, causing the color pattern to flow over time.

Phase Red: *Default:* 0.2, *Range:* any.

Shifts the red phase.

Phase Green: *Default:* 0.1, *Range:* any.

Shifts the green phase.

Phase Blue: *Default: 0, Range: any.*
Shifts the blue phase.

Twist: *Default: 1, Range: any.*
Adjusts the spiral direction of the radial lines.

Brightness: *Default: 0.8, Range: 0 or greater.*
Scales the brightness of the glows.

Color: *Default rgb: [1 1 1].*
Scales the color of the glows.

Threshold: *Default rgb: [0 0 0].*
Glows will be generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glows at only the brightest spots. A value of 0 causes glows on every non-black area.

Outer Brightness: *Default: 1, Range: 0 or greater.*
Scales the brightness of the glows at further distances from the source.

Glow Saturation: *Default: 1, Range: 0 or greater.*
Scales the saturation of the glow colors. Increase for more intense colors. Set to 0 for monochrome.

Scale Source: *Default: 1, Range: 0 to 1, Shared.*
Scales the brightness of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Eclipse With Bg: *Default: 0, Range: 0 to 1, Shared.*
If this is set to 1, the background is subtracted from the glow and gives an eclipsed shadow effect.

Params2:

Show: *Popup menu, Default: Result.*
Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowMask](#)

[GlowDistMask](#)

[GlowRainbowMask](#)

[GlowRingsMask](#)

[GlowDarksMask](#)

[GlowAura](#)

[GlowAuraComp](#)

[GlowAuraMaskComp](#)

[Glint](#)

[PsykoStripes](#)

[PseudoColor](#)

[Sapphire](#)

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GlowOrthiconMask

GlowEdgesMask

GlowNoiseMask

GlowDarks

In the S_Glows Plugin.

Areas of the source clip darker than the given threshold are blurred and combined with the input clip to give a deep smoky look. Adjust the Darkness, Width, and Threshold parameters to give different types of looks.



Inputs:

Source: The input clip that determines the glow locations and colors. This clip is also used as the background and the glows are layered back onto it.

Parameters:

Width: *Default:* 1, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still affects the dark areas; set the darkness parameter to zero if you want to pass the Source through unchanged.

Width X: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default:* 1, *Range:* 0 or greater.

Scales the vertical glow width. Set to 0 for horizontal only.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Darkness: *Default:* 1, *Range:* 0 or greater.

The magnitude of the dark glows.

Threshold: *Default:* 0.5, *Range:* 0 or greater.

Dark glows will be generated from locations in the source clip that are darker than this value. A value of 0.1 causes glows at only the darkest areas. A value of 1.0 causes glows on every non-white area.

Glow Saturation: *Default:* 1, *Range:* 0 or greater.

Scales the saturation of the dark colors. Increase for more intense colors.

Scale Source: *Default:* 1, *Range:* 0 to 1, *Shared.*

Scales the brightness of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Params2:

Show: *Popup menu, Default:* Result.

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Glow](#)

[GlowDist](#)

[GlowRainbow](#)

[GlowAura](#)

[GlowRings](#)

[GlowOrthicon](#)

[GlowEdges](#)

[GlowNoise](#)

[GlowDarksMask](#)

[GlowDarksComp](#)

[GlowDarksMaskComp](#)

[Glint](#)

[Sapphire Plug-ins](#)

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GlowDarksComp

In the S_GlowsComp Plugin.

Areas of the source clip darker than the given threshold are blurred and combined with the background clip to give a deep smoky look. This is similar to GlowDarks, but here the source and background can be different clips.



Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glows with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.

Parameters:

Width: *Default: 1, Range: 0 or greater.*

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still affects the dark areas; set the darkness parameter to zero if you want to pass the Source through unchanged.

Width X: *Default: 1, Range: 0 or greater.*

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default: 1, Range: 0 or greater.*

Scales the vertical glow width. Set to 0 for horizontal only.

Subpixel: *Check-box, Default: off.*

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Darkness: *Default: 1, Range: 0 or greater.*

The magnitude of the dark glows.

Threshold: *Default: 0.5, Range: 0 or greater.*

Dark glows will be generated from locations in the source clip that are darker than this value. A value of 0.1 causes glows at only the darkest areas. A value of 1.0 causes glows on every non-white area.

Glow Saturation: *Default: 1, Range: 0 or greater.*

Scales the saturation of the dark colors. Increase for more intense colors.

Source Opacity: *Default: 1, Range: 0 to 1, Shared.*

Scales the opacity of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background input clip.

Params2:

Glow Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the glows.

Glow From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate glows from the alpha channel of the source input instead of the RGB channels. In this case the glows will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowComp](#)

[GlowDistComp](#)

[GlowRainbowComp](#)

[GlowAuraComp](#)

[GlowRingsComp](#)

[GlowOrthiconComp](#)

[GlowEdgesComp](#)

[GlowNoiseComp](#)

[GlowDarks](#)

[GlowDarksMask](#)

[GlowDarksMaskComp](#)

[Glint](#)

[Sapphire Plug-ins](#)

[Introduction](#)

GlowDarksMaskComp

In the S_GlowsMaskCmp Plugin.

Areas of the source clip darker than the given threshold are blurred and combined with the background clip to give a deep smoky look. This is similar to GlowDarks but here the glow effect is scaled by the Mask input, and also the source and background can be different clips.



Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glows with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.

Mask: The source glow colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glows. A color Mask can be used to selectively adjust the glow colors in different regions. The Mask is applied to the source before the glows are generated so it will not clip the resulting glows.

Parameters:

Width: *Default:* 1, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still affects the dark areas; set the darkness parameter to zero if you want to pass the Source through unchanged.

Width X: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default:* 1, *Range:* 0 or greater.

Scales the vertical glow width. Set to 0 for horizontal only.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Darkness: *Default:* 1, *Range:* 0 or greater.

The magnitude of the dark glows.

Threshold: *Default:* 0.5, *Range:* 0 or greater.

Dark glows will be generated from locations in the source clip that are darker than this value. A value of 0.1 causes glows at only the darkest areas. A value of 1.0 causes glows on every non-white area.

Glow Saturation: *Default:* 1, *Range:* 0 or greater.

Scales the saturation of the dark colors. Increase for more intense colors.

Source Opacity: *Default:* 1, *Range:* 0 to 1, *Shared.*

Scales the opacity of the Source input when combined with the glows. This does not affect the generation of the

glows themselves.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*
Scales the brightness of the background input clip.

Params2:

Glow Under Src: *Default: 0, Range: 0 to 1, Shared.*
Set to 1 to composite the Source input over the glows.

Glow From Matte: *Default: 0, Range: 0 to 1, Shared.*
Set to 1 to generate glows from the alpha channel of the source input instead of the RGB channels. In this case the glows will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Comp Premult: *Check-box, Default: off, Shared.*
Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Show: *Popup menu, Default: Result.*
Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowMaskComp](#)

[GlowDistMaskComp](#)

[GlowRainbowMaskComp](#)

[GlowAuraMaskComp](#)

[GlowRingsMaskComp](#)

[GlowOrthiconMaskComp](#)

[GlowEdgesMaskComp](#)

[GlowNoiseMaskComp](#)

[GlowDarks](#)

[GlowDarksMask](#)

[GlowDarksComp](#)

[Glint](#)

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GlowDarksMask

In the S_GlowsMask Plugin.

Areas of the source clip darker than the given threshold are blurred and combined with the input clip to give a deep smoky look. This is similar to GlowDarks but here the glow effect is scaled by the Mask input.

Inputs:

Source: The input clip that determines the glow locations and colors. This clip is also used as the background and the glows are layered back onto it.

Mask: The source glow colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glows. A color Mask can be used to selectively adjust the glow colors in different regions. The Mask is applied to the source before the glows are generated so it will not clip the resulting glows.



Parameters:

Width: *Default:* 1, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still affects the dark areas; set the darkness parameter to zero if you want to pass the Source through unchanged.

Width X: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default:* 1, *Range:* 0 or greater.

Scales the vertical glow width. Set to 0 for horizontal only.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Darkness: *Default:* 1, *Range:* 0 or greater.

The magnitude of the dark glows.

Threshold: *Default:* 0.5, *Range:* 0 or greater.

Dark glows will be generated from locations in the source clip that are darker than this value. A value of 0.1 causes glows at only the darkest areas. A value of 1.0 causes glows on every non-white area.

Glow Saturation: *Default:* 1, *Range:* 0 or greater.

Scales the saturation of the dark colors. Increase for more intense colors.

Scale Source: *Default:* 1, *Range:* 0 to 1, *Shared.*

Scales the brightness of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Params2:

Show: *Popup menu, Default: Result.*
Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowMask](#)

[GlowDistMask](#)

[GlowRainbowMask](#)

[GlowAuraMask](#)

[GlowRingsMask](#)

[GlowOrthiconMask](#)

[GlowEdgesMask](#)

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GlowDist

In the S_Glows Plugin.

Generates glows based on the distances from the edges of the source input. Any edges in the input image, where the brightness crosses the given threshold value, will generate an equally bright glow into the darker side of the edges. This is best observed when used on images with dark backgrounds.



Inputs:

Source: The input clip that determines the glow locations and colors. This clip is also used as the background and the glows are layered back onto it.

Parameters:

Width: *Default:* 0.2, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Width Red: *Default:* 1, *Range:* 0 or greater.

Scales the red glow distance. If the red, green, and blue widths are equal, the glows will be a single color given by the Color parameter. If they are not equal, the glows will vary in color with distance.

Width Green: *Default:* 1.2, *Range:* 0 or greater.

Scales the green glow width.

Width Blue: *Default:* 1.4, *Range:* 0 or greater.

Scales the blue glow width.

Brightness: *Default:* 0.8, *Range:* 0 or greater.

Scales the brightness of the glows.

Color: *Default rgb:* [1 1 1].

Scales the color of the glows.

Threshold Add Color: *Default rgb:* [0 0 0].

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default:* 0.5, *Range:* 0 or greater.

Glows are generated at the edges of areas in the source clip that are brighter than this value. A value of 0.9 causes glows from only the brightest spots. A value of 0 causes glows for every non-black area.

Scale Source: *Default:* 1, *Range:* 0 to 1, *Shared.*

Scales the brightness of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Eclipse With Bg: *Default:* 0, *Range:* 0 to 1, *Shared.*

If this is set to 1, the background is subtracted from the glow and gives an eclipsed shadow effect.

Params2:

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Glow](#)

[GlowRainbow](#)

[GlowAura](#)

[GlowRings](#)

[GlowDarks](#)

[GlowOrthicon](#)

[GlowEdges](#)

[GlowNoise](#)

[GlowDistMask](#)

[GlowDistComp](#)

[GlowDistMaskComp](#)

[Glint](#)

[Sapphire Plug-ins](#)

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GlowDistComp

In the S_GlowsComp Plugin.

Generates glows based on the distances from the edges of the source input. Any edges in the input image, where the brightness crosses the given threshold value, will generate an equally bright glow into the darker side of the edges. This is similar to GlowDist, but here the source and background can be different clips.



Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glows with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.

Parameters:

Width: *Default:* 0.2, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Width Red: *Default:* 1, *Range:* 0 or greater.

Scales the red glow distance. If the red, green, and blue widths are equal, the glows will be a single color given by the Color parameter. If they are not equal, the glows will vary in color with distance.

Width Green: *Default:* 1.2, *Range:* 0 or greater.

Scales the green glow width.

Width Blue: *Default:* 1.4, *Range:* 0 or greater.

Scales the blue glow width.

Brightness: *Default:* 0.8, *Range:* 0 or greater.

Scales the brightness of the glows.

Color: *Default rgb:* [1 1 1].

Scales the color of the glows.

Threshold Add Color: *Default rgb:* [0 0 0].

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default:* 0.5, *Range:* 0 or greater.

Glows are generated at the edges of areas in the source clip that are brighter than this value. A value of 0.9 causes glows from only the brightest spots. A value of 0 causes glows for every non-black area.

Source Opacity: *Default:* 1, *Range:* 0 to 1, *Shared.*

Scales the opacity of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Scale Back: *Default:* 1, *Range:* 0 to 1, *Shared.*

Scales the brightness of the background. This parameter only has an effect if the background input is provided, and

is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Params2:

Glow Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the glows.

Glow From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate glows from the alpha channel of the source input instead of the RGB channels. In this case the glows will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Light Back: *Default: 0, Range: 0 to 1, Shared.*

Increase this to give a look of the glow casting light onto the background image. To see this more clearly you can also lower the Scale Background parameter or raise the Brightness parameter.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowComp](#)

[GlowRainbowComp](#)

[GlowAuraComp](#)

[GlowRingsComp](#)

[GlowDarksComp](#)

[GlowOrthiconComp](#)

[GlowEdgesComp](#)

[GlowNoiseComp](#)

[GlowDist](#)

[GlowDistMask](#)

[GlowDistMaskComp](#)

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GlowDistMaskComp

In the S_GlowsMaskCmp Plugin.

Generates glows based on the distances from the edges of the source input. Any edges in the input image, where the brightness crosses the given threshold value, will generate an equally bright glow into the darker side of the edges. This is similar to GlowDist but here the glow colors are also scaled by the Mask input, and also the source and background can be different clips.



Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glows with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.

Mask: The source glow colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glows. A color Mask can be used to selectively adjust the glow colors in different regions. The Mask is applied to the source before the glows are generated so it will not clip the resulting glows.

Parameters:

Width: *Default:* 0.2, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Width Red: *Default:* 1, *Range:* 0 or greater.

Scales the red glow distance. If the red, green, and blue widths are equal, the glows will be a single color given by the Color parameter. If they are not equal, the glows will vary in color with distance.

Width Green: *Default:* 1.2, *Range:* 0 or greater.

Scales the green glow width.

Width Blue: *Default:* 1.4, *Range:* 0 or greater.

Scales the blue glow width.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Brightness: *Default:* 0.8, *Range:* 0 or greater.

Scales the brightness of the glows.

Color: *Default rgb:* [1 1 1].

Scales the color of the glows.

Threshold Add Color: *Default rgb:* [0 0 0].

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default: 0.5, Range: 0 or greater.*

Glow is generated at the edges of areas in the source clip that are brighter than this value. A value of 0.9 causes glows from only the brightest spots. A value of 0 causes glows for every non-black area.

Source Opacity: *Default: 1, Range: 0 to 1, Shared.*

Scales the opacity of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background. This parameter only has an effect if the background input is provided, and is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Params2:

Glow Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the glows.

Glow From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate glows from the alpha channel of the source input instead of the RGB channels. In this case the glows will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Light Back: *Default: 0, Range: 0 to 1, Shared.*

Increase this to give a look of the glow casting light onto the background image. To see this more clearly you can also lower the Scale Background parameter or raise the Brightness parameter.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowMaskComp](#)

[GlowRainbowMaskComp](#)

[GlowAuraMaskComp](#)

[GlowRingsMaskComp](#)

[GlowDarksMaskComp](#)

[GlowOrthiconMaskComp](#)

[GlowDist](#)

[GlowDistMask](#)

[GlowDistComp](#)

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GlowEdgesMaskComp
GlowNoiseMaskComp

GlowDistMask

In the S_GlowsMask Plugin.

Generates glows based on the distances from the edges of the source input. Any edges in the input image, where the brightness crosses the given threshold value, will generate an equally bright glow into the darker side of the edges. This is similar to GlowDist but here the glow colors are also scaled by the Mask input.



Inputs:

Source: The input clip that determines the glow locations and colors. This clip is also used as the background and the glows are layered back onto it.

Mask: The source glow colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glows. A color Mask can be used to selectively adjust the glow colors in different regions. The Mask is applied to the source before the glows are generated so it will not clip the resulting glows.

Parameters:

Width: *Default:* 0.2, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Width Red: *Default:* 1, *Range:* 0 or greater.

Scales the red glow distance. If the red, green, and blue widths are equal, the glows will be a single color given by the Color parameter. If they are not equal, the glows will vary in color with distance.

Width Green: *Default:* 1.2, *Range:* 0 or greater.

Scales the green glow width.

Width Blue: *Default:* 1.4, *Range:* 0 or greater.

Scales the blue glow width.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Brightness: *Default:* 0.8, *Range:* 0 or greater.

Scales the brightness of the glows.

Color: *Default rgb:* [1 1 1].

Scales the color of the glows.

Threshold Add Color: *Default rgb:* [0 0 0].

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default:* 0.5, *Range:* 0 or greater.

Glows are generated at the edges of areas in the source clip that are brighter than this value. A value of 0.9 causes glows from only the brightest spots. A value of 0 causes glows for every non-black area.

Scale Source: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Eclipse With Bg: *Default: 0, Range: 0 to 1, Shared.*

If this is set to 1, the background is subtracted from the glow and gives an eclipsed shadow effect.

Params2:

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowMask](#)

[GlowRainbowMask](#)

[GlowAuraMask](#)

[GlowRingsMask](#)

[GlowDarksMask](#)

[GlowOrthiconMask](#)

[GlowEdgesMask](#)

[GlowNoiseMask](#)

[GlowDist](#)

[GlowDistComp](#)

[GlowDistMaskComp](#)

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GlowEdges

In the S_Glows Plugin.

Creates glowing light from the edges of the source clip. This differs from the default Glow in that small or thin objects generate as much glow around their edges as large objects. Also the glow colors are not affected by the colors of the source clip.



Inputs:

Source: Edges are extracted from this input clip to determine the glow locations.

Parameters:

Width: *Default:* 0.1, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Width Red: *Default:* 1, *Range:* 0 or greater.

Scales the red glow width. If the red, green, and blue widths are equal, the glow colors be uniform with distance. If they are not equal, the glows will vary in color with distance.

Width Green: *Default:* 1.2, *Range:* 0 or greater.

Scales the green glow width.

Width Blue: *Default:* 1.4, *Range:* 0 or greater.

Scales the blue glow width.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Width X: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default:* 1, *Range:* 0 or greater.

Scales the vertical glow width. Set to 0 for horizontal only.

Edges Smooth: *Default:* 0, *Range:* 0 or greater.

Determines the width of the extracted edges which generate the glows.

Edges Brightness: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the edges before the glows are applied.

Edges Threshold: *Default:* 0, *Range:* 0 or greater.

Increase to remove glows on the less sharp edges.

Glow Brightness: *Default:* 2, *Range:* 0 or greater.

Controls the overall glow brightness. Set to zero to get no glow.

Color: *Default rgb:* [1 1 1].

Scales the color of the glows.

Scale Source: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Eclipse With Bg: *Default: 0, Range: 0 to 1, Shared.*

If this is set to 1, the background is subtracted from the glow and gives an eclipsed shadow effect.

Params2:

Show: *Popup menu, Default: RESULT.*

Selects the type of output.

RESULT: Normally the glows are combined with the source or background, and output.

EDGES: The edge image only is output, before any glows are applied. This can be helpful while adjusting the various edge parameters.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Glow](#)

[GlowDist](#)

[GlowRainbow](#)

[GlowAura](#)

[GlowRings](#)

[GlowDarks](#)

[GlowOrthicon](#)

[GlowNoise](#)

[GlowEdgesMask](#)

[GlowEdgesComp](#)

[GlowEdgesMaskComp](#)

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GlowEdgesComp

In the S_GlowsComp Plugin.

Glowes are created from the edges of the source clip. This is similar to GlowEdges, but here the source and background can be different clips.

Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glows with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.



Parameters:

Width: *Default:* 0.1, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Width Red: *Default:* 1, *Range:* 0 or greater.

Scales the red glow width. If the red, green, and blue widths are equal, the glow colors be uniform with distance. If they are not equal, the glows will vary in color with distance.

Width Green: *Default:* 1.2, *Range:* 0 or greater.

Scales the green glow width.

Width Blue: *Default:* 1.4, *Range:* 0 or greater.

Scales the blue glow width.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Width X: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default:* 1, *Range:* 0 or greater.

Scales the vertical glow width. Set to 0 for horizontal only.

Edges Smooth: *Default:* 0, *Range:* 0 or greater.

Determines the width of the extracted edges which generate the glows.

Edges Brightness: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the edges before the glows are applied.

Edges Threshold: *Default:* 0, *Range:* 0 or greater.

Increase to remove glows on the less sharp edges.

Glow Brightness: *Default:* 2, *Range:* 0 or greater.

Controls the overall glow brightness. Set to zero to get no glow.

Color: *Default rgb:* [1 1 1].

Scales the color of the glows.

Source Opacity: *Default: 1, Range: 0 to 1, Shared.*

Scales the opacity of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background. This parameter only has an effect if the background input is provided, and is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Params2:

Glow Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the glows.

Glow From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate glows from the alpha channel of the source input instead of the RGB channels. In this case the glows will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Light Back: *Default: 0, Range: 0 to 1, Shared.*

Increase this to give a look of the glow casting light onto the background image. To see this more clearly you can also lower the Scale Background parameter or raise the Brightness parameter.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Show: *Popup menu, Default: RESULT.*

Selects the type of output.

RESULT: Normally the glows are combined with the source or background, and output.

EDGES: The edge image only is output, before any glows are applied. This can be helpful while adjusting the various edge parameters.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowComp](#)

[GlowDistComp](#)

[GlowRainbowComp](#)

[GlowAuraComp](#)

[GlowRingsComp](#)

[GlowDarksComp](#)

[GlowOrthiconComp](#)

[GlowNoiseComp](#)

[GlowEdges](#)

[GlowEdgesMask](#)

[GlowEdgesMaskComp](#)

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GlowEdgesMaskComp

In the S_GlowsMaskCmp Plugin.

Glowes are created from the edges of the source clip. This is similar to GlowEdges but here the glow colors are scaled by the Mask input, and also the source and background can be different clips.

Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glows with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.

Mask: The source glow colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glows. A color Mask can be used to selectively adjust the glow colors in different regions. The Mask is applied to the source before the glows are generated so it will not clip the resulting glows.

Parameters:

Width: *Default:* 0.1, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Width Red: *Default:* 1, *Range:* 0 or greater.

Scales the red glow width. If the red, green, and blue widths are equal, the glow colors be uniform with distance. If they are not equal, the glows will vary in color with distance.

Width Green: *Default:* 1.2, *Range:* 0 or greater.

Scales the green glow width.

Width Blue: *Default:* 1.4, *Range:* 0 or greater.

Scales the blue glow width.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Width X: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default:* 1, *Range:* 0 or greater.

Scales the vertical glow width. Set to 0 for horizontal only.

Edges Smooth: *Default:* 0, *Range:* 0 or greater.

Determines the width of the extracted edges which generate the glows.



Edges Brightness: *Default: 1, Range: 0 or greater.*
Scales the brightness of the edges before the glows are applied.

Edges Threshold: *Default: 0, Range: 0 or greater.*
Increase to remove glows on the less sharp edges.

Glow Brightness: *Default: 2, Range: 0 or greater.*
Controls the overall glow brightness. Set to zero to get no glow.

Color: *Default rgb: [1 1 1].*
Scales the color of the glows.

Source Opacity: *Default: 1, Range: 0 to 1, Shared.*
Scales the opacity of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*
Scales the brightness of the background. This parameter only has an effect if the background input is provided, and is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Params2:

Glow Under Src: *Default: 0, Range: 0 to 1, Shared.*
Set to 1 to composite the Source input over the glows.

Glow From Matte: *Default: 0, Range: 0 to 1, Shared.*
Set to 1 to generate glows from the alpha channel of the source input instead of the RGB channels. In this case the glows will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Light Back: *Default: 0, Range: 0 to 1, Shared.*
Increase this to give a look of the glow casting light onto the background image. To see this more clearly you can also lower the Scale Background parameter or raise the Brightness parameter.

Comp Premult: *Check-box, Default: off, Shared.*
Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Show: *Popup menu, Default: RESULT.*
Selects the type of output.

RESULT: Normally the glows are combined with the source or background, and output.

EDGES: The edge image only is output, before any glows are applied. This can be helpful while adjusting the various edge parameters.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowMaskComp](#)

[GlowDistMaskComp](#)

[GlowRainbowMaskComp](#)

[GlowAuraMaskComp](#)

[GlowRingsMaskComp](#)

[GlowDarksMaskComp](#)

[GlowOrthiconMaskComp](#)

[GlowNoiseMaskComp](#)

[GlowEdges](#)

[GlowEdgesMask](#)

[GlowEdgesComp](#)

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GlowEdgesMask

In the S_GlowsMask Plugin.

Glowes are created from the edges of the source clip. This is similar to GlowEdges but here the glow colors are scaled by the Mask input.

Inputs:

Source: Edges are extracted from this input clip to determine the glow locations.

Mask: The source glow colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glows. A color Mask can be used to selectively adjust the glow colors in different regions. The Mask is applied to the source before the glows are generated so it will not clip the resulting glows.



Parameters:

Width: *Default:* 0.1, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Width Red: *Default:* 1, *Range:* 0 or greater.

Scales the red glow width. If the red, green, and blue widths are equal, the glow colors be uniform with distance. If they are not equal, the glows will vary in color with distance.

Width Green: *Default:* 1.2, *Range:* 0 or greater.

Scales the green glow width.

Width Blue: *Default:* 1.4, *Range:* 0 or greater.

Scales the blue glow width.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Width X: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default:* 1, *Range:* 0 or greater.

Scales the vertical glow width. Set to 0 for horizontal only.

Edges Smooth: *Default:* 0, *Range:* 0 or greater.

Determines the width of the extracted edges which generate the glows.

Edges Brightness: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the edges before the glows are applied.

Edges Threshold: *Default:* 0, *Range:* 0 or greater.

Increase to remove glows on the less sharp edges.

Glow Brightness: *Default: 2, Range: 0 or greater.*
Controls the overall glow brightness. Set to zero to get no glow.

Color: *Default rgb: [1 1 1].*
Scales the color of the glows.

Scale Source: *Default: 1, Range: 0 to 1, Shared.*
Scales the brightness of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Eclipse With Bg: *Default: 0, Range: 0 to 1, Shared.*
If this is set to 1, the background is subtracted from the glow and gives an eclipsed shadow effect.

Params2:

Show: *Popup menu, Default: RESULT.*
Selects the type of output.

RESULT: Normally the glows are combined with the source or background, and output.

EDGES: The edge image only is output, before any glows are applied. This can be helpful while adjusting the various edge parameters.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowMask](#)

[GlowDistMask](#)

[GlowRainbowMask](#)

[GlowAuraMask](#)

[GlowRingsMask](#)

[GlowDarksMask](#)

[GlowOrthiconMask](#)

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GlowNoise

In the S_Glows Plugin.

Generates glowing light from areas of the source clip that are brighter than the given threshold. The glows are also attenuated by a solid noise texture to give them a noisy or grainy effect. If the Jitter Frames parameter is positive, the noise will be regenerated for each frame for a fizzling look. If Jitter Frames is zero, two noise textures are combined and slide over each other at a rate depending on the Spread Speed.



Inputs:

Source: The input clip that determines the glow locations and colors. This clip is also used as the background and the glows are layered back onto it.

Parameters:

Width: *Default:* 0.5, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Width Red: *Default:* 1, *Range:* 0 or greater.

Scales the red glow width. If the red, green, and blue widths are equal, the glows will match the color of the source clip. If they are not equal, the glows will vary in color with distance.

Width Green: *Default:* 1.2, *Range:* 0 or greater.

Scales the green glow width.

Width Blue: *Default:* 1.4, *Range:* 0 or greater.

Scales the blue glow width.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Width X: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default:* 1, *Range:* 0 or greater.

Scales the vertical glow width. Set to 0 for horizontal only.

Noise Amplitude: *Default:* 1, *Range:* 0 or greater.

The amplitude of noise to include in the glows.

Noise Frequency: *Default:* 40, *Range:* 0.02 or greater.

The spatial frequency of the noise texture. Increase for finer grain, decrease for coarser grain.

Noise Freq Rel Y: *Default:* 1, *Range:* 0.02 or greater.

The relative vertical frequency of the noise texture. Increase to stretch it horizontally or decrease to stretch it vertically.

Noise Octaves: *Integer, Default:* 1, *Range:* 1 to 10.

The number of octaves of noise to include. Each octave is twice the frequency and half the amplitude of the previous.

Brightness: *Default: 2, Range: 0 or greater.*

Scales the brightness of all the glows.

Color: *Default rgb: [1 1 1].*

Scales the color of the glows. The colors and brightnesses of the glows are also affected by the Source input.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default: 0, Range: 0 or greater.*

Glows are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glows at only the brightest spots. A value of 0 causes glows for every non-black area.

Scale Source: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Eclipse With Bg: *Default: 0, Range: 0 to 1, Shared.*

If this is set to 1, the background is subtracted from the glow and gives an eclipsed shadow effect.

Params2:

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

Noise Shift: *X & Y, Default: [0 0], Range: any.*

The horizontal and vertical translation of the noise texture. This can only be observed if Jitter Frames is zero.

Noise Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Jitter Frames: *Integer, Default: 1, Range: 0 or greater.*

If this is 0, the noise texture will remain the same for every frame processed. If it is 1, a new noise texture is used for each frame. If it is 2, a new noise texture is used for every other frame, and so on.

Spread Speed: *X & Y, Default: [0.1 0], Range: any.*

The rate and direction that two noise textures slide over each other. This has no effect unless Jitter Frames is zero.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Glow](#)

[GlowDist](#)

[GlowRainbow](#)

[GlowAura](#)

[GlowRings](#)

[GlowDarks](#)

[GlowOrthicon](#)

[GlowEdges](#)

[GlowNoiseMask](#)

[GlowNoiseComp](#)

[GlowNoiseMaskComp](#)

[Glint](#)

[Sapphire Plug-ins](#)

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GlowNoiseComp

In the S_GlowsComp Plugin.

This is similar to GlowNoise, but here the source and background can be different clips.

Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glows with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.



Parameters:

Width: *Default:* 0.5, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Width Red: *Default:* 1, *Range:* 0 or greater.

Scales the red glow width. If the red, green, and blue widths are equal, the glows will match the color of the source clip. If they are not equal, the glows will vary in color with distance.

Width Green: *Default:* 1.2, *Range:* 0 or greater.

Scales the green glow width.

Width Blue: *Default:* 1.4, *Range:* 0 or greater.

Scales the blue glow width.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Width X: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default:* 1, *Range:* 0 or greater.

Scales the vertical glow width. Set to 0 for horizontal only.

Noise Amplitude: *Default:* 1, *Range:* 0 or greater.

The amplitude of noise to include in the glows.

Noise Frequency: *Default:* 40, *Range:* 0.02 or greater.

The spatial frequency of the noise texture. Increase for finer grain, decrease for coarser grain.

Noise Freq Rel Y: *Default:* 1, *Range:* 0.02 or greater.

The relative vertical frequency of the noise texture. Increase to stretch it horizontally or decrease to stretch it vertically.

Noise Octaves: *Integer, Default:* 1, *Range:* 1 to 10.

The number of octaves of noise to include. Each octave is twice the frequency and half the amplitude of the previous.

Brightness: *Default: 2, Range: 0 or greater.*

Scales the brightness of all the glows.

Color: *Default rgb: [1 1 1].*

Scales the color of the glows. The colors and brightnesses of the glows are also affected by the Source input.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default: 0, Range: 0 or greater.*

Glows are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glows at only the brightest spots. A value of 0 causes glows for every non-black area.

Source Opacity: *Default: 1, Range: 0 to 1, Shared.*

Scales the opacity of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background. This parameter only has an effect if the background input is provided, and is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Params2:

Glow Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the glows.

Glow From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate glows from the alpha channel of the source input instead of the RGB channels. In this case the glows will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Light Back: *Default: 0, Range: 0 to 1, Shared.*

Increase this to give a look of the glow casting light onto the background image. To see this more clearly you can also lower the Scale Background parameter or raise the Brightness parameter.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

Noise Shift: *X & Y, Default: [0 0], Range: any.*

The horizontal and vertical translation of the noise texture. This can only be observed if Jitter Frames is zero.

Noise Seed: *Default:* 0.123, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Jitter Frames: *Integer, Default:* 1, *Range:* 0 or greater.

If this is 0, the noise texture will remain the same for every frame processed. If it is 1, a new noise texture is used for each frame. If it is 2, a new noise texture is used for every other frame, and so on.

Spread Speed: *X & Y, Default:* [0.1 0], *Range:* any.

The rate and direction that two noise textures slide over each other. This has no effect unless Jitter Frames is zero.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowComp](#)

[GlowDistComp](#)

[GlowRainbowComp](#)

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GlowNoiseMaskComp

In the S_GlowsMaskCmp Plugin.

This is similar to GlowNoise but here the glow colors are scaled by the Mask input, and also the source and background can be different clips.

Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glows with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.

Mask: The source glow colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glows. A color Mask can be used to selectively adjust the glow colors in different regions. The Mask is applied to the source before the glows are generated so it will not clip the resulting glows.

Parameters:

Width: *Default:* 0.5, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Width Red: *Default:* 1, *Range:* 0 or greater.

Scales the red glow width. If the red, green, and blue widths are equal, the glows will match the color of the source clip. If they are not equal, the glows will vary in color with distance.

Width Green: *Default:* 1.2, *Range:* 0 or greater.

Scales the green glow width.

Width Blue: *Default:* 1.4, *Range:* 0 or greater.

Scales the blue glow width.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Width X: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default:* 1, *Range:* 0 or greater.

Scales the vertical glow width. Set to 0 for horizontal only.

Noise Amplitude: *Default:* 1, *Range:* 0 or greater.

The amplitude of noise to include in the glows.



Noise Frequency: *Default: 40, Range: 0.02 or greater.*

The spatial frequency of the noise texture. Increase for finer grain, decrease for coarser grain.

Noise Freq Rel Y: *Default: 1, Range: 0.02 or greater.*

The relative vertical frequency of the noise texture. Increase to stretch it horizontally or decrease to stretch it vertically.

Noise Octaves: *Integer, Default: 1, Range: 1 to 10.*

The number of octaves of noise to include. Each octave is twice the frequency and half the amplitude of the previous.

Brightness: *Default: 2, Range: 0 or greater.*

Scales the brightness of all the glows.

Color: *Default rgb: [1 1 1].*

Scales the color of the glows. The colors and brightnesses of the glows are also affected by the Source input.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default: 0, Range: 0 or greater.*

Glows are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glows at only the brightest spots. A value of 0 causes glows for every non-black area.

Source Opacity: *Default: 1, Range: 0 to 1, Shared.*

Scales the opacity of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background. This parameter only has an effect if the background input is provided, and is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Params2:

Glow Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the glows.

Glow From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate glows from the alpha channel of the source input instead of the RGB channels. In this case the glows will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Light Back: *Default: 0, Range: 0 to 1, Shared.*

Increase this to give a look of the glow casting light onto the background image. To see this more clearly you can also lower the Scale Background parameter or raise the Brightness parameter.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

Noise Shift: *X & Y, Default: [0 0], Range: any.*

The horizontal and vertical translation of the noise texture. This can only be observed if Jitter Frames is zero.

Noise Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Jitter Frames: *Integer, Default: 1, Range: 0 or greater.*

If this is 0, the noise texture will remain the same for every frame processed. If it is 1, a new noise texture is used for each frame. If it is 2, a new noise texture is used for every other frame, and so on.

Spread Speed: *X & Y, Default: [0.1 0], Range: any.*

The rate and direction that two noise textures slide over each other. This has no effect unless Jitter Frames is zero.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowMaskComp](#)

[GlowDistMaskComp](#)

[GlowRainbowMaskComp](#)

[GlowAuraMaskComp](#)

[GlowRingsMaskComp](#)

[GlowDarksMaskComp](#)

[GlowOrthiconMaskComp](#)

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GlowNoiseMask

In the S_GlowsMask Plugin.

This is similar to GlowNoise but here the glow colors are scaled by the Mask input.

Inputs:

Source: The input clip that determines the glow locations and colors. This clip is also used as the background and the glows are layered back onto it.

Mask: The source glow colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glows. A color Mask can be used to selectively adjust the glow colors in different regions. The Mask is applied to the source before the glows are generated so it will not clip the resulting glows.



Parameters:

Width: *Default:* 0.5, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Width Red: *Default:* 1, *Range:* 0 or greater.

Scales the red glow width. If the red, green, and blue widths are equal, the glows will match the color of the source clip. If they are not equal, the glows will vary in color with distance.

Width Green: *Default:* 1.2, *Range:* 0 or greater.

Scales the green glow width.

Width Blue: *Default:* 1.4, *Range:* 0 or greater.

Scales the blue glow width.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Width X: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default:* 1, *Range:* 0 or greater.

Scales the vertical glow width. Set to 0 for horizontal only.

Noise Amplitude: *Default:* 1, *Range:* 0 or greater.

The amplitude of noise to include in the glows.

Noise Frequency: *Default:* 40, *Range:* 0.02 or greater.

The spatial frequency of the noise texture. Increase for finer grain, decrease for coarser grain.

Noise Freq Rel Y: *Default: 1, Range: 0.02 or greater.*

The relative vertical frequency of the noise texture. Increase to stretch it horizontally or decrease to stretch it vertically.

Noise Octaves: *Integer, Default: 1, Range: 1 to 10.*

The number of octaves of noise to include. Each octave is twice the frequency and half the amplitude of the previous.

Brightness: *Default: 2, Range: 0 or greater.*

Scales the brightness of all the glows.

Color: *Default rgb: [1 1 1].*

Scales the color of the glows. The colors and brightnesses of the glows are also affected by the Source input.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default: 0, Range: 0 or greater.*

Glows are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glows at only the brightest spots. A value of 0 causes glows for every non-black area.

Scale Source: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Eclipse With Bg: *Default: 0, Range: 0 to 1, Shared.*

If this is set to 1, the background is subtracted from the glow and gives an eclipsed shadow effect.

Params2:

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

Noise Shift: *X & Y, Default: [0 0], Range: any.*

The horizontal and vertical translation of the noise texture. This can only be observed if Jitter Frames is zero.

Noise Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Jitter Frames: *Integer, Default: 1, Range: 0 or greater.*

If this is 0, the noise texture will remain the same for every frame processed. If it is 1, a new noise texture is used for each frame. If it is 2, a new noise texture is used for every other frame, and so on.

Spread Speed: *X & Y, Default: [0.1 0], Range: any.*

The rate and direction that two noise textures slide over each other. This has no effect unless Jitter Frames is zero.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowMask](#)

[GlowDistMask](#)

[GlowRainbowMask](#)

[GlowAuraMask](#)

[GlowRingsMask](#)

[GlowDarksMask](#)

[GlowOrthiconMask](#)

[GlowEdgesMask](#)

[GlowNoise](#)

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GlowOrthicon

In the S_Glows Plugin.

The source clip is darkened at areas around parts of the source clip that are brighter than the given threshold, to give an 'orthicon' or 'dark glow' look. Lower the Threshold parameter to produce the orthicon effect in more areas. Adjust the Darkness and Width parameters to give different types of looks.



Inputs:

Source: The input clip that determines the locations to be darkened.

Parameters:

Darks Width: *Default: 0.2, Range: 0 or greater.*

Scales the dark glow distance. This and all the width parameters can be adjusted using the Width Widget.

Protect Width: *Default: 0.1, Range: 0 or greater.*

The distance around the bright areas that is protected from darkening. This should normally be less than the value of Darks Width.

Protect Amount: *Default: 1, Range: 0 or greater.*

The amount that the bright areas are protected from darkening.

Width X: *Default: 1, Range: 0 or greater.*

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default: 1, Range: 0 or greater.*

Scales the vertical glow width. Set to 0 for horizontal only.

Subpixel: *Check-box, Default: off.*

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Darkness: *Default: 1, Range: 0 or greater.*

Scales the amount of darkening.

Color: *Default rgb: [0 0 0].*

Scales the color of the glows. The colors and brightnesses of the glows are also affected by the Source input.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default: 0.7, Range: 0 or greater.*

Darkening will occur around locations in the source clip that are brighter than this value. A value of 0.9 causes dark glows from only the brightest spots. A value of 0 causes glows for every non-black area.

Scale Source: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Params2:

Show: *Popup menu, Default: Result.*
Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Glow](#)

[GlowDist](#)

[GlowRainbow](#)

[GlowAura](#)

[GlowRings](#)

[GlowDarks](#)

[GlowEdges](#)

[GlowNoise](#)

[GlowOrthiconMask](#)

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GlowOrthiconComp

In the S_GlowsComp Plugin.

The background clip is darkened at areas around parts of the source clip that are brighter than the given threshold, to give an 'orthicon' or 'dark glow' look. This is similar to GlowOrthicon, but here the source and background can be different clips.



Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glows with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.

Parameters:

Darks Width: *Default:* 0.2, *Range:* 0 or greater.

Scales the dark glow distance. This and all the width parameters can be adjusted using the Width Widget.

Protect Width: *Default:* 0.1, *Range:* 0 or greater.

The distance around the bright areas that is protected from darkening. This should normally be less than the value of Darks Width.

Protect Amount: *Default:* 1, *Range:* 0 or greater.

The amount that the bright areas are protected from darkening.

Width X: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default:* 1, *Range:* 0 or greater.

Scales the vertical glow width. Set to 0 for horizontal only.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Darkness: *Default:* 1, *Range:* 0 or greater.

Scales the amount of darkening.

Color: *Default rgb:* [0 0 0].

Scales the color of the glows. The colors and brightnesses of the glows are also affected by the Source input.

Threshold Add Color: *Default rgb:* [0 0 0].

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default:* 0.7, *Range:* 0 or greater.

Darkening will occur around locations in the source clip that are brighter than this value. A value of 0.9 causes dark glows from only the brightest spots. A value of 0 causes glows for every non-black area.

Source Opacity: *Default:* 1, *Range:* 0 to 1, *Shared.*

Scales the opacity of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background. This parameter only has an effect if the background input is provided, and is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Params2:

Glow Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the glows.

Glow From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate glows from the alpha channel of the source input instead of the RGB channels. In this case the glows will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowComp](#)

[GlowDistComp](#)

[GlowRainbowComp](#)

[GlowAuraComp](#)

[GlowRingsComp](#)

[GlowDarksComp](#)

[GlowEdgesComp](#)

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GlowOrthiconMaskComp

In the S_GlowsMaskCmp Plugin.

The source clip is darkened at areas around parts of the source clip that are brighter than the given threshold, to give an 'orthicon' or 'dark glow' look. This is similar to GlowOrthicon but here the glow effect is scaled by the Mask input, and also the source and background can be different clips.

Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glows with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.

Mask: The source glow colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glows. A color Mask can be used to selectively adjust the glow colors in different regions. The Mask is applied to the source before the glows are generated so it will not clip the resulting glows.

Parameters:

Darks Width: *Default: 0.2, Range: 0 or greater.*

Scales the dark glow distance. This and all the width parameters can be adjusted using the Width Widget.

Protect Width: *Default: 0.1, Range: 0 or greater.*

The distance around the bright areas that is protected from darkening. This should normally be less than the value of Darks Width.

Protect Amount: *Default: 1, Range: 0 or greater.*

The amount that the bright areas are protected from darkening.

Width X: *Default: 1, Range: 0 or greater.*

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default: 1, Range: 0 or greater.*

Scales the vertical glow width. Set to 0 for horizontal only.

Subpixel: *Check-box, Default: off.*

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Darkness: *Default: 1, Range: 0 or greater.*

Scales the amount of darkening.

Color: *Default rgb: [0 0 0].*

Scales the color of the glows. The colors and brightnesses of the glows are also affected by the Source input.



Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default: 0.7, Range: 0 or greater.*

Darkening will occur around locations in the source clip that are brighter than this value. A value of 0.9 causes dark glows from only the brightest spots. A value of 0 causes glows for every non-black area.

Source Opacity: *Default: 1, Range: 0 to 1, Shared.*

Scales the opacity of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background. This parameter only has an effect if the background input is provided, and is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Params2:

Glow Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the glows.

Glow From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate glows from the alpha channel of the source input instead of the RGB channels. In this case the glows will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowMaskComp](#)

[GlowDistMaskComp](#)

[GlowRainbowMaskComp](#)

[GlowAuraMaskComp](#)

[GlowRingsMaskComp](#)

[GlowDarksMaskComp](#)

[GlowEdgesMaskComp](#)

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GlowOrthiconMask

In the S_GlowsMask Plugin.

The source clip is darkened at areas around parts of the source clip that are brighter than the given threshold, to give an 'orthicon' or 'dark glow' look. This is similar to GlowOrthicon but here the glow effect is scaled by the Mask input.



Inputs:

Source: The input clip that determines the locations to be darkened.

Mask: The source glow colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glows. A color Mask can be used to selectively adjust the glow colors in different regions. The Mask is applied to the source before the glows are generated so it will not clip the resulting glows.

Parameters:

Darks Width: *Default:* 0.2, *Range:* 0 or greater.

Scales the dark glow distance. This and all the width parameters can be adjusted using the Width Widget.

Protect Width: *Default:* 0.1, *Range:* 0 or greater.

The distance around the bright areas that is protected from darkening. This should normally be less than the value of Darks Width.

Protect Amount: *Default:* 1, *Range:* 0 or greater.

The amount that the bright areas are protected from darkening.

Width X: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default:* 1, *Range:* 0 or greater.

Scales the vertical glow width. Set to 0 for horizontal only.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Darkness: *Default:* 1, *Range:* 0 or greater.

Scales the amount of darkening.

Color: *Default rgb:* [0 0 0].

Scales the color of the glows. The colors and brightnesses of the glows are also affected by the Source input.

Threshold Add Color: *Default rgb:* [0 0 0].

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default: 0.7, Range: 0 or greater.*

Darkening will occur around locations in the source clip that are brighter than this value. A value of 0.9 causes dark glows from only the brightest spots. A value of 0 causes glows for every non-black area.

Scale Source: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Params2:

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowMask](#)

[GlowDistMask](#)

[GlowRainbowMask](#)

[GlowAuraMask](#)

[GlowRingsMask](#)

[GlowDarksMask](#)

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GlowRainbow

In the S_Glows Plugin.

Generates rainbow colored glows based on the distances from the edges of the source input. Any edges in the input image, where the brightness crosses the given threshold value, will generate an equal glow into the darker side of the edges. This is best observed when used on images with dark backgrounds.



Inputs:

Source: The input clip that determines the glow locations and colors. This clip is also used as the background and the glows are layered back onto it.

Parameters:

Width: *Default:* 0.5, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Frequency: *Default:* 12, *Range:* 0 or greater.

The frequency of the color pattern. Increase for more cycles through the spectrum.

Frequency Red: *Default:* 1, *Range:* 0 or greater.

Scales the red frequency.

Frequency Green: *Default:* 0.9, *Range:* 0 or greater.

Scales the green frequency.

Frequency Blue: *Default:* 0.8, *Range:* 0 or greater.

Scales the blue frequency.

Phase: *Default:* 0, *Range:* any.

Shifts the color pattern.

Phase Speed: *Default:* 1, *Range:* any.

If non-zero, the color phase is automatically animated at this speed, causing the color pattern to flow over time.

Phase Red: *Default:* 0, *Range:* any.

Shifts the red phase.

Phase Green: *Default:* 0, *Range:* any.

Shifts the green phase.

Phase Blue: *Default:* 0, *Range:* any.

Shifts the blue phase.

Brightness: *Default:* 0.8, *Range:* 0 or greater.

Scales the brightness of the glows.

Color: *Default rgb:* [1 1 1].

Scales the color of the glows.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default: 0.5, Range: 0 or greater.*

Glows are generated at the edges of areas in the source clip that are brighter than this value. A value of 0.9 causes glows from only the brightest spots. A value of 0 causes glows for every non-black area.

Glow Saturation: *Default: 1, Range: 0 or greater.*

Scales the saturation of the glow colors. Increase for more intense colors. Set to 0 for monochrome.

Scale Source: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Eclipse With Bg: *Default: 0, Range: 0 to 1, Shared.*

If this is set to 1, the background is subtracted from the glow and gives an eclipsed shadow effect.

Params2:

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Glow](#)

[GlowDist](#)

[GlowAura](#)

[GlowRings](#)

[GlowDarks](#)

[GlowOrthicon](#)

[GlowEdges](#)

[GlowNoise](#)

[GlowRainbowMask](#)

[GlowRainbowComp](#)

[GlowRainbowMaskComp](#)

[Glint](#)

[PsykoStripes](#)

[PseudoColor](#)

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GlowRainbowComp

In the S_GlowsComp Plugin.

Generates rainbow colored glows based on the distances from the edges of the source input. Any edges in the input image, where the brightness crosses the given threshold value, will generate an equal glow into the darker side of the edges. This is similar to GlowRainbow, but here the source and background can be different clips.



Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glows with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.

Parameters:

Width: *Default:* 0.5, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Frequency: *Default:* 12, *Range:* 0 or greater.

The frequency of the color pattern. Increase for more cycles through the spectrum.

Frequency Red: *Default:* 1, *Range:* 0 or greater.

Scales the red frequency.

Frequency Green: *Default:* 0.9, *Range:* 0 or greater.

Scales the green frequency.

Frequency Blue: *Default:* 0.8, *Range:* 0 or greater.

Scales the blue frequency.

Phase: *Default:* 0, *Range:* any.

Shifts the color pattern.

Phase Speed: *Default:* 1, *Range:* any.

If non-zero, the color phase is automatically animated at this speed, causing the color pattern to flow over time.

Phase Red: *Default:* 0, *Range:* any.

Shifts the red phase.

Phase Green: *Default:* 0, *Range:* any.

Shifts the green phase.

Phase Blue: *Default:* 0, *Range:* any.

Shifts the blue phase.

Brightness: *Default:* 0.8, *Range:* 0 or greater.

Scales the brightness of the glows.

Color: *Default rgb: [1 1 1].*

Scales the color of the glows.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default: 0.5, Range: 0 or greater.*

Glows are generated at the edges of areas in the source clip that are brighter than this value. A value of 0.9 causes glows from only the brightest spots. A value of 0 causes glows for every non-black area.

Glow Saturation: *Default: 1, Range: 0 or greater.*

Scales the saturation of the glow colors. Increase for more intense colors. Set to 0 for monochrome.

Source Opacity: *Default: 1, Range: 0 to 1, Shared.*

Scales the opacity of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background. This parameter only has an effect if the background input is provided, and is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Params2:

Glow Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the glows.

Glow From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate glows from the alpha channel of the source input instead of the RGB channels. In this case the glows will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Light Back: *Default: 0, Range: 0 to 1, Shared.*

Increase this to give a look of the glow casting light onto the background image. To see this more clearly you can also lower the Scale Background parameter or raise the Brightness parameter.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowComp](#)

[GlowDistComp](#)

[GlowAuraComp](#)

[GlowRingsComp](#)

[GlowDarksComp](#)

[GlowOrthiconComp](#)

[GlowEdgesComp](#)

[GlowNoiseComp](#)

[GlowRainbow](#)

[GlowRainbowMask](#)

[GlowRainbowMaskComp](#)

[Glint](#)

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GlowRainbowMaskComp

In the S_GlowsMaskCmp Plugin.

Generates rainbow colored glows based on the distances from the edges of the source input. Any edges in the input image, where the brightness crosses the given threshold value, will generate an equal glow into the darker side of the edges. This is similar to GlowRainbow but here the glow colors are also scaled by the Mask input, and also the source and background can be different clips.



Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glows with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.

Mask: The source glow colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glows. A color Mask can be used to selectively adjust the glow colors in different regions. The Mask is applied to the source before the glows are generated so it will not clip the resulting glows.

Parameters:

Width: *Default:* 0.5, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Frequency: *Default:* 12, *Range:* 0 or greater.

The frequency of the color pattern. Increase for more cycles through the spectrum.

Frequency Red: *Default:* 1, *Range:* 0 or greater.

Scales the red frequency.

Frequency Green: *Default:* 0.9, *Range:* 0 or greater.

Scales the green frequency.

Frequency Blue: *Default:* 0.8, *Range:* 0 or greater.

Scales the blue frequency.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Phase: *Default:* 0, *Range:* any.

Shifts the color pattern.

Phase Speed: *Default:* 1, *Range:* any.

If non-zero, the color phase is automatically animated at this speed, causing the color pattern to flow over time.

Phase Red: *Default: 0, Range: any.*

Shifts the red phase.

Phase Green: *Default: 0, Range: any.*

Shifts the green phase.

Phase Blue: *Default: 0, Range: any.*

Shifts the blue phase.

Brightness: *Default: 0.8, Range: 0 or greater.*

Scales the brightness of the glows.

Color: *Default rgb: [1 1 1].*

Scales the color of the glows.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default: 0.5, Range: 0 or greater.*

Glows are generated at the edges of areas in the source clip that are brighter than this value. A value of 0.9 causes glows from only the brightest spots. A value of 0 causes glows for every non-black area.

Glow Saturation: *Default: 1, Range: 0 or greater.*

Scales the saturation of the glow colors. Increase for more intense colors. Set to 0 for monochrome.

Source Opacity: *Default: 1, Range: 0 to 1, Shared.*

Scales the opacity of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background. This parameter only has an effect if the background input is provided, and is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Params2:

Glow Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the glows.

Glow From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate glows from the alpha channel of the source input instead of the RGB channels. In this case the glows will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Light Back: *Default: 0, Range: 0 to 1, Shared.*

Increase this to give a look of the glow casting light onto the background image. To see this more clearly you can also lower the Scale Background parameter or raise the Brightness parameter.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowMaskComp](#)

[GlowDistMaskComp](#)

[GlowAuraMaskComp](#)

[GlowRingsMaskComp](#)

[GlowDarksMaskComp](#)

[GlowOrthiconMaskComp](#)

[GlowEdgesMaskComp](#)

[GlowNoiseMaskComp](#)

[GlowRainbow](#)

[GlowRainbowMask](#)

[GlowRainbowComp](#)

[Glint](#)

[PsykoStripes](#)

[PseudoColor](#)

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GlowRainbowMask

In the S_GlowsMask Plugin.

Generates rainbow colored glows based on the distances from the edges of the source input. Any edges in the input image, where the brightness crosses the given threshold value, will generate an equal glow into the darker side of the edges. This is similar to GlowRainbow but here the glow colors are also scaled by the Mask input.



Inputs:

Source: The input clip that determines the glow locations and colors. This clip is also used as the background and the glows are layered back onto it.

Mask: The source glow colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glows. A color Mask can be used to selectively adjust the glow colors in different regions. The Mask is applied to the source before the glows are generated so it will not clip the resulting glows.

Parameters:

Width: *Default:* 0.5, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Frequency: *Default:* 12, *Range:* 0 or greater.

The frequency of the color pattern. Increase for more cycles through the spectrum.

Frequency Red: *Default:* 1, *Range:* 0 or greater.

Scales the red frequency.

Frequency Green: *Default:* 0.9, *Range:* 0 or greater.

Scales the green frequency.

Frequency Blue: *Default:* 0.8, *Range:* 0 or greater.

Scales the blue frequency.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Phase: *Default:* 0, *Range:* any.

Shifts the color pattern.

Phase Speed: *Default:* 1, *Range:* any.

If non-zero, the color phase is automatically animated at this speed, causing the color pattern to flow over time.

Phase Red: *Default:* 0, *Range:* any.

Shifts the red phase.

Phase Green: *Default:* 0, *Range:* any.

Shifts the green phase.

Phase Blue: *Default: 0, Range: any.*
Shifts the blue phase.

Brightness: *Default: 0.8, Range: 0 or greater.*
Scales the brightness of the glows.

Color: *Default rgb: [1 1 1].*
Scales the color of the glows.

Threshold Add Color: *Default rgb: [0 0 0].*
This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default: 0.5, Range: 0 or greater.*
Glows are generated at the edges of areas in the source clip that are brighter than this value. A value of 0.9 causes glows from only the brightest spots. A value of 0 causes glows for every non-black area.

Glow Saturation: *Default: 1, Range: 0 or greater.*
Scales the saturation of the glow colors. Increase for more intense colors. Set to 0 for monochrome.

Scale Source: *Default: 1, Range: 0 to 1, Shared.*
Scales the brightness of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Eclipse With Bg: *Default: 0, Range: 0 to 1, Shared.*
If this is set to 1, the background is subtracted from the glow and gives an eclipsed shadow effect.

Params2:

Show: *Popup menu, Default: Result.*
Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowMask](#)

[GlowDistMask](#)

[GlowAuraMask](#)

[GlowRingsMask](#)

[GlowDarksMask](#)

[GlowOrthiconMask](#)

[GlowEdgesMask](#)

[GlowRainbow](#)

[GlowRainbowComp](#)

[GlowRainbowMaskComp](#)

[Glint](#)

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GlowRings

In the S_Glows Plugin.

Generates glows of colored rings around the areas of the source clip that are brighter than the given threshold, and then combines these with the source clip.

Inputs:

Source: The input clip that determines the glow locations and colors. This clip is also used as the background and the glows are layered back onto it.



Parameters:

Width: *Default:* 0.2, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Width Red: *Default:* 1, *Range:* 0 or greater.

Scales the red glow width. If the red, green, and blue widths are equal, the glows will match the color of the source clip. If they are not equal, the glows will vary in color with distance.

Width Green: *Default:* 1.5, *Range:* 0 or greater.

Scales the green glow width.

Width Blue: *Default:* 2, *Range:* 0 or greater.

Scales the blue glow width.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Width X: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default:* 1, *Range:* 0 or greater.

Scales the vertical glow width. Set to 0 for horizontal only.

Thickness Red: *Default:* 0.5, *Range:* 0 to 1.

Scales the thickness of the red region.

Thickness Green: *Default:* 0.5, *Range:* 0 to 1.

Scales the thickness of the green region.

Thickness Blue: *Default:* 0.5, *Range:* 0 to 1.

Scales the thickness of the blue region.

Brightness: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of all the glows.

Color: *Default rgb:* [1 1 1].

Scales the color of the glows. The colors and brightnesses of the glows are also affected by the Source input.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default: 0, Range: 0 or greater.*

Glow is generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glows at only the brightest spots. A value of 0 causes glows for every non-black area.

Scale Source: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Eclipse With Bg: *Default: 0, Range: 0 to 1, Shared.*

If this is set to 1, the background is subtracted from the glow and gives an eclipsed shadow effect.

Params2:

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Glow](#)

[GlowDist](#)

[GlowRainbow](#)

[GlowAura](#)

[GlowDarks](#)

[GlowOrthicon](#)

[GlowEdges](#)

[GlowNoise](#)

[GlowRingsMask](#)

[GlowRingsComp](#)

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GlowRingsComp

In the S_GlowsComp Plugin.

Generates glows of colored rings around the areas of the source clip that are brighter than the given threshold, and combines these with the background clip. This is similar to GlowRings, but here the source and background can be different clips.



Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glows with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.

Parameters:

Width: *Default:* 0.2, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Width Red: *Default:* 1, *Range:* 0 or greater.

Scales the red glow width. If the red, green, and blue widths are equal, the glows will match the color of the source clip. If they are not equal, the glows will vary in color with distance.

Width Green: *Default:* 1.5, *Range:* 0 or greater.

Scales the green glow width.

Width Blue: *Default:* 2, *Range:* 0 or greater.

Scales the blue glow width.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Width X: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default:* 1, *Range:* 0 or greater.

Scales the vertical glow width. Set to 0 for horizontal only.

Thickness Red: *Default:* 0.5, *Range:* 0 to 1.

Scales the thickness of the red region.

Thickness Green: *Default:* 0.5, *Range:* 0 to 1.

Scales the thickness of the green region.

Thickness Blue: *Default:* 0.5, *Range:* 0 to 1.

Scales the thickness of the blue region.

Brightness: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of all the glows.

Color: *Default rgb: [1 1 1].*

Scales the color of the glows. The colors and brightnesses of the glows are also affected by the Source input.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default: 0, Range: 0 or greater.*

Glows are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glows at only the brightest spots. A value of 0 causes glows for every non-black area.

Source Opacity: *Default: 1, Range: 0 to 1, Shared.*

Scales the opacity of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background. This parameter only has an effect if the background input is provided, and is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Params2:

Glow Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the glows.

Glow From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate glows from the alpha channel of the source input instead of the RGB channels. In this case the glows will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Light Back: *Default: 0, Range: 0 to 1, Shared.*

Increase this to give a look of the glow casting light onto the background image. To see this more clearly you can also lower the Scale Background parameter or raise the Brightness parameter.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowComp](#)

[GlowDistComp](#)

[GlowRainbowComp](#)

[GlowAuraComp](#)

[GlowDarksComp](#)

[GlowOrthiconComp](#)

[GlowEdgesComp](#)

[GlowNoiseComp](#)

[GlowRings](#)

[GlowRingsMask](#)

[GlowRingsMaskComp](#)

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GlowRingsMaskComp

In the S_GlowsMaskCmp Plugin.

Generates glows of colored rings around the areas of the source clip that are brighter than the given threshold, and then combines these with the background clip. This is similar to GlowRings but here the glow colors are also scaled by the Mask input, and also the source and background can be different clips.



Inputs:

Front: The clip to use as foreground.

Back: The clip to combine the glows with.

Matte: Specifies the opacities of the Front clip. These values are scaled by the Source Opacity parameter before being used.

Mask: The source glow colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glows. A color Mask can be used to selectively adjust the glow colors in different regions. The Mask is applied to the source before the glows are generated so it will not clip the resulting glows.

Parameters:

Width: *Default:* 0.2, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Width Red: *Default:* 1, *Range:* 0 or greater.

Scales the red glow width. If the red, green, and blue widths are equal, the glows will match the color of the source clip. If they are not equal, the glows will vary in color with distance.

Width Green: *Default:* 1.5, *Range:* 0 or greater.

Scales the green glow width.

Width Blue: *Default:* 2, *Range:* 0 or greater.

Scales the blue glow width.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Width X: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default:* 1, *Range:* 0 or greater.

Scales the vertical glow width. Set to 0 for horizontal only.

Thickness Red: *Default: 0.5, Range: 0 to 1.*
Scales the thickness of the red region.

Thickness Green: *Default: 0.5, Range: 0 to 1.*
Scales the thickness of the green region.

Thickness Blue: *Default: 0.5, Range: 0 to 1.*
Scales the thickness of the blue region.

Brightness: *Default: 1, Range: 0 or greater.*
Scales the brightness of all the glows.

Color: *Default rgb: [1 1 1].*
Scales the color of the glows. The colors and brightnesses of the glows are also affected by the Source input.

Threshold Add Color: *Default rgb: [0 0 0].*
This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default: 0, Range: 0 or greater.*
Glows are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glows at only the brightest spots. A value of 0 causes glows for every non-black area.

Source Opacity: *Default: 1, Range: 0 to 1, Shared.*
Scales the opacity of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Scale Back: *Default: 1, Range: 0 to 1, Shared.*
Scales the brightness of the background. This parameter only has an effect if the background input is provided, and is visible due to a partially transparent Source image or a reduced Source Opacity parameter value.

Params2:

Glow Under Src: *Default: 0, Range: 0 to 1, Shared.*
Set to 1 to composite the Source input over the glows.

Glow From Matte: *Default: 0, Range: 0 to 1, Shared.*
Set to 1 to generate glows from the alpha channel of the source input instead of the RGB channels. In this case the glows will not pick up color from the source and will typically be brighter. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Light Back: *Default: 0, Range: 0 to 1, Shared.*
Increase this to give a look of the glow casting light onto the background image. To see this more clearly you can also lower the Scale Background parameter or raise the Brightness parameter.

Comp Premult: *Check-box, Default: off, Shared.*
Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Show: *Popup menu, Default: Result.*
Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*
Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowMaskComp](#)

[GlowDistMaskComp](#)

[GlowRainbowMaskComp](#)

[GlowAuraMaskComp](#)

[GlowDarksMaskComp](#)

[GlowOrthiconMaskComp](#)

[GlowEdgesMaskComp](#)

[GlowNoiseMaskComp](#)

[GlowRings](#)

[GlowRingsMask](#)

[GlowRingsComp](#)

[Glint](#)

[Sapphire Plug-ins](#)

[Introduction](#)

GlowRingsMask

In the S_GlowsMask Plugin.

Generates glows of colored rings around the areas of the source clip that are brighter than the given threshold, and then combines these with the source clip. This is similar to GlowRings but here the glow colors are also scaled by the Mask input.



Inputs:

Source: The input clip that determines the glow locations and colors. This clip is also used as the background and the glows are layered back onto it.

Mask: The source glow colors are scaled by this input. A monochrome Mask can be used to choose a subset of Source areas that will generate glows. A color Mask can be used to selectively adjust the glow colors in different regions. The Mask is applied to the source before the glows are generated so it will not clip the resulting glows.

Parameters:

Width: *Default:* 0.2, *Range:* 0 or greater.

Scales the glow distance. This and all the width parameters can be adjusted using the Width Widget. Note that a zero glow width still enhances the bright areas; set the brightness parameter to zero if you want to pass the Source through unchanged.

Width Red: *Default:* 1, *Range:* 0 or greater.

Scales the red glow width. If the red, green, and blue widths are equal, the glows will match the color of the source clip. If they are not equal, the glows will vary in color with distance.

Width Green: *Default:* 1.5, *Range:* 0 or greater.

Scales the green glow width.

Width Blue: *Default:* 2, *Range:* 0 or greater.

Scales the blue glow width.

Subpixel: *Check-box, Default:* off.

Enables glowing by subpixel widths. Use this for smoother animation of the Width parameters.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Width X: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default:* 1, *Range:* 0 or greater.

Scales the vertical glow width. Set to 0 for horizontal only.

Thickness Red: *Default:* 0.5, *Range:* 0 to 1.

Scales the thickness of the red region.

Thickness Green: *Default:* 0.5, *Range:* 0 to 1.

Scales the thickness of the green region.

Thickness Blue: *Default: 0.5, Range: 0 to 1.*

Scales the thickness of the blue region.

Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of all the glows.

Color: *Default rgb: [1 1 1].*

Scales the color of the glows. The colors and brightnesses of the glows are also affected by the Source input.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the glows generated on areas of the source clip containing that color.

Threshold: *Default: 0, Range: 0 or greater.*

Glows are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glows at only the brightest spots. A value of 0 causes glows for every non-black area.

Scale Source: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the Source input when combined with the glows. This does not affect the generation of the glows themselves.

Eclipse With Bg: *Default: 0, Range: 0 to 1, Shared.*

If this is set to 1, the background is subtracted from the glow and gives an eclipsed shadow effect.

Params2:

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of combining the glow, source, and background.

Threshold: Shows the thresholded image that is used to generate the glow.

Combine: *Popup menu, Default: Screen.*

Determines how the glow is combined with the Source or Background. This parameter has no effect if Light BG is set to 1.

Mult: the source or background is multiplied by the glow.

Add: the glow is added to the source or background.

Screen: the glow is blended with the source or background using a screen operation.

Difference: the result is the difference between the glow and the source or background.

Overlay: the glow is combined with the source or background using an overlay function.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GlowMask](#)

[GlowDistMask](#)

[GlowRainbowMask](#)

[GlowAuraMask](#)

[GlowDarksMask](#)

[GlowOrthiconMask](#)

[GlowEdgesMask](#)

[GlowNoiseMask](#)

[GlowRings](#)

[GlowRingsComp](#)

[GlowRingsMaskComp](#)

[Glint](#)

[Sapphire Plug-ins](#)

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Gradient

In the S_Gradient Plugin.

Makes a smooth color gradient across the screen using given Start and End locations and colors, then optionally combines the gradient with a background clip. Increase Add Noise to reduce banding artifacts in the gradient due to color quantization.



Inputs:

Back: The clip to combine the gradient with.

Parameters:

Start: *X & Y, Default: [0 0.75], Range: any, Shared.*

The starting location of the gradient. This parameter can be adjusted using the Start Widget.

End: *X & Y, Default: [0 -0.75], Range: any, Shared.*

The ending location of the gradient. This parameter can be adjusted using the End Widget.

Add Noise: *Default: 0, Range: 0 or greater, Shared.*

If positive, this amount of noise is added to the gradient. This can create a grainy effect and eliminate banding in the gradient due to quantization. Set this to 1.0 to enable effective debanding for 8 bit results.

Smooth Curve: *Default: 0, Range: 0 to 1, Shared.*

If zero, a linear interpolation is used across the screen between the Start and End Color. Increase this value to use a smoother 'S' shaped curve for interpolation which can reduce the visual perception of the gradient's Start and End locations.

Screen Shift: *X & Y, Default: [0 0], Range: any, Shared.*

Offsets both the Start and End locations in screen coordinates. This may be helpful when using data from the Tracker.

Negate Shift: *Check-box, Default: off, Shared.*

If enabled, the Screen Shift is subtracted from the Start and End locations instead of added. It is also meant to help when using data from the Tracker.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the gradient image (both the Start Color and End Color).

Start Color: *Default rgb: [1 1 1], Shared.*

The color of the gradient at the Start location.

End Color: *Default rgb: [0 0 0], Shared.*

The color of the gradient at the End location

Combine: *Popup menu, Default: Grad Only.*

Determines how the gradient is combined with the background.

Grad Only: gives the gradient image alone with no background.

Mult: the background is multiplied by the gradient.

Add: the background is added to the gradient.

Screen: the background is blended with the gradient using a screen operation.

Difference: the result is the difference between the background and gradient.

Overlay: combines gradient and background using an overlay function.

Scale Back: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the background before combining it with the gradient.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GradientRadial](#)
[GradientMulti](#)

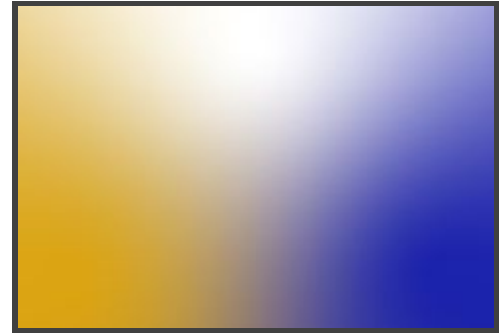
[WipeLine](#)
[Sapphire](#)
[Plug-ins](#)
[Introduction](#)

GradientMulti

Generates a smooth multi-color gradient across the screen using multiple control points, and optionally combines the gradient with a background clip.

Inputs:

Back: The clip to combine the gradient with.



Parameters:

Effect: *Popup menu, Default: Gradient 3.*

The number of control points and colors to use when creating the gradient.

Gradient 3: Three-color gradient.

Gradient 4: Four-color gradient.

Gradient 5: Five-color gradient.

Gradient 6: Six-color gradient.

Color 1: *Default rgb: [1 0 0], Shared.*

The color at Point 1.

Color 2: *Default rgb: [0 1 0], Shared.*

The color at Point 2.

Color 3: *Default rgb: [0 0 1], Shared.*

The color at Point 3.

Softness: *Default: 1, Range: 0.01 or greater, Shared.*

The softness of the edges between color regions. Increasing this parameter will create a smoother gradient, while decreasing it will create sharper edges and more well-defined colors.

Softness Falloff: *Default: 0, Range: 0 or greater, Shared.*

Reduces the softness as the distance from the control points increases. Higher values will create more well-defined color regions near the edges of the image, while lower values will cause the colors to blend together more.

Combine: *Popup menu, Default: Grad Only.*

Determines how the gradient is combined with the background.

Grad Only: gives the gradient image alone with no background.

Mult: the background is multiplied by the gradient.

Add: the background is added to the gradient.

Screen: the background is blended with the gradient using a screen operation.

Difference: the result is the difference between the background and gradient.

Overlay: combines gradient and background using an overlay function.

Scale Back: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the background before combining it with the gradient.

Params2:

Point 1: *X & Y, Default: [0 0], Range: any, Shared.*

First control point. This parameter can be adjusted using the Point 1 Widget.

Point 2: *X & Y, Default: [0 480], Range: any, Shared.*

Second control point. This parameter can be adjusted using the Point 2 Widget.

Point 3: *X & Y, Default: [720 480], Range: any, Shared.*

Third control point. This parameter can be adjusted using the Point Widget.

Params3:

Softness 1: *Default: 1, Range: 0.1 or greater, Shared.*

The relative softness of color 1.

Softness 2: *Default: 1, Range: 0.1 or greater, Shared.*

The relative softness of color 2.

Softness 3: *Default: 1, Range: 0.1 or greater, Shared.*

The relative softness of color 3.

Size 1: *Default: 1, Range: 0.1 or greater, Shared.*

Scales the size of the color centered at Point 1.

Size 2: *Default: 1, Range: 0.1 or greater, Shared.*

Scales the size of the color centered at Point 2.

Size 3: *Default: 1, Range: 0.1 or greater, Shared.*

Scales the size of the color centered at Point 3.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Gradient](#)

[GradientRadial](#)

[Sapphire](#)

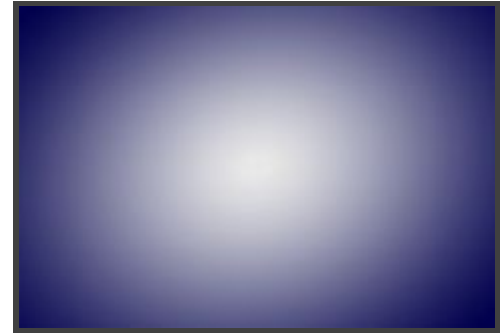
[Plug-ins](#)

[Introduction](#)

GradientRadial

In the S_Gradient Plugin.

Makes a smooth radial color gradient in an ellipse shape, given Center, Inner Radius, and Outer Radius parameters, and optionally combines the gradient with a background clip. Increase Add Noise to reduce banding artifacts in the gradient due to color quantization.



Inputs:

Back: The clip to combine the gradient with.

Parameters:

Center: *X & Y, Default: [0 0], Range: any, Shared.*

The center location of the ellipse shape. This parameter can be adjusted using the Center Widget.

Inner Radius: *Default: 0.2, Range: 0 or greater, Shared.*

Distance from the center that the gradient starts. This parameter can be adjusted using the Inner Radius Widget.

Outer Radius: *Default: 0.5, Range: 0 or greater, Shared.*

Distance from the center that the gradient ends. This parameter can be adjusted using the Outer Radius Widget.

Add Noise: *Default: 0, Range: 0 or greater, Shared.*

If positive, this amount of noise is added to the gradient. This can create a grainy effect and eliminate banding in the gradient due to quantization. Set this to 1.0 to enable effective debanding for 8 bit results.

Smooth Curve: *Default: 0, Range: 0 to 1, Shared.*

If zero, a linear interpolation is used across the screen between the Start and End Color. Increase this value to use a smoother 'S' shaped curve for interpolation which can reduce the visual perception of the gradient's Start and End locations.

Rel Width: *Default: 1, Range: 0.1 or greater, Shared.*

The relative horizontal size of the ellipse shape. Increase for a wider ellipse, decrease for a taller one.

Rel Height: *Default: 0.75, Range: 0.1 or greater, Shared.*

The relative vertical size of the ellipse shape. Increase for a taller ellipse, decrease for a wider one.

Rotate: *Default: 0, Range: any, Shared.*

Rotation in degrees of the ellipse. Note that rotation will have no effect when Rel Width and Rel Height are equal and the shape is a perfect circle. This parameter can be adjusted using the Rotate Widget.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the gradient image (both the Inner Color and Outer Color).

Inner Color: *Default rgb: [1 1 1], Shared.*

The gradient color at the Inner Radius.

Outer Color: *Default rgb: [0 0 0], Shared.*

The gradient color at the Outer Radius.

Combine: *Popup menu, Default: Grad Only.*

Determines how the gradient is combined with the background.

Grad Only: gives the gradient image alone with no background.

Multi: the background is multiplied by the gradient.

Add: the background is added to the gradient.

Screen: the background is blended with the gradient using a screen operation.

Difference: the result is the difference between the background and gradient.

Overlay: combines gradient and background using an overlay function.

Scale Back: *Default:* 1, *Range:* 0 or greater, *Shared.*

Scales the brightness of the background before combining it with the gradient.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Gradient](#)

[GradientMulti](#)

[GradientMulti](#)

[SpotLight](#)

[Vignette](#)

[Sapphire](#)

[Plug-ins](#)

[Introduction](#)

Grain: StaticColor

In the S_Grain Plugin.

Adds color and/or monochrome random noise of given amplitudes to every pixel of the source clip. Unlike the other Grain effects, there is no coherency of the grain between pixels, so the resulting look will vary with different output resolutions.

Inputs:

Source: The clip to be processed.

Parameters:

Bw Amplitude: *Default:* 0, *Range:* 0 or greater.
The amplitude of the black and white static to include.

Color Amp: *Default:* 0.1, *Range:* 0 or greater.
The amplitude of the color static to include.

Color Scale: *Default rgb:* [1 1 1].
Scales the color of the static by this value. The static will include both positive and negative values of this color.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

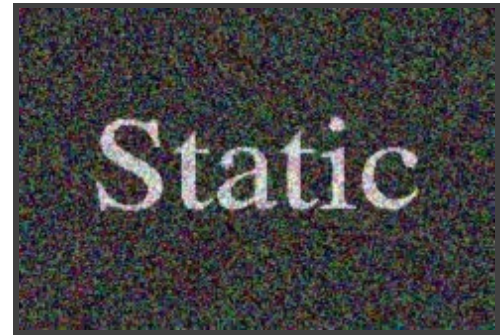
See Also:

[GrainColor](#)
[GrainMono](#)
[StaticMono](#)
[GrainRemove](#)

[StaticColorMask](#)
[StaticColorComp](#)

[FilmEffect](#)
[FilmDamage](#)
[Diffuse](#)
[Clouds](#)
[DissolveSpeckle](#)

[Sapphire](#)
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Grain: StaticColorComp

In the S_GrainComp Plugin.

Adds color and/or monochrome random noise of given amplitudes to the Front clip and then composites that over the Back clip using the matte. There is no coherency of the grain between pixels, so the resulting look will vary with different output resolutions.

Inputs:

Source: The clip to be processed.

Back: The clip to use as background. Grain is not added to this clip.

Matte: Specifies the opacities of the Front clip, for compositing over the Back. Only the red channel of this input is used.

Parameters:

Bw Amplitude: *Default:* 0, *Range:* 0 or greater.
The amplitude of the black and white static to include.

Color Amp: *Default:* 0.1, *Range:* 0 or greater.
The amplitude of the color static to include.

Color Scale: *Default rgb:* [1 1 1].
Scales the color of the static by this value. The static will include both positive and negative values of this color.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

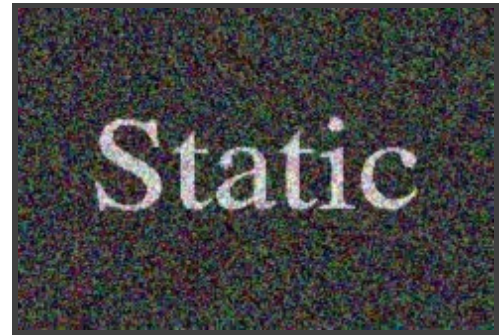
See Also:

[GrainColorComp](#)
[GrainMonoComp](#)
[StaticMonoComp](#)
[GrainRemoveComp](#)

[StaticColor](#)
[StaticColorMask](#)

[FilmEffect](#)
[FilmDamage](#)
[Diffuse](#)
[Clouds](#)
[DissolveSpeckle](#)

[Sapphire](#)
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Grain: StaticColorMask

In the S_GrainMask Plugin.

Adds color and/or monochrome random noise of given amplitudes to areas of the source clip specified by the Mask input. There is no coherency of the grain between pixels, so the resulting look will vary with different output resolutions.

Inputs:

Source: The clip to be processed.

Mask: Scales the amplitude of the applied effect. For black areas of Mask, the Source remains unchanged, for gray areas the effect is reduced. Only the red channel of this input is used. The mask can optionally be inverted using Invert Mask parameter.

Parameters:

Bw Amplitude: *Default:* 0, *Range:* 0 or greater.
The amplitude of the black and white static to include.

Color Amp: *Default:* 0.1, *Range:* 0 or greater.
The amplitude of the color static to include.

Color Scale: *Default rgb:* [1 1 1].
Scales the color of the static by this value. The static will include both positive and negative values of this color.

Invert Mask: *Check-box, Default:* off, *Shared.*
If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

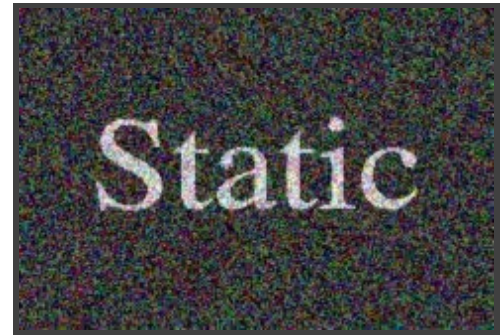
See Also:

[GrainColorMask](#)
[GrainMonoMask](#)
[StaticMonoMask](#)
[GrainRemoveMask](#)

[StaticColor](#)
[StaticColorComp](#)

[FilmEffect](#)
[FilmDamage](#)
[Diffuse](#)
[Clouds](#)
[DissolveSpeckle](#)

[Sapphire](#)
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Grain: StaticMono

In the S_Grain Plugin.

Adds black and white random noise of the given amplitude to the Source clip.

Inputs:

Source: The clip to be processed.

Parameters:

Amplitude: *Default:* 0.1, *Range:* 0 or greater.
The amplitude of static to add.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

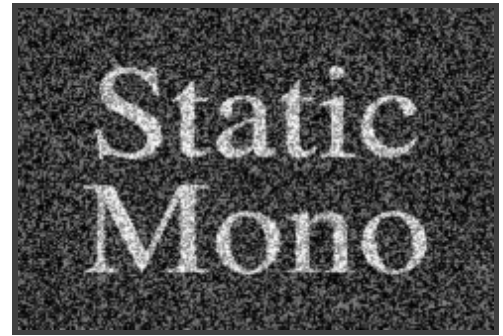
See Also:

[GrainColor](#)
[GrainMono](#)
[StaticColor](#)
[GrainRemove](#)

[StaticMonoMask](#)
[StaticMonoComp](#)

[FilmEffect](#)
[FilmDamage](#)
[Diffuse](#)
[Clouds](#)
[DissolveSpeckle](#)

[Sapphire](#)
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Grain: StaticMonoComp

In the S_GrainComp Plugin.

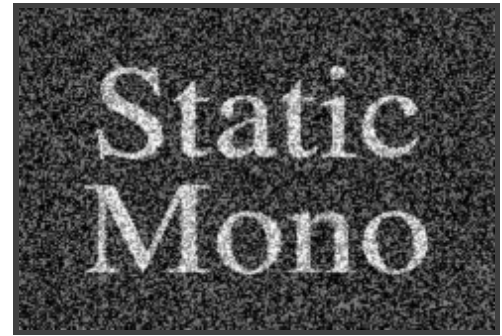
Adds black and white random noise of the given amplitude to the Front clip and then composites that over the Back clip using the Matte.

Inputs:

Source: The clip to be processed.

Back: The clip to use as background. Grain is not added to this clip.

Matte: Specifies the opacities of the Front clip, for compositing over the Back. Only the red channel of this input is used.



Parameters:

Amplitude: *Default:* 0.1, *Range:* 0 or greater.
The amplitude of static to add.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GrainColorComp](#)
[GrainMonoComp](#)
[StaticColorComp](#)
[GrainRemoveComp](#)

[StaticMono](#)
[StaticMonoMask](#)

[FilmEffect](#)
[FilmDamage](#)
[Diffuse](#)
[Clouds](#)
[DissolveSpeckle](#)

[Sapphire](#)
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Grain: StaticMonoMask

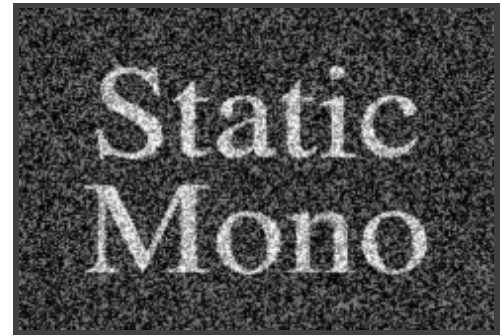
In the S_GrainMask Plugin.

Adds black and white random noise of the given amplitude to areas of the Source clip specified by the Mask input.

Inputs:

Source: The clip to be processed.

Mask: Scales the amplitude of the applied effect. For black areas of Mask, the Source remains unchanged, for gray areas the effect is reduced. Only the red channel of this input is used. The mask can optionally be inverted using Invert Mask parameter.



Parameters:

Amplitude: *Default:* 0.1, *Range:* 0 or greater.
The amplitude of static to add.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GrainColorMask](#)
[GrainMonoMask](#)
[StaticColorMask](#)
[GrainRemoveMask](#)

[StaticMono](#)
[StaticMonoComp](#)

[FilmEffect](#)
[FilmDamage](#)
[Diffuse](#)
[Clouds](#)
[DissolveSpeckle](#)

[Sapphire](#)
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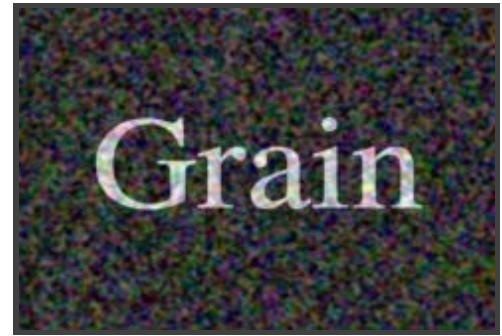
GrainColor

In the S_Grain Plugin.

Adds color and/or monochrome grain to the source clip. Amplitude and frequency parameters allow adjusting the grain texture independently for all colors together, each color channel, or black and white grain.

Inputs:

Source: The clip to be processed.



Parameters:

Color Amplitude: *Default:* 0.1, *Range:* 0 or greater.

The amplitude of color grain to include.

Color Frequency: *Default:* 100, *Range:* 0.01 or greater.

The frequency of the color grain. Increase for finer color grain, decrease for coarser color grain.

Color Octaves: *Integer, Default:* 1, *Range:* 1 to 10.

The number of octaves of color grain to include. Each octave is twice the frequency and half the amplitude of the previous.

Seed: *Default:* 0.123, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Jitter Frames: *Integer, Default:* 1, *Range:* 0 or greater, *Shared.*

If this is 0, the noise texture will remain the same for every frame processed. If it is 1, a new noise texture is used for each frame. If it is 2, a new noise texture is used for every other frame, and so on.

Red Freq: *Default:* 1, *Range:* 0 or greater.

The relative frequency of the red channel grain.

Green Freq: *Default:* 1, *Range:* 0 or greater.

The relative frequency of the green channel grain.

Blue Freq: *Default:* 1, *Range:* 0 or greater.

The relative frequency of the blue channel grain.

Color Scale: *Default rgb:* [1 1 1].

Scales the color of the grain by this value. The grain will include both positive and negative values of this color.

Bw Amplitude: *Default:* 0.05, *Range:* 0 or greater.

The amplitude of black and white grain to include.

Bw Frequency: *Default:* 100, *Range:* 0.01 or greater.

The frequency of the black and white grain. Increase for finer grain, decrease for coarser grain.

Bw Octaves: *Integer, Default:* 1, *Range:* 1 to 10.

The number of octaves of black and white grain to include. Each octave is twice the frequency and half the amplitude of the previous.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GrainMono](#)
[StaticColor](#)
[StaticMono](#)
[GrainRemove](#)

[GrainColorMask](#)
[GrainColorComp](#)

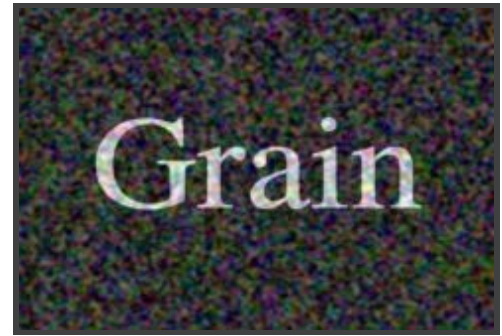
[FilmEffect](#)
[FilmDamage](#)
[Diffuse](#)
[Clouds](#)
[DissolveSpeckle](#)

[Sapphire](#)
[Plug-ins](#)
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GrainColorComp

In the S_GrainComp Plugin.

Adds color and/or monochrome grain of given amplitudes and frequencies to the Front clip, and then composites that over the Back clip using the Matte.



Inputs:

Source: The clip to be processed.

Back: The clip to use as background. Grain is not added to this clip.

Matte: Specifies the opacities of the Front clip, for compositing over the Back. Only the red channel of this input is used.

Parameters:

Color Amplitude: *Default:* 0.1, *Range:* 0 or greater.
The amplitude of color grain to include.

Color Frequency: *Default:* 100, *Range:* 0.01 or greater.
The frequency of the color grain. Increase for finer color grain, decrease for coarser color grain.

Color Octaves: *Integer, Default:* 1, *Range:* 1 to 10.
The number of octaves of color grain to include. Each octave is twice the frequency and half the amplitude of the previous.

Seed: *Default:* 0.123, *Range:* 0 or greater.
Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Jitter Frames: *Integer, Default:* 1, *Range:* 0 or greater, *Shared*.
If this is 0, the noise texture will remain the same for every frame processed. If it is 1, a new noise texture is used for each frame. If it is 2, a new noise texture is used for every other frame, and so on.

Red Freq: *Default:* 1, *Range:* 0 or greater.
The relative frequency of the red channel grain.

Green Freq: *Default:* 1, *Range:* 0 or greater.
The relative frequency of the green channel grain.

Blue Freq: *Default:* 1, *Range:* 0 or greater.
The relative frequency of the blue channel grain.

Color Scale: *Default rgb:* [1 1 1].
Scales the color of the grain by this value. The grain will include both positive and negative values of this color.

Bw Amplitude: *Default:* 0.05, *Range:* 0 or greater.
The amplitude of black and white grain to include.

Bw Frequency: *Default:* 100, *Range:* 0.01 or greater.
The frequency of the black and white grain. Increase for finer grain, decrease for coarser grain.

Bw Octaves: *Integer, Default: 1, Range: 1 to 10.*

The number of octaves of black and white grain to include. Each octave is twice the frequency and half the amplitude of the previous.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GrainMonoComp](#)

[StaticColorComp](#)

[StaticMonoComp](#)

[GrainRemoveComp](#)

[GrainColor](#)

[GrainColorMask](#)

[FilmEffect](#)

[FilmDamage](#)

[Diffuse](#)

[Clouds](#)

[DissolveSpeckle](#)

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[Introduction](#)

GrainColorMask

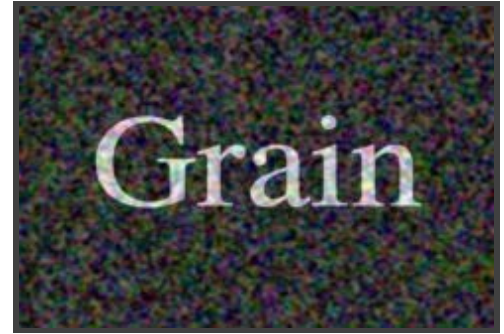
In the S_GrainMask Plugin.

Adds color and/or monochrome grain of given amplitudes and frequencies to areas of the source clip specified by the Mask input.

Inputs:

Source: The clip to be processed.

Mask: Scales the amplitude of the applied effect. For black areas of Mask, the Source remains unchanged, for gray areas the effect is reduced. Only the red channel of this input is used. The mask can optionally be inverted using Invert Mask parameter.



Parameters:

Color Amplitude: *Default: 0.1, Range: 0 or greater.*
The amplitude of color grain to include.

Color Frequency: *Default: 100, Range: 0.01 or greater.*
The frequency of the color grain. Increase for finer color grain, decrease for coarser color grain.

Color Octaves: *Integer, Default: 1, Range: 1 to 10.*
The number of octaves of color grain to include. Each octave is twice the frequency and half the amplitude of the previous.

Seed: *Default: 0.123, Range: 0 or greater.*
Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Jitter Frames: *Integer, Default: 1, Range: 0 or greater, Shared.*
If this is 0, the noise texture will remain the same for every frame processed. If it is 1, a new noise texture is used for each frame. If it is 2, a new noise texture is used for every other frame, and so on.

Red Freq: *Default: 1, Range: 0 or greater.*
The relative frequency of the red channel grain.

Green Freq: *Default: 1, Range: 0 or greater.*
The relative frequency of the green channel grain.

Blue Freq: *Default: 1, Range: 0 or greater.*
The relative frequency of the blue channel grain.

Color Scale: *Default rgb: [1 1 1].*
Scales the color of the grain by this value. The grain will include both positive and negative values of this color.

Bw Amplitude: *Default: 0.05, Range: 0 or greater.*
The amplitude of black and white grain to include.

Bw Frequency: *Default: 100, Range: 0.01 or greater.*
The frequency of the black and white grain. Increase for finer grain, decrease for coarser grain.

Bw Octaves: *Integer, Default: 1, Range: 1 to 10.*
The number of octaves of black and white grain to include. Each octave is twice the frequency and half the

amplitude of the previous.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GrainMonoMask](#)

[StaticColorMask](#)

[StaticMonoMask](#)

[GrainRemoveMask](#)

[GrainColor](#)

[GrainColorComp](#)

[FilmEffect](#)

[FilmDamage](#)

[Diffuse](#)

[Clouds](#)

[DissolveSpeckle](#)

[Sapphire](#)

[Plug-ins](#)

[Introduction](#)

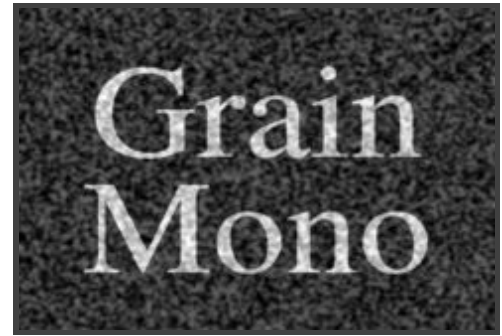
GrainMono

In the S_Grain Plugin.

Adds black and white grain of given amplitude and frequency to the source clip.

Inputs:

Source: The clip to be processed.



Parameters:

Amplitude: *Default:* 0.1, *Range:* 0 or greater.
The amplitude of grain to add.

Frequency: *Default:* 100, *Range:* 0.01 or greater.
The frequency of the grain.

Octaves: *Integer, Default:* 1, *Range:* 1 to 10.
The number of octaves of grain to include. Each octave is twice the frequency and half the amplitude of the previous.

Seed: *Default:* 0.123, *Range:* 0 or greater.
Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Jitter Frames: *Integer, Default:* 1, *Range:* 0 or greater, *Shared*.
If this is 0, the noise texture will remain the same for every frame processed. If it is 1, a new noise texture is used for each frame. If it is 2, a new noise texture is used for every other frame, and so on.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GrainColor](#)
[StaticColor](#)
[StaticMono](#)
[GrainRemove](#)

[GrainMonoMask](#)
[GrainMonoComp](#)

[FilmEffect](#)
[FilmDamage](#)
[Diffuse](#)
[Clouds](#)
[DissolveSpeckle](#)

[Sapphire](#)
[Plug-ins](#)
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GrainMonoComp

In the S_GrainComp Plugin.

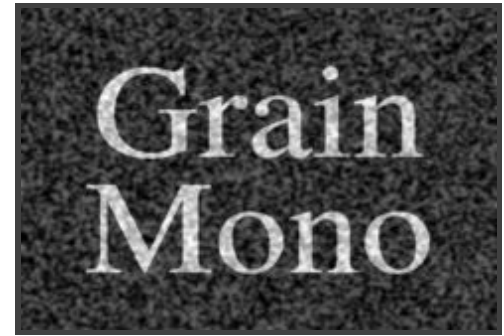
Adds black and white grain of given amplitude and frequency to the Front clip, and then composites that over the Back clip using the Matte.

Inputs:

Source: The clip to be processed.

Back: The clip to use as background. Grain is not added to this clip.

Matte: Specifies the opacities of the Front clip, for compositing over the Back. Only the red channel of this input is used.



Parameters:

Amplitude: *Default: 0.1, Range: 0 or greater.*
The amplitude of grain to add.

Frequency: *Default: 100, Range: 0.01 or greater.*
The frequency of the grain.

Octaves: *Integer, Default: 1, Range: 1 to 10.*
The number of octaves of grain to include. Each octave is twice the frequency and half the amplitude of the previous.

Seed: *Default: 0.123, Range: 0 or greater.*
Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Jitter Frames: *Integer, Default: 1, Range: 0 or greater, Shared.*
If this is 0, the noise texture will remain the same for every frame processed. If it is 1, a new noise texture is used for each frame. If it is 2, a new noise texture is used for every other frame, and so on.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GrainColorComp](#)
[StaticColorComp](#)
[StaticMonoComp](#)
[GrainRemoveComp](#)

[GrainMono](#)
[GrainMonoMask](#)

[FilmEffect](#)
[FilmDamage](#)
[Diffuse](#)
[Clouds](#)
[DissolveSpeckle](#)

[Sapphire](#)
[Plug-ins](#)
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GrainMonoMask

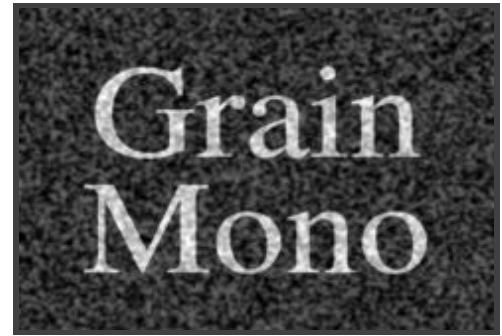
In the S_GrainMask Plugin.

Adds black and white grain of given amplitude and frequency to areas of the source clip specified by the Mask input.

Inputs:

Source: The clip to be processed.

Mask: Scales the amplitude of the applied effect. For black areas of Mask, the Source remains unchanged, for gray areas the effect is reduced. Only the red channel of this input is used. The mask can optionally be inverted using Invert Mask parameter.



Parameters:

Amplitude: *Default:* 0.1, *Range:* 0 or greater.
The amplitude of grain to add.

Frequency: *Default:* 100, *Range:* 0.01 or greater.
The frequency of the grain.

Octaves: *Integer, Default:* 1, *Range:* 1 to 10.
The number of octaves of grain to include. Each octave is twice the frequency and half the amplitude of the previous.

Seed: *Default:* 0.123, *Range:* 0 or greater.
Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Jitter Frames: *Integer, Default:* 1, *Range:* 0 or greater, *Shared*.
If this is 0, the noise texture will remain the same for every frame processed. If it is 1, a new noise texture is used for each frame. If it is 2, a new noise texture is used for every other frame, and so on.

Invert Mask: *Check-box, Default:* off, *Shared*.
If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GrainColorMask](#)
[StaticColorMask](#)
[StaticMonoMask](#)
[GrainRemoveMask](#)

[GrainMono](#)
[GrainMonoComp](#)

[FilmEffect](#)
[FilmDamage](#)
[Diffuse](#)
[Clouds](#)
[DissolveSpeckle](#)

[Sapphire](#)
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GrainRemove

In the S_Grain Plugin.

Smooths the source clip while retaining the edges. To adjust the parameters in this effect, first use the Show:Edges option to inspect which edges will be retained and adjust Edges Threshold, Edges Width, and Edges Scale until the important edges are fairly sharp and bright but not jaggy. Then return to Show:Result and adjust the smooth parameters to remove the appropriate amount of grain.



Inputs:

Source: The clip to be processed.

Parameters:

Smooth: *Default:* 0.1, *Range:* 0 or greater.
The amount of smoothing to apply to the non-edge regions.

Smooth Luma: *Default:* 0.5, *Range:* 0 or greater.
Scales the smoothing amount for the luminance component.

Smooth Chroma: *Default:* 1, *Range:* 0 or greater.
Scales the smoothing amount for the chrominance component.

Show: *Popup menu, Default:* RESULT.
Selects between output options.

RESULT: outputs the final result.

EDGES: outputs an image showing which edges are to be retained.

Edges Width: *Default:* 0.02, *Range:* 0 or greater.
The width of the edges to be retained.

Edges Scale: *Default:* 0.25, *Range:* 0 or greater.
The brightness of the edges to be retained.

Edges Threshold: *Default:* 0.3, *Range:* 0 or greater.
This value is subtracted from the initial edge image. Increasing it can help remove minor edges and speckles that should not be retained.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GrainColor](#)
[GrainMono](#)
[StaticColor](#)
[StaticMono](#)

[GrainRemoveMask](#)
[GrainRemoveComp](#)

[Blur](#)
[Sharpen](#)

[Sapphire](#)
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GrainRemoveComp

In the S_GrainComp Plugin.

Smooths the Front clip while retaining the edges, then composites that over the Back clip using the Matte. To adjust the parameters in this effect, first use the show:EDGES option to inspect which edges will be retained and adjust Edges Threshold, Edges Width, and Edges Scale until the important edges are fairly sharp and bright but not jaggy. Then return to show:RESULT and adjust the smooth parameters to remove the appropriate amount of grain.



Inputs:

Source: The clip to be processed.

Back: The clip to use as background. Grain is not added to this clip.

Matte: Specifies the opacities of the Front clip, for compositing over the Back. Only the red channel of this input is used.

Parameters:

Smooth: *Default:* 0.1, *Range:* 0 or greater.
The amount of smoothing to apply to the non-edge regions.

Smooth Luma: *Default:* 0.5, *Range:* 0 or greater.
Scales the smoothing amount for the luminance component.

Smooth Chroma: *Default:* 1, *Range:* 0 or greater.
Scales the smoothing amount for the chrominance component.

Show: *Popup menu, Default:* RESULT.
Selects between output options.

RESULT: outputs the final result.

EDGES: outputs an image showing which edges are to be retained.

Edges Width: *Default:* 0.02, *Range:* 0 or greater.
The width of the edges to be retained.

Edges Scale: *Default:* 0.25, *Range:* 0 or greater.
The brightness of the edges to be retained.

Edges Threshold: *Default:* 0.3, *Range:* 0 or greater.
This value is subtracted from the initial edge image. Increasing it can help remove minor edges and speckles that should not be retained.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GrainColorComp](#)
[GrainMonoComp](#)
[StaticColorComp](#)
[StaticMonoComp](#)

[GrainRemove](#)
[GrainRemoveMask](#)

[Blur](#)
[Sharpen](#)

[Sapphire](#)
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GrainRemoveMask

In the S_GrainMask Plugin.

Similar to GrainRemove but only applies the affect to areas specified by the Mask input. Smooths the source clip while retaining the edges. To adjust the parameters in this effect, first use the show:EDGES option to inspect which edges will be retained and adjust Edges Threshold, Edges Width, and Edges Scale until the important edges are fairly sharp and bright but not jaggy. Then return to show:RESULT and adjust the smooth parameters to remove the appropriate amount of grain.



Inputs:

Source: The clip to be processed.

Mask: Scales the amplitude of the applied effect. For black areas of Mask, the Source remains unchanged, for gray areas the effect is reduced. Only the red channel of this input is used. The mask can optionally be inverted using Invert Mask parameter.

Parameters:

Smooth: *Default:* 0.1, *Range:* 0 or greater.
The amount of smoothing to apply to the non-edge regions.

Smooth Luma: *Default:* 0.5, *Range:* 0 or greater.
Scales the smoothing amount for the luminance component.

Smooth Chroma: *Default:* 1, *Range:* 0 or greater.
Scales the smoothing amount for the chrominance component.

Show: *Popup menu, Default:* RESULT.
Selects between output options.

RESULT: outputs the final result.

EDGES: outputs an image showing which edges are to be retained.

Edges Width: *Default:* 0.02, *Range:* 0 or greater.
The width of the edges to be retained.

Edges Scale: *Default:* 0.25, *Range:* 0 or greater.
The brightness of the edges to be retained.

Edges Threshold: *Default:* 0.3, *Range:* 0 or greater.
This value is subtracted from the initial edge image. Increasing it can help remove minor edges and speckles that should not be retained.

Invert Mask: *Check-box, Default:* off, *Shared.*
If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GrainColorMask](#)
[GrainMonoMask](#)
[StaticColorMask](#)
[StaticMonoMask](#)

[GrainRemove](#)
[GrainRemoveComp](#)

[Blur](#)
[Sharpen](#)

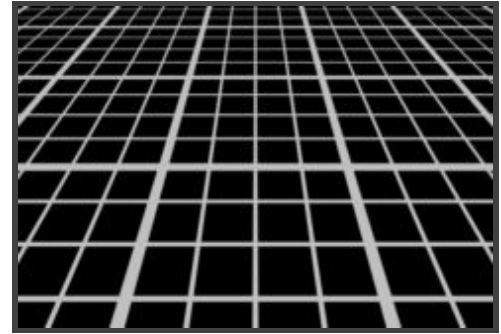
[Sapphire](#)
[Plug-ins](#)
[Introduction](#)

Grid

Generates a grid of lines and combines it with a background clip. Adjust the Latitude, Swing, and Roll parameters to rotate the grid on various axes, and adjust Shift and Z Dist to translate and zoom.

Inputs:

Back: The clip to draw the grid on.



Parameters:

Boxes: *X & Y, Integer, Default: [24 16], Range: 1 or greater.*
The total number of grid cells in the horizontal and vertical directions.

Grid Size: *Default: 1, Range: 0 or greater.*
Scales the size of the grid object.

Grid Size X: *Default: 1, Range: 0 or greater.*
Scales the relative horizontal size of the grid.

Grid Size Y: *Default: 0.75, Range: 0 or greater.*
Scales the relative vertical size of the grid.

Shift: *X & Y, Default: [0 0], Range: any.*
Translates the grid by this amount.

Line Width: *Default: 1, Range: 0 or greater.*
Scales the thickness of all the grid lines.

H Line Rel Width: *Default: 1, Range: 0 or greater.*
Scales the relative thickness of the horizontal lines.

V Line Rel Width: *Default: 1, Range: 0 or greater.*
Scales the relative thickness of the vertical lines.

Major Line Spacing: *Integer, Default: 4, Range: 0 or greater.*
Thicker lines are drawn at each interval of this many lines. If zero, the major lines are disabled and all lines will be equal width.

Major Line Width: *Default: 2.5, Range: 1 or greater.*
The relative thickness of the major lines.

Z Dist: *Default: 1, Range: 0.01 or greater.*
Scales the 'distance' of the grid. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move it closer and enlarge it.

Tele Lens Width: *Default: 1, Range: 0.2 or greater.*
The amount of lens telescoping. Increase to zoom in with less perspective, decrease for a wider viewing angle with more perspective.

Brightness: *Default: 1, Range: 0 or greater.*
Scales the brightness of the grid color.

Color: *Default rgb: [1 1 1].*

The color of the grid.

Opacity: *Default: 1, Range: 0 to 1.*

The opacity of the grid. Lower values allow more background to show through.

Latitude: *Default: 0, Range: any.*

Tilts the grid up or down by this many degrees.

Swing: *Default: 0, Range: any.*

Rotation of the grid in counter-clockwise degrees in its initial frame.

Roll: *Default: 0, Range: any.*

Tilts the grid from side to side, in counter-clockwise degrees. If Latitude is 0, the effects of Swing and Roll are the same.

Combine: *Popup menu, Default: Over.*

Determines how the grid is combined with the Background.

Over: composites the grid over the background.

Exclusion: combines the grid and the Background with a difference operator.

Scale Back: *Default: 1, Range: 0 or greater.*

Scales the brightness of the background before combining with the grid. If 0, the result will contain only the grid image over black.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

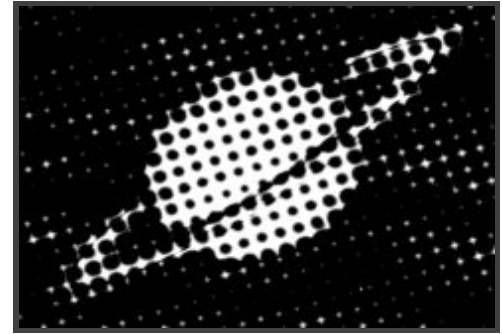
[WipeChecker](#)

[Sapphire Plug-ins Introduction](#)

HalfTone

In the S_HalfTone Plugin.

Generates a duotone version of the source clip using a black and white pattern of dots. Use the Smooth Source parameter to remove some details and make the dots more consistently round.



Inputs:

Source: The clip to be processed.

Parameters:

Dots Angle: *Default: 30, Range: any, Shared.*

The angle of the overall dots pattern, in counter-clockwise degrees.

Dots Frequency: *Default: 50, Range: 0 or greater, Shared.*

The frequency of the dots pattern. Increase for finer dots, decrease for larger dots.

Dots Rel Width: *Default: 1, Range: 0.01 or greater, Shared.*

The relative width of the dots. Increase for wider dots, decrease for taller ones.

Dots Sharpness: *Default: 4, Range: 0 or greater, Shared.*

Scales the sharpness of the edges of the dots.

Dots Darken: *Default: 0, Range: any, Shared.*

Increase to darken the resulting dot pattern.

Smooth Source: *Default: 0, Range: 0 or greater, Shared.*

If positive, the source is blurred by this amount before the halftone is applied. This can be used to remove some detail in the dots and make them more consistently round.

Dots: *Popup menu, Default: BLACK.*

Selects the dots' color model.

BLACK: dark dots are used on a bright background.

WHITE: bright dots are used on a dark background.

Color1: *Default rgb: [1 1 1].*

The 'bright' color to use for the dots pattern.

Color0: *Default rgb: [0 0 0].*

The 'dark' color to use for the dots pattern.

Dots Shift: *X & Y, Default: [0 0], Range: any, Shared.*

The horizontal and vertical translation of the dots pattern

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[HalfToneColor](#)

[HalfToneRings](#)

[ScanLines](#)

[WipeDots](#)

[Sapphire](#)

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Etching

VanGogh

Introduction

Sketch

Mosaic

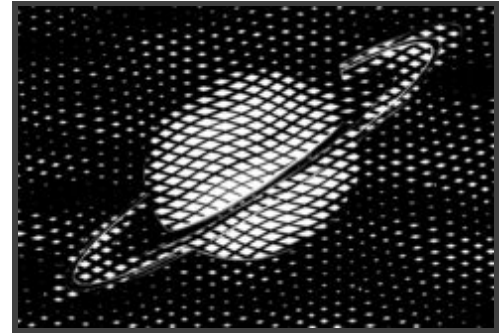
FlysEyeHex

JpegDamage

HalfTone: Etching

In the S_HalfTone Plugin.

Generates a version of the source clip using two sets of black and white lines of varying thickness to give an 'etching' or 'lithograph' look. Use the Smooth Source parameter to remove some details and make the lines more evenly shaped. Use the Lines Frequency parameter to adjust the density of all lines.



Inputs:

Source: The clip to be processed.

Parameters:

Lines Angle: *Default: 0, Range: any.*

Rotation of the etched lines pattern in counter-clockwise degrees.

Lines1 Angle: *Default: 30, Range: any.*

The relative angle of the first set of etched lines in counter-clockwise degrees.

Lines2 Angle: *Default: -20, Range: any.*

The relative angle of the second set of etched lines in counter-clockwise degrees.

Lines Sharpness: *Default: 4, Range: 0 or greater.*

The sharpness of the etched lines. Decrease for softer edges.

Lines Add Width: *Default: 0, Range: any.*

Increase for thicker lines.

Smooth Source: *Default: 0, Range: 0 or greater, Shared.*

If positive, the source is blurred by this amount before the etching is applied.

Lines Frequency: *Default: 50, Range: 0 or greater.*

The frequency of the etched lines. Increase for a finer line pattern, decrease for fewer lines.

Lines1 Frequency: *Default: 1, Range: 0 or greater.*

Scales the frequency of the first set of etched lines. Increase for a finer line pattern, decrease for fewer lines.

Lines2 Frequency: *Default: 1, Range: 0 or greater.*

Scales the frequency of the second set of etched lines.

Wave Amp: *Default: 0.1, Range: 0 or greater.*

The amplitude of the waviness of the sets of etched lines.

Wave Frequency: *Default: 2, Range: 0 or greater.*

The frequency of the waviness of the etched lines. Increase for more waves.

Color1: *Default rgb: [1 1 1].*

The 'brighter' color of the lines pattern.

Color0: *Default rgb: [0 0 0].*

The 'darker' color of the lines pattern.

Lines Shift: *X & Y, Default: [0 0], Range: any.*

Shifts the pattern of lines. This location will also be the center of rotation when the line angle parameters are adjusted. This parameter can be adjusted using the Lines Shift Widget.

Warp Amp: *Default: 0.05, Range: any.*

The amount the output is warped using the source brightness.

Warp Smooth: *Default: 0.4, Range: 0 or greater.*

The smoothness of the warping. This has no effect if Warp Amp is 0.

Params2:

Edges Scale: *Default: 0.5, Range: 0 or greater.*

Adjusts the amount of source edges to be included in the result. If positive, edges in the source image are found and added to the etching pattern.

Edges Threshold: *Default: 0.3, Range: 0 or greater.*

Determines which edges are included in the result. Increase to remove minor edges and speckles. This has no effect unless Edges Scale is positive.

Edges Width: *Default: 0, Range: 0 or greater.*

The width of the edges added to the result. Increase for wider edges. This has no effect unless Edges Scale is positive.

Edges Sharpness: *Default: 3, Range: 0 or greater.*

Increase for sharper edges, decrease for softer edges. This has no effect unless Edges Scale is positive.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[ScanLines](#)

[VanGogh](#)

[Sketch](#)

[Mosaic](#)

[FlysEyeHex](#)

[JpegDamage](#)

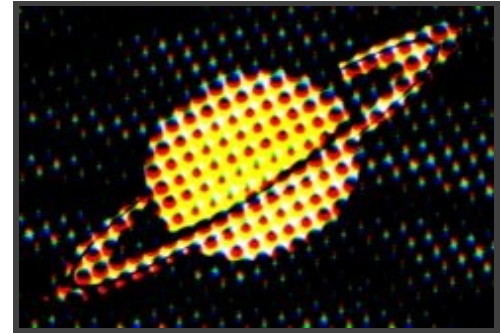
[Sapphire Plug-ins](#)

[Introduction](#)

HalfToneColor

In the S_HalfTone Plugin.

Generates a version of the source clip using a colored dot pattern. Use the Smooth Source parameter to remove some details and make the dots more consistently round. You can invert the dots pattern from CMY to RGB using the Dots menu.



Inputs:

Source: The clip to be processed.

Parameters:

Dots Angle: *Default: 30, Range: any, Shared.*

The angle of the overall dots pattern, in counter-clockwise degrees.

Dots Frequency: *Default: 50, Range: 0 or greater, Shared.*

The frequency of the dots pattern. Increase for finer dots, decrease for larger dots.

Dots Rel Width: *Default: 1, Range: 0.01 or greater, Shared.*

The relative width of the dots. Increase for wider dots, decrease for taller ones.

Dots Sharpness: *Default: 4, Range: 0 or greater, Shared.*

Scales the sharpness of the edges of the dots.

Dots Darken: *Default: 0, Range: any, Shared.*

Increase to darken the resulting dot pattern.

Smooth Source: *Default: 0, Range: 0 or greater, Shared.*

If positive, the source is blurred by this amount before the halftone is applied. This can be used to remove some detail in the dots and make them more consistently round.

Shift Red: *X & Y, Default: [0 0.5], Range: any.*

The translation of the red color channel.

Shift Green: *X & Y, Default: [0 0], Range: any.*

The translation of the green color channel.

Shift Blue: *X & Y, Default: [0 -0.5], Range: any.*

The translation of the blue color channel.

Dots: *Popup menu, Default: CMY.*

Selects the dots' color model.

CMY: cyan, magenta, and yellow dots are used on a white background.

RGB: red, green, and blue dots are used on a black background.

Saturation: *Default: 1, Range: 0 or greater.*

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Dots Shift: *X & Y, Default: [0 0], Range: any, Shared.*

The horizontal and vertical translation of the dots pattern

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[HalfTone](#)
[HalfToneRings](#)
[Etching](#)

[ScanLines](#)
[WipeDots](#)
[VanGogh](#)
[Sketch](#)
[Mosaic](#)
[FlysEyeHex](#)
[JpegDamage](#)

[Sapphire](#)
[Plug-ins](#)
[Introduction](#)

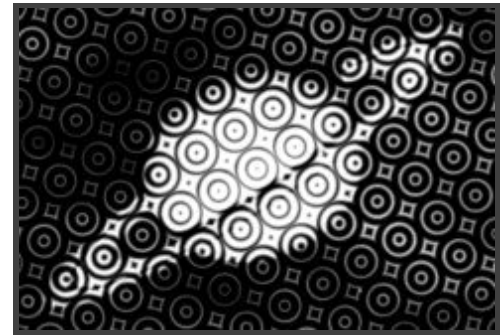
HalfToneRings

In the S_HalfTone Plugin.

Generates a duotone version of the source clip using a repeating pattern of concentric rings. Use the Smooth Source parameter to remove some details and make the dots more consistently shaped.

Inputs:

Source: The clip to be processed.



Parameters:

Rings Angle: *Default: 30, Range: any.*

The angle of the overall rings pattern, in counter-clockwise degrees.

Rings Frequency: *Default: 20, Range: 0 or greater.*

The frequency of the overall rings pattern. Increase for smaller rings, decrease for larger rings.

Rings Rel Width: *Default: 1, Range: 0.01 or greater.*

The relative width of the rings. Increase for wider rings, decrease for taller ones.

Rings Sharpness: *Default: 2, Range: 0 or greater.*

Scales the sharpness of the edges of the rings.

Rings Darken: *Default: 0, Range: any.*

Increase to darken the resulting rings pattern.

Smooth Source: *Default: 0, Range: 0 or greater, Shared.*

If positive, the source is blurred by this amount before the halftone is applied. This can be used to remove some detail in the dots and make them more consistently round.

Ring Number: *Default: 2, Range: 1 or greater.*

Determines the number of concentric rings in each tile of the repeating pattern.

Ring Phase: *Default: 0, Range: any.*

Shifts the rings in or out within each tile of the pattern.

Center: *Popup menu, Default: BLACK.*

Selects the rings' color model.

BLACK: dark rings are used on a bright background.

WHITE: bright rings are used on a dark background.

Color1: *Default rgb: [1 1 1].*

The 'bright' color to use for the dots pattern.

Color0: *Default rgb: [0 0 0].*

The 'dark' color to use for the dots pattern.

Rings Shift: *X & Y, Default: [0 0], Range: any.*

The horizontal and vertical translation of the overall rings pattern

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

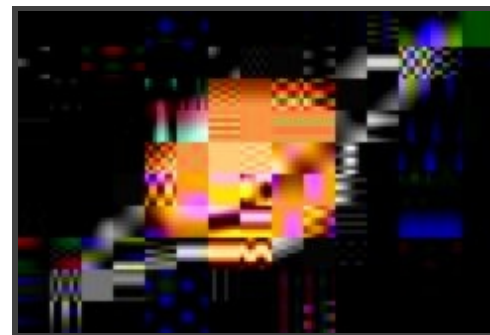
[HalfTone](#)
[HalfToneColor](#)
[Etching](#)

[ScanLines](#)
[WipeDots](#)
[VanGogh](#)
[Sketch](#)
[Mosaic](#)
[FlysEyeHex](#)
[JpegDamage](#)

[Sapphire](#)
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JpegDamage

Creates a version of the Source input that is subjected to Jpeg compression artifacts and errors. This can be used to give various looks of low quality digital transmissions. Three methods for manipulating your image are provided: the Jpeg quality can be adjusted, various internal frequencies can be scaled, and random decompression errors can be introduced. In all cases it can also be useful to lower the resolution factor to create larger, more obvious Jpeg blocks.



Inputs:

Source: The clip to be processed.

Parameters:

Quality: *Default:* 0.1, *Range:* 0.01 to 1.

Determines the amount of normal Jpeg artifacts. Use lower values for more compression.

X Freq Scale: *Default:* 1, *Range:* 0 or greater.

Scales the horizontal Jpeg frequencies. Values other than 1 cause abnormal results.

Y Freq Scale: *Default:* 1, *Range:* 0 or greater.

Scales the vertical Jpeg frequencies.

All Freq Scale: *Default:* 1, *Range:* 0 or greater.

Scales the frequencies for all Jpeg coefficients. Values other than 1 cause abnormal results, and create unusual looking blocky versions of your input.

Low Freq Scale: *Default:* 1, *Range:* 0 or greater.

Scales the softer low frequencies.

Mid Freq Scale: *Default:* 1, *Range:* 0 or greater.

Scales the middle range frequencies.

High Freq Scale: *Default:* 1, *Range:* 0 or greater.

Scales the sharper high frequencies. You may need a high Quality setting to see the high frequencies at all.

Affect Luma: *Default:* 1, *Range:* 0 or greater.

Determines how much the Freq Scale parameters above affect the luminance channel. A zero value causes no luminance change. Values greater than 1.0 exaggerate the change.

Affect Chroma: *Default:* 0.5, *Range:* 0 or greater.

Determines how much the Freq Scale parameters above affect the chroma channels. A zero value causes no chroma change. Values greater than 1.0 exaggerate the change.

Error Rate: *Default:* 0, *Range:* 0 or greater.

If positive, random decompression errors are introduced. The value determines the average number of errors in those blocks that receive errors. Larger values give a more even grainy look.

Err Block Density: *Default:* 0.75, *Range:* 0 to 1.

Determines the percentage of Jpeg blocks with errors. A value of .5 will give errors in half of the blocks and 1.0 will give errors in all blocks.

Error Amp: *Default:* 1, *Range:* 0 or greater.

The amplitude of the decompression errors. Larger values give more visually obvious errors. This has no effect

unless the Error Rate is also positive.

Error Coherence: *Default: 1, Range: 0 or greater.*

Determines how much the blocks with errors are grouped together. When zero, the errors are evenly distributed throughout the frame. When increased, the errors are clustered into larger groups. This has no effect unless the Error Rate is positive and the Err Block Density is less than 1.

Jitter Frames: *Integer, Default: 1, Range: 0 or greater.*

If this is 0, the random errors will remain the same for every frame processed. If it is 1, different errors are used for each frame. If it is 2, new errors are used for every other frame, and so on. This has no effect unless the Error Rate is also positive.

Rand Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different random error patterns, and the same value should give a repeatable result. This has no effect unless the Error Rate is also positive.

Scale Lights: *Default: 1, Range: 0 or greater.*

Scales the brightness of the result by this amount.

Offset Darks: *Default: 0, Range: any.*

Adds this gray value to the darker regions of the source. This can be negative to increase contrast.

Saturation: *Default: 1, Range: 0 or greater.*

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[ScanLines](#)

[HalfTone](#)

[Mosaic](#)

[FlysEyeRect](#)

[VanGogh](#)

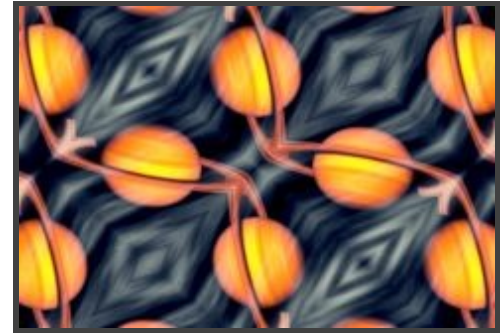
[Sapphire Plug-ins](#)

[Introduction](#)

KaleidoDiamonds

In the S_Kaleido Plugin.

Reflects the source clip into a pattern of diamonds. The 'Inside' parameters transform the Source image before it is reflected into the pattern. The Center and Z Dist transform the entire result including the reflection pattern, and the Rotate affects only the reflecting 'mirrors'.



Inputs:

Source: The clip to be processed.

Parameters:

Center: *X & Y, Default: [0 0], Range: any, Shared.*

Center location of the kaleidoscoped image in screen coordinates relative to the center of the frame. The entire result will be shifted by this amount. This parameter can be adjusted using the Center Widget.

Z Dist: *Default: 2, Range: any, Shared.*

Scales the 'distance' of the entire result in or out from the Center. Increase to zoom out, decrease to zoom in.

Rotate: *Default: 0, Range: any, Shared.*

Rotates the kaleidoscope's reflection pattern about the Center by this many counter-clockwise degrees.

Inside Shift: *X & Y, Default: [0 0], Range: any, Shared.*

Translates the source image inside the kaleidoscope before it is reflected.

Inside Z Dist: *Default: 1, Range: any, Shared.*

Zooms the source image in or out inside the kaleidoscope before it is reflected.

Inside Rotate: *Default: 0, Range: any, Shared.*

Rotates the source image inside the kaleidoscope before it is reflected.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image. This is used only if the image inside the kaleidoscope is not contained within the shape of mirrors.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Filter: *Check-box, Default: on, Shared.*

If enabled, the Source image is resampled using pixel averaging. This removes aliasing and gives a higher quality result, although it may not be necessary if your input image is smooth with no sharp edges or high frequencies.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[KaleidoTriangles](#)

[KaleidoSquares](#)

[KaleidoOct](#)

[KaleidoPolar](#)

[FlysEyeHex](#)

[FlysEyeCircles](#)

[FlysEyeRect](#)

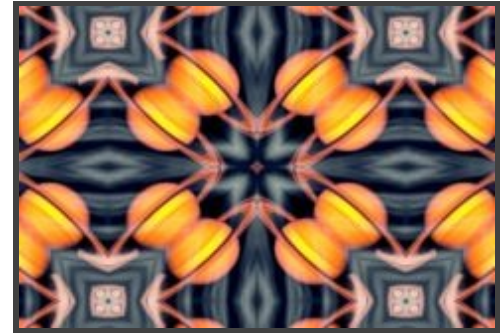
[Sapphire Plug-ins](#)

[Introduction](#)

KaleidoOct

In the S_Kaleido Plugin.

Reflects the source clip into an octagonal pattern of right triangles. The 'Inside' parameters transform the Source image before it is reflected into the pattern. The Center and Z Dist transform the entire result including the reflection pattern, and the Rotate affects only the reflecting 'mirrors'.



Inputs:

Source: The clip to be processed.

Parameters:

Center: *X & Y, Default: [0 0], Range: any, Shared.*

Center location of the kaleidoscoped image in screen coordinates relative to the center of the frame. The entire result will be shifted by this amount. This parameter can be adjusted using the Center Widget.

Z Dist: *Default: 2, Range: any, Shared.*

Scales the 'distance' of the entire result in or out from the Center. Increase to zoom out, decrease to zoom in.

Rotate: *Default: 0, Range: any, Shared.*

Rotates the kaleidoscope's reflection pattern about the Center by this many counter-clockwise degrees.

Inside Shift: *X & Y, Default: [0 0], Range: any, Shared.*

Translates the source image inside the kaleidoscope before it is reflected.

Inside Z Dist: *Default: 1, Range: any, Shared.*

Zooms the source image in or out inside the kaleidoscope before it is reflected.

Inside Rotate: *Default: 0, Range: any, Shared.*

Rotates the source image inside the kaleidoscope before it is reflected.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image. This is used only if the image inside the kaleidoscope is not contained within the shape of mirrors.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Filter: *Check-box, Default: on, Shared.*

If enabled, the Source image is resampled using pixel averaging. This removes aliasing and gives a higher quality result, although it may not be necessary if your input image is smooth with no sharp edges or high frequencies.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[KaleidoTriangles](#)

[KaleidoSquares](#)

[KaleidoDiamonds](#)

[KaleidoPolar](#)

[FlysEyeHex](#)

[FlysEyeCircles](#)

[FlysEyeRect](#)

[Sapphire Plug-ins](#)

[Introduction](#)

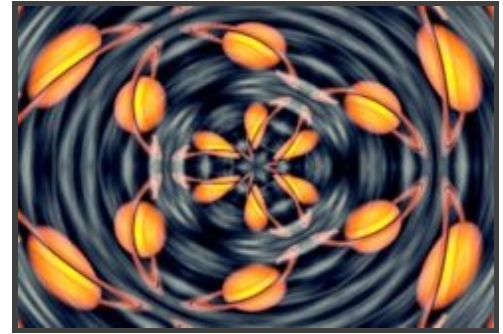
KaleidoPolar

In the S_Kaleido Plugin.

Warpes the source clip around in a disk shape and reflects radially as if viewed through a reflecting cylinder.

Inputs:

Source: The input clip to be warped.



Parameters:

Center: *X & Y, Default: [0 0], Range: any, Shared.*

Center location of the kaleidoscoped image in screen coordinates relative to the center of the frame. The entire result will be shifted by this amount. This parameter can be adjusted using the Center Widget.

Z Dist: *Default: 2, Range: any, Shared.*

Scales the 'distance' of the entire result in or out from the Center. Increase to zoom out, decrease to zoom in.

Rotate: *Default: 0, Range: any, Shared.*

Rotates the kaleidoscope's reflection pattern about the Center by this many counter-clockwise degrees.

Angle Repeats: *Default: 6, Range: 0.01 or greater.*

The number of copies of the source image to wrap around. This should be an even integer to avoid a seam where the first copy connects to the last.

Stretch: *X & Y, Default: [1 1], Range: any.*

Scales the horizontal or vertical size of the result.

Inside Shift Y: *Default: 0, Range: any.*

Shifts the source image up by this amount before it is reflected. This causes the resulting pattern of images to radiate outward from the center.

Filter: *Check-box, Default: on, Shared.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[KaleidoTriangles](#)

[KaleidoSquares](#)

[KaleidoDiamonds](#)

[KaleidoOct](#)

[WarpPolar](#)

[Sapphire Plug-ins](#)

[Introduction](#)

KaleidoSquares

In the S_Kaleido Plugin.

Reflects the source clip into a pattern of squares. The 'Inside' parameters transform the Source image before it is reflected into the pattern. The Center and Z Dist transform the entire result including the reflection pattern, and the Rotate affects only the reflecting 'mirrors'.

Inputs:

Source: The clip to be processed.

Parameters:

Center: *X & Y, Default: [0 0], Range: any, Shared.*

Center location of the kaleidoscoped image in screen coordinates relative to the center of the frame. The entire result will be shifted by this amount. This parameter can be adjusted using the Center Widget.

Z Dist: *Default: 2, Range: any, Shared.*

Scales the 'distance' of the entire result in or out from the Center. Increase to zoom out, decrease to zoom in.

Rotate: *Default: 0, Range: any, Shared.*

Rotates the kaleidoscope's reflection pattern about the Center by this many counter-clockwise degrees.

Inside Shift: *X & Y, Default: [0 0], Range: any, Shared.*

Translates the source image inside the kaleidoscope before it is reflected.

Inside Z Dist: *Default: 1, Range: any, Shared.*

Zooms the source image in or out inside the kaleidoscope before it is reflected.

Inside Rotate: *Default: 0, Range: any, Shared.*

Rotates the source image inside the kaleidoscope before it is reflected.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image. This is used only if the image inside the kaleidoscope is not contained within the shape of mirrors.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Filter: *Check-box, Default: on, Shared.*

If enabled, the Source image is resampled using pixel averaging. This removes aliasing and gives a higher quality result, although it may not be necessary if your input image is smooth with no sharp edges or high frequencies.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[KaleidoTriangles](#)

[KaleidoDiamonds](#)

[KaleidoOct](#)

[KaleidoPolar](#)

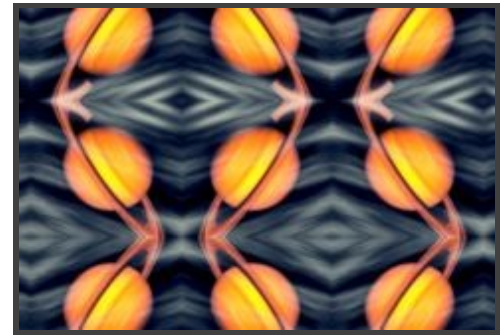
[FlysEyeHex](#)

[FlysEyeCircles](#)

[FlysEyeRect](#)

[Sapphire Plug-ins](#)

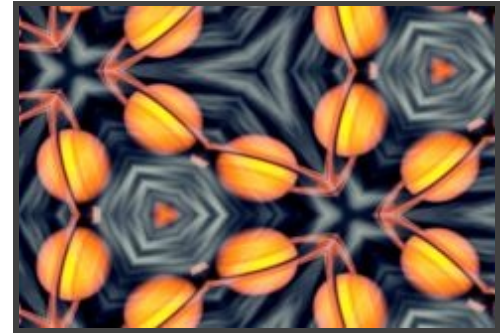
[Introduction](#)



KaleidoTriangles

In the S_Kaleido Plugin.

Reflects the source clip into a pattern of equilateral triangles. The 'Inside' parameters transform the Source image before it is reflected into the pattern. The Center and Z Dist transform the entire result including the reflection pattern, and the Rotate affects only the reflecting 'mirrors'.



Inputs:

Source: The clip to be processed.

Parameters:

Center: *X & Y, Default: [0 0], Range: any, Shared.*

Center location of the kaleidoscoped image in screen coordinates relative to the center of the frame. The entire result will be shifted by this amount. This parameter can be adjusted using the Center Widget.

Z Dist: *Default: 2, Range: any, Shared.*

Scales the 'distance' of the entire result in or out from the Center. Increase to zoom out, decrease to zoom in.

Rotate: *Default: 0, Range: any, Shared.*

Rotates the kaleidoscope's reflection pattern about the Center by this many counter-clockwise degrees.

Inside Shift: *X & Y, Default: [0 0], Range: any, Shared.*

Translates the source image inside the kaleidoscope before it is reflected.

Inside Z Dist: *Default: 1, Range: any, Shared.*

Zooms the source image in or out inside the kaleidoscope before it is reflected.

Inside Rotate: *Default: 0, Range: any, Shared.*

Rotates the source image inside the kaleidoscope before it is reflected.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image. This is used only if the image inside the kaleidoscope is not contained within the shape of mirrors.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Filter: *Check-box, Default: on, Shared.*

If enabled, the Source image is resampled using pixel averaging. This removes aliasing and gives a higher quality result, although it may not be necessary if your input image is smooth with no sharp edges or high frequencies.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[KaleidoSquares](#)

[KaleidoDiamonds](#)

[KaleidoOct](#)

[KaleidoPolar](#)

[FlysEyeHex](#)

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Layer

Layers the Front input over the Back input. Many blending options are provided which are similar to those used by Adobe Photoshop™.

Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.



Parameters:

Effect: *Popup menu, Default: Normal.*

Determines which blending method is used to combine the foreground and background pixel colors.

Normal: a normal composite. This will just give the foreground as the result unless the Opacity is below 1.0 or an alpha channel is given.

Dissolve: randomly replaces background pixels with foreground. The opacity determines the probability, so the foreground is more likely to replace the background for higher values of Opacity.

Multiply: this can be used as an 'intersection' operation on matte images. White is the identity for Multiply, where one image contains white the other is not affected, so the result only contains white where both inputs are white.

Screen: this can be useful for combining the bright areas of two clips. It can also be used as a 'union' operation on matte images. Black is the identity for Screen, where one image contains black the other is not affected, so the result is white where either of the input images is white.

Overlay: combines foreground and background using an overlay function.

Soft Light: darkens or lightens the background depending on the foreground.

Hard Light: similar to overlay but with foreground and background swapped.

Color Dodge: brightens the background depending on the foreground.

Color Burn: darkens the background depending on the foreground.

Darken: the minimum of foreground and background. This can also be used as an 'intersection' operation with slightly different results than Multiply.

Lighten: the maximum of foreground and background. This can also be used as a 'union' operation with slightly different results than Screen.

Add: adds the foreground to the background.

Subtract: subtracts the foreground from the background.

Difference: similar to Subtract but the absolute value of the result is used, which tends to give more resulting colors in bounds. This can be used to select the regions of two matte images where one or the other is white, but not both.

Exclusion: similar to Difference but with smoother results.

Hue: combines the hue of the foreground with the saturation and luminance of the background.

Saturation: combines the saturation of the foreground with the hue and luminance of the background.

Chroma: combines the hue and saturation of the foreground with the luminance of the background.

Luminance: combines the luminance of the foreground with the hue and saturation of the background.

Linear Dodge: adds foreground and background and clamps the result at white.

Linear Burn: adds foreground and background but offsets to make the result darker. Similar to multiply in that combining with white gives no change and combining with black gives black.

Linear Light: performs a linear burn or linear dodge depending on if the foreground is more or less than 50 percent gray.

Vivid Light: performs a color burn or color dodge depending on if the foreground is more or less than 50 percent gray.

Pin Light: performs a lighten or darken depending on if the foreground is more or less than 50 percent gray.

Front Lights: *Default: 1, Range: any, Shared.*
Scales the Foreground before performing the effect.

Front Darks: *Default: 0, Range: any, Shared.*
Offsets the darker regions of the Foreground before performing the effect. This can be negative to increase contrast.

Front Sat: *Default: 1, Range: 0 or greater, Shared.*
Scales the color saturation of the Foreground before performing the effect. 0.0 makes it monochromatic, 1.0 has no effect.

Hue Shift Front: *Default: 0, Range: any, Shared.*
Shifts the hue of the colors in the Front clip, in revolutions from red to green to blue to red.

Blur Front: *Default: 0, Range: 0 or greater, Shared.*
Amount to blur the foreground.

Opacity: *Default: 1, Range: 0 to 1, Shared.*
Scales the opacity of the effect. When this is decreased the result approaches the background. At zero, the result will equal the background.

Back Lights: *Default: 1, Range: any, Shared.*
Scales the Background before performing the effect.

Back Darks: *Default: 0, Range: any, Shared.*
Offsets the darker regions of the Background before performing the effect. This can be negative to increase contrast.

Back Sat: *Default: 1, Range: 0 or greater, Shared.*
Scales the color saturation of the Background before performing the effect. 0.0 makes it monochromatic, 1.0 has no effect.

Hue Shift Back: *Default: 0, Range: any, Shared.*
Shifts the hue of the colors in the Back clip, in revolutions from red to green to blue to red.

Blur Back: *Default: 0, Range: 0 or greater, Shared.*
Amount to blur the background.

Swap Inputs: *Check-box, Default: off, Shared.*
If enabled, effectively swaps the Background and Foreground inputs, and can be helpful for non-commutative operations like subtract. Note that this also causes parameters labeled 'Front' to affect the 'Back' input instead, and vice versa.

Result Lights: *Default: 1, Range: any, Shared.*
Scales the result after performing the effect.

Result Darks: *Default: 0, Range: any, Shared.*
Offsets the darker regions of the result after performing the effect. This can be negative to increase contrast.

Result Sat: *Default: 1, Range: 0 or greater, Shared.*
Scales the color saturation of the result after performing the effect. 0.0 makes it monochromatic, 1.0 has no effect.

Hue Shift Result: *Default: 0, Range: any, Shared.*
Shifts the hue of the colors in the result, in revolutions from red to green to blue to red.

Blur Subpixel: *Check-box, Default: on, Shared.*
Enables blurring by subpixel amounts. Use this for smoother animation of the Blur Front and Blur Back parameters.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[LayerComp](#)

[MathOps](#)

[Sapphire Plug-ins](#)

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LayerComp

Composites the Front input over the Back input using the Matte. A variety of blending options are provided which are similar to those used by Adobe Photoshop™.

Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Foreground clip. These values are scaled by the Opacity parameter before being used.

Parameters:

Effect: *Popup menu, Default: Normal.*

Determines which blending method is used to combine the foreground and background pixel colors.

Normal: a normal composite. This will give the foreground as the result where the Matte input is white, unless the Opacity is below 1.0.

Dissolve: randomly replaces background pixels with foreground. The opacity determines the probability, so the foreground is more likely to replace the background for higher values of Opacity.

Multiply: this can be used as an 'intersection' operation on matte images. White is the identity for Multiply, where one image contains white the other is not affected, so the result only contains white where both inputs are white.

Screen: this can be useful for combining the bright areas of two clips. It can also be used as a 'union' operation on matte images. Black is the identity for Screen, where one image contains black the other is not affected, so the result is white where either of the input images is white.

Overlay: combines foreground and background using an overlay function.

Soft Light: darkens or lightens the background depending on the foreground.

Hard Light: similar to overlay but with foreground and background swapped.

Color Dodge: brightens the background depending on the foreground.

Color Burn: darkens the background depending on the foreground.

Darken: the minimum of foreground and background. This can also be used as an 'intersection' operation with slightly different results than Multiply.

Lighten: the maximum of foreground and background. This can also be used as a 'union' operation with slightly different results than Screen.

Add: adds the foreground to the background.

Subtract: subtracts the foreground from the background.

Difference: similar to Subtract but the absolute value of the result is used, which tends to give more resulting colors in bounds. This can be used to select the regions of two matte images where one or the other is white, but not both.

Exclusion: similar to Difference but with smoother results.

Hue: combines the hue of the foreground with the saturation and luminance of the background.

Saturation: combines the saturation of the foreground with the hue and luminance of the background.

Chroma: combines the hue and saturation of the foreground with the luminance of the background.

Luminance: combines the luminance of the foreground with the hue and saturation of the background.

Linear Dodge: adds foreground and background and clamps the result at white.

Linear Burn: adds foreground and background but offsets to make the result darker. Similar to multiply in that combining with white gives no change and combining with black gives black.

Linear Light: performs a linear burn or linear dodge depending on if the foreground is more or less than 50 percent gray.

Vivid Light: performs a color burn or color dodge depending on if the foreground is more or less than 50 percent gray.



Pin Light: performs a lighten or darken depending on if the foreground is more or less than 50 percent gray.

Front Lights: *Default: 1, Range: any, Shared.*
Scales the Foreground before performing the effect.

Front Darks: *Default: 0, Range: any, Shared.*
Offsets the darker regions of the Foreground before performing the effect. This can be negative to increase contrast.

Front Sat: *Default: 1, Range: 0 or greater, Shared.*
Scales the color saturation of the Foreground before performing the effect. 0.0 makes it monochromatic, 1.0 has no effect.

Hue Shift Front: *Default: 0, Range: any, Shared.*
Shifts the hue of the colors in the Front clip, in revolutions from red to green to blue to red.

Blur Front: *Default: 0, Range: 0 or greater, Shared.*
Amount to blur the foreground.

Opacity: *Default: 1, Range: 0 to 1, Shared.*
Scales the opacity of the effect. When this is decreased the result approaches the background. At zero, the result will equal the background.

Back Lights: *Default: 1, Range: any, Shared.*
Scales the Background before performing the effect.

Back Darks: *Default: 0, Range: any, Shared.*
Offsets the darker regions of the Background before performing the effect. This can be negative to increase contrast.

Back Sat: *Default: 1, Range: 0 or greater, Shared.*
Scales the color saturation of the Background before performing the effect. 0.0 makes it monochromatic, 1.0 has no effect.

Hue Shift Back: *Default: 0, Range: any, Shared.*
Shifts the hue of the colors in the Back clip, in revolutions from red to green to blue to red.

Blur Back: *Default: 0, Range: 0 or greater, Shared.*
Amount to blur the background.

Result Lights: *Default: 1, Range: any, Shared.*
Scales the result after performing the effect.

Result Darks: *Default: 0, Range: any, Shared.*
Offsets the darker regions of the result after performing the effect. This can be negative to increase contrast.

Result Sat: *Default: 1, Range: 0 or greater, Shared.*
Scales the color saturation of the result after performing the effect. 0.0 makes it monochromatic, 1.0 has no effect.

Hue Shift Result: *Default: 0, Range: any, Shared.*
Shifts the hue of the colors in the result, in revolutions from red to green to blue to red.

Blur Subpixel: *Check-box, Default: on, Shared.*
Enables blurring by subpixel amounts. Use this for smoother animation of the Blur Front and Blur Back parameters.

Comp Premult: *Check-box, Default: off, Shared.*
Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the original Matte pixel values. This will give an 'additive' composite when in Normal mode. This has no effect if Use Alpha is No.

Invert Matte: *Check-box, Default: off, Shared.*

If enabled, the black and white of the matte are inverted before use.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Layer](#)

[MathOps](#)

[Sapphire Plug-ins](#)

[Introduction](#)

LensFlare

In the S_LensFlare Plugin.

Renders a lens flare image over the background clip, aligning various flare elements between the hotspot and pivot locations. Use the Lens menu to select different types of lensflares.



Inputs:

Back: The clip to use as background.

Parameters:

Hotspot: *X & Y, Default: [200 300], Range: any.*

The location of the brightest spot in the flare in screen coordinates. It can be set by enabling and moving the hotspot widget. The hotspot parameter is ignored if the AutoTrack effect option is selected.

Pivot: *X & Y, Default: [0 0], Range: any, Shared.*

The elements of the flare will be in a line between the Hotspot and the Pivot locations. The Pivot is in screen coordinates relative to the center of the frame.

Scale Widths: *Default: 1, Range: 0 or greater, Shared.*

Scales the sizes of all the flare elements. This parameter can be adjusted using the Scale Widths Widget.

Rel Heights: *Default: 1, Range: 0 or greater, Shared.*

Scales the vertical dimension of all the flare elements, making them elliptical instead of circular. This can also be adjusted using the Scale Widths Widget.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all the flare elements.

Hotspot Bright: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the hotspot elements only.

Rays Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the ray elements only.

Gamma: *Default: 1, Range: 0 or greater, Shared.*

Increasing gamma brightens the flare, and especially boosts the darker elements.

Saturation: *Default: 1, Range: any, Shared.*

Scales the color saturation of the flare elements. Increase for more intense colors. Set to 0 for a monochrome lens flare.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the flare, in revolutions from red to green to blue to red.

Lens: *Popup menu, Default: 50 300mm Zoom.*

The type of lens flare to apply. Custom lens flare types can also be made, or existing types modified, by editing the "s_lensflares.text" file.

50 300mm Zoom: hotspot with ray cluster, red glow and red ring, and many other elements.

35mm Prime: hotspot with ray cluster, red glow and red ring, and a few other elements.

105mm Prime: hotspot with ray cluster, blue ring, blue glow, and other elements.

Anamorphic 1: horizontal blue rays, diagonal blue ray, red glow and red ring.

Anamorphic 2: horizontal blue rays and red glow.
Anamorphic Blue: horizontal and diagonal blue rays with hexagonal blue/white glow.
Rays Only: ray cluster with no other flare elements.
Rays Only 2: ray cluster like 105mm_prime, but with no other flare elements.
Rays Only 3: ray cluster like anamorphic1, but with no other flare elements.
Simple Hex: four simple red and blue hexagon elements.
Blue Star Burst: many long blue rays with a white-hot center and various reflection elements.
Orange Rays 6: orange star with six rays and other elements.
California Sun: yellow-orange hotspot with long soft double rays and reflection ring.
Space Telescope: four pointed star with halo.
Red Laser: intense red rays.
DVcam Vertical: vertical CCD burnout effect.
White Sun: white cluster of many rays with a rainbow reflection.
Hex Reflections: bright center and rays with many blue-green reflection elements.
Diffraction Star: six pointed white star with rainbow colored rays for a diffraction look.
Diffraction Rays: white star with many rainbow diffraction rays.
Diffraction Rings: multiple rings of textured rainbows around a hotspot.
Chroma Ring: textured rainbow ring that scales with distance between hotspot and pivot.
Chroma Arc: textured rainbow arc that scales with distance between hotspot and pivot.
Chroma Arc 2: double rainbow arcs that scale with distance between hotspot and pivot.
Glint Rays: similar to the default settings of Glint.

Color: *Default rgb: [1 1 1], Shared.*
 Scales the color of all flare elements.

Hotspot Color: *Default rgb: [1 1 1], Shared.*
 Scales the color of the hotspot elements only.

Other Brightness: *Default: 1, Range: 0 or greater, Shared.*
 Scales the brightness of all flare elements that are NOT at the hotspot location.

Blur Flare: *Default: 0, Range: 0 or greater, Shared.*
 If positive, the flare image is blurred by this amount before being combined with the background.

Scale Back: *Default: 1, Range: 0 or greater, Shared.*
 Scales the brightness of the background before combining with the flare. If 0, the result will contain only the flare image over black.

Combine: *Popup menu, Default: Screen.*
 Determines how the flare image is combined with the Background.

Screen: performs a blend function which can help prevent overly bright results.
Add: causes the flare image to be added to the background.

Tint Back Whites: *Check-box, Default: off, Shared.*
 If this is enabled, the chroma of the flare is added only after the result is clamped to the maximum brightness. This allows the color of the flare image to still be visible even over bright white backgrounds. For the majority of backgrounds there will be no observable difference.

Params2:

These parameters allow further adjustment of the hotspot, and enabling of the screen interface widgets.

Rays Rotate: *Default: 0, Range: any, Shared.*
 Rotates the ray elements of the lens flare, if any, in counter-clockwise degrees.

Rays Num Scale: *Default: 1, Range: 0 or greater, Shared.*
 Increases or decreases the number of rays.

Rays Length: *Default: 1, Range: 0 or greater, Shared.*

Adjusts the length of the rays without changing their thickness, or changing the size of the other flare elements.

Rays Thickness: *Default: 1, Range: 0 or greater, Shared.*

Adjusts the thickness of the individual rays within the flare.

Other Width: *Default: 1, Range: 0 or greater, Shared.*

Scales the width of all flare elements that are NOT at the hotspot location.

Other Color: *Default rgb: [1 1 1].*

Scales the color of all flare elements that are NOT at the hotspot location.

Hotspot Shift: *X & Y, Default: [0 0], Range: any, Shared.*

Adds this amount to the hotspot location. This can be helpful if you want the hotspot to follow tracker data.

Negate Shift: *Check-box, Default: off, Shared.*

If enabled, the hotspot shift parameter is negated before affecting the hotspot.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[LensFlareAutoTrack](#)
[DissolveLensFlare](#)

[LensFlareMask](#)

[Glint](#)
[Glare](#)

[Sapphire](#)
[Plug-ins](#)
[Introduction](#)

LensFlareMask

In the S_LensFlareMask Plugin.

Renders a lens flare image over the background clip, aligning various flare elements between the hotspot and pivot locations. Obscures or colorizes the flare based on a mask clip.



Inputs:

Back: The clip to use as background.

Mask: The color of the flare is scaled by the color of this clip at the flare's hotspot location. A black and white mask can be used to create a flare that is obscured by foreground objects. A color mask will colorize the flare, which can give the appearance of the light source passing behind a partially-transparent object.

Parameters:

Hotspot: *X & Y, Default: [200 300], Range: any.*

The location of the brightest spot in the flare in screen coordinates. It can be set by enabling and moving the hotspot widget. The hotspot parameter is ignored if the AutoTrack effect option is selected.

Pivot: *X & Y, Default: [0 0], Range: any, Shared.*

The elements of the flare will be in a line between the Hotspot and the Pivot locations. The Pivot is in screen coordinates relative to the center of the frame.

Scale Widths: *Default: 1, Range: 0 or greater, Shared.*

Scales the sizes of all the flare elements. This parameter can be adjusted using the Scale Widths Widget.

Rel Heights: *Default: 1, Range: 0 or greater, Shared.*

Scales the vertical dimension of all the flare elements, making them elliptical instead of circular. This can also be adjusted using the Scale Widths Widget.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all the flare elements.

Hotspot Bright: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the hotspot elements only.

Rays Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the ray elements only.

Gamma: *Default: 1, Range: 0 or greater, Shared.*

Increasing gamma brightens the flare, and especially boosts the darker elements.

Saturation: *Default: 1, Range: any, Shared.*

Scales the color saturation of the flare elements. Increase for more intense colors. Set to 0 for a monochrome lens flare.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the flare, in revolutions from red to green to blue to red.

Lens: *Popup menu, Default: 50 300mm Zoom.*

The type of lens flare to apply. Custom lens flare types can also be made, or existing types modified, by editing the

"s_lensflares.text" file.

50 300mm Zoom: hotspot with ray cluster, red glow and red ring, and many other elements.
35mm Prime: hotspot with ray cluster, red glow and red ring, and a few other elements.
105mm Prime: hotspot with ray cluster, blue ring, blue glow, and other elements.
Anamorphic 1: horizontal blue rays, diagonal blue ray, red glow and red ring.
Anamorphic 2: horizontal blue rays and red glow.
Anamorphic Blue: horizontal and diagonal blue rays with hexagonal blue/white glow.
Rays Only: ray cluster with no other flare elements.
Rays Only 2: ray cluster like 105mm_prime, but with no other flare elements.
Rays Only 3: ray cluster like anamorphic1, but with no other flare elements.
Simple Hex: four simple red and blue hexagon elements.
Blue Star Burst: many long blue rays with a white-hot center and various reflection elements.
Orange Rays 6: orange star with six rays and other elements.
California Sun: yellow-orange hotspot with long soft double rays and reflection ring.
Space Telescope: four pointed star with halo.
Red Laser: intense red rays.
DVcam Vertical: vertical CCD burnout effect.
White Sun: white cluster of many rays with a rainbow reflection.
Hex Reflections: bright center and rays with many blue-green reflection elements.
Diffraction Star: six pointed white star with rainbow colored rays for a diffraction look.
Diffraction Rays: white star with many rainbow diffraction rays.
Diffraction Rings: multiple rings of textured rainbows around a hotspot.
Chroma Ring: textured rainbow ring that scales with distance between hotspot and pivot.
Chroma Arc: textured rainbow arc that scales with distance between hotspot and pivot.
Chroma Arc 2: double rainbow arcs that scale with distance between hotspot and pivot.
Glint Rays: similar to the default settings of Glint.

Color: *Default rgb: [1 1 1], Shared.*

Scales the color of all flare elements.

Hotspot Color: *Default rgb: [1 1 1], Shared.*

Scales the color of the hotspot elements only.

Other Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all flare elements that are NOT at the hotspot location.

Blur Flare: *Default: 0, Range: 0 or greater, Shared.*

If positive, the flare image is blurred by this amount before being combined with the background.

Scale Back: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the background before combining with the flare. If 0, the result will contain only the flare image over black.

Combine: *Popup menu, Default: Screen.*

Determines how the flare image is combined with the Background.

Screen: performs a blend function which can help prevent overly bright results.

Add: causes the flare image to be added to the background.

Tint Back Whites: *Check-box, Default: off, Shared.*

If this is enabled, the chroma of the flare is added only after the result is clamped to the maximum brightness. This allows the color of the flare image to still be visible even over bright white backgrounds. For the majority of backgrounds there will be no observable difference.

Params2:

These parameters allow further adjustment of the hotspot, and enabling of the screen interface widgets.

Rays Rotate: *Default: 0, Range: any, Shared.*

Rotates the ray elements of the lens flare, if any, in counter-clockwise degrees.

Rays Num Scale: *Default: 1, Range: 0 or greater, Shared.*

Increases or decreases the number of rays.

Rays Length: *Default: 1, Range: 0 or greater, Shared.*

Adjusts the length of the rays without changing their thickness, or changing the size of the other flare elements.

Rays Thickness: *Default: 1, Range: 0 or greater, Shared.*

Adjusts the thickness of the individual rays within the flare.

Other Width: *Default: 1, Range: 0 or greater, Shared.*

Scales the width of all flare elements that are NOT at the hotspot location.

Other Color: *Default rgb: [1 1 1].*

Scales the color of all flare elements that are NOT at the hotspot location.

Hotspot Shift: *X & Y, Default: [0 0], Range: any, Shared.*

Adds this amount to the hotspot location. This can be helpful if you want the hotspot to follow tracker data.

Negate Shift: *Check-box, Default: off, Shared.*

If enabled, the hotspot shift parameter is negated before affecting the hotspot.

Add Brightness: *Default: 0, Range: 0 to 1.*

Adds to the brightness of the flare regardless of the mask brightness at the hotspot. Use this parameter to give the flare a minimum brightness even where the mask is black, or to increase the brightness overall.

Blur Mask: *Default: 0.02, Range: 0 or greater.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Mask Type: *Popup menu, Default: Color.*

This setting is ignored unless the Mask input is provided.

Luma: uses the luminance of the Mask input to scale the brightness of the flares.

Color: uses the RGB channels of the Mask input to scale the colors of the flares.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[LensFlare](#)

[Glint](#)

[Sapphire](#)

[Glare](#)

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LensFlareAutoTrack

In the S_LensFlare Plugin.

Renders one or more lens flare images over the background clip, aligning various flare elements between the hotspot and pivot locations. In this AutoTrack version of LensFlare, the hotspots are automatically positioned on the brightest areas of the background clip. Increasing Blur For Auto will cause the input to be smoothed before the brightest locations are found and can help remove the effect of secondary bright spots.



Inputs:

Back: The clip to use as background.

Parameters:

Pivot: *X & Y, Default: [0 0], Range: any, Shared.*

The elements of the flare will be in a line between the Hotspot and the Pivot locations. The Pivot is in screen coordinates relative to the center of the frame.

Scale Widths: *Default: 1, Range: 0 or greater, Shared.*

Scales the sizes of all the flare elements. This parameter can be adjusted using the Scale Widths Widget.

Rel Heights: *Default: 1, Range: 0 or greater, Shared.*

Scales the vertical dimension of all the flare elements, making them elliptical instead of circular. This can also be adjusted using the Scale Widths Widget.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all the flare elements.

Hotspot Bright: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the hotspot elements only.

Rays Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the ray elements only.

Gamma: *Default: 1, Range: 0 or greater, Shared.*

Increasing gamma brightens the flare, and especially boosts the darker elements.

Saturation: *Default: 1, Range: any, Shared.*

Scales the color saturation of the flare elements. Increase for more intense colors. Set to 0 for a monochrome lens flare.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the flare, in revolutions from red to green to blue to red.

Lens: *Popup menu, Default: 50 300mm Zoom.*

The type of lens flare to apply. Custom lens flare types can also be made, or existing types modified, by editing the "s_lensflares.text" file.

50 300mm Zoom: hotspot with ray cluster, red glow and red ring, and many other elements.

35mm Prime: hotspot with ray cluster, red glow and red ring, and a few other elements.

105mm Prime: hotspot with ray cluster, blue ring, blue glow, and other elements.

Anamorphic 1: horizontal blue rays, diagonal blue ray, red glow and red ring.

Anamorphic 2: horizontal blue rays and red glow.

Anamorphic Blue: horizontal and diagonal blue rays with hexagonal blue/white glow.
Rays Only: ray cluster with no other flare elements.
Rays Only 2: ray cluster like 105mm_prime, but with no other flare elements.
Rays Only 3: ray cluster like anamorphic1, but with no other flare elements.
Simple Hex: four simple red and blue hexagon elements.
Blue Star Burst: many long blue rays with a white-hot center and various reflection elements.
Orange Rays 6: orange star with six rays and other elements.
California Sun: yellow-orange hotspot with long soft double rays and reflection ring.
Space Telescope: four pointed star with halo.
Red Laser: intense red rays.
DVcam Vertical: vertical CCD burnout effect.
White Sun: white cluster of many rays with a rainbow reflection.
Hex Reflections: bright center and rays with many blue-green reflection elements.
Diffraction Star: six pointed white star with rainbow colored rays for a diffraction look.
Diffraction Rays: white star with many rainbow diffraction rays.
Diffraction Rings: multiple rings of textured rainbows around a hotspot.
Chroma Ring: textured rainbow ring that scales with distance between hotspot and pivot.
Chroma Arc: textured rainbow arc that scales with distance between hotspot and pivot.
Chroma Arc 2: double rainbow arcs that scale with distance between hotspot and pivot.
Glint Rays: similar to the default settings of Glint.

Color: *Default rgb: [1 1 1], Shared.*
 Scales the color of all flare elements.

Hotspot Color: *Default rgb: [1 1 1], Shared.*
 Scales the color of the hotspot elements only.

Other Brightness: *Default: 1, Range: 0 or greater, Shared.*
 Scales the brightness of all flare elements that are NOT at the hotspot location.

Blur Flare: *Default: 0, Range: 0 or greater, Shared.*
 If positive, the flare image is blurred by this amount before being combined with the background.

Scale Back: *Default: 1, Range: 0 or greater, Shared.*
 Scales the brightness of the background before combining with the flare. If 0, the result will contain only the flare image over black.

Combine: *Popup menu, Default: Screen.*
 Determines how the flare image is combined with the Background.

Screen: performs a blend function which can help prevent overly bright results.
Add: causes the flare image to be added to the background.

Tint Back Whites: *Check-box, Default: off, Shared.*
 If this is enabled, the chroma of the flare is added only after the result is clamped to the maximum brightness. This allows the color of the flare image to still be visible even over bright white backgrounds. For the majority of backgrounds there will be no observable difference.

Params2:

These parameters allow further adjustment of the hotspot, and enabling of the screen interface widgets.

Rays Rotate: *Default: 0, Range: any, Shared.*
 Rotates the ray elements of the lens flare, if any, in counter-clockwise degrees.

Rays Num Scale: *Default: 1, Range: 0 or greater, Shared.*
 Increases or decreases the number of rays.

Rays Length: *Default: 1, Range: 0 or greater, Shared.*

Adjusts the length of the rays without changing their thickness, or changing the size of the other flare elements.

Rays Thickness: *Default: 1, Range: 0 or greater, Shared.*

Adjusts the thickness of the individual rays within the flare.

Other Width: *Default: 1, Range: 0 or greater, Shared.*

Scales the width of all flare elements that are NOT at the hotspot location.

Other Color: *Default rgb: [1 1 1].*

Scales the color of all flare elements that are NOT at the hotspot location.

Blur For Auto: *Default: 0.014, Range: 0 or greater.*

Used only if the effect is set to AutoTrack. The input is blurred by this amount before finding the brightest location.

Max Hotspots: *Integer, Default: 1, Range: 1 or greater.*

Maximum number of flares to render. Rendering multiple flares can give different tracking results than rendering a single flare.

Hotspot Thresh: *Default: 0.6, Range: 0 or greater.*

When rendering multiple flares, flares are drawn at locations in the source clip that are brighter than this value. If Max Flares is 1, has no effect.

Hotspot Shift: *X & Y, Default: [0 0], Range: any, Shared.*

Adds this amount to the hotspot locations. This allows for a relative adjustment of the hotspots away from the auto-tracked locations if necessary.

Negate Shift: *Check-box, Default: off, Shared.*

If enabled, the hotspot shift parameter is negated before affecting the hotspot.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[LensFlare](#)

[DissolveLensFlare](#)

[LensFlare](#)

[LensFlareMask](#)

[Glint](#)

[Glare](#)

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LensFlareAutoTrackMask

In the S_LensFlareMask Plugin.

Renders a lens flare image over the background clip, aligning various flare elements between the hotspot and pivot locations. Obscures or colorizes the flare based on a Mask input. In this AutoTrack version of LensFlare, the hotspots are automatically positioned on the brightest areas of the background clip. Increasing Blur For Auto will cause the input to be smoothed before the brightest locations are found and can help remove the effect of secondary bright spots.



Inputs:

Back: The clip to use as background.

Mask: The color of the flare is scaled by the color of this clip at the flare's hotspot location. A black and white mask can be used to create a flare that is obscured by foreground objects. A color mask will colorize the flare, which can give the appearance of the light source passing behind a partially-transparent object.

Parameters:

Pivot: *X & Y, Default: [0 0], Range: any, Shared.*

The elements of the flare will be in a line between the Hotspot and the Pivot locations. The Pivot is in screen coordinates relative to the center of the frame.

Scale Widths: *Default: 1, Range: 0 or greater, Shared.*

Scales the sizes of all the flare elements. This parameter can be adjusted using the Scale Widths Widget.

Rel Heights: *Default: 1, Range: 0 or greater, Shared.*

Scales the vertical dimension of all the flare elements, making them elliptical instead of circular. This can also be adjusted using the Scale Widths Widget.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all the flare elements.

Hotspot Bright: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the hotspot elements only.

Rays Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the ray elements only.

Gamma: *Default: 1, Range: 0 or greater, Shared.*

Increasing gamma brightens the flare, and especially boosts the darker elements.

Saturation: *Default: 1, Range: any, Shared.*

Scales the color saturation of the flare elements. Increase for more intense colors. Set to 0 for a monochrome lens flare.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the flare, in revolutions from red to green to blue to red.

Lens: *Popup menu, Default: 50 300mm Zoom.*

The type of lens flare to apply. Custom lens flare types can also be made, or existing types modified, by editing the

"s_lensflares.text" file.

50 300mm Zoom: hotspot with ray cluster, red glow and red ring, and many other elements.
35mm Prime: hotspot with ray cluster, red glow and red ring, and a few other elements.
105mm Prime: hotspot with ray cluster, blue ring, blue glow, and other elements.
Anamorphic 1: horizontal blue rays, diagonal blue ray, red glow and red ring.
Anamorphic 2: horizontal blue rays and red glow.
Anamorphic Blue: horizontal and diagonal blue rays with hexagonal blue/white glow.
Rays Only: ray cluster with no other flare elements.
Rays Only 2: ray cluster like 105mm_prime, but with no other flare elements.
Rays Only 3: ray cluster like anamorphic1, but with no other flare elements.
Simple Hex: four simple red and blue hexagon elements.
Blue Star Burst: many long blue rays with a white-hot center and various reflection elements.
Orange Rays 6: orange star with six rays and other elements.
California Sun: yellow-orange hotspot with long soft double rays and reflection ring.
Space Telescope: four pointed star with halo.
Red Laser: intense red rays.
DVcam Vertical: vertical CCD burnout effect.
White Sun: white cluster of many rays with a rainbow reflection.
Hex Reflections: bright center and rays with many blue-green reflection elements.
Diffraction Star: six pointed white star with rainbow colored rays for a diffraction look.
Diffraction Rays: white star with many rainbow diffraction rays.
Diffraction Rings: multiple rings of textured rainbows around a hotspot.
Chroma Ring: textured rainbow ring that scales with distance between hotspot and pivot.
Chroma Arc: textured rainbow arc that scales with distance between hotspot and pivot.
Chroma Arc 2: double rainbow arcs that scale with distance between hotspot and pivot.
Glint Rays: similar to the default settings of Glint.

Color: *Default rgb: [1 1 1], Shared.*

Scales the color of all flare elements.

Hotspot Color: *Default rgb: [1 1 1], Shared.*

Scales the color of the hotspot elements only.

Other Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all flare elements that are NOT at the hotspot location.

Blur Flare: *Default: 0, Range: 0 or greater, Shared.*

If positive, the flare image is blurred by this amount before being combined with the background.

Scale Back: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the background before combining with the flare. If 0, the result will contain only the flare image over black.

Combine: *Popup menu, Default: Screen.*

Determines how the flare image is combined with the Background.

Screen: performs a blend function which can help prevent overly bright results.

Add: causes the flare image to be added to the background.

Tint Back Whites: *Check-box, Default: off, Shared.*

If this is enabled, the chroma of the flare is added only after the result is clamped to the maximum brightness. This allows the color of the flare image to still be visible even over bright white backgrounds. For the majority of backgrounds there will be no observable difference.

Params2:

These parameters allow further adjustment of the hotspot, and enabling of the screen interface widgets.

Rays Rotate: *Default: 0, Range: any, Shared.*

Rotates the ray elements of the lens flare, if any, in counter-clockwise degrees.

Rays Num Scale: *Default: 1, Range: 0 or greater, Shared.*

Increases or decreases the number of rays.

Rays Length: *Default: 1, Range: 0 or greater, Shared.*

Adjusts the length of the rays without changing their thickness, or changing the size of the other flare elements.

Rays Thickness: *Default: 1, Range: 0 or greater, Shared.*

Adjusts the thickness of the individual rays within the flare.

Other Width: *Default: 1, Range: 0 or greater, Shared.*

Scales the width of all flare elements that are NOT at the hotspot location.

Other Color: *Default rgb: [1 1 1].*

Scales the color of all flare elements that are NOT at the hotspot location.

Blur For Auto: *Default: 0.014, Range: 0 or greater.*

Used only if the effect is set to AutoTrack. The input is blurred by this amount before finding the brightest location.

Max Hotspots: *Integer, Default: 1, Range: 1 or greater.*

Maximum number of flares to render. Rendering multiple flares can give different tracking results than rendering a single flare.

Hotspot Thresh: *Default: 0.6, Range: 0 or greater.*

When rendering multiple flares, flares are drawn at locations in the source clip that are brighter than this value. If Max Flares is 1, has no effect.

Hotspot Shift: *X & Y, Default: [0 0], Range: any, Shared.*

Adds this amount to the hotspot location. This can be helpful if you want the hotspot to follow tracker data.

Negate Shift: *Check-box, Default: off, Shared.*

If enabled, the hotspot shift parameter is negated before affecting the hotspot.

Add Brightness: *Default: 0, Range: 0 to 1.*

Adds to the brightness of the flare regardless of the mask brightness at the hotspot. Use this parameter to give the flare a minimum brightness even where the mask is black, or to increase the brightness overall.

Blur Mask: *Default: 0.02, Range: 0 or greater.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Mask Type: *Popup menu, Default: Color.*

This setting is ignored unless the Mask input is provided.

Luma: uses the luminance of the Mask input to scale the brightness of the flares.

Color: uses the RGB channels of the Mask input to scale the colors of the flares.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[LensFlare](#)
[LensFlareMask](#)

[Glint](#)
[Glare](#)

[Sapphire](#)
[Plug-ins](#)
[Introduction](#)

LensFlareTrack

Similar to LensFlare with the AutoTrack option but a separate Track input clip is used for tracking. Renders a lens flare image over the background clip, aligning various flare elements between the hotspot and pivot locations. Here the hotspots are automatically positioned on the brightest areas of the Track clip. Increasing Blur For Auto will cause the input to be smoothed before the brightest locations are found and can help remove the effect of secondary bright spots.



Inputs:

Back: The clip to use as background.

Track: The flare hotspots are automatically positioned on the brightest areas of this input.

Parameters:

Pivot: *X & Y, Default: [0 0], Range: any, Shared.*

The elements of the flare will be in a line between the Hotspot and the Pivot locations. The Pivot is in screen coordinates relative to the center of the frame.

Scale Widths: *Default: 1, Range: 0 or greater, Shared.*

Scales the sizes of all the flare elements. This parameter can be adjusted using the Scale Widths Widget.

Rel Heights: *Default: 1, Range: 0 or greater, Shared.*

Scales the vertical dimension of all the flare elements, making them elliptical instead of circular. This can also be adjusted using the Scale Widths Widget.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all the flare elements.

Hotspot Bright: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the hotspot elements only.

Rays Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the ray elements only.

Gamma: *Default: 1, Range: 0 or greater, Shared.*

Increasing gamma brightens the flare, and especially boosts the darker elements.

Saturation: *Default: 1, Range: any, Shared.*

Scales the color saturation of the flare elements. Increase for more intense colors. Set to 0 for a monochrome lens flare.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the flare, in revolutions from red to green to blue to red.

Lens: *Popup menu, Default: 50 300mm Zoom.*

The type of lens flare to apply. Custom lens flare types can also be made, or existing types modified, by editing the "s_lensflares.text" file.

50 300mm Zoom: hotspot with ray cluster, red glow and red ring, and many other elements.

35mm Prime: hotspot with ray cluster, red glow and red ring, and a few other elements.

105mm Prime: hotspot with ray cluster, blue ring, blue glow, and other elements.

Anamorphic 1: horizontal blue rays, diagonal blue ray, red glow and red ring.
Anamorphic 2: horizontal blue rays and red glow.
Anamorphic Blue: horizontal and diagonal blue rays with hexagonal blue/white glow.
Rays Only: ray cluster with no other flare elements.
Rays Only 2: ray cluster like 105mm_prime, but with no other flare elements.
Rays Only 3: ray cluster like anamorphic1, but with no other flare elements.
Simple Hex: four simple red and blue hexagon elements.
Blue Star Burst: many long blue rays with a white-hot center and various reflection elements.
Orange Rays 6: orange star with six rays and other elements.
California Sun: yellow-orange hotspot with long soft double rays and reflection ring.
Space Telescope: four pointed star with halo.
Red Laser: intense red rays.
DVcam Vertical: vertical CCD burnout effect.
White Sun: white cluster of many rays with a rainbow reflection.
Hex Reflections: bright center and rays with many blue-green reflection elements.
Diffraction Star: six pointed white star with rainbow colored rays for a diffraction look.
Diffraction Rays: white star with many rainbow diffraction rays.
Diffraction Rings: multiple rings of textured rainbows around a hotspot.
Chroma Ring: textured rainbow ring that scales with distance between hotspot and pivot.
Chroma Arc: textured rainbow arc that scales with distance between hotspot and pivot.
Chroma Arc 2: double rainbow arcs that scale with distance between hotspot and pivot.
Glint Rays: similar to the default settings of Glint.

Color: *Default rgb: [1 1 1], Shared.*
 Scales the color of all flare elements.

Hotspot Color: *Default rgb: [1 1 1], Shared.*
 Scales the color of the hotspot elements only.

Other Brightness: *Default: 1, Range: 0 or greater, Shared.*
 Scales the brightness of all flare elements that are NOT at the hotspot location.

Blur Flare: *Default: 0, Range: 0 or greater, Shared.*
 If positive, the flare image is blurred by this amount before being combined with the background.

Scale Back: *Default: 1, Range: 0 or greater, Shared.*
 Scales the brightness of the background before combining with the flare. If 0, the result will contain only the flare image over black.

Combine: *Popup menu, Default: Screen.*
 Determines how the flare image is combined with the Background.

Screen: performs a blend function which can help prevent overly bright results.
Add: causes the flare image to be added to the background.

Tint Back Whites: *Check-box, Default: off, Shared.*
 If this is enabled, the chroma of the flare is added only after the result is clamped to the maximum brightness. This allows the color of the flare image to still be visible even over bright white backgrounds. For the majority of backgrounds there will be no observable difference.

Params2:

These parameters allow further adjustment of the hotspot, and enabling of the screen interface widgets.

Rays Rotate: *Default: 0, Range: any, Shared.*
 Rotates the ray elements of the lens flare, if any, in counter-clockwise degrees.

Rays Num Scale: *Default: 1, Range: 0 or greater, Shared.*

Increases or decreases the number of rays.

Rays Length: *Default: 1, Range: 0 or greater, Shared.*

Adjusts the length of the rays without changing their thickness, or changing the size of the other flare elements.

Rays Thickness: *Default: 1, Range: 0 or greater, Shared.*

Adjusts the thickness of the individual rays within the flare.

Other Width: *Default: 1, Range: 0 or greater, Shared.*

Scales the width of all flare elements that are NOT at the hotspot location.

Other Color: *Default rgb: [1 1 1].*

Scales the color of all flare elements that are NOT at the hotspot location.

Blur For Auto: *Default: 0.014, Range: 0 or greater.*

Used only if the effect is set to AutoTrack. The input is blurred by this amount before finding the brightest location.

Max Hotspots: *Integer, Default: 1, Range: 1 or greater.*

Maximum number of flares to render. Rendering multiple flares can give different tracking results than rendering a single flare.

Hotspot Thresh: *Default: 0.6, Range: 0 or greater.*

When rendering multiple flares, flares are drawn at locations in the source clip that are brighter than this value. If Max Flares is 1, has no effect.

Hotspot Shift: *X & Y, Default: [0 0], Range: any, Shared.*

Adds this amount to the hotspot locations. This allows for a relative adjustment of the hotspots away from the auto-tracked locations if necessary.

Negate Shift: *Check-box, Default: off, Shared.*

If enabled, the hotspot shift parameter is negated before affecting the hotspot.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[LensFlare](#)

[LensFlareTrackMask](#)

[LensFlare](#)

[LensFlareMask](#)

[Glint](#)

[Glare](#)

[Sapphire](#)

[Plug-ins](#)

[Introduction](#)

LensFlareTrackMask

Similar to LensFlareMask with the AutoTrack option but a separate Track input clip is used for tracking. Renders a lens flare image over the background clip, aligning various flare elements between the hotspot and pivot locations. Obscures or colorizes the flare based on a Mask input. Here the hotspots are automatically positioned on the brightest areas of the Track clip. Increasing Blur For Auto will cause the input to be smoothed before the brightest locations are found and can help remove the effect of secondary bright spots.



Inputs:

Back: The clip to use as background.

Track: This is only used if the AutoTrack effect option is also selected. The lensflare hotspot is positioned on the brightest part of this image. If this input is not enabled, the Background is used instead.

Mask: The color of the flare is scaled by the color of this clip at the flare's hotspot location. A black and white mask can be used to create a flare that is obscured by foreground objects. A color mask will colorize the flare, which can give the appearance of the light source passing behind a partially-transparent object.

Parameters:

Pivot: *X & Y, Default: [0 0], Range: any, Shared.*

The elements of the flare will be in a line between the Hotspot and the Pivot locations. The Pivot is in screen coordinates relative to the center of the frame.

Scale Widths: *Default: 1, Range: 0 or greater, Shared.*

Scales the sizes of all the flare elements. This parameter can be adjusted using the Scale Widths Widget.

Rel Heights: *Default: 1, Range: 0 or greater, Shared.*

Scales the vertical dimension of all the flare elements, making them elliptical instead of circular. This can also be adjusted using the Scale Widths Widget.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all the flare elements.

Hotspot Bright: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the hotspot elements only.

Rays Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the ray elements only.

Gamma: *Default: 1, Range: 0 or greater, Shared.*

Increasing gamma brightens the flare, and especially boosts the darker elements.

Saturation: *Default: 1, Range: any, Shared.*

Scales the color saturation of the flare elements. Increase for more intense colors. Set to 0 for a monochrome lens flare.

Hue Shift: *Default: 0, Range: any, Shared.*

Shifts the hue of the flare, in revolutions from red to green to blue to red.

Lens: *Popup menu, Default: 50 300mm Zoom.*

The type of lens flare to apply. Custom lens flare types can also be made, or existing types modified, by editing the "s_lensflares.text" file.

50 300mm Zoom: hotspot with ray cluster, red glow and red ring, and many other elements.

35mm Prime: hotspot with ray cluster, red glow and red ring, and a few other elements.

105mm Prime: hotspot with ray cluster, blue ring, blue glow, and other elements.

Anamorphic 1: horizontal blue rays, diagonal blue ray, red glow and red ring.

Anamorphic 2: horizontal blue rays and red glow.

Anamorphic Blue: horizontal and diagonal blue rays with hexagonal blue/white glow.

Rays Only: ray cluster with no other flare elements.

Rays Only 2: ray cluster like 105mm_prime, but with no other flare elements.

Rays Only 3: ray cluster like anamorphic1, but with no other flare elements.

Simple Hex: four simple red and blue hexagon elements.

Blue Star Burst: many long blue rays with a white-hot center and various reflection elements.

Orange Rays 6: orange star with six rays and other elements.

California Sun: yellow-orange hotspot with long soft double rays and reflection ring.

Space Telescope: four pointed star with halo.

Red Laser: intense red rays.

DVcam Vertical: vertical CCD burnout effect.

White Sun: white cluster of many rays with a rainbow reflection.

Hex Reflections: bright center and rays with many blue-green reflection elements.

Diffraction Star: six pointed white star with rainbow colored rays for a diffraction look.

Diffraction Rays: white star with many rainbow diffraction rays.

Diffraction Rings: multiple rings of textured rainbows around a hotspot.

Chroma Ring: textured rainbow ring that scales with distance between hotspot and pivot.

Chroma Arc: textured rainbow arc that scales with distance between hotspot and pivot.

Chroma Arc 2: double rainbow arcs that scale with distance between hotspot and pivot.

Glint Rays: similar to the default settings of Glint.

Color: *Default rgb: [1 1 1], Shared.*

Scales the color of all flare elements.

Hotspot Color: *Default rgb: [1 1 1], Shared.*

Scales the color of the hotspot elements only.

Other Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all flare elements that are NOT at the hotspot location.

Blur Flare: *Default: 0, Range: 0 or greater, Shared.*

If positive, the flare image is blurred by this amount before being combined with the background.

Scale Back: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the background before combining with the flare. If 0, the result will contain only the flare image over black.

Combine: *Popup menu, Default: Screen.*

Determines how the flare image is combined with the Background.

Screen: performs a blend function which can help prevent overly bright results.

Add: causes the flare image to be added to the background.

Tint Back Whites: *Check-box, Default: off, Shared.*

If this is enabled, the chroma of the flare is added only after the result is clamped to the maximum brightness. This allows the color of the flare image to still be visible even over bright white backgrounds. For the majority of

backgrounds there will be no observable difference.

Params2:

These parameters allow further adjustment of the hotspot, and enabling of the screen interface widgets.

Rays Rotate: *Default: 0, Range: any, Shared.*

Rotates the ray elements of the lens flare, if any, in counter-clockwise degrees.

Rays Num Scale: *Default: 1, Range: 0 or greater, Shared.*

Increases or decreases the number of rays.

Rays Length: *Default: 1, Range: 0 or greater, Shared.*

Adjusts the length of the rays without changing their thickness, or changing the size of the other flare elements.

Rays Thickness: *Default: 1, Range: 0 or greater, Shared.*

Adjusts the thickness of the individual rays within the flare.

Other Width: *Default: 1, Range: 0 or greater, Shared.*

Scales the width of all flare elements that are NOT at the hotspot location.

Other Color: *Default rgb: [1 1 1].*

Scales the color of all flare elements that are NOT at the hotspot location.

Blur For Auto: *Default: 0.014, Range: 0 or greater.*

Used only if the effect is set to AutoTrack. The input is blurred by this amount before finding the brightest location.

Max Hotspots: *Integer, Default: 1, Range: 1 or greater.*

Maximum number of flares to render. Rendering multiple flares can give different tracking results than rendering a single flare.

Hotspot Thresh: *Default: 0.6, Range: 0 or greater.*

When rendering multiple flares, flares are drawn at locations in the source clip that are brighter than this value. If Max Flares is 1, has no effect.

Hotspot Shift: *X & Y, Default: [0 0], Range: any, Shared.*

Adds this amount to the hotspot location. This can be helpful if you want the hotspot to follow tracker data.

Negate Shift: *Check-box, Default: off, Shared.*

If enabled, the hotspot shift parameter is negated before affecting the hotspot.

Add Brightness: *Default: 0, Range: 0 to 1.*

Adds to the brightness of the flare regardless of the mask brightness at the hotspot. Use this parameter to give the flare a minimum brightness even where the mask is black, or to increase the brightness overall.

Blur Mask: *Default: 0.02, Range: 0 or greater.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Mask Type: *Popup menu, Default: Color.*

This setting is ignored unless the Mask input is provided.

Luma: uses the luminance of the Mask input to scale the brightness of the flares.

Color: uses the RGB channels of the Mask input to scale the colors of the flares.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[LensFlare](#)

[LensFlareMask](#)

[Glint](#)

[Glare](#)

[Sapphire](#)

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[Introduction](#)

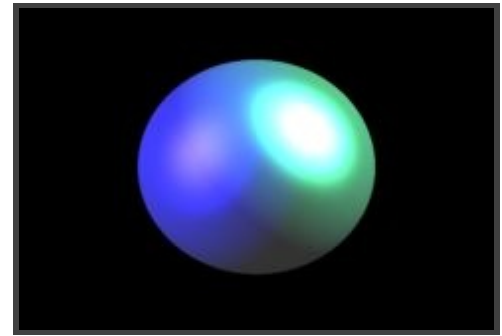
Light3D

Performs 3D relighting with up to 4 individually controlled light sources. The Source input is usually an ambient or diffuse pass from a 3d renderer that shows the surface colors. The Normal vector input determines the surface direction at each pixel. The source and normals should be generated together by the 3d program so they match.

Inputs:

Source: The 3d surface colors.

Normals: Contains the normal vectors matching the Source clip. Typically the red channel will have the X component of the normal, green will have Y, and blue will have Z, but you can adjust this mapping using the Normal Offset and Invert parameters on the second page.



Parameters:

Brightness: *Default: 1, Range: 0 or greater.*
Scales the brightness of all lights together.

Ambient Bright: *Default: 0.2, Range: any.*
The amount of ambient light included in the entire frame. This allows parts of the source where no light is falling to be visible.

Diffuse Bright: *Default: 1, Range: 0 or greater.*
Scales the diffuse light from all light sources.

Hilight Bright: *Default: 0.8, Range: 0 or greater.*
Scales the brightness of all specular highlights.

Hilight Size: *Default: 0.5, Range: 0 or greater.*
Adjusts the size of all specular highlights.

Light1 Enable: *Check-box, Default: on.*
Enables the first light source.

Light1 Color: *Default rgb: [1 1 1].*
The color of the first light source.

Diffuse Bright 1: *Default: 1, Range: 0 or greater.*
Scales the diffuse brightness for Light 1 only.

Hilight Bright 1: *Default: 1, Range: 0 or greater.*
Scales the brightness of the specular highlights for Light 1 only.

Hilight Size 1: *Default: 1, Range: 0 or greater.*
Adjusts the size of the specular highlights for Light 1 only.

Light1 Z: *Default: 0.5, Range: any.*
The z position of the first light source.

Light2 Enable: *Check-box, Default: off.*
Enables the second light source.

Light2 Color: *Default rgb: [1 1 1].*

The color of the second light source.

Diffuse Bright 2: *Default: 1, Range: 0 or greater.*

Scales the diffuse brightness for Light 2 only.

Hilight Bright 2: *Default: 1, Range: 0 or greater.*

Scales the brightness of the specular highlights for Light 2 only.

Hilight Size 2: *Default: 1, Range: 0 or greater.*

Adjusts the size of the specular highlights for Light 2 only.

Light2 Z: *Default: 0.5, Range: any.*

The z position of the second light source.

Params2:

Normal X <-: *Popup menu, Default: RED.*

Determines which color channel is used for the horizontal component of the normal vectors.

RED: Use Red channel.

GREEN: Use Green channel.

BLUE: Use Blue channel.

Normal Y <-: *Popup menu, Default: GREEN.*

Determines which color channel is used for the vertical component of the normal vectors.

RED: Use Red channel.

GREEN: Use Green channel.

BLUE: Use Blue channel.

Normal Z <-: *Popup menu, Default: BLUE.*

Determines which color channel is used for the depth component of the normal vectors.

RED: Use Red channel.

GREEN: Use Green channel.

BLUE: Use Blue channel.

Invert X: *Check-box, Default: off.*

If checked, inverts the horizontal component of the normal vectors.

Invert Y: *Check-box, Default: off.*

If checked, inverts the vertical component of the normal vectors.

Invert Z: *Check-box, Default: off.*

If checked, inverts the depth component of the normal vectors.

Normal Offset: *Default: -0.5, Range: any.*

Added to the values in the Normal input.

Light3 Enable: *Check-box, Default: off.*

Enables the third light source.

Light3 Color: *Default rgb: [1 1 1].*

The color of the third light source.

Diffuse Bright 3: *Default: 1, Range: 0 or greater.*

Scales the diffuse brightness for Light 3 only.

Highlight Bright 3: *Default: 1, Range: 0 or greater.*
Scales the brightness of the specular highlights for Light 3 only.

Highlight Size 3: *Default: 1, Range: 0 or greater.*
Adjusts the size of the specular highlights for Light 3 only.

Light3 Z: *Default: 0.5, Range: any.*
The z position of the third light source.

Light4 Enable: *Check-box, Default: off.*
Enables the fourth light source.

Light4 Color: *Default rgb: [1 1 1].*
The color of the fourth light source.

Diffuse Bright 4: *Default: 1, Range: 0 or greater.*
Scales the diffuse brightness for Light 4 only.

Highlight Bright 4: *Default: 1, Range: 0 or greater.*
Scales the brightness of the specular highlights for Light 4 only.

Highlight Size 4: *Default: 1, Range: 0 or greater.*
Adjusts the size of the specular highlights for Light 4 only.

Light4 Z: *Default: 0.5, Range: any.*
The z position of the fourth light source.

Params3:

Light1 Dir: *X & Y, Default: [-0.7 0.6], Range: any.*
The x and y position of the first light source. This parameter can be adjusted using the Light1 Dir Widget.

Light3 Dir: *X & Y, Default: [-0.7 -0.6], Range: any.*
The x and y position of the third light source. This parameter can be adjusted using the Light3 Dir Widget.

Light2 Dir: *X & Y, Default: [0.7 0.6], Range: any.*
The x and y position of the second light source. This parameter can be adjusted using the Light2 Dir Widget.

Light4 Dir: *X & Y, Default: [0.7 -0.6], Range: any.*
The x and y position of the fourth light source. This parameter can be adjusted using the Light4 Dir Widget.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Light3DMask](#)

[Emboss](#)

[Sapphire](#)

[EmbossShiny](#)

[Plug-ins](#)

[SpotLight](#)

[Introduction](#)

Light3DMask

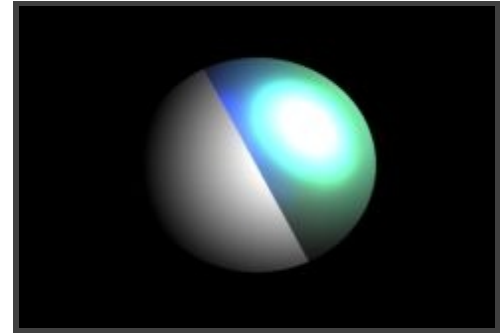
Performs 3D relighting using a source input with surface colors, and a normal vector input clip. The Mask input is used to interpolate between the original image and the result.

Inputs:

Source: The 3d surface colors.

Normals: Contains the normal vectors matching the Source clip. Typically the red channel will have the X component of the normal, green will have Y, and blue will have Z, but you can adjust this mapping using the Normal Offset and Invert parameters on the second page.

Mask: Used to interpolate between the original image and the result. Where the mask is black, no lighting is applied and the original Source image is visible.



Parameters:

Brightness: *Default: 1, Range: 0 or greater.*
Scales the brightness of all lights together.

Ambient Bright: *Default: 0.2, Range: any.*
The amount of ambient light included in the entire frame. This allows parts of the source where no light is falling to be visible.

Diffuse Bright: *Default: 1, Range: 0 or greater.*
Scales the diffuse light from all light sources.

Highlight Bright: *Default: 0.8, Range: 0 or greater.*
Scales the brightness of all specular highlights.

Highlight Size: *Default: 0.5, Range: 0 or greater.*
Adjusts the size of all specular highlights.

Light1 Enable: *Check-box, Default: on.*
Enables the first light source.

Light1 Color: *Default rgb: [1 1 1].*
The color of the first light source.

Diffuse Bright 1: *Default: 1, Range: 0 or greater.*
Scales the diffuse brightness for Light 1 only.

Highlight Bright 1: *Default: 1, Range: 0 or greater.*
Scales the brightness of the specular highlights for Light 1 only.

Highlight Size 1: *Default: 1, Range: 0 or greater.*
Adjusts the size of the specular highlights for Light 1 only.

Light1 Z: *Default: 0.5, Range: any.*
The z position of the first light source.

Light2 Enable: *Check-box, Default: off.*

Enables the second light source.

Light2 Color: *Default rgb: [1 1 1].*

The color of the second light source.

Diffuse Bright 2: *Default: 1, Range: 0 or greater.*

Scales the diffuse brightness for Light 2 only.

Hilight Bright 2: *Default: 1, Range: 0 or greater.*

Scales the brightness of the specular highlights for Light 2 only.

Hilight Size 2: *Default: 1, Range: 0 or greater.*

Adjusts the size of the specular highlights for Light 2 only.

Light2 Z: *Default: 0.5, Range: any.*

The z position of the second light source.

Blur Mask: *Default: 0, Range: 0 or greater.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Params2:

Normal X <-: *Popup menu, Default: RED.*

Determines which color channel is used for the horizontal component of the normal vectors.

RED: Use Red channel.

GREEN: Use Green channel.

BLUE: Use Blue channel.

Normal Y <-: *Popup menu, Default: GREEN.*

Determines which color channel is used for the vertical component of the normal vectors.

RED: Use Red channel.

GREEN: Use Green channel.

BLUE: Use Blue channel.

Normal Z <-: *Popup menu, Default: BLUE.*

Determines which color channel is used for the depth component of the normal vectors.

RED: Use Red channel.

GREEN: Use Green channel.

BLUE: Use Blue channel.

Invert X: *Check-box, Default: off.*

If checked, inverts the horizontal component of the normal vectors.

Invert Y: *Check-box, Default: off.*

If checked, inverts the vertical component of the normal vectors.

Invert Z: *Check-box, Default: off.*

If checked, inverts the depth component of the normal vectors.

Normal Offset: *Default: -0.5, Range: any.*
Added to the values in the Normal input.

Light3 Enable: *Check-box, Default: off.*
Enables the third light source.

Light3 Color: *Default rgb: [1 1 1].*
The color of the third light source.

Diffuse Bright 3: *Default: 1, Range: 0 or greater.*
Scales the diffuse brightness for Light 3 only.

Highlight Bright 3: *Default: 1, Range: 0 or greater.*
Scales the brightness of the specular highlights for Light 3 only.

Highlight Size 3: *Default: 1, Range: 0 or greater.*
Adjusts the size of the specular highlights for Light 3 only.

Light3 Z: *Default: 0.5, Range: any.*
The z position of the third light source.

Light4 Enable: *Check-box, Default: off.*
Enables the fourth light source.

Light4 Color: *Default rgb: [1 1 1].*
The color of the fourth light source.

Diffuse Bright 4: *Default: 1, Range: 0 or greater.*
Scales the diffuse brightness for Light 4 only.

Highlight Bright 4: *Default: 1, Range: 0 or greater.*
Scales the brightness of the specular highlights for Light 4 only.

Highlight Size 4: *Default: 1, Range: 0 or greater.*
Adjusts the size of the specular highlights for Light 4 only.

Light4 Z: *Default: 0.5, Range: any.*
The z position of the fourth light source.

Params3:

Light1 Dir: *X & Y, Default: [-0.7 0.6], Range: any.*
The x and y position of the first light source. This parameter can be adjusted using the Light1 Dir Widget.

Light3 Dir: *X & Y, Default: [-0.7 -0.6], Range: any.*
The x and y position of the third light source. This parameter can be adjusted using the Light3 Dir Widget.

Light2 Dir: *X & Y, Default: [0.7 0.6], Range: any.*
The x and y position of the second light source. This parameter can be adjusted using the Light2 Dir Widget.

Light4 Dir: *X & Y, Default: [0.7 -0.6], Range: any.*
The x and y position of the fourth light source. This parameter can be adjusted using the Light4 Dir Widget.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Light3D](#)

[Emboss](#)

[Sapphire](#)

[EmbossShiny](#)

[Plug-ins](#)

[SpotLight](#)

[Introduction](#)

MathOps

Combines two clips using one of a variety of mathematical operations.

Inputs:

SourceA: The first input clip to be processed.

SourceB: The second input clip to be processed.



Parameters:

Effect: *Popup menu, Default: Add.*

Determines which mathematical operation is applied to combine the pixel colors of the two source inputs.

Add: $A + B$.

Subtract: $A - B$.

Multiply: $A * B$. This can be used as an 'intersection' operation on matte images. The result only contains white where both inputs are white.

Divide: A / B . This can be used to 'un-premultiply' an image by using its matte as the second input.

Screen: $A + B - AB$. This can be useful in combining the bright areas of two clips. It can also be used as a 'union' operation on matte images. The result is white where either of the input images is white.

Average: $(A + B) / 2$.

Overlay: combines A over B with an overlay function.

Minimum: the smallest value for each color channel of each pixel. This can also be used as an 'intersection' operation with slightly different results than Multiply.

Maximum: the largest value for each color channel of each pixel. This can also be used as a 'union' operation with slightly different results than Screen.

Difference: similar to Subtract but the absolute value of the result is used, which tends to give more resulting colors in bounds. This can be used to select the regions of two matte images where one or the other is white, but not both.

Xor: performs an 'exclusive-or' operation on the colors of the source clips. This can also be used to select the regions of two matte images where one or the other is white, but not both, with slightly different results than Difference.

Xor Bits: performs a bitwise exclusive-or on the colors of the source clips. This can produce some interesting contour effects although the results are often difficult to predict.

And Bits: performs a bitwise logical and on the colors of the source clips. Similar to XorBits but tends to produce darker results.

Or Bits: performs a bitwise logical or on the colors of the source clips. Similar to XorBits but tends to produce brighter results.

Mod: gives the remainder after dividing the colors of the first source clip by the second. Set the A Scale parameter to a high value for some unusual pixel banding effects.

Round: the colors of the first source clip are rounded using the values of the second input as the step size.

Bounce: similar to Mod but the result contains fewer jagged edges. Set the A Scale parameter to a high value for some striping effects.

Atan: performs an arc-tangent function on the colors of the two source clips. The Dest Scale parameter is used in a slightly different way in this operation. Set it to a high value for some strange banding effects.

A Scale: *Default: 1, Range: any, Shared.*

Scales the brightness of SourceA before performing the operation.

A Offset: *Default: 0, Range: any, Shared.*

Adds to the brightness of SourceA (or subtracts if negative) before performing the operation. 0 has no effect, .5 is middle gray, and 1 is white.

A Saturation: *Default: 1, Range: 0 or greater, Shared.*

Adjusts the color intensity of SourceA before performing the operation. 0.0 makes it monochromatic, 1.0 has no effect.

B Scale: *Default: 1, Range: any, Shared.*

Scales the brightness of SourceB before performing the operation.

B Offset: *Default: 0, Range: any, Shared.*

Adds to the brightness of SourceB (or subtracts if negative) before performing the operation. 0 has no effect, .5 is middle gray, and 1 is white.

B Saturation: *Default: 1, Range: 0 or greater, Shared.*

Adjusts the color intensity of SourceB before performing the operation. 0.0 makes it monochromatic, 1.0 has no effect.

Swap Inputs: *Check-box, Default: off, Shared.*

If enabled, effectively swaps the A and B Source inputs, and can be helpful for non-commutative operations like subtract. Note that this also causes parameters labeled 'A' to affect the 'B' input instead, and vice versa.

Dest Scale: *Default: 1, Range: any, Shared.*

Scales the brightness of the result after performing the operation.

Dest Offset: *Default: 0, Range: any, Shared.*

Adds to the brightness of the result (or subtracts if negative) after performing the operation. 0 has no effect, .5 is middle gray, and 1 is white.

Dest Saturation: *Default: 1, Range: 0 or greater, Shared.*

Scales the color intensity of the result after performing the operation. 0.0 makes it monochromatic, 1.0 has no effect.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Layer](#)

[Sapphire Plug-ins Introduction](#)

MatteOps

Grows, shrinks, or adds noise to the edges of a Matte input, and outputs the resulting matte.

Inputs:

Matte: The matte input clip to process. It is assumed to have anti-aliased but hard edges, because very soft edges might not be affected in a useful way. Only the red channel of this input is used.



Parameters:

Shrink- Grow+: *Default: 0, Range: any.*

Amount to grow the matte edges in approximate pixels, or shrink if negative.

Edge Softness: *Default: 1, Range: 0.01 or greater.*

The resulting softness of the edges.

Post Blur: *Default: 0, Range: 0 or greater.*

If positive, the result is blurred by this amount. This is an alternative method for softening the edges.

Filter: *Popup menu, Default: TRIANGLE.*

The type of blur filter to use for the shrink or grow process.

BOX: uses a rectangular shaped filter.

TRIANGLE: smoother, uses a pyramid shaped filter.

GAUSS: smoothest, uses a gaussian shaped filter.

Invert Matte: *Check-box, Default: off.*

If enabled, the black and white of the output matte are inverted.

Noise Amplitude: *Default: 0, Range: 0 or greater.*

The amount of noise texture to add to the edges.

Noise Width: *Default: 0.05, Range: 0 or greater.*

The width of the area at the matte edges where the noise is included. This has no effect unless Noise Amplitude is positive

Frequency: *Default: 100, Range: 0.1 or greater.*

The frequency of the noise. Increase for finer grain noise, decrease for coarser noise. This has no effect unless Noise Amplitude is positive.

Frequency Rel X: *Default: 1, Range: 0.01 or greater.*

The relative horizontal frequency of the noise. Increase to stretch the noise vertically, decrease to stretch it horizontally. This has no effect unless Noise Amplitude is positive.

Octaves: *Integer, Default: 1, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the magnitude of the previous. This has no effect unless Noise Amplitude is positive.

Seed: *Default: 0.23, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Noise Shift: *X & Y, Default: [0 0], Range: any.*
The horizontal and vertical translation of the noise texture.

Jitter Frames: *Integer, Default: 1, Range: 0 or greater.*
If this is 0, the noise texture will remain the same for every frame processed. If it is 1, a new noise texture is used for each frame. If it is 2, a new noise texture is used for every other frame, and so on.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[MatteOpsMask](#)
[MatteOpsComp](#)

[DistortFine](#)
[WarpBubble](#)
[Diffuse](#)

[Sapphire](#)
[Plug-ins](#)
[Introduction](#)

MatteOpsComp

Grows, shrinks, or adds noise to the edges of a Matte input, then uses the result to composite the Front over the Back.

Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: The matte input clip to process. It is assumed to have anti-aliased but hard edges, because very soft edges might not be affected in a useful way. Only the red channel of this input is used.



Parameters:

Shrink- Grow+: *Default: 0, Range: any.*

Amount to grow the matte edges in approximate pixels, or shrink if negative.

Edge Softness: *Default: 1, Range: 0.01 or greater.*

The resulting softness of the edges.

Post Blur: *Default: 0, Range: 0 or greater.*

If positive, the result is blurred by this amount. This is an alternative method for softening the edges.

Filter: *Popup menu, Default: TRIANGLE.*

The type of blur filter to use for the shrink or grow process.

BOX: uses a rectangular shaped filter.

TRIANGLE: smoother, uses a pyramid shaped filter.

GAUSS: smoothest, uses a gaussian shaped filter.

Invert Matte: *Check-box, Default: off.*

If enabled, the black and white of the output matte are inverted.

Noise Amplitude: *Default: 0, Range: 0 or greater.*

The amount of noise texture to add to the edges.

Noise Width: *Default: 0.05, Range: 0 or greater.*

The width of the area at the matte edges where the noise is included. This has no effect unless Noise Amplitude is positive

Frequency: *Default: 100, Range: 0.1 or greater.*

The frequency of the noise. Increase for finer grain noise, decrease for coarser noise. This has no effect unless Noise Amplitude is positive.

Frequency Rel X: *Default: 1, Range: 0.01 or greater.*

The relative horizontal frequency of the noise. Increase to stretch the noise vertically, decrease to stretch it horizontally. This has no effect unless Noise Amplitude is positive.

Octaves: *Integer, Default: 1, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the magnitude of the previous. This has no effect unless Noise Amplitude is positive.

Seed: *Default:* 0.23, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Noise Shift: *X & Y, Default:* [0 0], *Range:* any.

The horizontal and vertical translation of the noise texture.

Jitter Frames: *Integer, Default:* 1, *Range:* 0 or greater.

If this is 0, the noise texture will remain the same for every frame processed. If it is 1, a new noise texture is used for each frame. If it is 2, a new noise texture is used for every other frame, and so on.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[MatteOps](#)

[MatteOpsMask](#)

[DistortFine](#)

[WarpBubble](#)

[Diffuse](#)

[Sapphire](#)

[Plug-ins](#)

[Introduction](#)

MatteOpsMask

Grows, shrinks, or adds noise to the edges of a Matte input, but only applies the operation to areas specified by the Mask input.

Inputs:

Matte: The matte input clip to process. It is assumed to have anti-aliased but hard edges, because very soft edges might not be affected in a useful way. Only the red channel of this input is used.

Mask: Determines the regions of the Matte that are affected by the operation. White causes the full effect, black causes no effect.



Parameters:

Shrink- Grow+: *Default: 0, Range: any.*

Amount to grow the matte edges in approximate pixels, or shrink if negative.

Edge Softness: *Default: 1, Range: 0.01 or greater.*

The resulting softness of the edges.

Post Blur: *Default: 0, Range: 0 or greater.*

If positive, the result is blurred by this amount. This is an alternative method for softening the edges.

Filter: *Popup menu, Default: TRIANGLE.*

The type of blur filter to use for the shrink or grow process.

BOX: uses a rectangular shaped filter.

TRIANGLE: smoother, uses a pyramid shaped filter.

GAUSS: smoothest, uses a gaussian shaped filter.

Invert Matte: *Check-box, Default: off.*

If enabled, the black and white of the output matte are inverted.

Noise Amplitude: *Default: 0, Range: 0 or greater.*

The amount of noise texture to add to the edges.

Noise Width: *Default: 0.05, Range: 0 or greater.*

The width of the area at the matte edges where the noise is included. This has no effect unless Noise Amplitude is positive

Frequency: *Default: 100, Range: 0.1 or greater.*

The frequency of the noise. Increase for finer grain noise, decrease for coarser noise. This has no effect unless Noise Amplitude is positive.

Frequency Rel X: *Default: 1, Range: 0.01 or greater.*

The relative horizontal frequency of the noise. Increase to stretch the noise vertically, decrease to stretch it horizontally. This has no effect unless Noise Amplitude is positive.

Octaves: *Integer, Default: 1, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the magnitude of the previous. This has no effect unless Noise Amplitude is positive.

Seed: *Default:* 0.23, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Noise Shift: *X & Y, Default:* [0 0], *Range:* any.

The horizontal and vertical translation of the noise texture.

Jitter Frames: *Integer, Default:* 1, *Range:* 0 or greater.

If this is 0, the noise texture will remain the same for every frame processed. If it is 1, a new noise texture is used for each frame. If it is 2, a new noise texture is used for every other frame, and so on.

Invert Mask: *Check-box, Default:* off.

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[MatteOps](#)

[MatteOpsComp](#)

[DistortFine](#)

[WarpBubble](#)

[Diffuse](#)

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Mosaic

Generates a pixelated version of the source clip. Adjust the size and shape of the blocks using the Pixel Frequency and Pixel Rel Width parameters. Increase the Smooth Colors parameter to cause the colors of nearby pixel blocks to be more consistent, and less flickery over time.

Inputs:

Source: The clip to be processed.



Parameters:

Pixel Frequency: *Default:* 40, *Range:* 1 or greater.

The frequency of the pixel blocks. Increase for more numerous, smaller pixels.

Pixel Rel Height: *Default:* 1, *Range:* 0.01 or greater.

The relative height of the pixel blocks. Increase for taller blocks, decrease for wider ones.

Pixel Shift: *X & Y, Default:* [0 0], *Range:* any.

The translation of the pixel pattern.

Smooth Colors: *Default:* 0, *Range:* 0 or greater.

Blurs the source before pixelating. Increase to cause the colors of nearby pixel blocks to be more consistent, and less flickery over time.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[MosaicMask](#)

[VanGogh](#)

[Sapphire](#)

[Sketch](#)

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[HalfTone](#)

[Introduction](#)

[HalfToneColor](#)

[Etching](#)

[ScanLines](#)

[FlysEyeHex](#)

[JpegDamage](#)

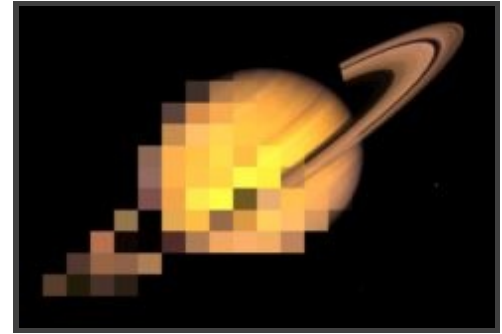
MosaicMask

Generates a pixelated version of the source clip. This is similar to Mosaic but a Mask input specifies which areas of the Source are to be pixelated.

Inputs:

Source: The clip to be processed.

Mask: The effect is applied only at Source areas specified by this Mask input. For gray values in the mask, the pixel blocks are mixed with the original source such that the blocks fade but remain whole. Only the red channel of this input is used. The mask can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters.



Parameters:

Pixel Frequency: *Default:* 40, *Range:* 1 or greater.

The frequency of the pixel blocks. Increase for more numerous, smaller pixels.

Pixel Rel Height: *Default:* 1, *Range:* 0.01 or greater.

The relative height of the pixel blocks. Increase for taller blocks, decrease for wider ones.

Pixel Shift: *X & Y, Default:* [0 0], *Range:* any.

The translation of the pixel pattern.

Smooth Colors: *Default:* 0, *Range:* 0 or greater.

Blurs the source before pixelating. Increase to cause the colors of nearby pixel blocks to be more consistent, and less flickery over time.

Blur Mask: *Default:* 0, *Range:* 0 or greater.

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default:* off.

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Mosaic](#)

[VanGogh](#)

[Sapphire](#)

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Posterize

Generates a posterized version of the input by limiting the number of colors in the source, and replacing detailed texture and noise with solid colors.

Inputs:

Source: The clip to be processed.



Parameters:

Amount: *Default: 0.1, Range: 0 to 1, Shared.*

Increase this for fewer and larger regions of solid colors. Decrease for more colors and more steps between colors.

Smooth Edges: *Default: 0.1, Range: 0 to 1, Shared.*

Amount to smooth the edges between color regions when posterizing. Increase this value to reduce aliasing between the colored areas. If set to 1, the areas will be completely smoothed together and no posterize effect will occur.

Color Phase: *Default: 0, Range: any, Shared.*

Amount to shift color boundaries when posterizing. Adjust this to fine-tune the location of the edges between the color regions. A phase of 1 is equivalent to 0.

Red Phase: *Default: 0, Range: any, Shared.*

Amount to shift the red channel boundaries when not preserving chroma. If Preserve Chroma is 1.0 this has no effect.

Green Phase: *Default: 0, Range: any, Shared.*

Amount to shift the green channel boundaries when not preserving chroma.

Blue Phase: *Default: 0, Range: any, Shared.*

Amount to shift the blue channel boundaries when not preserving chroma.

Preserve Chroma: *Default: 1, Range: 0 to 1, Shared.*

If set to 1, posterizes only the luma of the clip, leaving chroma unchanged. If set to 0, posterizes the RGB, affecting both luma and chroma which usually results in more color fringes between regions. Intermediate values interpolate between the two results.

Smooth Source: *Default: 0.01, Range: 0 or greater, Shared.*

Amount to blur the input clip before posterizing. Increase this value to reduce noise or jagged edges.

Saturation: *Default: 1, Range: any, Shared.*

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Scale Lights: *Default: 1, Range: 0 or greater, Shared.*

Scales the result by this value. Increase for a brighter result.

Offset Darks: *Default: 0, Range: any, Shared.*

Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Cartoon](#)
[CartoonPaint](#)
[Threshold](#)

[Sapphire](#)
[Plug-ins](#)
[Introduction](#)

Psyko: Zebrafy

In the S_Psyko Plugin.

Modulates the brightness of the source clip with a sinusoid to give a black and white solarized look.

Inputs:

Source: The clip to be processed.



Parameters:

Source Blur: *Default: 0.1, Range: 0 or greater, Shared.*
Smooths the source edges by this amount.

Frequency: *Default: 4, Range: any.*
The frequency of the stripe pattern. Increase for more color cycles.

Phase Start: *Default: 0, Range: any.*
The phase shift of the stripe pattern.

Phase Speed: *Default: 1, Range: any.*
The phase speed of the stripe pattern. If non-zero, the stripes are automatically animated to flow at this rate.

Subpixel: *Check-box, Default: on, Shared.*
Enables subpixel-width blur. Use this for smoother animation of the Source Blur parameter.

Brightness: *Default: 1, Range: 0 or greater, Shared.*
Scales the brightness of the result.

Color: *Default rgb: [1 1 1], Shared.*
Scales the color of the result. For example, if it is yellow [1 1 0], the blue of the result will be 0.

Offset: *Default: 0, Range: any, Shared.*
Adds this gray value to the result (or subtracts if negative). 0 has no effect, .5 is middle gray, and 1 is white.

Scale By Source: *Default: 0, Range: 0 to 1, Shared.*
The brightness of the output is scaled down by the original source brightness as this is increased to 1.

Scale By Src Amp: *Default: 1, Range: 0 or greater, Shared.*
This amplifies the effect of Scale By Source, so if increased above 1, the middle grays can still retain their full brightness. It has no effect unless Scale By Source is positive.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[ZebrafyColor](#)

[HalfTone](#)

[Sapphire](#)

[Etching](#)

[Plug-ins](#)

[ScanLines](#)

[Introduction](#)

[Solarize](#)

Psyko: ZebrafyColor

In the S_Psyko Plugin.

Modulates the brightness of the source clip with sinusoids for each color channel to give a color striped effect.

Inputs:

Source: The clip to be processed.



Parameters:

Source Blur: *Default: 0.1, Range: 0 or greater, Shared.*

Smooths the source edges by this amount.

Frequency: *Default: 3, Range: 0 or greater.*

The frequency of the stripe pattern. Increase for more color cycles.

Freq Red: *Default: 1, Range: 0 or greater, Shared.*

The frequency of the red color component. Increase for more cycles in the red channel.

Freq Green: *Default: 1.1, Range: 0 or greater, Shared.*

The frequency of the green color component. Increase for more cycles in the green channel.

Freq Blue: *Default: 1.2, Range: 0 or greater, Shared.*

The frequency of the blue color component. Increase for more cycles in the blue channel.

Subpixel: *Check-box, Default: on, Shared.*

Enables subpixel-width blur. Use this for smoother animation of the Source Blur parameter.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Color: *Default rgb: [1 1 1], Shared.*

Scales the color of the result. For example, if it is yellow [1 1 0], the blue of the result will be 0.

Offset: *Default: 0, Range: any, Shared.*

Adds this gray value to the result (or subtracts if negative). 0 has no effect, .5 is middle gray, and 1 is white.

Scale By Source: *Default: 0, Range: 0 to 1, Shared.*

The brightness of the output is scaled down by the original source brightness as this is increased to 1.

Scale By Src Amp: *Default: 1, Range: 0 or greater, Shared.*

This amplifies the effect of Scale By Source, so if increased above 1, the middle grays can still retain their full brightness. It has no effect unless Scale By Source is positive.

Saturation: *Default: 1, Range: 0 or greater, Shared.*

Scales the strength of the colors. Increase for more intense colors, or decrease for muted colors.

Params2:

Phase Speed: *Default: 1, Range: any.*

The phase speed of the stripe pattern. If non-zero, the stripes are automatically animated to flow at this rate.

Phase Start: *Default: 0, Range: any.*

The phase shift of the stripe pattern.

Phase Red: *Default: 0, Range: any, Shared.*

The phase offset of the red color component.

Phase Green: *Default: 0, Range: any, Shared.*

The phase offset of the green color component.

Phase Blue: *Default: 0, Range: any, Shared.*

The phase offset of the blue color component.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Zebrafy](#)

[PseudoColor](#)

[Sapphire](#)

[Solarize](#)

[Plug-ins](#)

[PsykoBlobs](#)

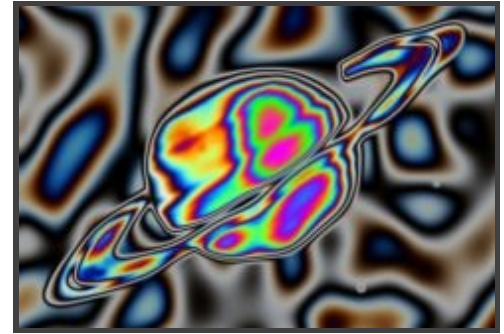
[Introduction](#)

[PsykoStripes](#)

PsykoBlobs

In the S_Psyko Plugin.

Combines the source clip with a field of 'blob' shapes and then passes them through a colorization process. The Phase Speed parameter causes the colors to automatically rotate over time.



Inputs:

Source: The clip to be processed.

Parameters:

Source Blur: *Default: 0.1, Range: 0 or greater, Shared.*

If positive, smooths out the edges of the source by this amount before applying the colorization.

Source Scale: *Default: 1, Range: 0 or greater, Shared.*

Scales the source values but not the added blobs.

Freq Colors: *Default: 4, Range: 0 or greater.*

The frequency of the color pattern. Increase for a busier texture with more cycles through the spectrum.

Freq Red: *Default: 1, Range: 0 or greater, Shared.*

The frequency of the red color component. Increase for more cycles in the red channel.

Freq Green: *Default: 1.1, Range: 0 or greater, Shared.*

The frequency of the green color component. Increase for more cycles in the green channel.

Freq Blue: *Default: 1.2, Range: 0 or greater, Shared.*

The frequency of the blue color component. Increase for more cycles in the blue channel.

Noise Freq: *Default: 4, Range: 0.01 or greater.*

The spatial frequency of the 'blobs' noise texture. Increase for more blobs, decrease for fewer.

Noise Freq Relx: *Default: 1, Range: 0.01 or greater.*

The relative horizontal frequency of the noise texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Noise Octaves: *Integer, Default: 1, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Noise Seed: *Default: 0.23, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Noise Shift: *X & Y, Default: [0 0], Range: any.*

Translation offset of the noise texture.

Subpixel: *Check-box, Default: on, Shared.*

Enables subpixel-width blur. Use this for smoother animation of the Source Blur parameter.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Color: *Default rgb: [1 1 1], Shared.*

Scales the color of the result. For example, if it is yellow [1 1 0], the blue of the result will be 0.

Offset: *Default: 0, Range: any, Shared.*

Adds this gray value to the result (or subtracts if negative). 0 has no effect, .5 is middle gray, and 1 is white.

Scale By Source: *Default: 0, Range: 0 to 1, Shared.*

The brightness of the output is scaled down by the original source brightness as this is increased to 1.

Scale By Src Amp: *Default: 1, Range: 0 or greater, Shared.*

This amplifies the effect of Scale By Source, so if increased above 1, the middle grays can still retain their full brightness. It has no effect unless Scale By Source is positive.

Saturation: *Default: 1, Range: 0 or greater, Shared.*

Scales the strength of the colors. Increase for more intense colors, or decrease for muted colors.

Params2:

Phase Speed: *Default: 1, Range: any.*

The phase speed of the color patterns. If non-zero, the phase is automatically animated to give the color pattern a boiling look.

Phase Start: *Default: 0.5, Range: any.*

The phase offset of the color patterns.

Phase Red: *Default: 0, Range: any, Shared.*

The phase offset of the red color component.

Phase Green: *Default: 0, Range: any, Shared.*

The phase offset of the green color component.

Phase Blue: *Default: 0, Range: any, Shared.*

The phase offset of the blue color component.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[PsykoStripes](#)

[PseudoColor](#)

[Sapphire](#)

[ZebrafyColor](#)

[Plug-ins](#)

[CloudsPsyko](#)

[Introduction](#)

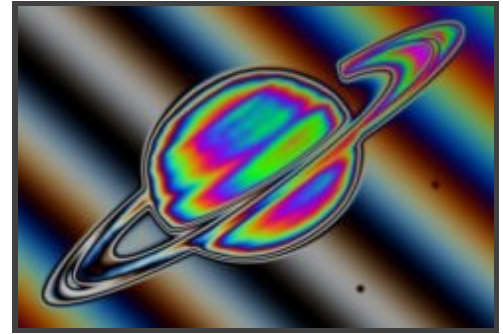
PsykoStripes

In the S_Psyko Plugin.

Combines the source clip with a stripe pattern and then passes them through a colorization process. The Phase Speed parameter causes the colors to automatically rotate over time.

Inputs:

Source: The clip to be processed.



Parameters:

Source Blur: *Default: 0.1, Range: 0 or greater, Shared.*

If positive, smooths out the edges of the source by this amount before applying the colorization.

Source Scale: *Default: 1, Range: 0 or greater, Shared.*

Scales the source values but not the added stripes.

Freq Colors: *Default: 3, Range: 0 or greater.*

The frequency of the color pattern. Increase for a busier texture with more cycles through the spectrum.

Freq Red: *Default: 1, Range: 0 or greater, Shared.*

The frequency of the red color component. Increase for more cycles in the red channel.

Freq Green: *Default: 1.1, Range: 0 or greater, Shared.*

The frequency of the green color component. Increase for more cycles in the green channel.

Freq Blue: *Default: 1.2, Range: 0 or greater, Shared.*

The frequency of the blue color component. Increase for more cycles in the blue channel.

Stripe Dir: *Default: 45, Range: any.*

The direction of the stripes, in counter-clockwise degrees from vertical.

Stripe Mag: *Default: 0.5, Range: 0 or greater.*

The magnitude of the stripes. Increase for more cycles of the colors in the stripe direction.

Subpixel: *Check-box, Default: on, Shared.*

Enables subpixel-width blur. Use this for smoother animation of the Source Blur parameter.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Color: *Default rgb: [1 1 1], Shared.*

Scales the color of the result. For example, if it is yellow [1 1 0], the blue of the result will be 0.

Offset: *Default: 0, Range: any, Shared.*

Adds this gray value to the result (or subtracts if negative). 0 has no effect, .5 is middle gray, and 1 is white.

Scale By Source: *Default: 0, Range: 0 to 1, Shared.*

The brightness of the output is scaled down by the original source brightness as this is increased to 1.

Scale By Src Amp: *Default: 1, Range: 0 or greater, Shared.*

This amplifies the effect of Scale By Source, so if increased above 1, the middle grays can still retain their full brightness. It has no effect unless Scale By Source is positive.

Saturation: *Default: 1, Range: 0 or greater, Shared.*

Scales the strength of the colors. Increase for more intense colors, or decrease for muted colors.

Params2:

Phase Speed: *Default: 1, Range: any.*

The phase speed of the color patterns. If non-zero, the phase is automatically animated to give the color pattern a boiling look.

Phase Start: *Default: 0.5, Range: any.*

The phase offset of the color patterns.

Phase Red: *Default: 0, Range: any, Shared.*

The phase offset of the red color component.

Phase Green: *Default: 0, Range: any, Shared.*

The phase offset of the green color component.

Phase Blue: *Default: 0, Range: any, Shared.*

The phase offset of the blue color component.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[PsykoBlobs](#)

[PseudoColor](#)

[Sapphire](#)

[ZebrafyColor](#)

[Plug-ins](#)

[CloudsPsyko](#)

[Introduction](#)

RackDefocus

In the S_RackDefocus Plugin.

Generates a defocused version of the source clip using a 'circle of confusion' convolution. This effect is often preferable to a gaussian blur for simulating a real defocused camera lens, because bright spots can be defocused into clean shapes instead of being smoothed away. The iris shape can be controlled using Points, Pointiness and Rotate, and the Use Gamma parameter can adjust the relative brightness of the blurred highlights.



Inputs:

Source: The clip to be processed.

Parameters:

Defocus Width: *Default: 0.1, Range: 0 or greater, Shared.*

The width of the defocus. This parameter can be adjusted using the Width Widget.

Rel Height: *Default: 1, Range: 0.01 or greater, Shared.*

The relative height of the iris shape. If it is not 1, circles become ellipses, etc.

Gauss Blur: *Default: 0, Range: 0 or greater, Shared.*

If positive, a gaussian blur is also applied which smooths out the edges of the shapes. This might also darken the highlights because Gamma is not considered in the gaussian blur.

Use Gamma: *Default: 1, Range: 0.1 or greater, Shared.*

Values above 1 cause highlights in the source clip to keep their brightness after the defocus is applied.

Boost Highlights: *Default: 0, Range: 0 or greater, Shared.*

The amount to increase the luma of the highlights in the source clip. Increase this parameter to blow out the highlights without affecting the darks or mid-tones.

Hilite Threshold: *Default: 0.9, Range: 0 or greater, Shared.*

The minimum luma value for highlights. Pixels brighter than this will be brightened according to the Boost Highlights parameter.

Shape: *Popup menu, Default: Circle.*

Determines the shape of the simulated camera iris.

Circle: round.

3 sides: triangle.

4 sides: square.

5 sides: pentagon.

6 sides: hexagon.

7 sides: etc.

Roundness: *Default: 0, Range: any, Shared.*

Modifies the shape of the simulated camera iris. A value of 1 produces a circle; 0 gives a flat-sided polygon with a number of sides given by the Shape parameter. Less than 0 causes the sides to squeeze inward giving a star shape, while a value greater than 1 causes the corners to squeeze inward, giving a flowery shape. Has no effect if the Shape is set to Circle.

Rotate: *Default: 0, Range: any, Shared.*

Rotates the iris shape.

Bokeh: *Default: 0, Range: any, Shared.*

Softens the outer edge of the iris shape, which gives a softer look to the defocused highlights. A negative value darkens the center of the iris shape, producing a ring-like defocus shape.

Scale Result: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Offset Darks: *Default: 0, Range: any, Shared.*

Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

Edge Mode: *Popup menu, Default: REFLECT.*

Determines the behavior when accessing areas outside the source image.

BLACK: Areas outside the source image are treated as black, which can produce dark areas around the edges of the image. Select this for fastest rendering.

REPEAT: Repeats the last pixel outside the border of the image.

REFLECT: Reflects the image outside the border.

Mix With Source: *Default: 0, Range: 0 to 1, Shared.*

Interpolates between the defocused result and the original source. Set this to 1 for the original source.

Show Shape: *Check-box, Default: off, Shared.*

Show the iris shape instead of the defocused image.

Params2:

Lens Noise: *Default: 0, Range: 0 or greater, Shared.*

Increase to add noise to the iris shape, dirtying up the defocus a little. Can make the result more realistic. Turn up past 1 for a more stylistic result.

Noise Freq: *Default: 10, Range: 0.01 or greater, Shared.*

The frequency of the added noise. Ignored if Lens Noise is zero.

Noise Freq Rel X: *Default: 1, Range: 0.01 or greater, Shared.*

The relative horizontal frequency of the added iris noise. Increase to stretch it vertically or decrease to stretch it horizontally.

Noise Seed: *Default: 0.123, Range: 0 or greater, Shared.*

The seed value for the added noise. To make the noise appear different on each frame, animate this to be different on each frame. The actual value doesn't matter; only that it's different.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[RackDefocusMono](#)
[DefocusPrism](#)

[RackDfComp](#)
[Blur](#)
[BlurChannels](#)
[BlurChroma](#)
[ZDefocus](#)
[Convolve](#)

[Sapphire Plug-ins](#)
[Introduction](#)

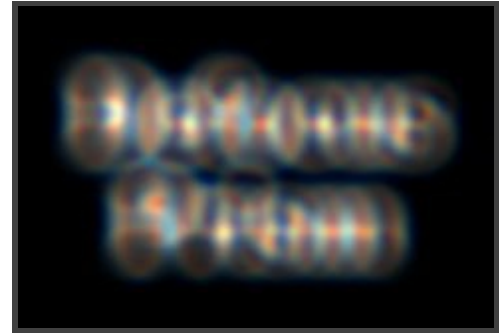
RackDefocus: Prism

In the S_RackDefocus Plugin.

Defocuses the color channels of the source clip into rings of different widths.

Inputs:

Source: The clip to be processed.



Parameters:

Defocus Width: *Default: 0.1, Range: 0 or greater, Shared.*

The width of the defocus. This parameter can be adjusted using the Width Widget.

Rel Height: *Default: 1, Range: 0.01 or greater, Shared.*

The relative height of the iris shape. If it is not 1, circles become ellipses, etc.

Gauss Blur: *Default: 0, Range: 0 or greater, Shared.*

If positive, a gaussian blur is also applied which smooths out the edges of the shapes. This might also darken the highlights because Gamma is not considered in the gaussian blur.

Use Gamma: *Default: 1, Range: 0.1 or greater, Shared.*

Values above 1 cause highlights in the source clip to keep their brightness after the defocus is applied.

Boost Highlights: *Default: 0, Range: 0 or greater, Shared.*

The amount to increase the luma of the highlights in the source clip. Increase this parameter to blow out the highlights without affecting the darks or mid-tones.

Hilite Threshold: *Default: 0.9, Range: 0 or greater, Shared.*

The minimum luma value for highlights. Pixels brighter than this will be brightened according to the Boost Highlights parameter.

Shape: *Popup menu, Default: Circle.*

Determines the shape of the simulated camera iris.

Circle: round.

3 sides: triangle.

4 sides: square.

5 sides: pentagon.

6 sides: hexagon.

7 sides: etc.

Roundness: *Default: 0, Range: any, Shared.*

Modifies the shape of the simulated camera iris. A value of 1 produces a circle; 0 gives a flat-sided polygon with a number of sides given by the Shape parameter. Less than 0 causes the sides to squeeze inward giving a star shape, while a value greater than 1 causes the corners to squeeze inward, giving a flowery shape. Has no effect if the Shape is set to Circle.

Rotate: *Default: 0, Range: any, Shared.*

Rotates the iris shape.

Bokeh: *Default: 0, Range: any, Shared.*

Softens the outer edge of the iris shape, which gives a softer look to the defocused highlights. A negative value darkens the center of the iris shape, producing a ring-like defocus shape.

Scale Color: *Default rgb: [1 1 1], Shared.*

Scales the color of the result. For example, if it is yellow [1 1 0], the blue of the result will be 0.

Chroma Sep: *Default: 0.3, Range: -1 to 1, Shared.*

The amount of separation between the three color channel rings.

Scale Result: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Offset Darks: *Default: 0, Range: any, Shared.*

Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

Edge Mode: *Popup menu, Default: REFLECT.*

Determines the behavior when accessing areas outside the source image.

BLACK: Areas outside the source image are treated as black, which can produce dark areas around the edges of the image. Select this for fastest rendering.

REPEAT: Repeats the last pixel outside the border of the image.

REFLECT: Reflects the image outside the border.

Mix With Source: *Default: 0, Range: 0 to 1, Shared.*

Interpolates between the defocused result and the original source. Set this to 1 for the original source.

Chroma Ringthick: *Default: 0.3, Range: 0.01 or greater, Shared.*

The thickness of each of the three color channel rings.

Show Shape: *Check-box, Default: off, Shared.*

Show the iris shape instead of the defocused image.

Params2:

Lens Noise: *Default: 0, Range: 0 or greater, Shared.*

Increase to add noise to the iris shape, dirtying up the defocus a little. Can make the result more realistic. Turn up past 1 for a more stylistic result.

Noise Freq: *Default: 10, Range: 0.01 or greater, Shared.*

The frequency of the added noise. Ignored if Lens Noise is zero.

Noise Freq Rel X: *Default: 1, Range: 0.01 or greater, Shared.*

The relative horizontal frequency of the added iris noise. Increase to stretch it vertically or decrease to stretch it horizontally.

Noise Seed: *Default: 0.123, Range: 0 or greater, Shared.*

The seed value for the added noise. To make the noise appear different on each frame, animate this to be different on each frame. The actual value doesn't matter; only that it's different.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[RackDefocus](#)

[RackDefocusMono](#)

[RackDfComp](#)

[Blur](#)

[BlurChannels](#)

[BlurChroma](#)

[WarpChroma](#)

[Convolve](#)

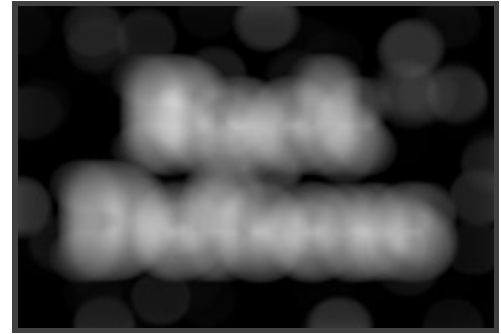
[Sapphire Plug-ins](#)

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RackDefocusMono

In the S_RackDefocus Plugin.

Similar to RackDefocus, but first makes the source monochrome and then defocuses the resulting single channel (faster), using a 'circle of confusion' convolution. This effect is often preferable to a gaussian blur for simulating a real defocused camera lens, because bright spots can be defocused into clean circles instead of being smoothed away.



Inputs:

Source: The clip to be processed.

Parameters:

Defocus Width: *Default: 0.1, Range: 0 or greater, Shared.*

The width of the defocus. This parameter can be adjusted using the Width Widget.

Rel Height: *Default: 1, Range: 0.01 or greater, Shared.*

The relative height of the iris shape. If it is not 1, circles become ellipses, etc.

Gauss Blur: *Default: 0, Range: 0 or greater, Shared.*

If positive, a gaussian blur is also applied which smooths out the edges of the shapes. This might also darken the highlights because Gamma is not considered in the gaussian blur.

Use Gamma: *Default: 1, Range: 0.1 or greater, Shared.*

Values above 1 cause highlights in the source clip to keep their brightness after the defocus is applied.

Boost Highlights: *Default: 0, Range: 0 or greater, Shared.*

The amount to increase the luma of the highlights in the source clip. Increase this parameter to blow out the highlights without affecting the darks or mid-tones.

Hilite Threshold: *Default: 0.9, Range: 0 or greater, Shared.*

The minimum luma value for highlights. Pixels brighter than this will be brightened according to the Boost Highlights parameter.

Shape: *Popup menu, Default: Circle.*

Determines the shape of the simulated camera iris.

Circle: round.

3 sides: triangle.

4 sides: square.

5 sides: pentagon.

6 sides: hexagon.

7 sides: etc.

Roundness: *Default: 0, Range: any, Shared.*

Modifies the shape of the simulated camera iris. A value of 1 produces a circle; 0 gives a flat-sided polygon with a number of sides given by the Shape parameter. Less than 0 causes the sides to squeeze inward giving a star shape, while a value greater than 1 causes the corners to squeeze inward, giving a flowery shape. Has no effect if the Shape is set to Circle.

Rotate: *Default: 0, Range: any, Shared.*

Rotates the iris shape.

Bokeh: *Default: 0, Range: any, Shared.*

Softens the outer edge of the iris shape, which gives a softer look to the defocused highlights. A negative value darkens the center of the iris shape, producing a ring-like defocus shape.

Scale Result: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Offset Darks: *Default: 0, Range: any, Shared.*

Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

Edge Mode: *Popup menu, Default: REFLECT.*

Determines the behavior when accessing areas outside the source image.

BLACK: Areas outside the source image are treated as black, which can produce dark areas around the edges of the image. Select this for fastest rendering.

REPEAT: Repeats the last pixel outside the border of the image.

REFLECT: Reflects the image outside the border.

Mix With Source: *Default: 0, Range: 0 to 1, Shared.*

Interpolates between the defocused result and the original source. Set this to 1 for the original source.

Show Shape: *Check-box, Default: off, Shared.*

Show the iris shape instead of the defocused image.

Params2:

Lens Noise: *Default: 0, Range: 0 or greater, Shared.*

Increase to add noise to the iris shape, dirtying up the defocus a little. Can make the result more realistic. Turn up past 1 for a more stylistic result.

Noise Freq: *Default: 10, Range: 0.01 or greater, Shared.*

The frequency of the added noise. Ignored if Lens Noise is zero.

Noise Freq Rel X: *Default: 1, Range: 0.01 or greater, Shared.*

The relative horizontal frequency of the added iris noise. Increase to stretch it vertically or decrease to stretch it horizontally.

Noise Seed: *Default: 0.123, Range: 0 or greater, Shared.*

The seed value for the added noise. To make the noise appear different on each frame, animate this to be different on each frame. The actual value doesn't matter; only that it's different.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[RackDefocus](#)
[DefocusPrism](#)

[RackDfComp](#)
[Blur](#)
[BlurChannels](#)
[BlurChroma](#)
[ZDefocus](#)
[Convolve](#)

[Sapphire](#)
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RackDfComp

Composites the Foreground over the Background using a Matte while defocusing both layers by different amounts.

Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip. Only the red channel of this input is used.



Parameters:

Defocus Front: *Default:* 0.1, *Range:* 0 or greater.

The amount to defocus the Foreground and its Matte. This parameter can be adjusted using the Fg Defocus Widget.

Defocus Back: *Default:* 0, *Range:* 0 or greater.

The amount to defocus the Background. This parameter can be adjusted using the Bg Defocus Widget.

Rel Height: *Default:* 1, *Range:* 0.01 or greater.

The relative height of the iris shape. If it is not 1, circles become ellipses, etc.

Use Gamma: *Default:* 1, *Range:* 0.1 or greater.

Values above 1 cause highlights in the source clip to keep their brightness after the defocus is applied.

Matte Gamma: *Default:* 1, *Range:* 0.1 or greater.

The gamma value to use for the defocus of the Matte.

Shape: *Popup menu, Default:* Circle.

Determines the shape of the simulated camera iris.

Circle: round.

3 sides: triangle.

4 sides: square.

5 sides: pentagon.

6 sides: hexagon.

7 sides: etc.

Roundness: *Default:* 0, *Range:* any.

Modifies the shape of the simulated camera iris. A value of 1 produces a circle; 0 gives a flat-sided polygon with a number of sides given by the Shape parameter. Less than 0 causes the sides to squeeze inward giving a star shape, while a value greater than 1 causes the corners to squeeze inward, giving a flowery shape. Has no effect if the Shape is set to Circle.

Rotate: *Default:* 0, *Range:* any.

Rotates the iris shape.

Bokeh: *Default:* 0, *Range:* any.

Softens the outer edge of the iris shape, which gives a softer look to the defocused highlights. A negative value darkens the center of the iris shape, producing a ring-like defocus shape.

Boost Highlights: *Default:* 0, *Range:* 0 or greater.

The amount to increase the luma of the highlights in the source clip. Increase this parameter to blow out the

highlights without affecting the darks or mid-tones.

Hilite Threshold: *Default: 0.9, Range: 0 or greater.*

The minimum luma value for highlights. Pixels brighter than this will be brightened according to the Boost Highlights parameter.

Comp Premult: *Check-box, Default: off.*

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Invert Matte: *Check-box, Default: off.*

If enabled, the black and white of the matte are inverted before use.

Edge Mode: *Popup menu, Default: REFLECT.*

Determines the behavior when accessing areas outside the source image.

BLACK: Areas outside the source image are treated as black, which can produce dark areas around the edges of the image. Select this for fastest rendering.

REPEAT: Repeats the last pixel outside the border of the image.

REFLECT: Reflects the image outside the border.

Params2:

Lens Noise: *Default: 0, Range: 0 or greater.*

Increase to add noise to the iris shape, dirtying up the defocus a little. Can make the result more realistic. Turn up past 1 for a more stylistic result.

Noise Freq: *Default: 10, Range: 0.01 or greater.*

The frequency of the added noise. Ignored if Lens Noise is zero.

Noise Freq Rel X: *Default: 1, Range: 0.01 or greater.*

The relative horizontal frequency of the added iris noise. Increase to stretch it vertically or decrease to stretch it horizontally.

Noise Seed: *Default: 0.123, Range: 0 or greater.*

The seed value for the added noise. To make the noise appear different on each frame, animate this to be different on each frame. The actual value doesn't matter; only that it's different.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[RackDefocus](#)

[DefocusPrism](#)

[Blur](#)

[Convolve](#)

[ConvolveComp](#)

[Sapphire Plug-ins](#)

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Rays

Generates beams of light emitting from the bright areas of the source clip. Lower the Threshold parameter to generate rays from more areas or raise it to generate rays from only the brightest areas. Set the Rays Res parameter to 1/2 for faster rendering with slightly softer rays.

Inputs:

Source: The clip to be processed.



Parameters:

Center: *X & Y, Default: [0 0], Range: any.*

The location from which the rays beam outwards. This parameter can be adjusted using the Center Widget.

Rays Length: *Default: 0.2, Range: 1 or less.*

The length of the rays. A length of 1.0 gives rays that continue forever, although they may still fade out as they go. To make the rays look longer you can also increase the Rel Outer Bright parameter. If Rays Length is negative the rays can beam inwards instead of outwards. Note that processing times increase for longer rays. This parameter can be adjusted using the Center Widget.

Rel Outer Bright: *Default: 0, Range: 0 or greater.*

The relative brightness of the outer end of the rays. This is normally near 0 so the rays fade away at their outer ends, but higher values can cause longer looking rays.

Shimmer Amp: *Default: 0.5, Range: 0 or greater.*

Modulates the ray source image with this amount of noise texture to give the rays a shimmering look.

Shimmer Shift: *X & Y, Default: [0 0], Range: any.*

Translation of the shimmer texture. This has no effect unless Shimmer Amp is positive.

Shimmer Speed: *X & Y, Default: [0 0], Range: any.*

Translation speed of the shimmer texture. If non-zero, the shimmering is automatically animated to shift at this rate.

Shimmer Freq: *Default: 40, Range: 0.1 or greater.*

The frequency of the shimmer texture. Increase for a finer grained shimmer effect, decrease for larger, softer shimmer. This has no effect unless Shimmer Amp is positive.

Shimmer Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator for the shimmer texture. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Rays Brightness: *Default: 2, Range: 0 or greater.*

Scales the brightness of the ray beams.

Rays Color: *Default rgb: [1 1 1].*

Scales the color of the ray beams.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the rays generated on areas of the source clip containing that color.

Threshold: *Default: 0.5, Range: 0 or greater.*

Rays are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes rays at only the brightest spots. A value of 0 causes rays for every non-black area.

Rays Res: *Popup menu, Default: FULL.*

Selects the resolution factor for the rays. Higher resolutions give sharper rays, lower resolutions give smoother rays and faster processing. This 'Res' factor only affects the rays: the background is still combined with the rays at full resolution.

FULL: Full resolution is used.

1/2: The rays are calculated at half resolution.

1/4: The rays are calculated at quarter resolution.

Scale Source: *Default: 1, Range: 0 to 1.*

Scales the brightness of the Source input when combined with the rays. This does not affect the generation of the rays themselves.

Use Src Chroma: *Default: 1, Range: 0 or greater.*

If this is 1, the chroma of the Source input affects the chroma of the resulting rays. If it is 0, only the brightness of the Source input affects the brightness of the rays, and the rendering speed should also be faster. Values between 0 and 1 interpolate between these two options.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[RaysMask](#)

[RaysComp](#)

[RaysMaskComp](#)

[EdgeRays](#)

[Streaks](#)

[BlurMotion](#)

[WarpChroma](#)

[EdgeDetect](#)

[Glow](#)

[Sapphire Plug-ins](#)

[Introduction](#)

RaysComp

Generates beams of light emitting from the bright areas of the source clip. The rays and the source clip are composited over the background. Lower the Threshold parameter to generate rays from more areas or raise it to generate rays from only the brightest areas. Set the Rays Res parameter to 1/2 for faster rendering with slightly softer rays.



Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip.

Parameters:

Center: *X & Y, Default: [0 0], Range: any.*

The location from which the rays beam outwards. This parameter can be adjusted using the Center Widget.

Rays Length: *Default: 0.2, Range: 1 or less.*

The length of the rays. A length of 1.0 gives rays that continue forever, although they may still fade out as they go. To make the rays look longer you can also increase the Rel Outer Bright parameter. If Rays Length is negative the rays can beam inwards instead of outwards. Note that processing times increase for longer rays. This parameter can be adjusted using the Center Widget.

Rel Outer Bright: *Default: 0, Range: 0 or greater.*

The relative brightness of the outer end of the rays. This is normally near 0 so the rays fade away at their outer ends, but higher values can cause longer looking rays.

Shimmer Amp: *Default: 0.5, Range: 0 or greater.*

Modulates the ray source image with this amount of noise texture to give the rays a shimmering look.

Shimmer Shift: *X & Y, Default: [0 0], Range: any.*

Translation of the shimmer texture. This has no effect unless Shimmer Amp is positive.

Shimmer Speed: *X & Y, Default: [0 0], Range: any.*

Translation speed of the shimmer texture. If non-zero, the shimmering is automatically animated to shift at this rate.

Shimmer Freq: *Default: 40, Range: 0.1 or greater.*

The frequency of the shimmer texture. Increase for a finer grained shimmer effect, decrease for larger, softer shimmer. This has no effect unless Shimmer Amp is positive.

Shimmer Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator for the shimmer texture. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Rays Brightness: *Default: 2, Range: 0 or greater.*

Scales the brightness of the ray beams.

Rays Color: *Default rgb: [1 1 1].*

Scales the color of the ray beams.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the rays generated on areas of the

source clip containing that color.

Threshold: *Default: 0.5, Range: 0 or greater.*

Rays are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes rays at only the brightest spots. A value of 0 causes rays for every non-black area.

Rays Res: *Popup menu, Default: FULL.*

Selects the resolution factor for the rays. Higher resolutions give sharper rays, lower resolutions give smoother rays and faster processing. This 'Res' factor only affects the rays: the background is still combined with the rays at full resolution.

FULL: Full resolution is used.

1/2: The rays are calculated at half resolution.

1/4: The rays are calculated at quarter resolution.

Source Opacity: *Default: 1, Range: 0 to 1.*

Scales the opacity of the Source input when combined with the rays. This does not affect the generation of the rays themselves.

Use Src Chroma: *Default: 1, Range: 0 or greater.*

If this is 1, the chroma of the Source input affects the chroma of the resulting rays. If it is 0, only the brightness of the Source input affects the brightness of the rays, and the rendering speed should also be faster. Values between 0 and 1 interpolate between these two options.

Params2:

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background before combining with the rays. If 0, the result will contain only the rays image over black.

Rays Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the rays.

Rays From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate rays from the edges of the source's alpha channel instead of its RGB channels. This will typically reduce the rays generated from internal edges. Values between 0 and 1 interpolate between using the RGB and the Alpha.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Rays](#)

[RaysMask](#)

[RaysMaskComp](#)

[EdgeRays](#)

[Streaks](#)

[BlurMotion](#)

[WarpChroma](#)

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More Effects

This page is required due to an Acrobat reader bug which causes second-level PDF tables-of-contents with more than 256 entries not to work properly. Please ignore it.

RaysMaskComp

Generates beams of light emitting from the bright areas of the source clip. The ray colors are scaled by the Mask input. The rays and the source clip are composited over the background. Lower the Threshold parameter to generate rays from more areas or raise it to generate rays from only the brightest areas. Set the Rays Res parameter to 1/2 for faster rendering with slightly softer rays.



Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip.

Mask: The ray colors are scaled by this input. The mask can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters. The Effect option selects whether color or brightness values of the Mask are used.

Parameters:

Effect: *Popup menu, Default: Rays Mono Mask.*
This setting is ignored unless the Mask input is connected.

Rays Mono Mask: uses the Mask input to scale the brightness of the rays.
Rays Color Mask: uses a color Mask input to scale the colors of the rays.

Center: *X & Y, Default: [0 0], Range: any.*
The location from which the rays beam outwards. This parameter can be adjusted using the Center Widget.

Rays Length: *Default: 0.2, Range: 1 or less.*
The length of the rays. A length of 1.0 gives rays that continue forever, although they may still fade out as they go. To make the rays look longer you can also increase the Rel Outer Bright parameter. If Rays Length is negative the rays can beam inwards instead of outwards. Note that processing times increase for longer rays. This parameter can be adjusted using the Center Widget.

Rel Outer Bright: *Default: 0, Range: 0 or greater.*
The relative brightness of the outer end of the rays. This is normally near 0 so the rays fade away at their outer ends, but higher values can cause longer looking rays.

Invert Mask: *Check-box, Default: off.*
If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Blur Mask: *Default: 0, Range: 0 or greater.*
Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Shimmer Amp: *Default: 0.5, Range: 0 or greater.*
Modulates the ray source image with this amount of noise texture to give the rays a shimmering look.

Shimmer Shift: *X & Y, Default: [0 0], Range: any.*

Translation of the shimmer texture. This has no effect unless Shimmer Amp is positive.

Shimmer Speed: *X & Y, Default: [0 0], Range: any.*

Translation speed of the shimmer texture. If non-zero, the shimmering is automatically animated to shift at this rate.

Shimmer Freq: *Default: 40, Range: 0.1 or greater.*

The frequency of the shimmer texture. Increase for a finer grained shimmer effect, decrease for larger, softer shimmer. This has no effect unless Shimmer Amp is positive.

Shimmer Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator for the shimmer texture. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Rays Brightness: *Default: 2, Range: 0 or greater.*

Scales the brightness of the ray beams.

Rays Color: *Default rgb: [1 1 1].*

Scales the color of the ray beams.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the rays generated on areas of the source clip containing that color.

Threshold: *Default: 0.5, Range: 0 or greater.*

Rays are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes rays at only the brightest spots. A value of 0 causes rays for every non-black area.

Rays Res: *Popup menu, Default: FULL.*

Selects the resolution factor for the rays. Higher resolutions give sharper rays, lower resolutions give smoother rays and faster processing. This 'Res' factor only affects the rays: the background is still combined with the rays at full resolution.

FULL: Full resolution is used.

1/2: The rays are calculated at half resolution.

1/4: The rays are calculated at quarter resolution.

Source Opacity: *Default: 1, Range: 0 to 1.*

Scales the opacity of the Source input when combined with the rays. This does not affect the generation of the rays themselves.

Use Src Chroma: *Default: 1, Range: 0 or greater.*

If this is 1, the chroma of the Source input affects the chroma of the resulting rays. If it is 0, only the brightness of the Source input affects the brightness of the rays, and the rendering speed should also be faster. Values between 0 and 1 interpolate between these two options.

Params2:

Scale Back: *Default: 1, Range: 0 to 1, Shared.*

Scales the brightness of the background before combining with the rays. If 0, the result will contain only the rays image over black.

Rays Under Src: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to composite the Source input over the rays.

Rays From Matte: *Default: 0, Range: 0 to 1, Shared.*

Set to 1 to generate rays from the edges of the source's alpha channel instead of its RGB channels. This will typically reduce the rays generated from internal edges. Values between 0 and 1 interpolate between using the RGB

and the Alpha.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Front pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Rays](#)

[RaysMask](#)

[RaysComp](#)

[EdgeRays](#)

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RaysMask

Generates beams of light emitting from the bright areas of the source clip. The ray colors are scaled by the Mask input. Lower the Threshold parameter to generate rays from more areas or raise it to generate rays from only the brightest areas. Set the Rays Res parameter to 1/2 for faster rendering with slightly softer rays.



Inputs:

Source: The clip to be processed.

Mask: The ray colors are scaled by this input. The mask can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters. The Effect option selects whether color or brightness values of the Mask are used.

Parameters:

Effect: *Popup menu, Default: Rays Mono Mask.*

This setting is ignored unless the Mask input is connected.

Rays Mono Mask: uses the Mask input to scale the brightness of the rays.

Rays Color Mask: uses a color Mask input to scale the colors of the rays.

Center: *X & Y, Default: [0 0], Range: any.*

The location from which the rays beam outwards. This parameter can be adjusted using the Center Widget.

Rays Length: *Default: 0.2, Range: 1 or less.*

The length of the rays. A length of 1.0 gives rays that continue forever, although they may still fade out as they go. To make the rays look longer you can also increase the Rel Outer Bright parameter. If Rays Length is negative the rays can beam inwards instead of outwards. Note that processing times increase for longer rays. This parameter can be adjusted using the Center Widget.

Rel Outer Bright: *Default: 0, Range: 0 or greater.*

The relative brightness of the outer end of the rays. This is normally near 0 so the rays fade away at their outer ends, but higher values can cause longer looking rays.

Invert Mask: *Check-box, Default: off.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Blur Mask: *Default: 0, Range: 0 or greater.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Shimmer Amp: *Default: 0.5, Range: 0 or greater.*

Modulates the ray source image with this amount of noise texture to give the rays a shimmering look.

Shimmer Shift: *X & Y, Default: [0 0], Range: any.*

Translation of the shimmer texture. This has no effect unless Shimmer Amp is positive.

Shimmer Speed: *X & Y, Default: [0 0], Range: any.*

Translation speed of the shimmer texture. If non-zero, the shimmering is automatically animated to shift at this rate.

Shimmer Freq: *Default: 40, Range: 0.1 or greater.*

The frequency of the shimmer texture. Increase for a finer grained shimmer effect, decrease for larger, softer

shimmer. This has no effect unless Shimmer Amp is positive.

Shimmer Seed: *Default:* 0.123, *Range:* 0 or greater.

Used to initialize the random number generator for the shimmer texture. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Rays Brightness: *Default:* 2, *Range:* 0 or greater.

Scales the brightness of the ray beams.

Rays Color: *Default rgb:* [1 1 1].

Scales the color of the ray beams.

Threshold Add Color: *Default rgb:* [0 0 0].

This can be used to raise the threshold on a specific color and thereby reduce the rays generated on areas of the source clip containing that color.

Threshold: *Default:* 0.5, *Range:* 0 or greater.

Rays are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes rays at only the brightest spots. A value of 0 causes rays for every non-black area.

Rays Res: *Popup menu, Default:* FULL.

Selects the resolution factor for the rays. Higher resolutions give sharper rays, lower resolutions give smoother rays and faster processing. This 'Res' factor only affects the rays: the background is still combined with the rays at full resolution.

FULL: Full resolution is used.

1/2: The rays are calculated at half resolution.

1/4: The rays are calculated at quarter resolution.

Scale Source: *Default:* 1, *Range:* 0 to 1.

Scales the brightness of the Source input when combined with the rays. This does not affect the generation of the rays themselves.

Use Src Chroma: *Default:* 1, *Range:* 0 or greater.

If this is 1, the chroma of the Source input affects the chroma of the resulting rays. If it is 0, only the brightness of the Source input affects the brightness of the rays, and the rendering speed should also be faster. Values between 0 and 1 interpolate between these two options.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Rays](#)

[RaysComp](#)

[RaysMaskComp](#)

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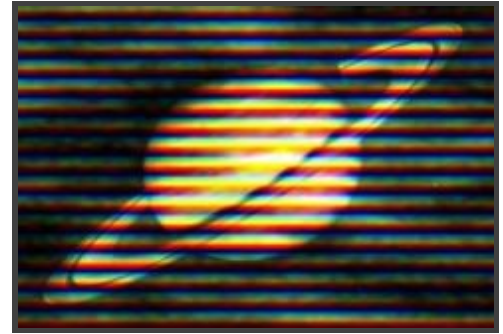
ScanLines

In the S_ScanLines Plugin.

Creates a version of the source clip with a scan line pattern resembling a color TV monitor. Increase the Add Noise parameter to also add a grainy effect to the result.

Inputs:

Source: The clip to be processed.



Parameters:

Lines Frequency: *Default: 50, Range: 0 or greater, Shared.*

The frequency of scan lines on the screen. Increase for more lines, decrease for fewer.

Lines Sharpness: *Default: 1, Range: 0 or greater, Shared.*

Scales the severity of the lines. Increase for sharper edges, or decrease for a more subtle effect. A sharpness of zero reduces the scan line effect to nothing.

Lines Angle: *Default: 0, Range: any, Shared.*

The angle in degrees of the scan lines. Set to 90 for vertical lines instead of horizontal. This parameter can be adjusted using the Lines Angle Widget.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Offset: *Default: 0, Range: any, Shared.*

Adds this gray value to the result (or subtracts if negative). 0 has no effect, .5 is middle gray, and 1 is white.

Gamma: *Default: 1.5, Range: 0 or greater, Shared.*

Scales the brightness of the image by a curve using this gamma value, allowing adjustment of the middle gray values in the scan lines. This can help make the average brightness of the output match the input.

Smooth Source: *Default: 0, Range: 0 or greater, Shared.*

If positive, the source clip is blurred by this amount before being processed.

Lines Shift: *Default: 0, Range: any, Shared.*

Offsets the position of the pattern of lines. A value of 1.0 shifts one entire scan line over, giving the same result as 0.

Shift Red: *Default: 0, Range: any.*

Shifts the red scan lines by this amount, relative to the other lines. Set the red, green, and blue shifts to -.33, .0, and .33 for an out-of-alignment television set look.

Shift Green: *Default: 0, Range: any.*

Shifts the green scan lines by this amount.

Shift Blue: *Default: 0, Range: any.*

Shifts the blue scan lines by this amount.

Scale Color: *Default rgb: [1 1 1].*

Scales the color of the result. For example, if it is yellow [1 1 0], the blue of the result will be 0.

Saturation: *Default: 1, Range: 0 or greater.*

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Add Noise: *Default: 0, Range: 0 or greater, Shared.*

If positive, this much color noise is added to the image.

Noise Freq Rel: *Default: 1, Range: 0 or greater, Shared.*

The frequency of the noise, relative to the frequency of lines. This has no effect unless the Add Noise parameter above is positive.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[ScanLinesMono](#)

[HalfTone](#)

[Sapphire Plug-ins](#)

[HalfToneColor](#)

[Introduction](#)

[Etching](#)

[WipeStripes](#)

[JpegDamage](#)

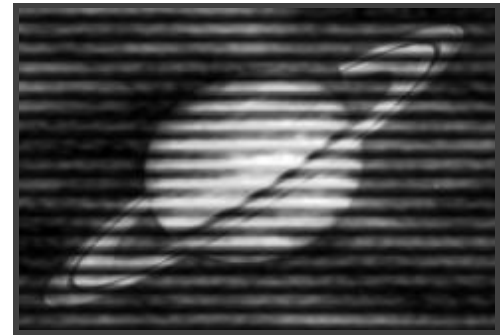
ScanLinesMono

In the S_ScanLines Plugin.

A monochrome version of ScanLines. Creates a version of the source clip with a scan lines pattern resembling a black and white TV monitor. Increase the Add Noise parameter to also add a grainy effect to the result.

Inputs:

Source: The clip to be processed.



Parameters:

Lines Frequency: *Default: 50, Range: 0 or greater, Shared.*

The frequency of scan lines on the screen. Increase for more lines, decrease for fewer.

Lines Sharpness: *Default: 1, Range: 0 or greater, Shared.*

Scales the severity of the lines. Increase for sharper edges, or decrease for a more subtle effect. A sharpness of zero reduces the scan line effect to nothing.

Lines Angle: *Default: 0, Range: any, Shared.*

The angle in degrees of the scan lines. Set to 90 for vertical lines instead of horizontal. This parameter can be adjusted using the Lines Angle Widget.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Offset: *Default: 0, Range: any, Shared.*

Adds this gray value to the result (or subtracts if negative). 0 has no effect, .5 is middle gray, and 1 is white.

Gamma: *Default: 1.5, Range: 0 or greater, Shared.*

Scales the brightness of the image by a curve using this gamma value, allowing adjustment of the middle gray values in the scan lines. This can help make the average brightness of the output match the input.

Smooth Source: *Default: 0, Range: 0 or greater, Shared.*

If positive, the source clip is blurred by this amount before being processed.

Lines Shift: *Default: 0, Range: any, Shared.*

Offsets the position of the pattern of lines. A value of 1.0 shifts one entire scan line over, giving the same result as 0.

Color1: *Default rgb: [1 1 1].*

The 'brighter' color of the scan lines pattern.

Color0: *Default rgb: [0 0 0].*

The 'darker' color of the scan lines pattern.

Add Noise: *Default: 0, Range: 0 or greater, Shared.*

If positive, this much black and white noise is added to the image.

Noise Freq Rel: *Default: 1, Range: 0 or greater, Shared.*

The frequency of the noise, relative to the frequency of lines. This has no effect unless the Add Noise parameter above is positive.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[ScanLines](#)

[HalfTone](#)

[Sapphire](#)

[HalfToneColor](#)

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Shake

Applies a shaking motion to the source clip over time with translation, zooming, and/or rotation. The shaking is random but repeatable, so with the same parameters the same shaking motion is generated each time. Turn on Motion Blur and adjust the Mo Blur Length for different amounts of blur. Adjust the Amplitude and Frequency for different shaking speeds and amounts. The Rand parameters give detailed control of the random non-periodic shaking, and the Wave parameters adjust the regular periodic shaking. The X, Y, Z, and Tilt parameters control the horizontal, vertical, zoom, and rotation amounts of shaking respectively.



Inputs:

Source: The clip to shake.

Parameters:

Amplitude: *Default:* 1, *Range:* 0 or greater.
Scales the amplitude of the shaking motion.

Frequency: *Default:* 8, *Range:* 0 or greater.
Increase for faster shaking, decrease for slower shaking. (Be careful if you animate frequency values because the resulting shake frequency is also affected by the rate of change of the value.)

Phase: *Default:* 0, *Range:* any.
Time shift of the shaking motions. (If you animate this value, its rate of change will also affect the apparent frequency.)

Z Dist: *Default:* 1, *Range:* any.
Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Seed: *Default:* 0, *Range:* 0 or greater.
Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Motion Blur: *Popup menu, Default:* No.
Options for motion blur of the shaking motion.

No: motion blur off.

Yes Quick: motion blurs the result in the direction of the shaking motions, with a faster but lower quality motion blur.

Yes: motion blurs the result using a higher quality motion blur.

Mo Blur Length: *Default:* 1, *Range:* 0 or greater.
Scales the amount of motion blur. Use around .5 when processing on fields or 1.0 for frames to give realistic motion blur. This parameter has no effect if Motion Blur is No.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].
Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

X Axis Parameters:

X Rand Amp: *Default: 0.2, Range: 0 or greater.*
Amplitude of horizontal random shaking.

X Rand Freq: *Default: 1, Range: 0 or greater.*
Frequency of horizontal random shaking.

X Wave Amp: *Default: 0, Range: 0 or greater.*
Amplitude of horizontal regular wave shaking.

X Wave Freq: *Default: 2.5, Range: 0 or greater.*
Frequency of horizontal regular wave shaking, in cycles per second.

X Phase: *Default: 0, Range: any.*
Time shift of the horizontal shaking.

Y Axis Parameters:

Y Rand Amp: *Default: 0.1, Range: 0 or greater.*
Amplitude of the vertical random shaking.

Y Rand Freq: *Default: 1, Range: 0 or greater.*
Frequency of the vertical random shaking.

Y Wave Amp: *Default: 0, Range: 0 or greater.*
Amplitude of the vertical regular wave shaking.

Y Wave Freq: *Default: 3, Range: 0 or greater.*
Frequency of the vertical regular wave shaking, in cycles per second.

Y Phase: *Default: 0, Range: any.*
Time shift of the vertical shaking.

Z Axis Parameters:

Z Rand Amp: *Default: 0, Range: 0 or greater.*
Amplitude of the zoom random shaking.

Z Rand Freq: *Default: 1, Range: 0 or greater.*
Frequency of the zoom random shaking.

Z Wave Amp: *Default: 0, Range: 0 or greater.*
Amplitude of the zoom regular wave shaking.

Z Wave Freq: *Default: 3.5, Range: 0 or greater.*
Frequency of the zoom regular wave shaking, in cycles per second.

Z Phase: *Default: 0, Range: any.*
Time shift of the zoom shaking.

Tilt Parameters:

Tilt Rand Amp: *Default: 5, Range: 0 or greater.*
Amplitude of the rotational random shaking, in degrees.

Tilt Rand Freq: *Default: 1, Range: 0 or greater.*
Frequency of the rotational random shaking.

Tilt Wave Amp: *Default: 0, Range: 0 or greater.*
Amplitude of the rotational regular wave shaking, in degrees.

Tilt Wave Freq: *Default: 2, Range: 0 or greater.*
Frequency of the rotational regular wave shaking, in cycles per second.

Tilt Phase: *Default: 0, Range: any.*
Time shift of the rotational shaking.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Flicker](#)
[WarpTransform](#)
[BlurMotion](#)
[BlurMotionCurves](#)

[Sapphire Plug-ins](#)
[Introduction](#)

Shape

Draws a shape into the image. It can give a wide variety of shapes, from polygons and circles to stars, flower shapes, and swirled starfish shapes. The main parameters to look at are Points, Pointiness, Roundness, and Swirl.

Inputs:

None



Parameters:

Center: *X & Y, Default: [360 243], Range: any.*

The center point of the shape. This parameter can be adjusted using the Center Widget.

Size: *Default: 0.5, Range: 0 or greater.*

The overall size of the shape. This parameter can be adjusted using the Size Widget.

Rel Width: *Default: 1, Range: 0 or greater.*

Increase to make the shape wider.

Rel Height: *Default: 1, Range: 0 or greater.*

Increase to make the shape taller.

Rotate: *Default: 0, Range: any.*

Rotates the whole shape around its center. This parameter can be adjusted using the Rotate Widget.

Rotate Pre Scale: *Default: 0, Range: any.*

Rotates the figure around its center before the Rel Width and Rel Height are applied. You can use both rotations to get interesting effects.

Points: *Integer, Default: 5, Range: 3 or greater.*

The number of points in the shape. Unless Pointiness is zero, the shape will have this many points around the edge.

Pointiness: *Default: 2.15, Range: any.*

How pointy the shape is. 0 gives a circle (as long as Roundness is 1); 1 gives a regular polygon. Greater than 1 gives starlike shapes, and less than zero gives flower-like shapes with outward-facing lobes.

Roundness: *Default: 0, Range: 0 to 1.*

How rounded the edges of the shape are between the points. 0 means straight lines, and 1 means smoothly curved. When Pointiness is 1, this has no effect.

Swirl: *Default: 0, Range: -5 to 5.*

Setting this to nonzero swirls the whole shape around; the outward edge is rotated more than the center to give a vortex-like appearance. Try it with large pointiness.

Blur: *Default: 0, Range: 0 or greater.*

Blurs the whole shape.

Brightness1: *Default: 1, Range: 0 or greater.*

Scales the brightness of the shape.

Color1: *Default rgb: [1 1 1].*

The color of the shape.

Color0: *Default rgb:* [0 0 0].

The color of the background of the shape image.

Offset0: *Default:* 0, *Range:* any.

Adds this value to color0.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[ShapeComp](#)

[WipeStar](#)

[Sapphire](#)

[SpotLight](#)

[Plug-ins](#)

[TextureTiles](#)

[Introduction](#)

ShapeComp

Shape draws a shape into the image, then combines the shape with a background clip.

Inputs:

Back: The clip to use as background.



Parameters:

Center: *X & Y, Default: [360 243], Range: any.*

The center point of the shape. This parameter can be adjusted using the Center Widget.

Size: *Default: 0.5, Range: 0 or greater.*

The overall size of the shape. This parameter can be adjusted using the Size Widget.

Rel Width: *Default: 1, Range: 0 or greater.*

Increase to make the shape wider.

Rel Height: *Default: 1, Range: 0 or greater.*

Increase to make the shape taller.

Rotate: *Default: 0, Range: any.*

Rotates the whole shape around its center. This parameter can be adjusted using the Rotate Widget.

Rotate Pre Scale: *Default: 0, Range: any.*

Rotates the figure around its center before the Rel Width and Rel Height are applied. You can use both rotations to get interesting effects.

Points: *Integer, Default: 5, Range: 3 or greater.*

The number of points in the shape. Unless Pointiness is zero, the shape will have this many points around the edge.

Pointiness: *Default: 2.15, Range: any.*

How pointy the shape is. 0 gives a circle (as long as Roundness is 1); 1 gives a regular polygon. Greater than 1 gives starlike shapes, and less than zero gives flower-like shapes with outward-facing lobes.

Roundness: *Default: 0, Range: 0 to 1.*

How rounded the edges of the shape are between the points. 0 means straight lines, and 1 means smoothly curved. When Pointiness is 1, this has no effect.

Swirl: *Default: 0, Range: -5 to 5.*

Setting this to nonzero swirls the whole shape around; the outward edge is rotated more than the center to give a vortex-like appearance. Try it with large pointiness.

Blur: *Default: 0, Range: 0 or greater.*

Blurs the whole shape.

Brightness1: *Default: 1, Range: 0 or greater.*

Scales the brightness of the shape.

Color1: *Default rgb: [1 1 1].*

The color of the shape.

Color0: *Default rgb: [0 0 0].*

The color of the background of the shape image.

Offset0: *Default: 0, Range: any.*

Adds this value to color0.

Combine: *Popup menu, Default: Screen.*

Determines how the shape image is combined with the Background.

Texture Only: gives only the shape image with no Background.

Mult: the shape image is multiplied by the Background.

Add: the shape image is added to the Background.

Screen: the shape image is blended with the Background using a screen operation.

Difference: the result is the difference between the shape image and Background.

Overlay: the shape image is combined with the Background using an overlay function.

Scale Back: *Default: 1, Range: any, Shared.*

Scales the brightness of the background before combining with the shapes. If 0, the result will contain only the shape image over black.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Shape](#)

[WipeStar](#)

[Sapphire](#)

[SpotLight](#)

[Plug-ins](#)

[TextureTiles](#)

[Introduction](#)

Sharpen

Amplifies the high frequencies in the source clip such as edges and details. Increase the Sharpen Width parameter to sharpen more of the mid range frequencies, and adjust Sharpen Amp to control the amount of sharpening applied.

Inputs:

Source: The clip to be processed.



Parameters:

Sharpen Amp: *Default: 1, Range: any.*

The amount of sharpening to apply.

Sharpen Width: *Default: 0.1, Range: 0 or greater.*

The width in pixels to perform the sharpen. Increase to sharpen softer edges, decrease to sharpen only the sharper edges. This parameter can be adjusted using the Width Widget.

Sharpen Luma: *Default: 1, Range: 0 or greater.*

The relative amount of sharpening to apply to the luminance of the source.

Sharpen Chroma: *Default: 1, Range: 0 or greater.*

The relative amount of sharpening to apply to the chroma of the source.

Sharpen Red: *Default: 1, Range: any.*

The relative amount of sharpening to apply to the red color channel.

Sharpen Green: *Default: 1, Range: any.*

The relative amount of sharpening to apply to the green color channel.

Sharpen Blue: *Default: 1, Range: any.*

The relative amount of sharpening to apply to the blue color channel.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[SharpenMask](#)

[EdgeDetect](#)

[Sapphire Plug-ins](#)

[BandPass](#)

[Introduction](#)

[Threshold](#)

SharpenMask

Amplifies the high frequencies in the source clip like Sharpen, except a Mask input is provided to select subsections of the image for sharpening.

Inputs:

Source: The clip to be processed.

Mask: Scales the amount of sharpening by this input. The Source is not affected where it is black, and full sharpening occurs where it is white.



Parameters:

Sharpen Amp: *Default: 1, Range: any.*
The amount of sharpening to apply.

Sharpen Width: *Default: 0.1, Range: 0 or greater.*
The width in pixels to perform the sharpen. Increase to sharpen softer edges, decrease to sharpen only the sharper edges. This parameter can be adjusted using the Width Widget.

Sharpen Luma: *Default: 1, Range: 0 or greater.*
The relative amount of sharpening to apply to the luminance of the source.

Sharpen Chroma: *Default: 1, Range: 0 or greater.*
The relative amount of sharpening to apply to the chroma of the source.

Invert Mask: *Check-box, Default: off.*
If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Sharpen Red: *Default: 1, Range: any.*
The relative amount of sharpening to apply to the red color channel.

Sharpen Green: *Default: 1, Range: any.*
The relative amount of sharpening to apply to the green color channel.

Sharpen Blue: *Default: 1, Range: any.*
The relative amount of sharpening to apply to the blue color channel.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Sharpen](#)

[EdgeDetect](#)
[BandPass](#)
[Threshold](#)

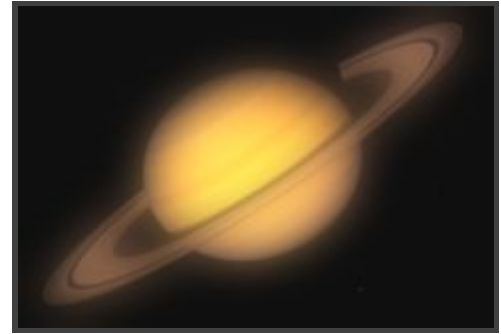
[Sapphire Plug-ins](#)
[Introduction](#)

SoftFocus

Combines a blurred version of the source with the original to give a 'soft focus' effect. Adjust the Width and Mix parameters to give different types of looks.

Inputs:

Source: The clip to be processed.



Parameters:

Width: *Default:* 0.2, *Range:* 0 or greater.

Scales the width of the soft focus blur. This parameter can be adjusted using the Width Widget.

Width Rel: *X & Y, Default:* [1 1], *Range:* 0 or greater.

The relative horizontal and vertical blur widths. Set Width Rel X to 0 for a vertical-only blur, or set Width Rel Y to 0 for a horizontal-only blur. This parameter can be adjusted using the Width Widget.

Mix With Blurred: *Default:* 0, *Range:* 0 to 1.

If positive, mixes in more of the blurred version of the source.

Mix With Source: *Default:* 0, *Range:* 0 to 1.

If positive, increases the amount of original source in the result.

Scale Result: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the result.

Offset Darks: *Default:* 0, *Range:* any.

Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

Subpixel: *Check-box, Default:* off.

Enables blurring by subpixel amounts. Use this for smoother animation of the Width parameters.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Blur](#)
[Glow](#)

[Sapphire Plug-ins](#)
[Introduction](#)

Sparkles

In the S_Sparkles Plugin.

Generates a field of sparkling glint effects. Adjust the Frequency, Density, and Size parameters for different types of sparkling patterns.

Inputs:

None



Parameters:

Size: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of all the glint rays. This and all the size parameters can be adjusted using the Size Widget.

Size X: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the horizontal glint rays.

Size Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the vertical glint rays.

Size Diag1: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top right to bottom left.

Size Diag2: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top left to bottom right.

Size Red: *Default: 0.6, Range: 0 or greater.*

Scales the length of the red component of the rays. If the red, green, and blue sizes are equal the sparkles will be monochrome.

Size Green: *Default: 0.8, Range: 0 or greater.*

Scales the length of the green component of the rays.

Size Blue: *Default: 1, Range: 0 or greater.*

Scales the length of the blue component of the rays.

Frequency: *Default: 32, Range: any, Shared.*

The frequency of the sparkles. Increase to zoom out, decrease to zoom in.

Density: *Default: 0.65, Range: 0 or greater, Shared.*

Increase to add more sparkles.

Seed: *Default: 0.23, Range: 0 or greater, Shared.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all the sparkles.

Color: *Default rgb: [1 1 1], Shared.*

Scales the color of all the sparkles.

Sparkle Speed: *X & Y, Default: [0.1 0], Range: any, Shared.*

If non-zero, the sparkles automatically twinkle on and off at this rate.

Smooth Anim: *Check-box, Default: off, Shared.*

Enable for more steady animation, especially at high values of Frequency.

Params2:

Brightness X: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the horizontal glint rays.

Brightness Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the vertical glint rays.

Brightness Diag1: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top right to bottom left.

Brightness Diag2: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top left to bottom right.

Shift Start: *X & Y, Default: [0 0], Range: any, Shared.*

Translation offset of the result.

Shift Speed: *X & Y, Default: [0 0], Range: any, Shared.*

Translation speed of the result. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[SparklesColor](#)

[SparklesMask](#)

[Glint](#)

[SparklesComp](#)

[Sapphire Plug-ins](#)

[SparklesMaskComp](#)

[Introduction](#)

SparklesComp

In the S_SparklesComp Plugin.

Like Sparkles but with a Back input. Generates a field of sparkling glint effects and combines them with the background.

Inputs:

Back: The clip to combine the sparkles with.



Parameters:

Size: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of all the glint rays. This and all the size parameters can be adjusted using the Size Widget.

Size X: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the horizontal glint rays.

Size Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the vertical glint rays.

Size Diag1: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top right to bottom left.

Size Diag2: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top left to bottom right.

Size Red: *Default: 0.6, Range: 0 or greater.*

Scales the length of the red component of the rays. If the red, green, and blue sizes are equal the sparkles will be monochrome.

Size Green: *Default: 0.8, Range: 0 or greater.*

Scales the length of the green component of the rays.

Size Blue: *Default: 1, Range: 0 or greater.*

Scales the length of the blue component of the rays.

Frequency: *Default: 32, Range: any, Shared.*

The frequency of the sparkles. Increase to zoom out, decrease to zoom in.

Density: *Default: 0.65, Range: 0 or greater, Shared.*

Increase to add more sparkles.

Seed: *Default: 0.23, Range: 0 or greater, Shared.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all the sparkles.

Color: *Default rgb: [1 1 1], Shared.*

Scales the color of all the sparkles.

Sparkle Speed: *X & Y, Default: [0.1 0], Range: any, Shared.*

If non-zero, the sparkles automatically twinkle on and off at this rate.

Smooth Anim: *Check-box, Default: off, Shared.*

Enable for more steady animation, especially at high values of Frequency.

Scale Back: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the background before combining with the Sparkles. If 0, the result will contain only the sparkles image over black.

Params2:

Brightness X: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the horizontal glint rays.

Brightness Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the vertical glint rays.

Brightness Diag1: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top right to bottom left.

Brightness Diag2: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top left to bottom right.

Shift Start: *X & Y, Default: [0 0], Range: any, Shared.*

Translation offset of the result.

Shift Speed: *X & Y, Default: [0 0], Range: any, Shared.*

Translation speed of the result. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[SparklesColorComp](#)

[Sparkles](#)

[Glint](#)

[SparklesMask](#)

[Sapphire Plug-ins](#)

[SparklesMaskComp](#)

[Introduction](#)

SparklesMaskComp

In the S_SparklesMskCmp Plugin.

Like Sparkles but with both a Back and Mask input. Generates a field of sparkling glint effects and combines them with the background.

Inputs:

Back: The clip to combine the sparkles with.

Mask: The sparkle colors are scaled by this input. A monochrome Mask can be used to choose the areas that will generate sparkles. A color Mask can be used to selectively adjust the sparkle colors in different regions. The Mask is applied before the sparkles are generated so it will not clip the resulting glint rays.



Parameters:

Size: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of all the glint rays. This and all the size parameters can be adjusted using the Size Widget.

Size X: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the horizontal glint rays.

Size Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the vertical glint rays.

Size Diag1: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top right to bottom left.

Size Diag2: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top left to bottom right.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Size Red: *Default: 0.6, Range: 0 or greater.*

Scales the length of the red component of the rays. If the red, green, and blue sizes are equal the sparkles will be monochrome.

Size Green: *Default: 0.8, Range: 0 or greater.*

Scales the length of the green component of the rays.

Size Blue: *Default: 1, Range: 0 or greater.*

Scales the length of the blue component of the rays.

Frequency: *Default: 32, Range: any, Shared.*

The frequency of the sparkles. Increase to zoom out, decrease to zoom in.

Density: *Default: 0.65, Range: 0 or greater, Shared.*

Increase to add more sparkles.

Seed: *Default: 0.23, Range: 0 or greater, Shared.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give

different results and the same value should give a repeatable result.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all the sparkles.

Color: *Default rgb: [1 1 1], Shared.*

Scales the color of all the sparkles.

Sparkle Speed: *X & Y, Default: [0.1 0], Range: any, Shared.*

If non-zero, the sparkles automatically twinkle on and off at this rate.

Smooth Anim: *Check-box, Default: off, Shared.*

Enable for more steady animation, especially at high values of Frequency.

Scale Back: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the background before combining with the Sparkles. If 0, the result will contain only the sparkles image over black.

Params2:

Brightness X: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the horizontal glint rays.

Brightness Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the vertical glint rays.

Brightness Diag1: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top right to bottom left.

Brightness Diag2: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top left to bottom right.

Shift Start: *X & Y, Default: [0 0], Range: any, Shared.*

Translation offset of the result.

Shift Speed: *X & Y, Default: [0 0], Range: any, Shared.*

Translation speed of the result. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[SparklesColorMaskComp](#)

[Sparkles](#)

[Glint](#)

[SparklesMask](#)

[Sapphire Plug-ins](#)

[SparklesComp](#)

[Introduction](#)

SparklesMask

In the S_SparklesMsk Plugin.

Like Sparkles but with a Mask input. Generates a field of sparkling glint effects.

Inputs:

Mask: The sparkle colors are scaled by this input. A monochrome Mask can be used to choose the areas that will generate sparkles. A color Mask can be used to selectively adjust the sparkle colors in different regions. The Mask is applied before the sparkles are generated so it will not clip the resulting glint rays.



Parameters:

Size: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of all the glint rays. This and all the size parameters can be adjusted using the Size Widget.

Size X: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the horizontal glint rays.

Size Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the vertical glint rays.

Size Diag1: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top right to bottom left.

Size Diag2: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top left to bottom right.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Size Red: *Default: 0.6, Range: 0 or greater.*

Scales the length of the red component of the rays. If the red, green, and blue sizes are equal the sparkles will be monochrome.

Size Green: *Default: 0.8, Range: 0 or greater.*

Scales the length of the green component of the rays.

Size Blue: *Default: 1, Range: 0 or greater.*

Scales the length of the blue component of the rays.

Frequency: *Default: 32, Range: any, Shared.*

The frequency of the sparkles. Increase to zoom out, decrease to zoom in.

Density: *Default: 0.65, Range: 0 or greater, Shared.*

Increase to add more sparkles.

Seed: *Default: 0.23, Range: 0 or greater, Shared.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all the sparkles.

Color: *Default rgb: [1 1 1], Shared.*

Scales the color of all the sparkles.

Sparkle Speed: *X & Y, Default: [0.1 0], Range: any, Shared.*

If non-zero, the sparkles automatically twinkle on and off at this rate.

Smooth Anim: *Check-box, Default: off, Shared.*

Enable for more steady animation, especially at high values of Frequency.

Params2:

Brightness X: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the horizontal glint rays.

Brightness Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the vertical glint rays.

Brightness Diag1: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top right to bottom left.

Brightness Diag2: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top left to bottom right.

Shift Start: *X & Y, Default: [0 0], Range: any, Shared.*

Translation offset of the result.

Shift Speed: *X & Y, Default: [0 0], Range: any, Shared.*

Translation speed of the result. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[SparklesColorMask](#)

[Sparkles](#)

[Glint](#)

[SparklesComp](#)

[Sapphire Plug-ins](#)

[SparklesMaskComp](#)

[Introduction](#)

SparklesColor

In the S_Sparkles Plugin.

Generates a field of sparkling Glint effects with varying colors. Adjust the Frequency, Density, and Size parameters for different types of sparkling patterns.

Inputs:

None

Parameters:

Size: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of all the glint rays. This and all the size parameters can be adjusted using the Size Widget.

Size X: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the horizontal glint rays.

Size Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the vertical glint rays.

Size Diag1: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top right to bottom left.

Size Diag2: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top left to bottom right.

Size Red: *Default: 0.6, Range: 0 or greater.*

Scales the length of the red component of the rays. If the red, green, and blue sizes are equal the sparkles will be monochrome.

Size Green: *Default: 0.6, Range: 0 or greater.*

Scales the length of the green component of the rays.

Size Blue: *Default: 0.6, Range: 0 or greater.*

Scales the length of the blue component of the rays.

Frequency: *Default: 32, Range: any, Shared.*

The frequency of the sparkles. Increase to zoom out, decrease to zoom in.

Density: *Default: 0.65, Range: 0 or greater, Shared.*

Increase to add more sparkles.

Seed: *Default: 0.23, Range: 0 or greater, Shared.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all the sparkles.

Color: *Default rgb: [1 1 1], Shared.*

Scales the color of all the sparkles.



Color Variation: *Default: 1, Range: 0 or greater, Shared.*

Scales the saturation of the sparkles. Increase for more intense colors, decrease for more subtle colors.

Sparkle Speed: *X & Y, Default: [0.1 0], Range: any, Shared.*

If non-zero, the sparkles automatically twinkle on and off at this rate.

Smooth Anim: *Check-box, Default: off, Shared.*

Enable for more steady animation, especially at high values of Frequency.

Params2:

Brightness X: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the horizontal glint rays.

Brightness Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the vertical glint rays.

Brightness Diag1: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top right to bottom left.

Brightness Diag2: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top left to bottom right.

Shift Start: *X & Y, Default: [0 0], Range: any, Shared.*

Translation offset of the result.

Shift Speed: *X & Y, Default: [0 0], Range: any, Shared.*

Translation speed of the result. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Sparkles](#)

[SparklesColorMask](#)

[Glint](#)

[SparklesColorComp](#)

[Sapphire Plug-ins](#)

[SparklesColorMaskComp](#)

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SparklesColorComp

In the S_SparklesComp Plugin.

Like Sparkles Color but with a Back input. Generates a field of sparkling glint effects with varying colors and combines them with the background.

Inputs:

Back: The clip to combine the sparkles with.



Parameters:

Size: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of all the glint rays. This and all the size parameters can be adjusted using the Size Widget.

Size X: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the horizontal glint rays.

Size Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the vertical glint rays.

Size Diag1: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top right to bottom left.

Size Diag2: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top left to bottom right.

Size Red: *Default: 0.6, Range: 0 or greater.*

Scales the length of the red component of the rays. If the red, green, and blue sizes are equal the sparkles will be monochrome.

Size Green: *Default: 0.6, Range: 0 or greater.*

Scales the length of the green component of the rays.

Size Blue: *Default: 0.6, Range: 0 or greater.*

Scales the length of the blue component of the rays.

Frequency: *Default: 32, Range: any, Shared.*

The frequency of the sparkles. Increase to zoom out, decrease to zoom in.

Density: *Default: 0.65, Range: 0 or greater, Shared.*

Increase to add more sparkles.

Seed: *Default: 0.23, Range: 0 or greater, Shared.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all the sparkles.

Color: *Default rgb: [1 1 1], Shared.*

Scales the color of all the sparkles.

Color Variation: *Default: 1, Range: 0 or greater, Shared.*

Scales the saturation of the sparkles. Increase for more intense colors, decrease for more subtle colors.

Sparkle Speed: *X & Y, Default: [0.1 0], Range: any, Shared.*

If non-zero, the sparkles automatically twinkle on and off at this rate.

Smooth Anim: *Check-box, Default: off, Shared.*

Enable for more steady animation, especially at high values of Frequency.

Scale Back: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the background before combining with the Sparkles. If 0, the result will contain only the sparkles image over black.

Params2:

Brightness X: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the horizontal glint rays.

Brightness Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the vertical glint rays.

Brightness Diag1: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top right to bottom left.

Brightness Diag2: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top left to bottom right.

Shift Start: *X & Y, Default: [0 0], Range: any, Shared.*

Translation offset of the result.

Shift Speed: *X & Y, Default: [0 0], Range: any, Shared.*

Translation speed of the result. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[SparklesComp](#)

[SparklesColor](#)

[Glint](#)

[SparklesColorMask](#)

[Sapphire Plug-ins](#)

[SparklesColorMaskComp](#)

[Introduction](#)

SparklesColorMaskComp

In the S_SparklesMskCmp Plugin.

Like Sparkles Color but with both a Back and Mask input. Generates a field of sparkling glint effects with varying colors and combines them with the background.



Inputs:

Back: The clip to combine the sparkles with.

Mask: The sparkle colors are scaled by this input. A monochrome Mask can be used to choose the areas that will generate sparkles. A color Mask can be used to selectively adjust the sparkle colors in different regions. The Mask is applied before the sparkles are generated so it will not clip the resulting glint rays.

Parameters:

Size: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of all the glint rays. This and all the size parameters can be adjusted using the Size Widget.

Size X: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the horizontal glint rays.

Size Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the vertical glint rays.

Size Diag1: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top right to bottom left.

Size Diag2: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top left to bottom right.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Size Red: *Default: 0.6, Range: 0 or greater.*

Scales the length of the red component of the rays. If the red, green, and blue sizes are equal the sparkles will be monochrome.

Size Green: *Default: 0.6, Range: 0 or greater.*

Scales the length of the green component of the rays.

Size Blue: *Default: 0.6, Range: 0 or greater.*

Scales the length of the blue component of the rays.

Frequency: *Default: 32, Range: any, Shared.*

The frequency of the sparkles. Increase to zoom out, decrease to zoom in.

Density: *Default: 0.65, Range: 0 or greater, Shared.*

Increase to add more sparkles.

Seed: *Default: 0.23, Range: 0 or greater, Shared.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all the sparkles.

Color: *Default rgb: [1 1 1], Shared.*

Scales the color of all the sparkles.

Color Variation: *Default: 1, Range: 0 or greater, Shared.*

Scales the saturation of the sparkles. Increase for more intense colors, decrease for more subtle colors.

Sparkle Speed: *X & Y, Default: [0.1 0], Range: any, Shared.*

If non-zero, the sparkles automatically twinkle on and off at this rate.

Smooth Anim: *Check-box, Default: off, Shared.*

Enable for more steady animation, especially at high values of Frequency.

Scale Back: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the background before combining with the Sparkles. If 0, the result will contain only the sparkles image over black.

Params2:

Brightness X: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the horizontal glint rays.

Brightness Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the vertical glint rays.

Brightness Diag1: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top right to bottom left.

Brightness Diag2: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top left to bottom right.

Shift Start: *X & Y, Default: [0 0], Range: any, Shared.*

Translation offset of the result.

Shift Speed: *X & Y, Default: [0 0], Range: any, Shared.*

Translation speed of the result. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[SparklesMaskComp](#)

[SparklesColor](#)

[Glint](#)

[SparklesColorMask](#)

[Sapphire Plug-ins](#)

[SparklesColorComp](#)

[Introduction](#)

SparklesColorMask

In the S_SparklesMsk Plugin.

Like Sparkles Color but with a Mask input. Generates a field of sparkling glint effects with varying colors.

Inputs:

Mask: The sparkle colors are scaled by this input. A monochrome Mask can be used to choose the areas that will generate sparkles. A color Mask can be used to selectively adjust the sparkle colors in different regions. The Mask is applied before the sparkles are generated so it will not clip the resulting glint rays.



Parameters:

Size: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of all the glint rays. This and all the size parameters can be adjusted using the Size Widget.

Size X: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the horizontal glint rays.

Size Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the length of the vertical glint rays.

Size Diag1: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top right to bottom left.

Size Diag2: *Default: 0.5, Range: 0 or greater, Shared.*

Scales the length of the diagonal rays from top left to bottom right.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Size Red: *Default: 0.6, Range: 0 or greater.*

Scales the length of the red component of the rays. If the red, green, and blue sizes are equal the sparkles will be monochrome.

Size Green: *Default: 0.6, Range: 0 or greater.*

Scales the length of the green component of the rays.

Size Blue: *Default: 0.6, Range: 0 or greater.*

Scales the length of the blue component of the rays.

Frequency: *Default: 32, Range: any, Shared.*

The frequency of the sparkles. Increase to zoom out, decrease to zoom in.

Density: *Default: 0.65, Range: 0 or greater, Shared.*

Increase to add more sparkles.

Seed: *Default: 0.23, Range: 0 or greater, Shared.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of all the sparkles.

Color: *Default rgb: [1 1 1], Shared.*

Scales the color of all the sparkles.

Color Variation: *Default: 1, Range: 0 or greater, Shared.*

Scales the saturation of the sparkles. Increase for more intense colors, decrease for more subtle colors.

Sparkle Speed: *X & Y, Default: [0.1 0], Range: any, Shared.*

If non-zero, the sparkles automatically twinkle on and off at this rate.

Smooth Anim: *Check-box, Default: off, Shared.*

Enable for more steady animation, especially at high values of Frequency.

Params2:

Brightness X: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the horizontal glint rays.

Brightness Y: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the vertical glint rays.

Brightness Diag1: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top right to bottom left.

Brightness Diag2: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the diagonal rays from top left to bottom right.

Shift Start: *X & Y, Default: [0 0], Range: any, Shared.*

Translation offset of the result.

Shift Speed: *X & Y, Default: [0 0], Range: any, Shared.*

Translation speed of the result. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[SparklesMask](#)

[SparklesColor](#)

[Glint](#)

[SparklesColorComp](#)

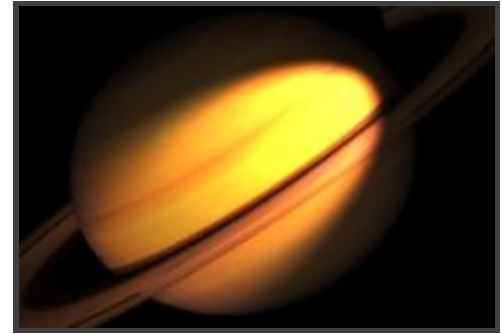
[Sapphire Plug-ins](#)

[SparklesColorMaskComp](#)

[Introduction](#)

SpotLight

Lights the input clip using one or two spotlights. For each enabled light, the intersection of a 3D light cone with the image plane is calculated using the given light source position, aim location, and beam angle. Ambient light can also be applied to affect the entire source image evenly. A wide variety of lighting shapes can be created by adjusting the parameters provided.



Inputs:

Back: The clip to combine the spots with.

Parameters:

Light1 Enable: *Check-box, Default: on.*
Turns on or off this spotlight.

Light1 Bright: *Default: 0.8, Range: any.*
Scales the brightness of this spotlight. This value can be made negative for a 'dark' spotlight effect.

Falloff Power1: *Default: 0, Range: 0 or greater.*
Determines how much the spotlight brightness fades with distance. A value of 0 causes no fading, 1 fades the light as distance increases, and 2 fades it faster with distance. A value of 2 is correct for a physically realistic point light.

Light1: *X & Y, Default: [0.3 0.3], Range: any.*
The position of this light source relative to the image plane. This parameter can be adjusted using the Light1 Widget.

Light1 Z: *Default: 0.5, Range: 0.1 or greater.*
The distance of this light source from the image plane. Decreasing this brings the light source closer to the surface and causes the direction of the beam to be more parallel to the surface, which can stretch the spot into an ellipse or hyperbola shape.

Light1 Color: *Default rgb: [1 1 1].*
Determines the color of this spotlight.

Spread Angle1: *Default: 90, Range: 0 to 360.*
The spread angle of this spotlight beam in degrees. Larger values open up the beam for a larger spot.

Softness1: *Default: 0.5, Range: 0.01 or greater.*
Determines the amount of penumbra or the softness of the spotlight edges, relative to the Spread Angle. Lower values make crisp edged shapes, higher values make softer shapes.

Aim1: *X & Y, Default: [0 0], Range: any.*
This spotlight is directed at this location on the image plane. If this is directly under the Light Source a circular spot will result. When moved away from the Light Source it can also cause the spot to change to an ellipse or hyperbola shape. This parameter can be adjusted using the Aim1 Widget.

Ambient Bright: *Default: 0.2, Range: any.*
The amount of ambient light included in the entire frame. This allows parts of the Background outside of the spotlights to still be visible if desired.

All Lights Brt: *Default: 1, Range: any.*
Scales the brightness of all the spotlights together.

All Shift: *X & Y, Default: [0 0], Range: any.*

Shifts the entire spotlight pattern without changing their shapes by adding this amount to all light and aim positions.

All Aims Shift: *X & Y, Default: [0 0], Range: any.*

Adds this amount to all lights Aim parameters. This can be used to easily make all lights aim at the same location. This parameter can be adjusted using the All Aims Shift Widget.

Combine: *Popup menu, Default: Mult.*

Determines how the light is combined with the Background.

Lights Only: gives only the light image with no Background.

Mult: the light is multiplied by the Background. This is the effect that a real light would typically have.

Add: the light is added to the Background.

Screen: the light is blended with the Background using a screen operation.

Overlay: the light is combined with the Background using an overlay function.

Ambient Color: *Default rgb: [1 1 1].*

Determines the color of the ambient light.

All Lights Color: *Default rgb: [1 1 1].*

Scales the color of all the spotlights together.

Params2:

Light2 Enable: *Check-box, Default: off.*

Turns on or off the second spotlight.

The remainder of the Light2 parameters are the same as those described above for Light1, but control the second spotlight instead.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[LensFlare](#)

[Emboss](#)

[Sapphire Plug-ins](#)

[Introduction](#)

Streaks

Motion blurs the bright areas of the source into streaks between the From and To transformations. This can be used to create an extended film exposure effect, or simulate soft beams of light. From and To parameters do not refer to time. They describe the two transformations in space that determine the style of blur applied to each frame.



Inputs:

Source: The clip to be processed.

Parameters:

From Z Dist: *Default:* 1, *Range:* 0.001 or greater.

The 'distance' of the From transformation. This zooms about the Center location when Shift is 0. Increase to zoom out, decrease to zoom in. This parameter can be adjusted using the From Transform Widget.

From Rotate: *Default:* 0, *Range:* any.

The rotation angle of the From transformation, in degrees, about the center. This parameter can be adjusted using the From Transform Widget.

From Shift: *X & Y, Default:* [0 0], *Range:* any.

The horizontal and vertical translations of the From transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the From Transform Widget.

Center: *X & Y, Default:* [0 0], *Range:* any.

The center of rotation and zooming, in screen coordinates relative to the center of the frame. The shift values should be zero for this location to make sense. This parameter can be adjusted using the Center Widget.

Exposure Bias: *Default:* 0, *Range:* 0 to 1.

Determines the variable amount of exposure along the path between the From and To transformations. A value of 0 causes more exposure at the From end, 0.5 causes equal exposure along the path, and 1.0 causes more exposure at the To end. If you have bright spots on a dark background, a 0 value would cause the processed spots to be brighter at the From end and dark at the To end, and a 1.0 value would cause the opposite.

To Z Dist: *Default:* 0.8, *Range:* 0.001 or greater.

The 'distance' of the To transformation. Increase to zoom out, or decrease to zoom in. This parameter can be adjusted using the To Transform Widget.

To Rotate: *Default:* 0, *Range:* any.

The rotation angle of the To transformation, in degrees, about the center. Note that if the From and To Rotate angles are very different, the interpolation between them will become less accurate. This parameter can be adjusted using the To Transform Widget.

To Shift: *X & Y, Default:* [0 0], *Range:* any.

The horizontal and vertical translations of the To transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the To Transform Widget.

Mix Src Darks: *Default:* 1, *Range:* 0 or greater.

The dark non-streaked components of the Source are scaled by this amount and added to the result. This allows combining the streaked and non-streaked versions of the source clip.

Mix Src Brights: *Default: 0, Range: 0 or greater.*

The original bright components of the Source that were used to generate the streaks are scaled by this amount and added to the result. This allows combining some non-streaked bright areas of the source clip with the output.

Scale Streaks: *Default: 1, Range: 0 or greater.*

Scales the brightness of the streaks.

Scale Result: *Default: 1, Range: 0 or greater.*

Scales the brightness of the result.

Threshold: *Default: 0.5, Range: 0 or greater.*

Streaks are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes streaks at only the brightest spots. A value of 0 causes streaks for every non-black area.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the streaks generated on areas of the source clip containing that color.

Wrap: *Popup menu, Default: NO.*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Subpixel: *Check-box, Default: on.*

If enabled, uses a better quality but slightly slower method for rendering the streaks.

Streaks Res: *Popup menu, Default: FULL.*

Selects the resolution factor for the streaks. This is similar to the general 'Res' factor parameter, but it only affects the streaks: the original mixed with the streaks remains at full resolution. Higher resolutions give better quality, lower resolutions give faster processing.

FULL: Full resolution is used.

1/2: The streaks are calculated at half resolution.

1/4: The streaks are calculated at quarter resolution.

Combine: *Popup menu, Default: Add.*

Determines how the streaks are combined with the background.

Add: causes the streaks to be added to the background.

Screen: performs a blend function which can help prevent overly bright results.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[StreaksMask](#)

[StreaksComp](#)

[StreaksMaskCmp](#)

[Rays](#)

[EdgeRays](#)

[BlurMotion](#)

[WarpRepeat](#)

[WarpChroma](#)

[Sapphire Plug-ins](#)

[Introduction](#)

StreaksComp

Motion blurs the bright areas of the source into streaks between the From and To transformations, and combines that with the background input. This can be used to create an extended film exposure effect, or simulate soft beams of light.

Inputs:

Source: The clip to be processed.

Back: The background to combine the streaks with.



Parameters:

From Z Dist: *Default:* 1, *Range:* 0.001 or greater.

The 'distance' of the From transformation. This zooms about the Center location when Shift is 0. Increase to zoom out, decrease to zoom in. This parameter can be adjusted using the From Transform Widget.

From Rotate: *Default:* 0, *Range:* any.

The rotation angle of the From transformation, in degrees, about the center. This parameter can be adjusted using the From Transform Widget.

From Shift: *X & Y, Default:* [0 0], *Range:* any.

The horizontal and vertical translations of the From transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the From Transform Widget.

Center: *X & Y, Default:* [0 0], *Range:* any.

The center of rotation and zooming, in screen coordinates relative to the center of the frame. The shift values should be zero for this location to make sense. This parameter can be adjusted using the Center Widget.

Exposure Bias: *Default:* 0, *Range:* 0 to 1.

Determines the variable amount of exposure along the path between the From and To transformations. A value of 0 causes more exposure at the From end, 0.5 causes equal exposure along the path, and 1.0 causes more exposure at the To end. If you have bright spots on a dark background, a 0 value would cause the processed spots to be brighter at the From end and dark at the To end, and a 1.0 value would cause the opposite.

To Z Dist: *Default:* 0.8, *Range:* 0.001 or greater.

The 'distance' of the To transformation. Increase to zoom out, or decrease to zoom in. This parameter can be adjusted using the To Transform Widget.

To Rotate: *Default:* 0, *Range:* any.

The rotation angle of the To transformation, in degrees, about the center. Note that if the From and To Rotate angles are very different, the interpolation between them will become less accurate. This parameter can be adjusted using the To Transform Widget.

To Shift: *X & Y, Default:* [0 0], *Range:* any.

The horizontal and vertical translations of the To transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the To Transform Widget.

Scale Streaks: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the streaks.

Scale Back: *Default: 1, Range: 0 or greater.*

Scales the brightness of the background before combining with the streaks. If 0, the result will contain only the streaks image over black.

Scale Result: *Default: 1, Range: 0 or greater.*

Scales the brightness of the result.

Threshold: *Default: 0.5, Range: 0 or greater.*

Streaks are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes streaks at only the brightest spots. A value of 0 causes streaks for every non-black area.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the streaks generated on areas of the source clip containing that color.

Wrap: *Popup menu, Default: NO.*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Subpixel: *Check-box, Default: on.*

If enabled, uses a better quality but slightly slower method for rendering the streaks.

Streaks Res: *Popup menu, Default: FULL.*

Selects the resolution factor for the streaks. This is similar to the general 'Res' factor parameter, but it only affects the streaks: the original mixed with the streaks remains at full resolution. Higher resolutions give better quality, lower resolutions give faster processing.

FULL: Full resolution is used.

1/2: The streaks are calculated at half resolution.

1/4: The streaks are calculated at quarter resolution.

Combine: *Popup menu, Default: Add.*

Determines how the streaks are combined with the background.

Add: causes the streaks to be added to the background.

Screen: performs a blend function which can help prevent overly bright results.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Streaks](#)

[StreaksMask](#)

[StreaksMaskCmp](#)

[Rays](#)

[EdgeRays](#)

[BlurMotion](#)

[WarpRepeat](#)

[WarpChroma](#)

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StreaksMaskCmp

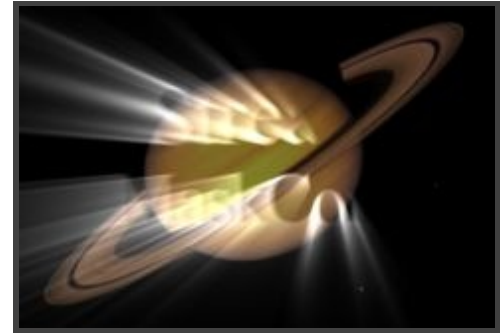
Motion blurs the bright areas of the source into streaks between the From and To transformations, at non-black areas of the Mask, and combines that with the background input. This can be used to create an extended film exposure effect, or simulate soft beams of light.

Inputs:

Source: The clip to be processed.

Back: The background to combine the streaks with.

Mask: The Source is scaled by the values of this input clip before the areas that get streaked are determined. This can be used to selectively remove or reduce the streaks applied to specific areas of the Source.



Parameters:

From Z Dist: *Default:* 1, *Range:* 0.001 or greater.

The 'distance' of the From transformation. This zooms about the Center location when Shift is 0. Increase to zoom out, decrease to zoom in. This parameter can be adjusted using the From Transfm Widget.

From Rotate: *Default:* 0, *Range:* any.

The rotation angle of the From transformation, in degrees, about the center. This parameter can be adjusted using the From Transfm Widget.

From Shift: *X & Y, Default:* [0 0], *Range:* any.

The horizontal and vertical translations of the From transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the From Transfm Widget.

Center: *X & Y, Default:* [0 0], *Range:* any.

The center of rotation and zooming, in screen coordinates relative to the center of the frame. The shift values should be zero for this location to make sense. This parameter can be adjusted using the Center Widget.

Exposure Bias: *Default:* 0, *Range:* 0 to 1.

Determines the variable amount of exposure along the path between the From and To transformations. A value of 0 causes more exposure at the From end, 0.5 causes equal exposure along the path, and 1.0 causes more exposure at the To end. If you have bright spots on a dark background, a 0 value would cause the processed spots to be brighter at the From end and dark at the To end, and a 1.0 value would cause the opposite.

To Z Dist: *Default:* 0.8, *Range:* 0.001 or greater.

The 'distance' of the To transformation. Increase to zoom out, or decrease to zoom in. This parameter can be adjusted using the To Transform Widget.

To Rotate: *Default:* 0, *Range:* any.

The rotation angle of the To transformation, in degrees, about the center. Note that if the From and To Rotate angles are very different, the interpolation between them will become less accurate. This parameter can be adjusted using the To Transform Widget.

To Shift: *X & Y, Default:* [0 0], *Range:* any.

The horizontal and vertical translations of the To transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the To Transform Widget.

Scale Streaks: *Default: 1, Range: 0 or greater.*

Scales the brightness of the streaks.

Scale Back: *Default: 1, Range: 0 or greater.*

Scales the brightness of the background before combining with the streaks. If 0, the result will contain only the streaks image over black.

Scale Result: *Default: 1, Range: 0 or greater.*

Scales the brightness of the result.

Threshold: *Default: 0.5, Range: 0 or greater.*

Streaks are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes streaks at only the brightest spots. A value of 0 causes streaks for every non-black area.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the streaks generated on areas of the source clip containing that color.

Wrap: *Popup menu, Default: NO.*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Subpixel: *Check-box, Default: on.*

If enabled, uses a better quality but slightly slower method for rendering the streaks.

Streaks Res: *Popup menu, Default: FULL.*

Selects the resolution factor for the streaks. This is similar to the general 'Res' factor parameter, but it only affects the streaks: the original mixed with the streaks remains at full resolution. Higher resolutions give better quality, lower resolutions give faster processing.

FULL: Full resolution is used.

1/2: The streaks are calculated at half resolution.

1/4: The streaks are calculated at quarter resolution.

Combine: *Popup menu, Default: Add.*

Determines how the streaks are combined with the background.

Add: causes the streaks to be added to the background.

Screen: performs a blend function which can help prevent overly bright results.

Params2:

Blur Mask: *Default: 0, Range: 0 or greater.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Mask Type: *Popup menu, Default: Luma.*

Determines how the Mask input channels are used to make a monochrome mask.

Luma: the luminance of the RGB channels is used.

Color: The red, green, and blue channels are used.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Streaks](#)
[StreaksMask](#)
[StreaksComp](#)

[Rays](#)
[EdgeRays](#)
[BlurMotion](#)
[WarpRepeat](#)
[WarpChroma](#)

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StreaksMask

Motion blurs the bright areas of the source into streaks between the From and To transformations, at non-black areas of the Mask. This can be used to create an extended film exposure effect, or simulate soft beams of light.

Inputs:

Source: The clip to be processed.

Mask: The Source is scaled by the values of this input clip before the areas that get streaked are determined. This can be used to selectively remove or reduce the streaks applied to specific areas of the Source.



Parameters:

From Z Dist: *Default:* 1, *Range:* 0.001 or greater.

The 'distance' of the From transformation. This zooms about the Center location when Shift is 0. Increase to zoom out, decrease to zoom in. This parameter can be adjusted using the From Transfm Widget.

From Rotate: *Default:* 0, *Range:* any.

The rotation angle of the From transformation, in degrees, about the center. This parameter can be adjusted using the From Transfm Widget.

From Shift: *X & Y, Default:* [0 0], *Range:* any.

The horizontal and vertical translations of the From transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the From Transfm Widget.

Center: *X & Y, Default:* [0 0], *Range:* any.

The center of rotation and zooming, in screen coordinates relative to the center of the frame. The shift values should be zero for this location to make sense. This parameter can be adjusted using the Center Widget.

Exposure Bias: *Default:* 0, *Range:* 0 to 1.

Determines the variable amount of exposure along the path between the From and To transformations. A value of 0 causes more exposure at the From end, 0.5 causes equal exposure along the path, and 1.0 causes more exposure at the To end. If you have bright spots on a dark background, a 0 value would cause the processed spots to be brighter at the From end and dark at the To end, and a 1.0 value would cause the opposite.

To Z Dist: *Default:* 0.8, *Range:* 0.001 or greater.

The 'distance' of the To transformation. Increase to zoom out, or decrease to zoom in. This parameter can be adjusted using the To Transform Widget.

To Rotate: *Default:* 0, *Range:* any.

The rotation angle of the To transformation, in degrees, about the center. Note that if the From and To Rotate angles are very different, the interpolation between them will become less accurate. This parameter can be adjusted using the To Transform Widget.

To Shift: *X & Y, Default:* [0 0], *Range:* any.

The horizontal and vertical translations of the To transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the To Transform Widget.

Mix Src Darks: *Default:* 1, *Range:* 0 or greater.

The dark non-streaked components of the Source are scaled by this amount and added to the result. This allows

combining the streaked and non-streaked versions of the source clip.

Mix Src Brights: *Default: 0, Range: 0 or greater.*

The original bright components of the Source that were used to generate the streaks are scaled by this amount and added to the result. This allows combining some non-streaked bright areas of the source clip with the output.

Scale Streaks: *Default: 1, Range: 0 or greater.*

Scales the brightness of the streaks.

Scale Result: *Default: 1, Range: 0 or greater.*

Scales the brightness of the result.

Threshold: *Default: 0.5, Range: 0 or greater.*

Streaks are generated from locations in the source clip that are brighter than this value. A value of 0.9 causes streaks at only the brightest spots. A value of 0 causes streaks for every non-black area.

Threshold Add Color: *Default rgb: [0 0 0].*

This can be used to raise the threshold on a specific color and thereby reduce the streaks generated on areas of the source clip containing that color.

Wrap: *Popup menu, Default: NO.*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Subpixel: *Check-box, Default: on.*

If enabled, uses a better quality but slightly slower method for rendering the streaks.

Streaks Res: *Popup menu, Default: FULL.*

Selects the resolution factor for the streaks. This is similar to the general 'Res' factor parameter, but it only affects the streaks: the original mixed with the streaks remains at full resolution. Higher resolutions give better quality, lower resolutions give faster processing.

FULL: Full resolution is used.

1/2: The streaks are calculated at half resolution.

1/4: The streaks are calculated at quarter resolution.

Combine: *Popup menu, Default: Add.*

Determines how the streaks are combined with the background.

Add: causes the streaks to be added to the background.

Screen: performs a blend function which can help prevent overly bright results.

Params2:

Blur Mask: *Default: 0, Range: 0 or greater.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Mask Type: *Popup menu, Default: Luma.*

Determines how the Mask input channels are used to make a monochrome mask.

Luma: the luminance of the RGB channels is used.

Color: The red, green, and blue channels are used.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Streaks](#)

[StreaksComp](#)

[StreaksMaskCmp](#)

[Rays](#)

[EdgeRays](#)

[BlurMotion](#)

[WarpRepeat](#)

[WarpChroma](#)

[Sapphire Plug-ins](#)

[Introduction](#)

TVChannelChange

Transitions between two input clips by simulating a channel change on an old television set. The first clip goes black with bad reception, followed by the second clip with bad reception. The reception improves over time until only the second clip is left.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Dissolve Amt: *AutoTransition, Default: 0, Range: 0 to 1.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter automatically animates from 0 to 1 to perform a complete transition.

Reception: *Default: 1.6, Range: 0 or greater.*

Master scale for all reception-oriented artifacts: static, interference, ghosting, horizontal and vertical hold, hum bars, and color stripes. Turn to zero to get perfect reception, i.e. zero of each of the above artifacts.

Dead Time Style: *Popup menu, Default: Static Over Black.*

Selects what the channel change should look like when there is no signal between the channels.

Black: use black between the channels.

Static Over Black: bad reception artifacts are displayed over black between the channels.

Static Over Dissolve: the first channel dissolves into the second while reception artifacts are applied to both.

Dead Time Length: *Default: 0.2, Range: 0 to 1.*

The fraction of of the transition time to spend in between channels.

Dead Time Start: *Default: 0, Range: 0 to 1.*

The amount of time into the transition to start the channel change. Set this to zero if you want the first channel to go straight to dead air. Set this to one if you the second channel to snap in from dead air. If the parameter is greater than zero, the reception on the outgoing channel will get worse before going to dead air time. Conversely the new channel will get progressively better reception over time.

Tv Pixels: *Default: 720, Range: 1 or greater.*

The number of 'TV pixels' across the screen. Controls the size of the static, interference, scanlines, and dropouts. Lower this to simulate a lower resolution TV.

Static Amplitude: *Default: 0.8, Range: 0 or greater.*

Scales the brightness of the static noise. Scaled by Reception Master. The static dot size is controlled by the TV Pixels parameter.

Static Density: *Default: 0.7, Range: 0.01 to 1.*

Density of the static; turn up to get more static pixels; turn down to get only occasional static pixels.

Interference Amp: *Default: 0.6, Range: 0 or greater.*

Simulates interference from nearby electrical devices (electric motors, cordless phones, and so on). The look is a pattern of semi-regularly spaced random color dots. The dot size is controlled by the TV Pixels parameter. Scaled by Reception Master.

Ghost Amplitude: *Default: 0.6, Range: 0 or greater.*

Ghosts are copies of the image that result from multipath distortion between the transmitter and the TV. Turn up this parameter to get stronger ghosts. Scaled by Reception Master.

Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Horizontal Hold: *Default: 0.5, Range: 0 or greater.*

Horizontal hold causes the image to shift horizontally in a semi-random way, simulating a TV with a bad horizontal hold circuit, or a signal not strong enough to engage the horizontal hold. Scaled by Reception.

Vertical Hold: *Default: 0.8, Range: 0 to 2.*

Vertical hold causes the image to shift vertically in a rolling motion. It's normally caused by a weak signal preventing the TV from locking on. This parameter controls the fraction of the time that the image is having hold problems. Set to zero for no vertical hold problems. Scaled by Reception.

Bars Amp: *Default: 0.3, Range: 0 or greater.*

Power line hum and other TV problems can cause rolling light and dark bars to crawl up the screen. This can also be caused by failure to synchronize a video camera to the TV output. This parameter controls the overall strength of these bars. There are two sets of bars, one large and one small, that mutually interfere. This parameter controls the overall brightness scale of the bars. Turn to zero for no bars. Scaled by Reception Master.

Stripes Amp: *Default: 0.2, Range: 0 or greater.*

Another common form of interference, color stripes are caused by phase shifts in the chroma signal, among other things. This parameter controls the overall brightness of the color stripes. Scaled by Reception Master.

Params2:

H Frequency: *Default: 1.25, Range: 0 or greater.*

Vertical frequency of the horizontal-hold waves.

H Time Vary: *Default: 0.5, Range: 0 or greater.*

Modulates the horizontal-hold waves over time by this amount. When increased, some frames will have more horizontal shifting while other frames will have less.

V Frequency: *Default: 2, Range: 0 or greater.*

The frequency of vertical hold jumps. Decrease to get a more consistent rolling motion, or increase to get a jumpier look.

V Speed: *Default: 2, Range: any.*

The average speed of the vertical hold rolling motion over time.

V Random: *Default: 0.1, Range: 0 or greater.*

Controls how much randomness there is in the vertical hold rolling motion. Set to zero for smooth rolling, 1 or more for jittery behavior.

Border Data: *Default: 1, Range: 0 to 10.*

Brightness of the dots and lines that appear in the vertical blanking interval specified by Border Width.

Int Frequency: *Default: 1.27, Range: 0 to 500.*

Interference frequency. The look is very sensitive to this parameter. Fractional values like 0.3 or 1.23 look better than integers. Animating it very slightly, say from 1.27 to 1.3 gives a nice look.

Dots Speed: *Default: 1, Range: any.*

The dot pattern moves with this speed over time in X and Y.

Tint Lights: *Default rgb: [1 1 1].*

Scales the result by this color, thus tinting the lighter regions.

Hue Shift: *Default: 0, Range: any.*

Shift the color hues by this amount.

Saturation: *Default: 1, Range: any.*

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Scale Lights: *Default: 1, Range: 0 or greater.*

Scales the result by this gray value. Increase for a brighter result.

Offset Darks: *Default: 0, Range: any.*

Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TVDamage](#)

[JpegDamage](#)

[FilmDamage](#)

[FilmEffect](#)

[ScanLines](#)

[Vignette](#)

[HalfTone](#)

[Diffuse](#)

[StaticColor](#)

[StaticMono](#)

[Sapphire](#)

[Plug-ins](#)

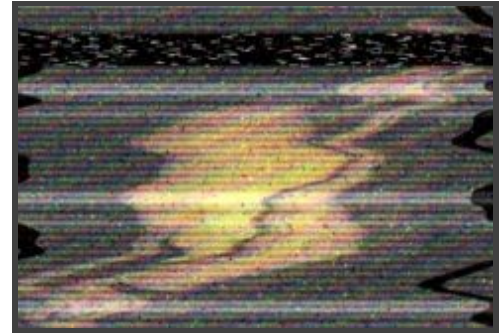
[Introduction](#)

TVDamage

Simulates a TV with transmission and reception problems, VCR issues, and TV hardware difficulties. Simulates static, interference, ghosting, horizontal and vertical hold, hum bars, color stripes, visible scanlines, VCR fast-forward, dropouts, vignetting, orthicon, fisheye, and turn-off.

Inputs:

Source: The clip to be processed.



Parameters:

Effect: *Popup menu, Default: Color.*

Type of TV to simulate: color or black & white.

Color: simulates a color TV.

Mono: simulates a black & white TV.

Reception Master: *Default: 0.4, Range: 0 or greater, Shared.*

Master control for all reception-oriented artifacts: static, interference, ghosting, horizontal and vertical hold, hum bars, and color stripes. Turn to zero to get perfect reception, i.e. zero of each of the above artifacts.

Tv Pixels: *Default: 720, Range: 1 or greater, Shared.*

The number of 'TV pixels' across the screen. Controls the size of the static, interference, scanlines, and dropouts. Lower this to simulate a lower resolution TV.

Seed: *Default: 0.123, Range: 0 or greater, Shared.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Static Amplitude: *Default: 0.8, Range: 0 or greater, Shared.*

Scales the brightness of the static noise. Scaled by Reception Master. The static dot size is controlled by the TV Pixels parameter.

Static Density: *Default: 0.7, Range: 0.01 to 1, Shared.*

Density of the static; turn up to get more static pixels; turn down to get only occasional static pixels.

Interference Amp: *Default: 0.6, Range: 0 or greater, Shared.*

Simulates interference from nearby electrical devices (electric motors, cordless phones, and so on). The look is a pattern of semi-regularly spaced random color dots. The dot size is controlled by the TV Pixels parameter. Scaled by Reception Master.

Ghost Amplitude: *Default: 0.6, Range: 0 or greater, Shared.*

Ghosts are copies of the image that result from multipath distortion between the transmitter and the TV. Turn up this parameter to get stronger ghosts. Scaled by Reception Master.

Horizontal Hold: *Default: 0.5, Range: 0 or greater, Shared.*

This causes the image to shift horizontally in a semi-random way, simulating a TV with a bad horizontal hold circuit, or a signal not strong enough to engage the horizontal hold. Scaled by Reception Master.

Vertical Hold: *Default: 0.8, Range: 0 to 2, Shared.*

This causes the image to shift vertically in a rolling motion, and is normally caused by a weak signal preventing the TV from locking on. This parameter controls the fraction of the time that the image is having hold problems. Set to zero for no vertical hold problems. Scaled by Reception Master.

Bars Amp: *Default: 0.3, Range: 0 or greater, Shared.*

Power line hum and other TV problems can cause rolling light and dark bars to crawl up the screen. This can also be caused by failure to synchronize a video camera to the TV output. This parameter controls the overall strength of these bars. There are two sets of bars, one large and one small, that mutually interfere. This parameter controls the overall brightness scale of the bars. Turn to zero for no bars. Scaled by Reception Master.

Stripes Amp: *Default: 0.2, Range: 0 or greater, Shared.*

Another common form of interference, color stripes are caused by phase shifts in the chroma signal, among other things. This parameter controls the overall brightness of the color stripes. Scaled by Reception Master.

Fast Forward: *Default: 0, Range: 0 or greater, Shared.*

Generates a VCR fast-forward look with torn bars across the screen.

Tape Dropouts: *Default: 0, Range: 0 or greater, Shared.*

Generates VCR dropouts on random frames, at random times.

Vignette Dark: *Default: 0, Range: 0 to 1, Shared.*

Vignetting is darkening of the image towards the corners and sides of the image. This parameter controls how much the outer corners of the screen should be darkened (vignetted). 0 gives no vignetting, 1 gives maximum darkening.

Scanlines: *Default: 0.1, Range: 0 or greater, Shared.*

Creates visible scanlines in the image. Increase to get more intense scanlines, or set to zero for no scanlines. The width of the scanlines is controlled by the TV Pixels parameter and Scanlines Rel Freq.

Scanlines Freq: *Default: 1, Range: 0 or greater, Shared.*

Relative frequency of the TV scanlines. Increase to get more scanlines, decrease to get fewer large scanlines. Note that the number of scanlines is also controlled by the TV Pixels parameter.

Orthicon: *Default: 0, Range: 0 or greater, Shared.*

Darkens the clip at areas around parts of the source clip that are brighter than the given threshold, to simulate a 1950s 'orthicon' TV camera look. Most useful in black & white mode.

Turn Off: *Default: 0, Range: 0 to 1, Shared.*

Animate this parameter from 0 to 1 to simulate the TV turning off. The image will turn white and shrink to a dot in the center, with a flash near the end.

Fish Eye: *Default: 0, Range: any, Shared.*

Expands the center of the source clip as if viewed through a fish-eye lens. This gives an old-time slightly rounded TV look.

Params2:

Num Ghosts: *Integer, Default: 5, Range: 0 or greater, Shared.*

The number of ghost images. Some may be ahead (to the left of) the source image, most will be to the right. Some will be positive and some negative (inverted). See Shift and Negative Ghosts below.

Negative Ghosts: *Default: 0.5, Range: 0 to 1, Shared.*

The fraction of the ghosts that are negative (inverted), on average.

Ghost Spacing: *Default: 0.2, Range: 0 or greater, Shared.*

Amount to spread out the ghost images horizontally.

Vary Position: *Default: 0.3, Range: 0 to 1, Shared.*

Controls the regularity of the ghost image spacing. Set to zero for regularly spaced ghosts; set to one for random positioning.

Ghost Shift: *Default: 0.5, Range: -1 to 1, Shared.*

Shifts the ghost images to the left or right, without shifting the main image.

Ghost Smooth: *Default: 0, Range: 0 or greater, Shared.*

Blurs the ghost images without blurring the main image or any other artifacts.

H Frequency: *Default: 1.25, Range: 0 or greater, Shared.*

Vertical frequency of the horizontal-hold waves.

H Time Vary: *Default: 0.5, Range: 0 or greater, Shared.*

Modulates the horizontal-hold waves over time by this amount. When increased, some frames will have more horizontal shifting while other frames will have less.

V Frequency: *Default: 2, Range: 0 or greater, Shared.*

The frequency of vertical hold jumps. Decrease to get a more consistent rolling motion, or increase to get a jumpier look.

V Speed: *Default: 2, Range: any, Shared.*

The average speed of the vertical hold rolling motion over time.

V Random: *Default: 0.1, Range: 0 or greater, Shared.*

Controls how much randomness there is in the vertical hold rolling motion. Set to zero for smooth rolling, 1 or more for jittery behavior.

Border Data: *Default: 1, Range: 0 to 10, Shared.*

Brightness of the dots and lines that appear in the vertical blanking interval specified by Border Width.

Roll Speed: *Default: 1, Range: 0 or greater, Shared.*

Bars and color stripes are automatically animated to roll at this speed.

Bar Frequency: *Default: 1, Range: 0.1 or greater, Shared.*

The frequency of the bars; turn up for more thinner bars, turn down for fewer fat bars.

Bar1 Width: *Default: 0.35, Range: 0 to 1, Shared.*

Fraction of the main bar that is light; the rest is dark.

Bar2 Rel Freq: *Default: 6, Range: 1 or greater, Shared.*

Controls the frequency of the smaller bars.

Stripe Frequency: *Default: 10, Range: 1 or greater, Shared.*

Spatial frequency of the color stripes.

Stripe Angle: *Default: 160, Range: any, Shared.*

Angle of the stripes.

Int Frequency: *Default: 1.27, Range: 0 to 500, Shared.*

Interference frequency. The look is very sensitive to this parameter. Fractional values like 0.3 or 1.23 look better than integers. Animating it very slightly, say from 1.27 to 1.3 gives a nice look.

Dots Speed: *Default: 1, Range: any, Shared.*

The dot pattern moves with this speed over time in X and Y.

Params3:

FF Freq: *Default: 4, Range: 0 or greater, Shared.*

How many fast-forward bands to create.

FF Shift: *Default: 0.1, Range: 0 or greater, Shared.*

Shifts the fast-forward bands up or down.

FF Height: *Default: 0.16, Range: 0 to 1, Shared.*

The height of each fast-forward band.

Dropout Len: *Default: 0.5, Range: 0 or greater, Shared.*

The average length of each dropout scanline.

Dropout Y Thresh: *Default: 0.75, Range: 0 to 1, Shared.*

Increase to cover more of the screen with dropouts (on average); decrease to cover less of it. If you don't see any dropouts at all on some frames, increase this parameter.

Dropouts Always: *Default: 1, Range: 0 to 1, Shared.*

Dropouts only appear on some frames; increase this parameter to see dropouts on more frames, so they occur more frequently in time. If you don't see dropouts on any frames, increase this parameter.

Threshold: *Default: 0.7, Range: 0 or greater, Shared.*

Darkening will occur around locations in the source clip that are brighter than this value. A value of 0.9 causes dark glows from only the brightest spots. A value of 0 causes glows for every non-black area.

Darks Width: *Default: 0.2, Range: 0 or greater, Shared.*

Scales the dark glow distance.

Vignt Radius: *Default: 1, Range: 0 or greater, Shared.*

Distance from the center where the vignetting starts.

Vignt Edge Soft: *Default: 0.5, Range: 0 or greater, Shared.*

The width of the vignette's soft edge. Larger values give softer, less visible edges.

Vignt Rel Height: *Default: 0.75, Range: 0.1 or greater, Shared.*

Controls the aspect ratio of the vignette ellipse. This should normally be set to the aspect ratio of the image, e.g. .75 for NTSC.

Tint Lights: *Default rgb: [1 1 1], Shared.*

Scales the result by this color, thus tinting the lighter regions.

Hue Shift: *Default: 0, Range: any, Shared.*

Shift the color hues by this amount.

Saturation: *Default: 1, Range: any, Shared.*

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Flare Width: *Default: 1, Range: 0 or greater, Shared.*

Width of the flare or flash near the end of the turn-off sequence. Set to zero to omit this flash.

Flare Brightness: *Default: 2, Range: 0 or greater, Shared.*

Brightness of the flare or flash near the end of the turn-off sequence.

Fade Out Time: *Default: 0.3, Range: 0 to 1, Shared.*

The point during the turn-off sequence at which the image should begin the fade out. When the Turn Off parameter is greater than this value, the image will be faded, turning black when Turn Off is 1. A value of zero produces a slow, gradual fade. A value of one will cut to black instantly at the end of the turn off.

Scale Lights: *Default: 1, Range: 0 or greater, Shared.*

Scales the result by this gray value. Increase for a brighter result.

Offset Darks: *Default: 0, Range: any, Shared.*

Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[JpegDamage](#)

[FilmDamage](#)

[FilmEffect](#)

[ScanLines](#)

[TVChannelChange](#)

[Vignette](#)

[HalfTone](#)

[Diffuse](#)

[StaticColor](#)

[StaticMono](#)

[Sapphire Plug-ins](#)

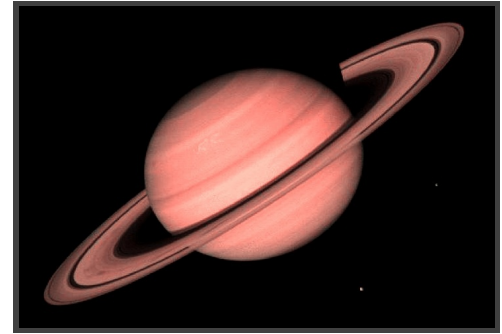
[Introduction](#)

Technicolor2Strip

In the S_Technicolor Plugin.

Simulates the old Technicolor 2-strip film process from the 1920s. The scene is exposed twice, through red and green filters, onto alternating frames of a monochrome film strip. Then the red print is dyed with a red dye, and the green print is dyed cyan. Those two strips are cemented together back-to-back to form the final print. The result contains mostly red and green colors, with some synthetic blue from the blue components of the dyes.

This effect simulates the two filter colors and the two dye colors, and also allows adding grain and color correction.



Inputs:

Source: The clip to be processed.

Parameters:

Brightness: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Saturation: *Default: 1, Range: any, Shared.*

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Offset Darks: *Default: 0, Range: any, Shared.*

Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

Grain Amp: *Default: 0, Range: 0 to 1, Shared.*

Scales the amplitude of the film grain that is added to the result. Set this to 0 to disable all grain.

Grain Blur: *Default: 0, Range: 0 to 0.1, Shared.*

The grain is smoothed by this amount. Increase for coarser grain.

Red Filter: *Default rgb: [1 0 0].*

The color of the red filter.

Bluegreen Filter: *Default rgb: [0 1 0.5].*

The color of the green filter.

Red Dye: *Default rgb: [1 0 0].*

The dye color for the red strip.

Cyan Dye: *Default rgb: [0.02 1 0.91].*

The dye color for the cyan strip. Adjust slightly greener for a warmer look.

Show: *Popup menu, Default: Result.*

Shows either the final result, or any of various intermediate parts of the process.

Result: Shows the final result.

Red Strip: Shows the red-filtered source as monochrome, as it would be on the real film.

BlueGreen Strip: Shows the blue-green-filtered source as monochrome, as it would be on the real film.

Red Dye: Shows the red-dyed red strip.

Cyan Dye: Shows the cyan-dyed green strip.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Technicolor3Strip](#)

[FilmEffect](#)

[FilmDamage](#)

[BleachBypass](#)

[DogVision](#)

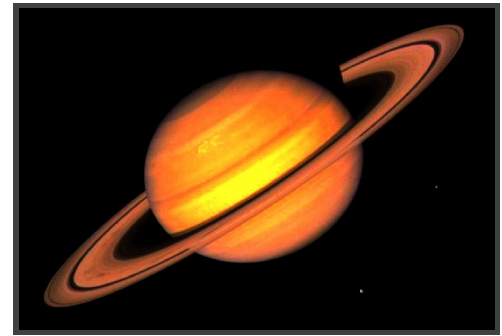
[Sapphire Plug-ins](#)

[Introduction](#)

Technicolor3Strip

In the S_Technicolor Plugin.

Simulates the Technicolor 3-strip film process from 1935 through 1955. Three-strip Technicolor was a subtractive process which exposed three separate film strips through color filters, then applied complementary color dyes to the print according to the density of the original records. Technicolor was used for many films such as The Wizard Of Oz, Fantasia, and Gone With The Wind. Modern color film has much broader color filtering in the emulsion layers, so this effect simulates the narrower filters and sharper colored dyes of Technicolor which gave it its characteristic vibrancy. This effect also allows adding grain and color correction.



Inputs:

Source: The clip to be processed.

Parameters:

Brightness: *Default: 1, Range: 0 or greater, Shared.*
Scales the brightness of the result.

Saturation: *Default: 1, Range: any, Shared.*
Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Offset Darks: *Default: 0, Range: any, Shared.*
Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

Grain Amp: *Default: 0, Range: 0 to 1, Shared.*
Scales the amplitude of the film grain that is added to the result. Set this to 0 to disable all grain.

Grain Blur: *Default: 0, Range: 0 to 0.1, Shared.*
The grain is smoothed by this amount. Increase for coarser grain.

Tint: *Default rgb: [1 1 1].*
Tints the image towards the given color.

Amount: *Default: 1, Range: 0 or greater.*
Amount of Technicolor effect to use. Set to zero to get the original source. Increase beyond to oversaturate.

Show: *Popup menu, Default: Result.*
Shows either the final result, or any of various intermediate parts of the process.

Result: Shows the final result.

Pure Colors: Shows an RGB mask containing only the pure colors in the source.

Complementary Masks: Shows a mask of the complementary colors used to apply the dyes to the final print.

Key Density: *Default: 0.1, Range: 0 to 1.*

From 1932 up to about 1945, the blank print started with a 50 percent black and white duplicate of the green original record. This increased apparent sharpness and improved contrast. Set this to 0.5 for a historically accurate key layer, but it will decrease the overall brightness. After 1945 the key layer was no longer needed due to improvements in the process.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Technicolor2Strip](#)

[FilmEffect](#)

[FilmDamage](#)

[BleachBypass](#)

[DogVision](#)

[Sapphire Plug-ins](#)

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Temporal: FreezeFrame

In the S_Temporal Plugin.

Freezes motion for each duration of Freeze Frames. For example if Freeze Frames is 5 and the source frames are:

1 2 3 4 5 6 7 8 9 10 11... the output frames would be:
1 1 1 1 1 6 6 6 6 6 11...

Inputs:

Source: The input to process. In Batch, it is recommended that this input be a clip of frames rather than another node.

Parameters:

Freeze Frames: *Integer, Default: 5, Range: 1 or greater.*
The number of frames for each hold.

Frame Start: *Integer, Default: 1, Range: 1 or greater.*
The offset of the start and stop frames for each freeze. For example if this were 3, the output frames would be:
1 1 3 3 3 3 3 8 8 8 8...

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GetFrame](#)
[TimeWarpRGB](#)
[MotionDetect](#)
[TimeSlice](#)
[JitterFrames](#)
[RandomEdits](#)
[ReverseEdits](#)
[ReverseClip](#)

[Sapphire Plug-ins](#)
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Temporal: GetFrame

In the S_Temporal Plugin.

Retrieves a specified frame from the source clip for each destination frame. This is meant to be used by animating the value of Get Frame to speed up, slow down, or reverse the input clip in an arbitrary way as desired.

Inputs:

Source: The input to process. In Batch, it is recommended that this input be a clip of frames rather than another node.

Parameters:

Get Frame: *Default:* 1, *Range:* 1 or greater.

The frame number of the source clip to access. This parameter should be animated to control the desired changes in motion. (If the Get Frame parameter is not animated it will just give a single still frame of that number for the entire clip.)

Interp Frames: *Check-box, Default:* off.

Selects the method to use for non-integer frame number references. If disabled, the nearest integer frame number is used with no interpolation. If enabled, it performs a weighted interpolation between the two nearest integer frame numbers and usually gives smoother results for slow motions.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TimeWarpRGB](#)

[MotionDetect](#)

[TimeSlice](#)

[FreezeFrame](#)

[JitterFrames](#)

[RandomEdits](#)

[ReverseEdits](#)

[ReverseClip](#)

[Sapphire Plug-ins](#)

[Introduction](#)

Temporal: JitterFrames

In the S_Temporal Plugin.

Each output frame receives a random frame between the current frame plus and minus the Jitter Frame Dist. The jittering is random but repeatable.

Inputs:

Source: The input to process. In Batch, it is recommended that this input be a clip of frames rather than another node.

Parameters:

Edit Frame Length: *Integer, Default: 1, Range: 1 or greater.*

If greater than 1, groups of frames of this size are jittered together instead of individually.

Jitter Frame Dist: *Default: 10, Range: 0 or greater.*

The magnitude of jittering.

Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GetFrame](#)

[TimeWarpRGB](#)

[MotionDetect](#)

[TimeSlice](#)

[FreezeFrame](#)

[RandomEdits](#)

[ReverseEdits](#)

[ReverseClip](#)

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Temporal: MotionDetect

In the S_Temporal Plugin.

Shows areas of motion in a clip. For each frame, finds the difference between the current frame and a previous frame.

Inputs:

Source: The input to process. In Batch, it is recommended that this input be a clip of frames rather than another node.



Parameters:

Delay Frames: *Integer, Default: 1, Range: any.*

The number of frames back to get the previous frame which is compared to the current frame.

Scale Result: *Default: 1, Range: 0 or greater.*

Scales the brightness of the result.

Saturation: *Default: 1, Range: 0 or greater.*

Scales the color saturation of the motion image. Increase for more intense colors. Set to 0 for monochrome.

Offset Darks: *Default: 0, Range: any.*

Adds this gray value to the darker regions of the motion image. This can be negative to increase contrast.

Motion: *Popup menu, Default: All.*

Selects between different motion types to detect.

All: shows all motion, both increasing and decreasing brightness levels.

Brighter: shows only motion in which the brightness is increasing, for example the leading edge of an object moving over a darker background.

Darker: shows only motion in which the brightness is decreasing, for example the trailing edge of an object moving over a darker background.

Combine: *Popup menu, Default: Motion Only.*

Determines how the motion image is combined with the original source.

Motion Only: gives the motion alone.

Mult: the motion is multiplied by the source.

Add: the motion is added to the source.

Screen: the motion is blended with the source using a screen operation.

Difference: the result is the difference between the motion and source.

Overlay: combines the motion and source using an overlay function.

Subtract: subtracts the motion image from the source darkening those areas.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GetFrame](#)

[TimeWarpRGB](#)

[TimeSlice](#)

[FreezeFrame](#)

[Sapphire Plug-ins](#)

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JitterFrames
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Temporal: RandomEdits

In the S_Temporal Plugin.

Randomly re-edits the entire source clip. The shuffling is random but repeatable.

Inputs:

Source: The input to process. In Batch, it is recommended that this input be a clip of frames rather than another node.

Parameters:

Edit Frame Length: *Integer, Default: 2, Range: 1 or greater.*
Segments of this duration are randomly rearranged.

Seed: *Default: 0.123, Range: 0 or greater.*
Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GetFrame](#)
[TimeWarpRGB](#)
[MotionDetect](#)
[TimeSlice](#)
[FreezeFrame](#)
[JitterFrames](#)
[ReverseEdits](#)
[ReverseClip](#)

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Temporal: ReverseClip

In the S_Temporal Plugin.

Reverses the frame order of a clip, and optionally also reverses the fields of each frame.

Inputs:

Source: The input to process. In Batch, it is recommended that this input be a clip of frames rather than another node.

Parameters:

Swap Fields: *Popup menu, Default: Yes Up1.*

Enables and selects the method for also reversing the fields of the result.

NO: Fields are not swapped.

Yes Ave: Fields are swapped by averaging up 1 pixel and down 1 pixel. This method causes slight vertical blurring, but the result is not shifted.

Yes Up1: Fields are swapped by shifting the result up 1 pixel. This method avoids vertical blurring.

Yes Dn1: Fields are swapped by shifting the result down 1 pixel. This method also avoids vertical blurring.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GetFrame](#)

[TimeWarpRGB](#)

[MotionDetect](#)

[TimeSlice](#)

[FreezeFrame](#)

[JitterFrames](#)

[RandomEdits](#)

[ReverseEdits](#)

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Temporal: ReverseEdits

In the S_Temporal Plugin.

Independently reverses segments of the input clip. For example if Edit Frame Length is 5, and the input clip frames are:

1 2 3 4 5 6 7 8 9 10 11... the output frames would be:
5 4 3 2 1 10 9 8 7 6 15...

Inputs:

Source: The input to process. In Batch, it is recommended that this input be a clip of frames rather than another node.

Parameters:

Edit Frame Length: *Integer, Default: 5, Range: 1 or greater.*
The duration of each segment to be reversed.

Edits Start: *Integer, Default: 1, Range: 1 or greater.*
The offset of the start and stop frames for each segment.

Reverse All: *Check-box, Default: off.*
If enabled, reverses the entire result, so each segment plays forwards again but the segments are in backwards order.

Swap Fields: *Popup menu, Default: NO.*
Enables and selects the method for also reversing the fields of the result.

NO: Fields are not swapped.

Yes Ave: Fields are swapped by averaging up 1 pixel and down 1 pixel. This method causes slight vertical blurring, but the result is not shifted.

Yes Up1: Fields are swapped by shifting the result up 1 pixel. This method avoids vertical blurring.

Yes Dn1: Fields are swapped by shifting the result down 1 pixel. This method also avoids vertical blurring.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GetFrame](#)
[TimeWarpRGB](#)
[MotionDetect](#)
[TimeSlice](#)
[FreezeFrame](#)
[JitterFrames](#)
[RandomEdits](#)
[ReverseClip](#)

[Sapphire Plug-ins](#)
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Temporal: TimeSlice

In the S_Temporal Plugin.

Divides the output frame into slices, where each slice receives a different frame from the source clip. An example use of this effect might be to make a turning object twist into a helix shape instead of rigidly rotating. The slices are oriented depending on Slice Direction, and receive relative frame numbers between plus and minus half of Slice Number. For example if the current frame number is 30, Slice Direction is 90 degrees, Slice Number is 12, and Frame Offset is 0, the result will consist of horizontal slices containing approximately frames 30-6 to 30+6 from bottom to top.



Inputs:

Source: The input to process. In Batch, it is recommended that this input be a clip of frames rather than another node.

Parameters:

Slice Direction: *Default:* 90, *Range:* any.

The orientation of the slices, in counter-clockwise degrees. If this is 0 the slices will go from left to right. If it is -90 they will go from top to bottom. This parameter can be adjusted using the Slice Widget.

Slice Number: *Default:* 12, *Range:* 0 to 500.

The number of time slices to slice the frame into. This parameter can be adjusted using the Slice Widget.

Frame Offset: *Default:* 0, *Range:* -100 to 100.

Shifts all frame numbers in time that the slices receive. This parameter can be adjusted using the Slice Widget.

Interp Frames: *Check-box, Default:* off.

Selects the method to use for non-integer frame number references. If disabled, the nearest integer frame number is used with no interpolation, which usually gives visible edges between the time slices. If enabled, a weighted interpolation is performed between the two nearest integer frame numbers, which smooths the results between the time slices.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GetFrame](#)
[TimeWarpRGB](#)
[MotionDetect](#)
[FreezeFrame](#)
[JitterFrames](#)
[RandomEdits](#)
[ReverseEdits](#)
[ReverseClip](#)

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Temporal: TimeWarpRGB

In the S_Temporal Plugin.

Shifts the red, green, and blue channels in time by different amounts, to give a temporal chroma distortion.

Inputs:

Source: The input to process. In Batch, it is recommended that this input be a clip of frames rather than another node.



Parameters:

Shift Frames Red: *Integer, Default: 1, Range: any.*
The number of frames to shift the red channel.

Shift Frames Green: *Integer, Default: 0, Range: any.*
The number of frames to shift the green channel.

Shift Frames Blue: *Integer, Default: -1, Range: any.*
The number of frames to shift the blue channel.

Clamp Chroma: *Default: 1, Range: 0 to 1.*

If less than one, the chroma of the output is reduced to this value. This can help keep the output colors video safe.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[GetFrame](#)
[MotionDetect](#)
[TimeSlice](#)
[FreezeFrame](#)
[JitterFrames](#)
[RandomEdits](#)
[ReverseEdits](#)
[ReverseClip](#)

[Sapphire Plug-ins](#)
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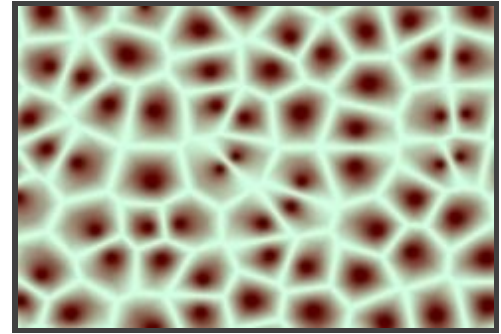
TextureCells

In the S_Textures Plugin.

Generates an image of procedural cellular shapes. The Rotate Speed parameter causes the cell centers to rotate within each cell over time.

Inputs:

None



Parameters:

Frequency: *Default:* 16, *Range:* 0.01 or greater.

The spatial frequency of the texture. Increase to zoom out, decrease to zoom in.

Frequency Rel X: *Default:* 1, *Range:* 0.01 or greater.

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Shift: *X & Y, Default:* [0 0], *Range:* any.

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Rotate Centers: *Default:* 0, *Range:* any.

Rotation offset of the cell centers, in counter-clockwise degrees.

Seed: *Default:* 0.234, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Rotate Speed: *Default:* 90, *Range:* any.

The speed of cell center rotation, in counter-clockwise degrees per second. If non-zero, the cell centers are automatically animated to wiggle at this rate.

Brightness1: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb:* [1 1 1].

The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between Color0 and Color1.

Color0: *Default rgb:* [0 0 0].

The color of the 'darker' parts of the texture.

Offset0: *Default:* 0, *Range:* any.

Adds this value to color0. Decrease to a negative value for more contrast.

Invert: *Popup YES-NO, Default:* No.

If enabled, the resulting texture colors are inverted. This is similar to swapping Color0 and Color1.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFolded](#)

[TextureWeave](#)

[TexturePlasma](#)

[TextureNoiseEmboss](#)

[TextureNoisePaint](#)

[TextureSpots](#)

[TextureChromaSpiral](#)

[TextureMoire](#)

[TextureTiles](#)

[TextureNeurons](#)

[TextureLoops](#)

[TextureFlux](#)

[TextureCellsComp](#)

[WipeCells](#)

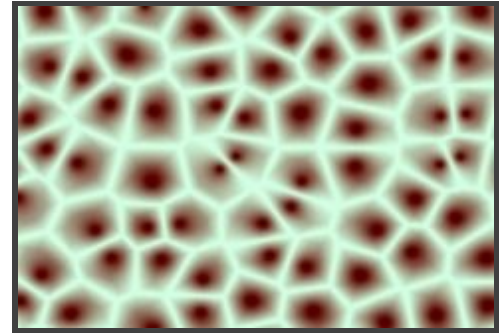
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TextureCellsComp

In the S_TexturesComp Plugin.

Generates an image of procedural cellular shapes, then combines the texture with a background clip. The cell centers can be animated to rotate within each cell.



Inputs:

Back: The clip to combine the texture image with. This may be ignored if the Combine option is set to Texture Only, but the output clip will default to the same length as this clip.

Parameters:

Frequency: *Default:* 16, *Range:* 0.01 or greater.

The spatial frequency of the texture. Increase to zoom out, decrease to zoom in.

Frequency Rel X: *Default:* 1, *Range:* 0.01 or greater.

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Shift: *X & Y, Default:* [0 0], *Range:* any.

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Rotate Centers: *Default:* 0, *Range:* any.

Rotation offset of the cell centers, in counter-clockwise degrees.

Seed: *Default:* 0.234, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Rotate Speed: *Default:* 90, *Range:* any.

The speed of cell center rotation, in counter-clockwise degrees per second. If non-zero, the cell centers are automatically animated to wiggle at this rate.

Brightness1: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb:* [1 1 1].

The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between Color0 and Color1.

Color0: *Default rgb:* [0 0 0].

The color of the 'darker' parts of the texture.

Offset0: *Default:* 0, *Range:* any.

Adds this value to color0. Decrease to a negative value for more contrast.

Combine: *Popup menu, Default:* Screen.

Determines how the texture is combined with the Background.

Texture Only: gives only the texture image with no Background.

Mult: the texture is multiplied by the Background.

Add: the texture is added to the Background.

Screen: the texture is blended with the Background using a screen operation.
Difference: the result is the difference between the texture and Background.
Overlay: the texture is combined with the Background using an overlay function.

Scale Back: *Default: 1, Range: any, Shared.*

The background brightness is scaled by this value before being combined with the texture.

Invert: *Popup YES-NO, Default: No.*

If enabled, the resulting texture colors are inverted. This is similar to swapping Color0 and Color1.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFoldedComp](#)

[TextureWeaveComp](#)

[TexturePlasmaComp](#)

[TextureNoiseEmbossCmp](#)

[TextureNoisePaintComp](#)

[TextureSpotsComp](#)

[TextureChromaSpiralCmp](#)

[TextureMoireComp](#)

[TextureTilesComp](#)

[TextureNeuronsComp](#)

[TextureLoopsComp](#)

[TextureFluxComp](#)

[TextureCells](#)

[WipeCells](#)

[Sapphire Plug-ins](#)

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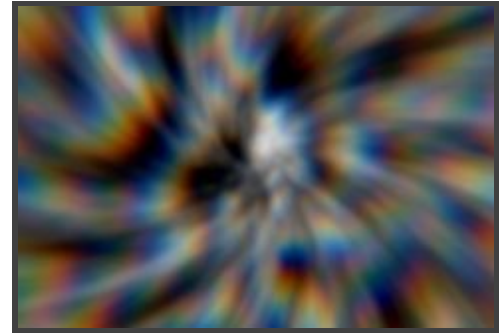
TextureChromaSpiral

In the S_Textures Plugin.

Creates an abstract texture by applying a WarpChroma effect to a procedurally generated noise texture.

Inputs:

None



Parameters:

Noise Frequency: *Default: 6, Range: 0 or greater.*

The spatial frequency of the initial noise texture. Increase to zoom out, decrease to zoom in.

Noise Octaves: *Integer, Default: 3, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Noise Shift: *X & Y, Default: [0 0], Range: 0 or greater.*

Translation offset of the initial noise texture.

Noise Seed: *Default: 0.23, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Center: *X & Y, Default: [0 0], Range: any.*

The center location of the chroma warp, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Z Dist: *Default: 0.7, Range: any.*

The distance that the chroma warp effect is applied over.

Rotate: *Default: -8, Range: any.*

The rotation of the spiral, in degrees. Set to 0 for a straight zoom.

Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of the result.

Color: *Default rgb: [1 1 1].*

Scales the color of the result. For example, if it is yellow [1 1 0], the blue of the result will be 0.

Steps: *Integer, Default: 12, Range: 3 to 100.*

The number of color samples along the spectrum to include. More steps give a smoother result, but require more time to process.

Offset: *Default: 0, Range: any.*

Adds this gray value to the result (or subtracts if negative). 0 has no effect, .5 is middle gray, and 1 is white.

Wrap: *Popup menu, Default: REFLECT.*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFolded](#)

[TextureWeave](#)

[TexturePlasma](#)

[TextureNoiseEmboss](#)

[TextureNoisePaint](#)

[TextureSpots](#)

[TextureCells](#)

[TextureMoire](#)

[TextureTiles](#)

[TextureNeurons](#)

[TextureLoops](#)

[TextureFlux](#)

[TextureChromaSpiralCmp](#)

[WarpChroma](#)

[Clouds](#)

[CloudsVortex](#)

[Sapphire](#)

[Plug-ins](#)

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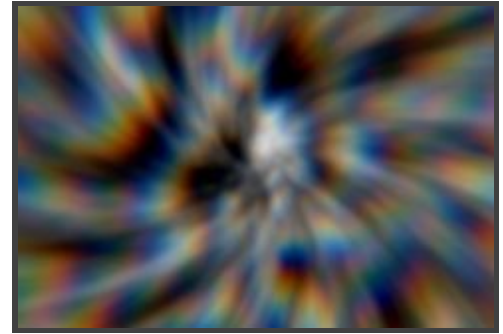
TextureChromaSpiralCmp

In the S_TexturesComp Plugin.

Creates an abstract texture by applying a WarpChroma effect to a procedurally generated noise texture, then combines the texture with a background clip.

Inputs:

Back: The clip to combine the texture image with. This may be ignored if the Combine option is set to Texture Only, but the output clip will default to the same length as this clip.



Parameters:

Noise Frequency: *Default:* 6, *Range:* 0 or greater.

The spatial frequency of the initial noise texture. Increase to zoom out, decrease to zoom in.

Noise Octaves: *Integer, Default:* 3, *Range:* 1 to 10.

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Noise Shift: *X & Y, Default:* [0 0], *Range:* 0 or greater.

Translation offset of the initial noise texture.

Noise Seed: *Default:* 0.23, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Center: *X & Y, Default:* [0 0], *Range:* any.

The center location of the chroma warp, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Z Dist: *Default:* 0.7, *Range:* any.

The distance that the chroma warp effect is applied over.

Rotate: *Default:* -8, *Range:* any.

The rotation of the spiral, in degrees. Set to 0 for a straight zoom.

Brightness: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the result.

Color: *Default rgb:* [1 1 1].

Scales the color of the result. For example, if it is yellow [1 1 0], the blue of the result will be 0.

Steps: *Integer, Default:* 12, *Range:* 3 to 100.

The number of color samples along the spectrum to include. More steps give a smoother result, but require more time to process.

Offset: *Default:* 0, *Range:* any.

Adds this gray value to the result (or subtracts if negative). 0 has no effect, .5 is middle gray, and 1 is white.

Combine: *Popup menu, Default:* Screen.

Determines how the texture is combined with the Background.

Texture Only: gives only the texture image with no Background.

Mult: the texture is multiplied by the Background.

Add: the texture is added to the Background.

Screen: the texture is blended with the Background using a screen operation.

Difference: the result is the difference between the texture and Background.

Overlay: the texture is combined with the Background using an overlay function.

Scale Back: *Default: 1, Range: any, Shared.*

The background brightness is scaled by this value before being combined with the texture.

Wrap: *Popup menu, Default: REFLECT.*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFoldedComp](#)

[TextureWeaveComp](#)

[TexturePlasmaComp](#)

[TextureNoiseEmbossComp](#)

[TextureNoisePaintComp](#)

[TextureSpotsComp](#)

[TextureCellsComp](#)

[TextureMoireComp](#)

[TextureTilesComp](#)

[TextureNeuronsComp](#)

[TextureLoopsComp](#)

[TextureFluxComp](#)

[TextureChromaSpiral](#)

[WarpChroma](#)

[Clouds](#)

[CloudsVortex](#)

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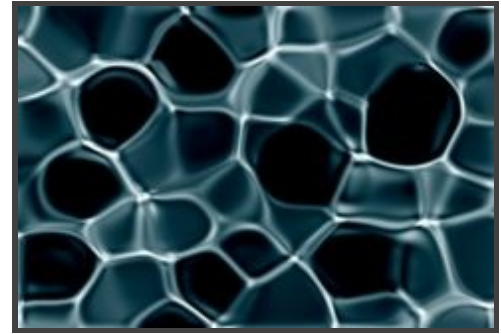
TextureFlux

In the S_Textures Plugin.

Creates abstract textures of fluctuating liquid or cellular patterns. The Morph Speed parameter causes the pattern to automatically undulate over time.

Inputs:

None



Parameters:

Frequency: *Default: 4, Range: 0.01 or greater.*

The spatial frequency of the texture. Increase to zoom out, decrease to zoom in.

Freq Rel X: *Default: 1, Range: 0.01 or greater.*

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Octaves: *Integer, Default: 2, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.234, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Shift: *X & Y, Default: [0 0], Range: any.*

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Bubble Amount: *Default: 1, Range: any.*

Amplitude of warping applied to generate the bubble shapes. This can be negative to generate brighter bubble shapes with dark edges.

Bubble Smooth: *Default: 0.25, Range: 0.01 or greater.*

Smooths the warping pattern by this amount.

Rotate Warp Dir: *Default: 0, Range: any.*

Rotates the direction of the warping. This can cause a twisting effect or an inverted effect when set to 180.

Morph Speed: *Default: 0.3, Range: any.*

Speed to automatically undulate the underlying noise pattern over time.

Morph: *X & Y, Default: [0 1], Range: any.*

The horizontal and vertical directions to undulate the underlying noise pattern, when using Morph Speed.

Brightness1: *Default: 1, Range: 0 or greater.*

Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb: [1 1 1].*

The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between Color0 and Color1.

Color0: *Default rgb:* [0 0.12 0.15].
The color of the 'darker' parts of the texture.

Offset0: *Default:* 0, *Range:* any.
Adds this value to color0. Decrease to a negative value for more contrast.

Filter: *Popup YES-NO, Default:* No.
The type of convolution filter to blur with.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFolded](#)

[TextureWeave](#)

[TexturePlasma](#)

[TextureNoiseEmboss](#)

[TextureNoisePaint](#)

[TextureSpots](#)

[TextureCells](#)

[TextureChromaSpiral](#)

[TextureMoire](#)

[TextureTiles](#)

[TextureNeurons](#)

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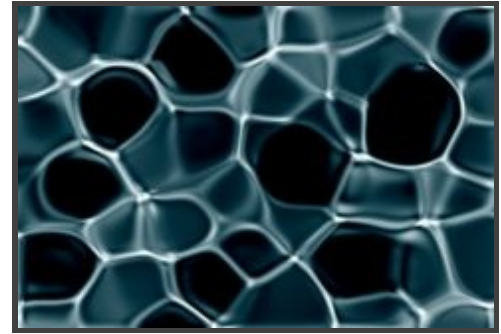
TextureFluxComp

In the S_TexturesComp Plugin.

Creates abstract textures of fluctuating liquid or cellular patterns, then combines the texture with a background clip.

Inputs:

Back: The clip to combine the texture image with. This may be ignored if the Combine option is set to Texture Only, but the output clip will default to the same length as this clip.



Parameters:

Frequency: *Default:* 4, *Range:* 0.01 or greater.

The spatial frequency of the texture. Increase to zoom out, decrease to zoom in.

Freq Rel X: *Default:* 1, *Range:* 0.01 or greater.

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Octaves: *Integer, Default:* 2, *Range:* 1 to 10.

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default:* 0.234, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Shift: *X & Y, Default:* [0 0], *Range:* any.

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Bubble Amount: *Default:* 1, *Range:* any.

Amplitude of warping applied to generate the bubble shapes. This can be negative to generate brighter bubble shapes with dark edges.

Bubble Smooth: *Default:* 0.25, *Range:* 0.01 or greater.

Smooths the warping pattern by this amount.

Rotate Warp Dir: *Default:* 0, *Range:* any.

Rotates the direction of the warping. This can cause a twisting effect or an inverted effect when set to 180.

Morph Speed: *Default:* 0.3, *Range:* any.

Speed to automatically undulate the underlying noise pattern over time.

Morph: *X & Y, Default:* [0 1], *Range:* any.

The horizontal and vertical directions to undulate the underlying noise pattern, when using Morph Speed.

Brightness1: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb:* [1 1 1].

The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between Color0 and Color1.

Color0: *Default rgb: [0 0.12 0.15].*
The color of the 'darker' parts of the texture.

Offset0: *Default: 0, Range: any.*
Adds this value to color0. Decrease to a negative value for more contrast.

Combine: *Popup menu, Default: Screen.*
Determines how the texture is combined with the Background.

Texture Only: gives only the texture image with no Background.

Mult: the texture is multiplied by the Background.

Add: the texture is added to the Background.

Screen: the texture is blended with the Background using a screen operation.

Difference: the result is the difference between the texture and Background.

Overlay: the texture is combined with the Background using an overlay function.

Scale Back: *Default: 1, Range: any, Shared.*
The background brightness is scaled by this value before being combined with the texture.

Filter: *Popup YES-NO, Default: No.*
The type of convolution filter to blur with.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFoldedComp](#)

[TextureWeaveComp](#)

[TexturePlasmaComp](#)

[TextureNoiseEmbossCmp](#)

[TextureNoisePaintComp](#)

[TextureSpotsComp](#)

[TextureCellsComp](#)

[TextureChromaSpiralCmp](#)

[TextureMoireComp](#)

[TextureTilesComp](#)

[TextureNeuronsComp](#)

[TextureLoopsComp](#)

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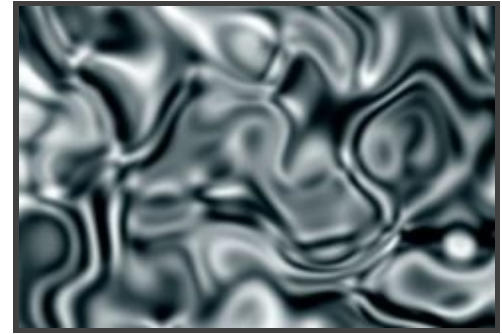
TextureFolded

In the S_Textures Plugin.

Creates an abstract texture resembling folded cloth or liquid that can be animated to give a dynamic turbulent effect. The Fold Speed parameters cause the pattern to automatically undulate over time.

Inputs:

None



Parameters:

Frequency: *Default: 4, Range: 0.01 or greater.*

The spatial frequency of the texture. Increase to zoom out, decrease to zoom in.

Frequency Rel X: *Default: 1, Range: 0.01 or greater.*

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Octaves: *Integer, Default: 1, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.432, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Shift Start: *X & Y, Default: [0 0], Range: any.*

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Fold Amp: *Default: 72, Range: any.*

The angle of the folding distortions.

Fold Freq: *Default: 0.5, Range: 0.01 or greater.*

The frequency of the noise used for the folding distortions.

Fold Octaves: *Integer, Default: 1, Range: 1 to 10.*

The number of octaves of noise to use for the folding distortions.

Fold Start: *X & Y, Default: [0 0], Range: any.*

The offset of the folding effect.

Fold Speed: *X & Y, Default: [1 0], Range: any.*

The speed of the animated folding effect. If non-zero, the folding effect automatically undulates at this rate.

Brightness1: *Default: 1, Range: 0 or greater.*

Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb: [1 1 1].*

The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between Color0 and Color1.

Color0: *Default rgb: [0 0 0].*

The color of the 'darker' parts of the texture.

Offset0: *Default:* 0, *Range:* any.

Adds this value to color0. Decrease to a negative value for more contrast.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureWeave](#)

[TexturePlasma](#)

[TextureNoiseEmboss](#)

[TextureNoisePaint](#)

[TextureSpots](#)

[TextureCells](#)

[TextureChromaSpiral](#)

[TextureMoire](#)

[TextureTiles](#)

[TextureNeurons](#)

[TextureLoops](#)

[TextureFlux](#)

[TextureFoldedComp](#)

[Clouds](#)

[Sapphire Plug-ins](#)

[Introduction](#)

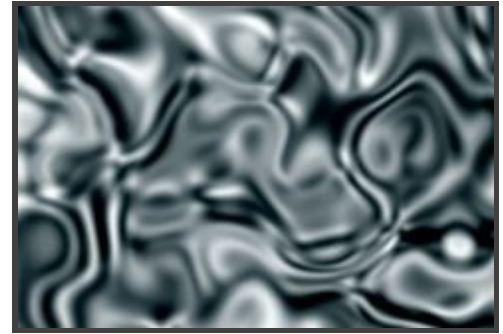
TextureFoldedComp

In the S_TexturesComp Plugin.

Creates an abstract texture resembling folded cloth or liquid that can be animated to give a dynamic turbulent effect, then combines the texture with a background clip.

Inputs:

Back: The clip to combine the texture image with. This may be ignored if the Combine option is set to Texture Only, but the output clip will default to the same length as this clip.



Parameters:

Frequency: *Default:* 4, *Range:* 0.01 or greater.

The spatial frequency of the texture. Increase to zoom out, decrease to zoom in.

Frequency Rel X: *Default:* 1, *Range:* 0.01 or greater.

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Octaves: *Integer, Default:* 1, *Range:* 1 to 10.

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default:* 0.432, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Shift Start: *X & Y, Default:* [0 0], *Range:* any.

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Fold Amp: *Default:* 72, *Range:* any.

The angle of the folding distortions.

Fold Freq: *Default:* 0.5, *Range:* 0.01 or greater.

The frequency of the noise used for the folding distortions.

Fold Octaves: *Integer, Default:* 1, *Range:* 1 to 10.

The number of octaves of noise to use for the folding distortions.

Fold Start: *X & Y, Default:* [0 0], *Range:* any.

The offset of the folding effect.

Fold Speed: *X & Y, Default:* [1 0], *Range:* any.

The speed of the animated folding effect. If non-zero, the folding effect automatically undulates at this rate.

Brightness1: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb:* [1 1 1].

The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between Color0 and Color1.

Color0: *Default rgb:* [0 0 0].

The color of the 'darker' parts of the texture.

Offset0: *Default:* 0, *Range:* any.

Adds this value to color0. Decrease to a negative value for more contrast.

Combine: *Popup menu, Default:* Screen.

Determines how the texture is combined with the Background.

Texture Only: gives only the texture image with no Background.

Mult: the texture is multiplied by the Background.

Add: the texture is added to the Background.

Screen: the texture is blended with the Background using a screen operation.

Difference: the result is the difference between the texture and Background.

Overlay: the texture is combined with the Background using an overlay function.

Scale Back: *Default:* 1, *Range:* any, *Shared.*

The background brightness is scaled by this value before being combined with the texture.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureWeaveComp](#)

[TexturePlasmaComp](#)

[TextureNoiseEmbossCmp](#)

[TextureNoisePaintComp](#)

[TextureSpotsComp](#)

[TextureCellsComp](#)

[TextureChromaSpiralCmp](#)

[TextureMoireComp](#)

[TextureTilesComp](#)

[TextureNeuronsComp](#)

[TextureLoopsComp](#)

[TextureFluxComp](#)

[TextureFolded](#)

[Clouds](#)

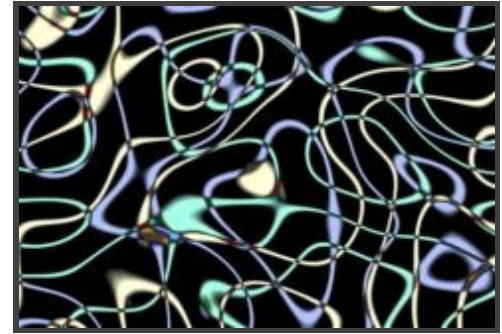
[Sapphire Plug-ins](#)

[Introduction](#)

TextureLoops

In the S_Textures Plugin.

Creates an abstract texture of overlapping loop shapes. Three sets of shapes can be separately adjusted, colored, and then combined together. The Phase Speed parameter causes the pattern to automatically change over time.



Inputs:

None

Parameters:

Frequency: *Default: 3, Range: 0.01 or greater.*

The spatial frequency of the texture. Increase to zoom out, decrease to zoom in.

Freq Rel X: *Default: 1, Range: 0.01 or greater.*

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Loop Freq: *Default: 4, Range: 1 or greater.*

Frequency of the loops within the noise patterns. Increase for more concentric loops, decrease for fewer.

Phase Start: *Default: 0, Range: any.*

The phase of the ring loops. Shifts inwards or outwards.

Phase Speed: *Default: 0.05, Range: any.*

The automatic change in phase over time.

Seed: *Default: 1, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Thickness: *Default: 0.1, Range: -1 to 2.*

Controls the thickness of the loops.

Softness: *Default: 0.2, Range: 0.01 or greater.*

The softness of the edges of the loop shapes. Increase for smoother edges or to reduce aliasing.

Smooth: *Default: 0, Range: 0 or greater.*

Amount to blur the loop shapes before combining. Increase for a defocus look, or to help remove aliasing artifacts.

Shift: *X & Y, Default: [0 0], Range: any.*

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Brightness1: *Default: 1, Range: 0 or greater.*

Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb: [1 1 1].*

The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between Color0 and Color1.

Color0: *Default rgb: [0 0 0].*

The color of the 'darker' parts of the texture.

Offset0: *Default: 0, Range: any.*

Adds this value to color0. Decrease to a negative value for more contrast.

Saturation: *Default: 1, Range: any.*

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Invert: *Popup YES-NO, Default: No.*

If enabled, the resulting texture colors are inverted. This is similar to swapping Color0 and Color1.

Params2:

Loops1 Bright: *Default: 1, Range: 0 or greater.*

Scales the brightness of the first set of loops. Set to zero to remove them.

Loops2 Bright: *Default: 1, Range: 0 or greater.*

Scales the brightness of the second set of loops. Set to zero to remove them.

Loops3 Bright: *Default: 1, Range: 0 or greater.*

Scales the brightness of the third set of loops. Set to zero to remove them.

Loops1 Color: *Default rgb: [1 1 1].*

Color of the first set of loops.

Loops2 Color: *Default rgb: [1 1 1].*

Color of the second set of loops.

Loops3 Color: *Default rgb: [1 1 1].*

Color of the third set of loops.

Loops1 Thick: *Default: 0, Range: -1 to 1.*

Adds this amount to the thickness of the first set of loops.

Loops2 Thick: *Default: 0, Range: -1 to 1.*

Adds this amount to the thickness of the second set of loops.

Loops3 Thick: *Default: 0, Range: -1 to 1.*

Adds this amount to the thickness of the third set of loops.

Loops1 Freq: *Default: 1, Range: 0.01 or greater.*

Relative frequency of the first set of loops.

Loops2 Freq: *Default: 1, Range: 0.01 or greater.*

Relative frequency of the second set of loops.

Loops3 Freq: *Default: 1, Range: 0.01 or greater.*

Relative frequency of the third set of loops.

Combine Loops: *Popup menu, Default: Diff.*

Operation used to combine the colors of the three sets of loops.

Add: adds them together.

Screen: uses a screen transfer mode to combine them.

Diff: uses a difference operator to combine them.

Comp: composites the second over the third, and the first over that.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFolded](#)

[TextureWeave](#)

[TexturePlasma](#)

[TextureNoiseEmboss](#)

[TextureNoisePaint](#)

[TextureSpots](#)

[TextureCells](#)

[TextureChromaSpiral](#)

[TextureMoire](#)

[TextureTiles](#)

[TextureNeurons](#)

[TextureFlux](#)

[TextureLoopsComp](#)

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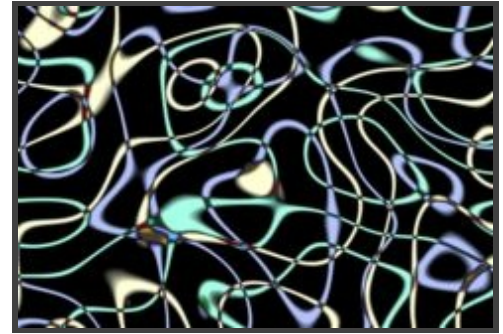
TextureLoopsComp

In the S_TexturesComp Plugin.

Creates an abstract texture of overlapping loop shapes, then combines the texture with a background clip.

Inputs:

Back: The clip to combine the texture image with. This may be ignored if the Combine option is set to Texture Only, but the output clip will default to the same length as this clip.



Parameters:

Frequency: *Default:* 3, *Range:* 0.01 or greater.

The spatial frequency of the texture. Increase to zoom out, decrease to zoom in.

Freq Rel X: *Default:* 1, *Range:* 0.01 or greater.

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Loop Freq: *Default:* 4, *Range:* 1 or greater.

Frequency of the loops within the noise patterns. Increase for more concentric loops, decrease for fewer.

Phase Start: *Default:* 0, *Range:* any.

The phase of the ring loops. Shifts inwards or outwards.

Phase Speed: *Default:* 0.05, *Range:* any.

The automatic change in phase over time.

Seed: *Default:* 1, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Thickness: *Default:* 0.1, *Range:* -1 to 2.

Controls the thickness of the loops.

Softness: *Default:* 0.2, *Range:* 0.01 or greater.

The softness of the edges of the loop shapes. Increase for smoother edges or to reduce aliasing.

Smooth: *Default:* 0, *Range:* 0 or greater.

Amount to blur the loop shapes before combining. Increase for a defocus look, or to help remove aliasing artifacts.

Shift: *X & Y, Default:* [0 0], *Range:* any.

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Brightness1: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb:* [1 1 1].

The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between Color0 and Color1.

Color0: *Default rgb:* [0 0 0].

The color of the 'darker' parts of the texture.

Offset0: *Default: 0, Range: any.*

Adds this value to color0. Decrease to a negative value for more contrast.

Saturation: *Default: 1, Range: any.*

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Combine: *Popup menu, Default: Screen.*

Determines how the texture is combined with the Background.

Texture Only: gives only the texture image with no Background.

Mult: the texture is multiplied by the Background.

Add: the texture is added to the Background.

Screen: the texture is blended with the Background using a screen operation.

Difference: the result is the difference between the texture and Background.

Overlay: the texture is combined with the Background using an overlay function.

Scale Back: *Default: 1, Range: any, Shared.*

The background brightness is scaled by this value before being combined with the texture.

Invert: *Popup YES-NO, Default: No.*

If enabled, the resulting texture colors are inverted. This is similar to swapping Color0 and Color1.

Params2:

Loops1 Bright: *Default: 1, Range: 0 or greater.*

Scales the brightness of the first set of loops. Set to zero to remove them.

Loops2 Bright: *Default: 1, Range: 0 or greater.*

Scales the brightness of the second set of loops. Set to zero to remove them.

Loops3 Bright: *Default: 1, Range: 0 or greater.*

Scales the brightness of the third set of loops. Set to zero to remove them.

Loops1 Color: *Default rgb: [1 1 1].*

Color of the first set of loops.

Loops2 Color: *Default rgb: [1 1 1].*

Color of the second set of loops.

Loops3 Color: *Default rgb: [1 1 1].*

Color of the third set of loops.

Loops1 Thick: *Default: 0, Range: -1 to 1.*

Adds this amount to the thickness of the first set of loops.

Loops2 Thick: *Default: 0, Range: -1 to 1.*

Adds this amount to the thickness of the second set of loops.

Loops3 Thick: *Default: 0, Range: -1 to 1.*

Adds this amount to the thickness of the third set of loops.

Loops1 Freq: *Default: 1, Range: 0.01 or greater.*

Relative frequency of the first set of loops.

Loops2 Freq: *Default: 1, Range: 0.01 or greater.*

Relative frequency of the second set of loops.

Loops3 Freq: *Default:* 1, *Range:* 0.01 or greater.

Relative frequency of the third set of loops.

Combine Loops: *Popup menu, Default: Diff.*

Operation used to combine the colors of the three sets of loops.

Add: adds them together.

Screen: uses a screen transfer mode to combine them.

Diff: uses a difference operator to combine them.

Comp: composites the second over the third, and the first over that.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFoldedComp](#)

[TextureWeaveComp](#)

[TexturePlasmaComp](#)

[TextureNoiseEmbossCmp](#)

[TextureNoisePaintComp](#)

[TextureSpotsComp](#)

[TextureCellsComp](#)

[TextureChromaSpiralCmp](#)

[TextureMoireComp](#)

[TextureTilesComp](#)

[TextureNeuronsComp](#)

[TextureFluxComp](#)

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TextureMoire

In the S_Textures Plugin.

Creates an abstract Moire texture by adding together two patterns of concentric rings. The Phase Speed and Moire Speed parameters cause the rings to automatically animate over time.

Inputs:

None

Parameters:

A Center: *X & Y, Default: [-0.1 -0.1], Range: any.*

The center location of the A ring pattern. This parameter can be adjusted using the A Center Widget.

B Center: *X & Y, Default: [0.1 0.1], Range: any.*

The center location of the B ring pattern. This parameter can be adjusted using the B Center Widget.

Phase Start: *Default: 0, Range: any.*

The phase of the ring patterns. Increase to shift outwards from the centers, or decrease to shift inwards toward the centers. The phase parameters are relative to the period of the rings (1/frequency) so changing any by exactly 1 should give the same result again.

Phase Speed: *Default: 1, Range: any.*

The automatic change in phase, per second.

Saturation: *Default: 1, Range: 0 or greater.*

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Frequency: *Default: 20, Range: 0.5 or greater.*

The frequency of the rings. Increase for more and smaller rings, or decrease for fewer larger rings.

Phase Red: *Default: 0.2, Range: any.*

Shifts the ring phases for the red color channel only.

Phase Green: *Default: 0.1, Range: any.*

Shifts the ring phases for the green color channel only.

Phase Blue: *Default: 0, Range: any.*

Shifts the ring phases for the blue color channel only.

Moire Phase: *Default: 0, Range: any.*

The relative start phase of the two ring patterns. Shifts the A ring pattern out and the B ring pattern in by the same amount, causing changes in the moire pattern itself.

Moire Speed: *Default: 1, Range: any.*

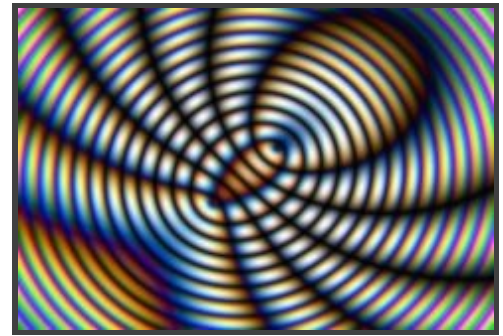
Automatic change per second in the relative phase of the two ring patterns.

Brightness1: *Default: 1, Range: 0 or greater.*

Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb: [1 1 1].*

The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between Color0 and Color1.



Color0: *Default rgb:* [0 0 0].

The color of the 'darker' parts of the texture.

Offset0: *Default:* 0, *Range:* any.

Adds this value to color0. Decrease to a negative value for more contrast.

Params2:

A Brightness: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the A ring pattern. Set this to zero to disable and view only the B rings.

A Rel Width: *Default:* 1, *Range:* 0.2 or greater.

The relative horizontal size of the A ring pattern. Increase for wider ring shapes, decrease for taller ones.

A Rel Freq: *Default:* 1, *Range:* 0.1 or greater.

Scales the ring frequencies of the A ring pattern.

A Rotate: *Default:* 0, *Range:* any.

Rotation in degrees of the A ring pattern. Note that this will have no effect when A Rel Width is 1.

A Color: *Default rgb:* [0.5 0.5 0.5].

Scales the color of the A ring pattern.

B Color: *Default rgb:* [0.5 0.5 0.5].

Scales the color of the B ring pattern.

B Brightness: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the B ring pattern. Set this to zero to disable and view only the A rings.

B Rel Width: *Default:* 1, *Range:* 0.2 or greater.

The relative horizontal size of the B ring pattern. Increase for wider ring shapes, decrease for taller ones.

B Rel Freq: *Default:* 1, *Range:* 0.1 or greater.

Scales the ring frequencies of the B ring pattern.

B Rotate: *Default:* 0, *Range:* any.

Rotation in degrees of the B ring pattern. Note that this will have no effect when A Rel Width is 1.

Rel Freq Red: *Default:* 1, *Range:* 0.1 or greater.

Scales the ring frequencies for the red color channel only.

Rel Freq Green: *Default:* 1, *Range:* 0.1 or greater.

Scales the ring frequencies for the green color channel only.

Rel Freq Blue: *Default:* 1, *Range:* 0.1 or greater.

Scales the ring frequencies for the blue color channel only.

Double Space Rings: *Popup YES-NO, Default:* No.

If checked, every other ring is negative giving a double spaced look. If unchecked, the absolute value of the wave form is used which gives twice as many visible rings.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFolded](#)

[TextureWeave](#)

[TexturePlasma](#)

[TextureNoiseEmboss](#)

[TextureNoisePaint](#)

[TextureSpots](#)

[TextureCells](#)

[TextureChromaSpiral](#)

[TextureTiles](#)

[TextureNeurons](#)

[TextureLoops](#)

[TextureFlux](#)

[TextureMoireComp](#)

[WipeRings](#)

[Sapphire Plug-ins](#)

[Introduction](#)

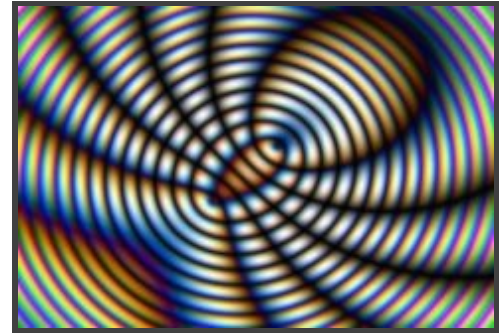
TextureMoireComp

In the S_TexturesComp Plugin.

Creates an abstract Moire texture by adding together two patterns of concentric rings, then combines the texture with a background clip.

Inputs:

Back: The clip to combine the texture image with. This may be ignored if the Combine option is set to Texture Only, but the output clip will default to the same length as this clip.



Parameters:

A Center: *X & Y, Default: [-0.1 -0.1], Range: any.*

The center location of the A ring pattern. This parameter can be adjusted using the A Center Widget.

B Center: *X & Y, Default: [0.1 0.1], Range: any.*

The center location of the B ring pattern. This parameter can be adjusted using the B Center Widget.

Phase Start: *Default: 0, Range: any.*

The phase of the ring patterns. Increase to shift outwards from the centers, or decrease to shift inwards toward the centers. The phase parameters are relative to the period of the rings (1/frequency) so changing any by exactly 1 should give the same result again.

Phase Speed: *Default: 1, Range: any.*

The automatic change in phase, per second.

Saturation: *Default: 1, Range: 0 or greater.*

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Frequency: *Default: 20, Range: 0.5 or greater.*

The frequency of the rings. Increase for more and smaller rings, or decrease for fewer larger rings.

Phase Red: *Default: 0.2, Range: any.*

Shifts the ring phases for the red color channel only.

Phase Green: *Default: 0.1, Range: any.*

Shifts the ring phases for the green color channel only.

Phase Blue: *Default: 0, Range: any.*

Shifts the ring phases for the blue color channel only.

Moire Phase: *Default: 0, Range: any.*

The relative start phase of the two ring patterns. Shifts the A ring pattern out and the B ring pattern in by the same amount, causing changes in the moire pattern itself.

Moire Speed: *Default: 1, Range: any.*

Automatic change per second in the relative phase of the two ring patterns.

Brightness1: *Default: 1, Range: 0 or greater.*

Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb: [1 1 1].*

The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between

Color0 and Color1.

Color0: *Default rgb:* [0 0 0].

The color of the 'darker' parts of the texture.

Offset0: *Default:* 0, *Range:* any.

Adds this value to color0. Decrease to a negative value for more contrast.

Combine: *Popup menu, Default:* Screen.

Determines how the texture is combined with the Background.

Texture Only: gives only the texture image with no Background.

Mult: the texture is multiplied by the Background.

Add: the texture is added to the Background.

Screen: the texture is blended with the Background using a screen operation.

Difference: the result is the difference between the texture and Background.

Overlay: the texture is combined with the Background using an overlay function.

Scale Back: *Default:* 1, *Range:* any, *Shared.*

The background brightness is scaled by this value before being combined with the texture.

Params2:

A Brightness: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the A ring pattern. Set this to zero to disable and view only the B rings.

A Rel Width: *Default:* 1, *Range:* 0.2 or greater.

The relative horizontal size of the A ring pattern. Increase for wider ring shapes, decrease for taller ones.

A Rel Freq: *Default:* 1, *Range:* 0.1 or greater.

Scales the ring frequencies of the A ring pattern.

A Rotate: *Default:* 0, *Range:* any.

Rotation in degrees of the A ring pattern. Note that this will have no effect when A Rel Width is 1.

A Color: *Default rgb:* [0.5 0.5 0.5].

Scales the color of the A ring pattern.

B Color: *Default rgb:* [0.5 0.5 0.5].

Scales the color of the B ring pattern.

B Brightness: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the B ring pattern. Set this to zero to disable and view only the A rings.

B Rel Width: *Default:* 1, *Range:* 0.2 or greater.

The relative horizontal size of the B ring pattern. Increase for wider ring shapes, decrease for taller ones.

B Rel Freq: *Default:* 1, *Range:* 0.1 or greater.

Scales the ring frequencies of the B ring pattern.

B Rotate: *Default:* 0, *Range:* any.

Rotation in degrees of the B ring pattern. Note that this will have no effect when A Rel Width is 1.

Rel Freq Red: *Default:* 1, *Range:* 0.1 or greater.

Scales the ring frequencies for the red color channel only.

Rel Freq Green: *Default:* 1, *Range:* 0.1 or greater.

Scales the ring frequencies for the green color channel only.

Rel Freq Blue: *Default: 1, Range: 0.1 or greater.*
Scales the ring frequencies for the blue color channel only.

Double Space Rings: *Popup YES-NO, Default: No.*
If checked, every other ring is negative giving a double spaced look. If unchecked, the absolute value of the wave form is used which gives twice as many visible rings.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

TextureFoldedComp	TextureMoire	WipeRings
TextureWeaveComp		Sapphire Plug-ins
TexturePlasmaComp		Introduction
TextureNoiseEmbossComp		
TextureNoisePaintComp		
TextureSpotsComp		
TextureCellsComp		
TextureChromaSpiralComp		
TextureTilesComp		
TextureNeuronsComp		
TextureLoopsComp		
TextureFluxComp		

TextureNeurons

In the S_Textures Plugin.

Creates an abstract texture resembling moving nerve cell tendrils. The Phase Speed and Morph Speed parameters cause the pattern to automatically change over time.

Inputs:

None

Parameters:

Frequency: *Default: 3, Range: 0.01 or greater.*

The spatial frequency of the texture. Increase to zoom out, decrease to zoom in.

Freq Rel X: *Default: 1, Range: 0.01 or greater.*

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Seed: *Default: 1, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Phase Start: *Default: 0, Range: any.*

Amount to rotate the arms about their centers.

Phase Speed: *Default: 0.05, Range: any.*

Speed to automatically rotate the arms and move the lines over time.

Morph Speed: *Default: 0.05, Range: any.*

Speed to automatically undulate the underlying noise pattern over time.

Arms: *Integer, Default: 9, Range: 0 to 50.*

The number of tendrils emanating from each center point in the texture.

Softness: *Default: 0.5, Range: 0.1 or greater.*

Decrease for sharper line edges. Increase for smoother line edges or to reduce aliasing.

Thickness: *Default: 1.1, Range: 0 or greater.*

Decrease for thinner lines. Increase for stronger brighter lines.

Outer Bright: *Default: 0.4, Range: 0.01 or greater.*

Scales the brightness of the regions away from the neuron centers. Decrease to remove the connecting lines and leave only the star shapes at the centers.

Wiggle Amp: *Default: 0.1, Range: 0 or greater.*

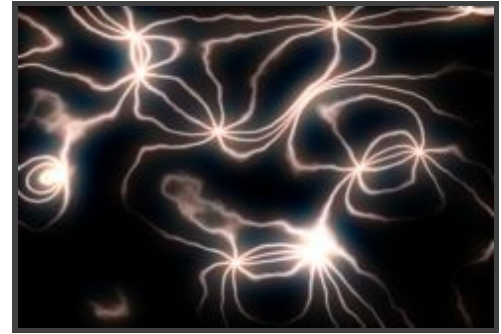
Amount of additional noise too apply along the pattern of lines. Turn down to get smoother lines.

Wiggle Freq Rel: *Default: 2, Range: 0 or greater.*

Frequency of the additional noise.

Wiggle Octaves: *Integer, Default: 4, Range: 1 to 10.*

The number of octaves to use for the additional noise.



Brightness: *Default:* 1, *Range:* 0 or greater.
Brightness of the result.

Color: *Default rgb:* [1 1 1].
Scales the color of the result.

Glow Color: *Default rgb:* [1 0.8 0.8].
Color of the glow applied to the texture.

Glow Brightness: *Default:* 2, *Range:* 0 or greater.
Brightness of the glow applied to the texture.

Glow Width: *Default:* 1, *Range:* 0 or greater.
The width of the glow applied to the texture.

Params2:

Smooth: *Default:* 0, *Range:* 0 or greater.
Amount to blur the line pattern. Increase for a defocus look, or to help remove aliasing artifacts.

Shift: *X & Y, Default:* [0 0], *Range:* any.
Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Morph: *X & Y, Default:* [1 0], *Range:* any.
The horizontal and vertical directions to undulate the underlying noise pattern, when using Morph Speed.

Twist: *Default:* 0, *Range:* any.
Amount to rotate the centers to cause a twisting effect.

Glow Width Red: *Default:* 0.4, *Range:* 0 or greater.
The relative red width of the glow.

Glow Width Grn: *Default:* 0.6, *Range:* 0 or greater.
The relative green width of the glow.

Glow Width Blue: *Default:* 0.8, *Range:* 0 or greater.
The relative blue width of the glow.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFolded](#)

[TextureWeave](#)

[TexturePlasma](#)

[TextureNoiseEmboss](#)

[TextureNoisePaint](#)

[TextureSpots](#)

[TextureCells](#)

[TextureChromaSpiral](#)

[TextureMoire](#)

[TextureTiles](#)

[TextureLoops](#)

[TextureFlux](#)

[TextureNeuronsComp](#)

[Sapphire Plug-ins](#)

[Introduction](#)

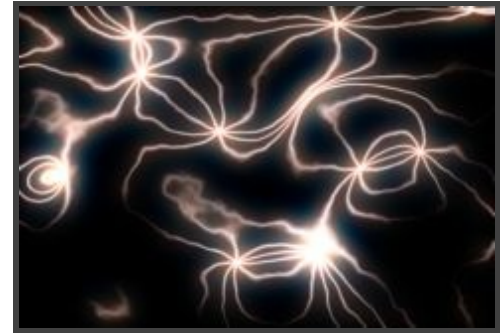
TextureNeuronsComp

In the S_TexturesComp Plugin.

Creates an abstract texture resembling nerve cell tendrils, then combines the texture with a background clip.

Inputs:

Back: The clip to combine the texture image with. This may be ignored if the Combine option is set to Texture Only, but the output clip will default to the same length as this clip.



Parameters:

Frequency: *Default: 3, Range: 0.01 or greater.*

The spatial frequency of the texture. Increase to zoom out, decrease to zoom in.

Freq Rel X: *Default: 1, Range: 0.01 or greater.*

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Seed: *Default: 1, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Phase Start: *Default: 0, Range: any.*

Amount to rotate the arms about their centers.

Phase Speed: *Default: 0.05, Range: any.*

Speed to automatically rotate the arms and move the lines over time.

Morph Speed: *Default: 0.05, Range: any.*

Speed to automatically undulate the underlying noise pattern over time.

Arms: *Integer, Default: 9, Range: 0 to 50.*

The number of tendrils emanating from each center point in the texture.

Softness: *Default: 0.5, Range: 0.1 or greater.*

Decrease for sharper line edges. Increase for smoother line edges or to reduce aliasing.

Thickness: *Default: 1.1, Range: 0 or greater.*

Decrease for thinner lines. Increase for stronger brighter lines.

Outer Bright: *Default: 0.4, Range: 0.01 or greater.*

Scales the brightness of the regions away from the neuron centers. Decrease to remove the connecting lines and leave only the star shapes at the centers.

Wiggle Amp: *Default: 0.1, Range: 0 or greater.*

Amount of additional noise too apply along the pattern of lines. Turn down to get smoother lines.

Wiggle Freq Rel: *Default: 2, Range: 0 or greater.*

Frequency of the additional noise.

Wiggle Octaves: *Integer, Default: 4, Range: 1 to 10.*

The number of octaves to use for the additional noise.

Brightness: *Default: 1, Range: 0 or greater.*
Brightness of the result.

Color: *Default rgb: [1 1 1].*
Scales the color of the result.

Glow Color: *Default rgb: [1 0.8 0.8].*
Color of the glow applied to the texture.

Glow Brightness: *Default: 2, Range: 0 or greater.*
Brightness of the glow applied to the texture.

Glow Width: *Default: 1, Range: 0 or greater.*
The width of the glow applied to the texture.

Combine: *Popup menu, Default: Screen.*
Determines how the texture is combined with the Background.

***Texture Only:** gives only the texture image with no Background.*

***Mult:** the texture is multiplied by the Background.*

***Add:** the texture is added to the Background.*

***Screen:** the texture is blended with the Background using a screen operation.*

***Difference:** the result is the difference between the texture and Background.*

***Overlay:** the texture is combined with the Background using an overlay function.*

Scale Back: *Default: 1, Range: any, Shared.*
The background brightness is scaled by this value before being combined with the texture.

Params2:

Smooth: *Default: 0, Range: 0 or greater.*
Amount to blur the line pattern. Increase for a defocus look, or to help remove aliasing artifacts.

Shift: *X & Y, Default: [0 0], Range: any.*
Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Morph: *X & Y, Default: [1 0], Range: any.*
The horizontal and vertical directions to undulate the underlying noise pattern, when using Morph Speed.

Twist: *Default: 0, Range: any.*
Amount to rotate the centers to cause a twisting effect.

Glow Width Red: *Default: 0.4, Range: 0 or greater.*
The relative red width of the glow.

Glow Width Grn: *Default: 0.6, Range: 0 or greater.*
The relative green width of the glow.

Glow Width Blue: *Default: 0.8, Range: 0 or greater.*
The relative blue width of the glow.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFoldedComp](#)

[TextureWeaveComp](#)

[TexturePlasmaComp](#)

[TextureNoiseEmbossCmp](#)

[TextureNoisePaintComp](#)

[TextureSpotsComp](#)

[TextureCellsComp](#)

[TextureChromaSpiralCmp](#)

[TextureMoireComp](#)

[TextureTilesComp](#)

[TextureLoopsComp](#)

[TextureFluxComp](#)

[TextureNeurons](#)

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TextureNoiseEmboss

In the S_Textures Plugin.

Creates an abstract texture by applying a EmbossShiny effect to a procedurally generated noise texture. Adjust the Light Dir to illuminate the pattern from different angles.

Inputs:

None

Parameters:

Frequency: *Default: 2, Range: 0.1 or greater.*

The spatial frequency of the texture. Increase to zoom out, decrease to zoom in.

Frequency Rel X: *Default: 1.5, Range: 0.01 or greater.*

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Octaves: *Integer, Default: 5, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.23, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Shift: *X & Y, Default: [0 0], Range: any.*

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Light Dir: *X & Y, Default: [0.2 0.2], Range: any.*

The direction vector for the light source. Surface shading is calculated using light from this direction shining onto the generated bump map. This parameter can be adjusted using the Light Dir Widget.

Bumps Scale: *Default: 2.5, Range: any.*

Scales the amplitude of the bump map.

Bumps Threshold: *Default: 0, Range: 0 or greater.*

This value is subtracted from the Bumps input before it is used. It can be used to create flat areas resembling 'lakes.'

Hilite Brightnss: *Default: 0.5, Range: 0 or greater.*

Scales the brightness of the specular highlights.

Hilite Size: *Default: 0.5, Range: 0.1 or greater.*

Adjusts the size of the specular highlights.

Brightness: *Default: 1, Range: 0 or greater.*

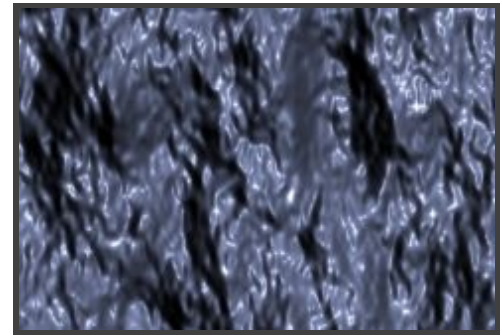
Scales the brightness of the result.

Surface Color: *Default rgb: [0.75 0.75 0.75].*

The color of the surface. The final color is affected by both this and the Light Color.

Light Color: *Default rgb: [1 1 1].*

The color of the light source that creates the embossed result.



Noise Smooth: *Default:* 0, *Range:* 0 or greater.

Smooths the noise texture before applying the Emboss. This can be helpful in removing unwanted artifacts from the noise generation algorithm.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFolded](#)

[TextureWeave](#)

[TexturePlasma](#)

[TextureNoisePaint](#)

[TextureSpots](#)

[TextureCells](#)

[TextureChromaSpiral](#)

[TextureMoire](#)

[TextureTiles](#)

[TextureNeurons](#)

[TextureLoops](#)

[TextureFlux](#)

[TextureNoiseEmbossCmp](#)

[Clouds](#)

[EmbossShiny](#)

[Sapphire](#)

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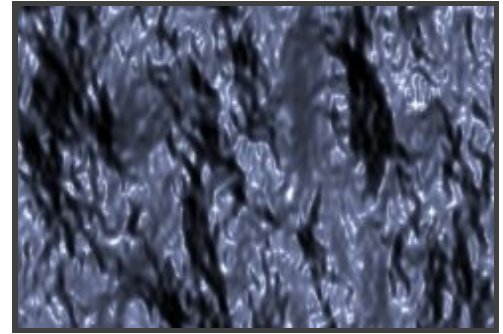
TextureNoiseEmbossCmp

In the S_TexturesComp Plugin.

Creates an abstract texture by applying a EmbossShiny effect to a procedurally generated noise texture, then combines the texture with a background clip.

Inputs:

Back: The clip to combine the texture image with. This may be ignored if the Combine option is set to Texture Only, but the output clip will default to the same length as this clip.



Parameters:

Frequency: *Default: 2, Range: 0.1 or greater.*

The spatial frequency of the texture. Increase to zoom out, decrease to zoom in.

Frequency Rel X: *Default: 1.5, Range: 0.01 or greater.*

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Octaves: *Integer, Default: 5, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.23, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Shift: *X & Y, Default: [0 0], Range: any.*

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Light Dir: *X & Y, Default: [0.2 0.2], Range: any.*

The direction vector for the light source. Surface shading is calculated using light from this direction shining onto the generated bump map. This parameter can be adjusted using the Light Dir Widget.

Bumps Scale: *Default: 2.5, Range: any.*

Scales the amplitude of the bump map.

Bumps Threshold: *Default: 0, Range: 0 or greater.*

This value is subtracted from the Bumps input before it is used. It can be used to create flat areas resembling 'lakes.'

Hilite Brightnss: *Default: 0.5, Range: 0 or greater.*

Scales the brightness of the specular highlights.

Hilite Size: *Default: 0.5, Range: 0.1 or greater.*

Adjusts the size of the specular highlights.

Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of the result.

Surface Color: *Default rgb: [0.75 0.75 0.75].*

The color of the surface. The final color is affected by both this and the Light Color.

Light Color: *Default rgb: [1 1 1].*

The color of the light source that creates the embossed result.

Noise Smooth: *Default: 0, Range: 0 or greater.*

Smooths the noise texture before applying the Emboss. This can be helpful in removing unwanted artifacts from the noise generation algorithm.

Combine: *Popup menu, Default: Screen.*

Determines how the texture is combined with the Background.

***Texture Only:** gives only the texture image with no Background.*

***Mult:** the texture is multiplied by the Background.*

***Add:** the texture is added to the Background.*

***Screen:** the texture is blended with the Background using a screen operation.*

***Difference:** the result is the difference between the texture and Background.*

***Overlay:** the texture is combined with the Background using an overlay function.*

Scale Back: *Default: 1, Range: any, Shared.*

The background brightness is scaled by this value before being combined with the texture.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFoldedComp](#)

[TextureWeaveComp](#)

[TexturePlasmaComp](#)

[TextureNoisePaintComp](#)

[TextureSpotsComp](#)

[TextureCellsComp](#)

[TextureChromaSpiralCmp](#)

[TextureMoireComp](#)

[TextureTilesComp](#)

[TextureNeuronsComp](#)

[TextureLoopsComp](#)

[TextureFluxComp](#)

[TextureNoiseEmboss](#)

[Clouds](#)

[EmbossShiny](#)

[Sapphire](#)

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TextureNoisePaint

In the S_Textures Plugin.

Creates an abstract texture by applying an AutoPaint effect to a procedurally generated noise texture.

Inputs:

None



Parameters:

Noise Frequency: *Default: 4, Range: 0.1 or greater.*

The spatial frequency of the initial noise texture. Increase to zoom out, decrease to zoom in.

Noise Freq Rel X: *Default: 1, Range: 0.01 or greater.*

The relative horizontal frequency of the initial noise texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Noise Octaves: *Integer, Default: 1, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Noise Seed: *Default: 0.23, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Noise Shift: *X & Y, Default: [0 0], Range: any.*

Translation offset of the initial noise texture.

Stroke Frequency: *Default: 32, Range: 0.1 or greater.*

The density of brush strokes in the frame. Increase for smaller strokes.

Stroke Length: *Default: -5, Range: any.*

Determines the length of the brush strokes along the directions of edges in the source clip. If this is negative the strokes will align perpendicular to the edges for a 'HairyPaint' style.

Stroke Align: *Default: 0, Range: 0 or greater.*

Increase to smooth out the directions of the strokes so nearby strokes are more parallel.

Sharpen: *Default: 1, Range: any.*

The amount of post-process sharpening applied.

Sharpen Width: *Default: 0.1, Range: 0 or greater.*

The width at which to apply the post-process sharpening filter, relative to the stroke sizes. Higher values affect wider areas from the edges, lower values only affect areas near sharp edges.

Jitter Frames: *Integer, Default: 0, Range: 0 or greater.*

If this is 0, the locations of the strokes will remain the same for every frame processed. If it is 1, the locations of the strokes are re-randomized for each frame. If it is 2, they are re-randomized every second frame, and so on.

Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of the result.

Color: *Default rgb:* [1 1 1].

Scales the color of the result. For example, if it is yellow [1 1 0], the blue of the result will be 0.

Saturation: *Default:* 0.8, *Range:* 0 or greater.

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Offset: *Default:* 0, *Range:* any.

Adds this gray value to the result (or subtracts if negative). 0 has no effect, .5 is middle gray, and 1 is white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFolded](#)

[TextureWeave](#)

[TexturePlasma](#)

[TextureNoiseEmboss](#)

[TextureSpots](#)

[TextureCells](#)

[TextureChromaSpiral](#)

[TextureMoire](#)

[TextureTiles](#)

[TextureNeurons](#)

[TextureLoops](#)

[TextureFlux](#)

[TextureNoisePaintComp](#)

[CloudsColorSmooth](#)

[VanGogh](#)

[Sapphire](#)

[Plug-ins](#)

[Introduction](#)

TextureNoisePaintComp

In the S_TexturesComp Plugin.

Creates an abstract texture by applying an AutoPaint effect to a procedurally generated noise texture, then combines the texture with a background clip.

Inputs:

Back: The clip to combine the texture image with. This may be ignored if the Combine option is set to Texture Only, but the output clip will default to the same length as this clip.



Parameters:

Noise Frequency: *Default: 4, Range: 0.1 or greater.*

The spatial frequency of the initial noise texture. Increase to zoom out, decrease to zoom in.

Noise Freq Rel X: *Default: 1, Range: 0.01 or greater.*

The relative horizontal frequency of the initial noise texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Noise Octaves: *Integer, Default: 1, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Noise Seed: *Default: 0.23, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Noise Shift: *X & Y, Default: [0 0], Range: any.*

Translation offset of the initial noise texture.

Stroke Frequency: *Default: 32, Range: 0.1 or greater.*

The density of brush strokes in the frame. Increase for smaller strokes.

Stroke Length: *Default: -5, Range: any.*

Determines the length of the brush strokes along the directions of edges in the source clip. If this is negative the strokes will align perpendicular to the edges for a 'HairyPaint' style.

Stroke Align: *Default: 0, Range: 0 or greater.*

Increase to smooth out the directions of the strokes so nearby strokes are more parallel.

Sharpen: *Default: 1, Range: any.*

The amount of post-process sharpening applied.

Sharpen Width: *Default: 0.1, Range: 0 or greater.*

The width at which to apply the post-process sharpening filter, relative to the stroke sizes. Higher values affect wider areas from the edges, lower values only affect areas near sharp edges.

Jitter Frames: *Integer, Default: 0, Range: 0 or greater.*

If this is 0, the locations of the strokes will remain the same for every frame processed. If it is 1, the locations of the strokes are re-randomized for each frame. If it is 2, they are re-randomized every second frame, and so on.

Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of the result.

Color: *Default rgb: [1 1 1].*

Scales the color of the result. For example, if it is yellow [1 1 0], the blue of the result will be 0.

Saturation: *Default: 0.8, Range: 0 or greater.*

Scales the color saturation. Increase for more intense colors. Set to 0 for monochrome.

Offset: *Default: 0, Range: any.*

Adds this gray value to the result (or subtracts if negative). 0 has no effect, .5 is middle gray, and 1 is white.

Combine: *Popup menu, Default: Screen.*

Determines how the texture is combined with the Background.

Texture Only: gives only the texture image with no Background.

Mult: the texture is multiplied by the Background.

Add: the texture is added to the Background.

Screen: the texture is blended with the Background using a screen operation.

Difference: the result is the difference between the texture and Background.

Overlay: the texture is combined with the Background using an overlay function.

Scale Back: *Default: 1, Range: any, Shared.*

The background brightness is scaled by this value before being combined with the texture.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFoldedComp](#)

[TextureWeaveComp](#)

[TexturePlasmaComp](#)

[TextureNoiseEmbossCmp](#)

[TextureSpotsComp](#)

[TextureCellsComp](#)

[TextureChromaSpiralCmp](#)

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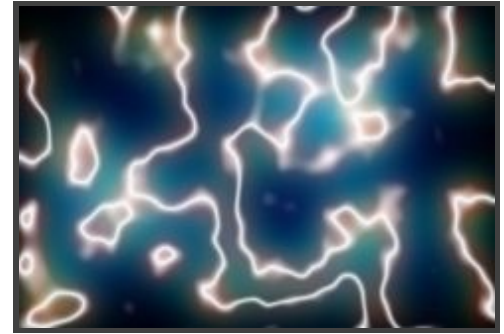
TexturePlasma

In the S_Textures Plugin.

Creates an abstract texture resembling an electrical plasma effect. The Phase Speed parameter causes the pattern to automatically undulate over time.

Inputs:

None



Parameters:

Noise Frequency: *Default:* 1.2, *Range:* 0.01 or greater.

The spatial frequency of the initial noise texture. Increase to zoom out, decrease to zoom in.

Noise Freq Rel X: *Default:* 1, *Range:* 0.01 or greater.

The relative horizontal frequency of the initial noise texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Noise Octaves: *Integer, Default:* 4, *Range:* 1 to 10.

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Noise Seed: *Default:* 0.12, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Add Grad: *X & Y, Default:* [0.1 0], *Range:* any.

Determines the amplitude and direction of a gradient which orients the plasma lines. Increasing X makes the lines more vertical, and increasing Y makes them horizontal.

Layers: *Default:* 4.5, *Range:* 0 or greater.

The number of layers of plasma lines. Increase for a more striped effect.

Threshold: *Default:* 0.5, *Range:* 0 or greater.

Determines the thickness of the plasma lines. Increase for thinner lines, decrease for thicker and brighter ones.

Shift: *X & Y, Default:* [0 0], *Range:* any.

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Phase Start: *Default:* 0, *Range:* any.

Phase offset of the plasma lines.

Phase Speed: *Default:* 1, *Range:* any.

Phase speed of the plasma lines. If non-zero, the lines are automatically animated to undulate at this rate.

Brightness: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the result.

Color: *Default rgb:* [1 1 1].

Scales the color of the result. For example, if it is yellow [1 1 0], the blue of the result will be 0.

Glow Color: *Default rgb:* [0.6 0.8 1].
Scales the color of the glow applied to the plasma texture.

Glow Brightness: *Default:* 3, *Range:* 0 or greater.
Scales the brightness of the glow applied to the plasma texture.

Glow Width: *Default:* 1, *Range:* 0 or greater.
The width of the glow applied to the plasma texture.

Params2:

Glow Width Red: *Default:* 0.6, *Range:* 0 or greater.
The relative red width of the glow.

Glow Width Grn: *Default:* 1.2, *Range:* 0 or greater.
The relative green width of the glow.

Glow Width Blue: *Default:* 1.8, *Range:* 0 or greater.
The relative blue width of the glow.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFolded](#)

[TextureWeave](#)

[TextureNoiseEmboss](#)

[TextureNoisePaint](#)

[TextureSpots](#)

[TextureCells](#)

[TextureChromaSpiral](#)

[TextureMoire](#)

[TextureTiles](#)

[TextureNeurons](#)

[TextureLoops](#)

[TextureFlux](#)

[TexturePlasmaComp](#)

[Clouds](#)

[Glow](#)

[Sapphire](#)

[Plug-ins](#)

[Introduction](#)

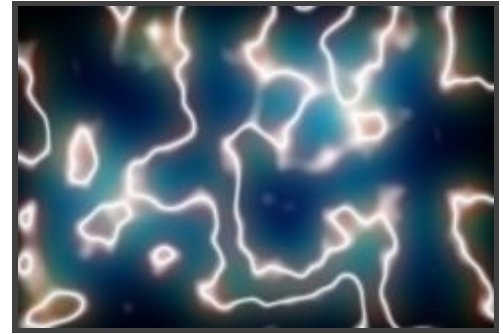
TexturePlasmaComp

In the S_TexturesComp Plugin.

Creates an abstract texture resembling an electrical plasma effect, then combines the texture with a background clip.

Inputs:

Back: The clip to combine the texture image with. This may be ignored if the Combine option is set to Texture Only, but the output clip will default to the same length as this clip.



Parameters:

Noise Frequency: *Default:* 1.2, *Range:* 0.01 or greater.

The spatial frequency of the initial noise texture. Increase to zoom out, decrease to zoom in.

Noise Freq Rel X: *Default:* 1, *Range:* 0.01 or greater.

The relative horizontal frequency of the initial noise texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Noise Octaves: *Integer, Default:* 4, *Range:* 1 to 10.

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Noise Seed: *Default:* 0.12, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Add Grad: *X & Y, Default:* [0.1 0], *Range:* any.

Determines the amplitude and direction of a gradient which orients the plasma lines. Increasing X makes the lines more vertical, and increasing Y makes them horizontal.

Layers: *Default:* 4.5, *Range:* 0 or greater.

The number of layers of plasma lines. Increase for a more striped effect.

Threshold: *Default:* 0.5, *Range:* 0 or greater.

Determines the thickness of the plasma lines. Increase for thinner lines, decrease for thicker and brighter ones.

Shift: *X & Y, Default:* [0 0], *Range:* any.

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Phase Start: *Default:* 0, *Range:* any.

Phase offset of the plasma lines.

Phase Speed: *Default:* 1, *Range:* any.

Phase speed of the plasma lines. If non-zero, the lines are automatically animated to undulate at this rate.

Brightness: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the result.

Color: *Default rgb:* [1 1 1].

Scales the color of the result. For example, if it is yellow [1 1 0], the blue of the result will be 0.

Glow Color: *Default rgb: [0.6 0.8 1].*
Scales the color of the glow applied to the plasma texture.

Glow Brightness: *Default: 3, Range: 0 or greater.*
Scales the brightness of the glow applied to the plasma texture.

Glow Width: *Default: 1, Range: 0 or greater.*
The width of the glow applied to the plasma texture.

Combine: *Popup menu, Default: Screen.*
Determines how the texture is combined with the Background.

Texture Only: gives only the texture image with no Background.
Mult: the texture is multiplied by the Background.
Add: the texture is added to the Background.
Screen: the texture is blended with the Background using a screen operation.
Difference: the result is the difference between the texture and Background.
Overlay: the texture is combined with the Background using an overlay function.

Scale Back: *Default: 1, Range: any, Shared.*
The background brightness is scaled by this value before being combined with the texture.

Params2:

Glow Width Red: *Default: 0.6, Range: 0 or greater.*
The relative red width of the glow.

Glow Width Grn: *Default: 1.2, Range: 0 or greater.*
The relative green width of the glow.

Glow Width Blue: *Default: 1.8, Range: 0 or greater.*
The relative blue width of the glow.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

TextureFoldedComp	TexturePlasma	Clouds	Sapphire
TextureWeaveComp		Glow	Plug-ins
TextureNoiseEmbossCmp			Introduction
TextureNoisePaintComp			
TextureSpotsComp			
TextureCellsComp			
TextureChromaSpiralCmp			
TextureMoireComp			
TextureTilesComp			
TextureNeuronsComp			
TextureLoopsComp			
TextureFluxComp			

TextureSpots

In the S_Textures Plugin.

Creates a field of spots that can be distorted and animated. The Warp Speed parameter causes the spots to be distorted over time by a random warping pattern.

Inputs:

None

Parameters:

Frequency: *Default:* 8, *Range:* 0.01 or greater.

The spatial frequency of the texture. Increase to zoom out, decrease to zoom in.

Radius: *Default:* 1, *Range:* 0 to 2.

The radius of the spots. Adjust this to change the size of the spots without changing the number of spots.

Shift: *X & Y, Default:* [0 0], *Range:* any.

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Seed: *Default:* 0.23, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Rand Warp Amp: *Default:* 0.2, *Range:* 0 or greater.

The amplitude of a bubble warping distortion applied to the spots.

Rand Warp Freq: *Default:* 1, *Range:* 0.01 or greater.

The spatial frequency of the noise used for the warping distortion. This has no effect unless Rand Warp Amp is positive.

Warp Start: *X & Y, Default:* [0 0], *Range:* any.

The translation offset warping pattern. This has no effect unless Rand Warp Amp is positive.

Warp Speed: *X & Y, Default:* [0.5 0], *Range:* any.

The translation speed of the warping pattern. If non-zero the spots are animated to wiggle at this rate. This has no effect unless Rand Warp Amp is positive.

Brightness1: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb:* [1 1 1].

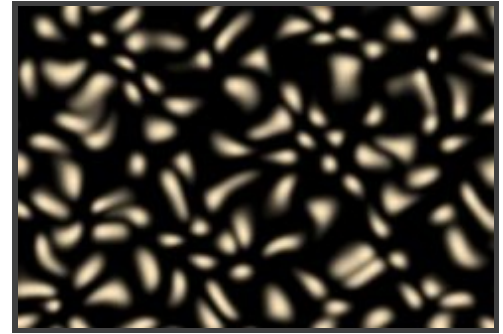
The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between Color0 and Color1.

Color0: *Default rgb:* [0 0 0].

The color of the 'darker' parts of the texture.

Offset0: *Default:* 0, *Range:* any.

Adds this value to color0. Decrease to a negative value for more contrast.



Invert: *Popup YES-NO, Default: No.*

If enabled, the resulting texture colors are inverted. This is similar to swapping Color0 and Color1.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFolded](#)

[TextureWeave](#)

[TexturePlasma](#)

[TextureNoiseEmboss](#)

[TextureNoisePaint](#)

[TextureCells](#)

[TextureChromaSpiral](#)

[TextureMoire](#)

[TextureTiles](#)

[TextureNeurons](#)

[TextureLoops](#)

[TextureFlux](#)

[TextureSpotsComp](#)

[WarpBubble](#)

[Sapphire Plug-ins](#)

[Introduction](#)

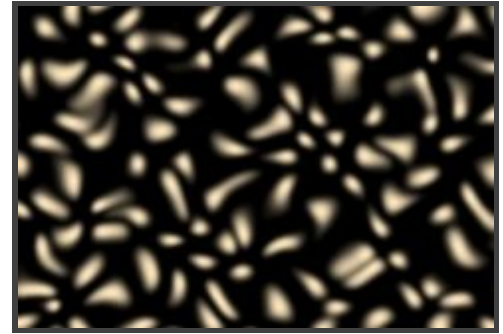
TextureSpotsComp

In the S_TexturesComp Plugin.

Creates a field of spots that can be distorted and animated, then combines the texture with a background clip.

Inputs:

Back: The clip to combine the texture image with. This may be ignored if the Combine option is set to Texture Only, but the output clip will default to the same length as this clip.



Parameters:

Frequency: *Default:* 8, *Range:* 0.01 or greater.

The spatial frequency of the texture. Increase to zoom out, decrease to zoom in.

Radius: *Default:* 1, *Range:* 0 to 2.

The radius of the spots. Adjust this to change the size of the spots without changing the number of spots.

Shift: *X & Y, Default:* [0 0], *Range:* any.

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Seed: *Default:* 0.23, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Rand Warp Amp: *Default:* 0.2, *Range:* 0 or greater.

The amplitude of a bubble warping distortion applied to the spots.

Rand Warp Freq: *Default:* 1, *Range:* 0.01 or greater.

The spatial frequency of the noise used for the warping distortion. This has no effect unless Rand Warp Amp is positive.

Warp Start: *X & Y, Default:* [0 0], *Range:* any.

The translation offset warping pattern. This has no effect unless Rand Warp Amp is positive.

Warp Speed: *X & Y, Default:* [0.5 0], *Range:* any.

The translation speed of the warping pattern. If non-zero the spots are animated to wiggle at this rate. This has no effect unless Rand Warp Amp is positive.

Brightness1: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb:* [1 1 1].

The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between Color0 and Color1.

Color0: *Default rgb:* [0 0 0].

The color of the 'darker' parts of the texture.

Offset0: *Default:* 0, *Range:* any.

Adds this value to color0. Decrease to a negative value for more contrast.

Combine: *Popup menu, Default: Screen.*

Determines how the texture is combined with the Background.

Texture Only: gives only the texture image with no Background.

Mult: the texture is multiplied by the Background.

Add: the texture is added to the Background.

Screen: the texture is blended with the Background using a screen operation.

Difference: the result is the difference between the texture and Background.

Overlay: the texture is combined with the Background using an overlay function.

Scale Back: *Default: 1, Range: any, Shared.*

The background brightness is scaled by this value before being combined with the texture.

Invert: *Popup YES-NO, Default: No.*

If enabled, the resulting texture colors are inverted. This is similar to swapping Color0 and Color1.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFoldedComp](#)

[TextureWeaveComp](#)

[TexturePlasmaComp](#)

[TextureNoiseEmbossCmp](#)

[TextureNoisePaintComp](#)

[TextureCellsComp](#)

[TextureChromaSpiralCmp](#)

[TextureMoireComp](#)

[TextureTilesComp](#)

[TextureNeuronsComp](#)

[TextureLoopsComp](#)

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TextureTiles

In the S_Textures Plugin.

TextureTiles draws a repeating pattern of tiles. The shapes can be hexagons, triangles, diamonds, stars, or variations on those, depending on the Morph parameters.

Inputs:

None

Parameters:

Frequency: *Default: 5, Range: 0.01 or greater.*

Spatial frequency of the tile pattern; increase for many smaller tiles, decrease for fewer large tiles. This parameter can be adjusted using the Frequency Widget.

Angle: *Default: 0, Range: any.*

Rotates the whole pattern around the center point. Use Shift to adjust the center of rotation.

Size: *Default: 0.5, Range: 0 to 1.*

The size of each tile, within its cell. Zero will give all color0, one will give all color1. This doesn't change the overall size of the pattern; use Frequency for that.

Size Grad Add: *Default: 0, Range: -10 to 10.*

Change the size of the shapes (like the Size parameter) differently across the image.

Size Grad Angle: *Default: 0, Range: any.*

Angle of the size gradient. If Size Grad Add is zero, this has no effect.

Size Radial: *Default: 0, Range: any.*

Change the size of the shapes (like the Size parameter) according to the distance from the center point. Increase to make the sizes smaller around the edges.

Rel Width: *Default: 1, Range: 0.1 or greater.*

Squashes or stretches the pattern.

Rel Wid Pre Rot: *Default: 1, Range: 0.1 or greater.*

Squashes or stretches the pattern *before* rotating by Angle. Use this if you want to squash or stretch and have the whole squashed/stretched pattern rotate around the center. If Angle is zero, this has the same effect as Rel Width.

Morph Shapes: *Default: 0, Range: any.*

Changes the shapes of the tiles smoothly, from hexagons to triangles, diamonds, and stars.

Morph Speed: *Default: 0.1, Range: any.*

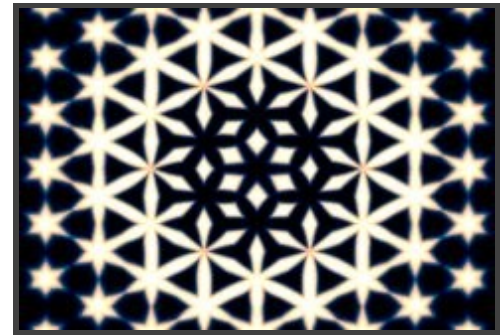
Automatically animates the shape morphing over time. A value of one means a complete morph cycle once per second.

Morph Grad Add: *Default: 0, Range: any.*

Change the shape morphing across the image, so the left side has one shape, and the right side another. See Morph Grad Angle to change the angle of this gradient.

Morph Grad Angle: *Default: 0, Range: any.*

Angle of the morph gradient. If Morph Grad Add is zero, this has no effect.



Morph Radial: *Default: 0, Range: any.*

Morph the shapes radially away from the center point; the shapes will be (for instance) hexagons in the center, smoothly becoming different toward the edges of the image. Morph Shapes and Morph Speed also interact with this parameter.

Brightness1: *Default: 1, Range: 0 or greater.*

Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb: [1 1 1].*

The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between Color0 and Color1.

Color0: *Default rgb: [0 0 0].*

The color of the 'darker' parts of the texture.

Offset0: *Default: 0, Range: any.*

Adds this value to color0. Decrease to a negative value for more contrast.

Edge Softness: *Default: 0.15, Range: 0 or greater.*

Softens the edges of each tile. If Softness Red/Green/Blue are not one, there will be some color fringing around the edges of the tiles when this is on.

Invert: *Popup YES-NO, Default: No.*

Invert the whole pattern, swapping the dark and bright areas.

Params2:

Shift: *X & Y, Default: [0 0], Range: any.*

Shift the whole pattern on the screen. Also sets the center point for rotation, Morph Radial, and Size Radial. This parameter can be adjusted using the Shift Widget.

Softness Red: *Default: 0, Range: 0 or greater.*

Relative softness of the red channel; see Edge Softness. To remove the color fringing around the edges of the tiles, set all the Softness Red/Green/Blue to one.

Softness Green: *Default: 1, Range: 0 or greater.*

Relative softness of the green channel; see Edge Softness. To remove the color fringing around the edges of the tiles, set all the Softness Red/Green/Blue to one.

Softness Blue: *Default: 2, Range: 0 or greater.*

Relative softness of the blue channel; see Edge Softness. To remove the color fringing around the edges of the tiles, set all the Softness Red/Green/Blue to one.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFolded](#)

[TextureWeave](#)

[TexturePlasma](#)

[TextureNoiseEmboss](#)

[TextureNoisePaint](#)

[TextureSpots](#)

[TextureCells](#)

[TextureChromaSpiral](#)

[TextureMoire](#)

[TextureTilesComp](#)

[WipeTiles](#)

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[Introduction](#)

TextureNeurons

TextureLoops

TextureFlux

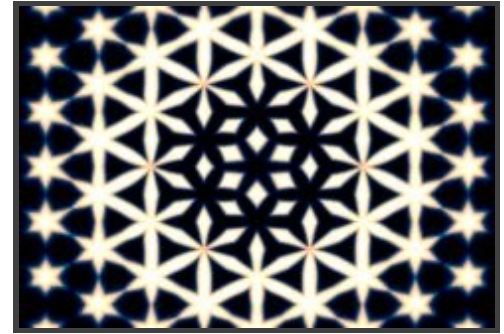
TextureTilesComp

In the S_TexturesComp Plugin.

Draws a repeating pattern of tiles, then combines that texture with a background clip.

Inputs:

Back: The clip to combine the texture image with. This may be ignored if the Combine option is set to Texture Only, but the output clip will default to the same length as this clip.



Parameters:

Frequency: *Default: 5, Range: 0.01 or greater.*

Spatial frequency of the tile pattern; increase for many smaller tiles, decrease for fewer large tiles. This parameter can be adjusted using the Frequency Widget.

Angle: *Default: 0, Range: any.*

Rotates the whole pattern around the center point. Use Shift to adjust the center of rotation.

Size: *Default: 0.5, Range: 0 to 1.*

The size of each tile, within its cell. Zero will give all color0, one will give all color1. This doesn't change the overall size of the pattern; use Frequency for that.

Size Grad Add: *Default: 0, Range: -10 to 10.*

Change the size of the shapes (like the Size parameter) differently across the image.

Size Grad Angle: *Default: 0, Range: any.*

Angle of the size gradient. If Size Grad Add is zero, this has no effect.

Size Radial: *Default: 0, Range: any.*

Change the size of the shapes (like the Size parameter) according to the distance from the center point. Increase to make the sizes smaller around the edges.

Rel Width: *Default: 1, Range: 0.1 or greater.*

Squashes or stretches the pattern.

Rel Wid Pre Rot: *Default: 1, Range: 0.1 or greater.*

Squashes or stretches the pattern *before* rotating by Angle. Use this if you want to squash or stretch and have the whole squashed/stretched pattern rotate around the center. If Angle is zero, this has the same effect as Rel Width.

Morph Shapes: *Default: 0, Range: any.*

Changes the shapes of the tiles smoothly, from hexagons to triangles, diamonds, and stars.

Morph Speed: *Default: 0.1, Range: any.*

Automatically animates the shape morphing over time. A value of one means a complete morph cycle once per second.

Morph Grad Add: *Default: 0, Range: any.*

Change the shape morphing across the image, so the left side has one shape, and the right side another. See Morph Grad Angle to change the angle of this gradient.

Morph Grad Angle: *Default: 0, Range: any.*

Angle of the morph gradient. If Morph Grad Add is zero, this has no effect.

Morph Radial: *Default: 0, Range: any.*

Morph the shapes radially away from the center point; the shapes will be (for instance) hexagons in the center, smoothly becoming different toward the edges of the image. Morph Shapes and Morph Speed also interact with this parameter.

Brightness1: *Default: 1, Range: 0 or greater.*

Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb: [1 1 1].*

The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between Color0 and Color1.

Color0: *Default rgb: [0 0 0].*

The color of the 'darker' parts of the texture.

Offset0: *Default: 0, Range: any.*

Adds this value to color0. Decrease to a negative value for more contrast.

Edge Softness: *Default: 0.15, Range: 0 or greater.*

Softens the edges of each tile. If Softness Red/Green/Blue are not one, there will be some color fringing around the edges of the tiles when this is on.

Combine: *Popup menu, Default: Screen.*

Determines how the texture is combined with the Background.

Texture Only: gives only the texture image with no Background.

Mult: the texture is multiplied by the Background.

Add: the texture is added to the Background.

Screen: the texture is blended with the Background using a screen operation.

Difference: the result is the difference between the texture and Background.

Overlay: the texture is combined with the Background using an overlay function.

Scale Back: *Default: 1, Range: any, Shared.*

The background brightness is scaled by this value before being combined with the texture.

Invert: *Popup YES-NO, Default: No.*

Invert the whole pattern, swapping the dark and bright areas.

Params2:

Shift: *X & Y, Default: [0 0], Range: any.*

Shift the whole pattern on the screen. Also sets the center point for rotation, Morph Radial, and Size Radial. This parameter can be adjusted using the Shift Widget.

Softness Red: *Default: 0, Range: 0 or greater.*

Relative softness of the red channel; see Edge Softness. To remove the color fringing around the edges of the tiles, set all the Softness Red/Green/Blue to one.

Softness Green: *Default: 1, Range: 0 or greater.*

Relative softness of the green channel; see Edge Softness. To remove the color fringing around the edges of the tiles, set all the Softness Red/Green/Blue to one.

Softness Blue: *Default: 2, Range: 0 or greater.*

Relative softness of the blue channel; see Edge Softness. To remove the color fringing around the edges of the tiles, set all the Softness Red/Green/Blue to one.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFoldedComp](#)

[TextureWeaveComp](#)

[TexturePlasmaComp](#)

[TextureNoiseEmbossCmp](#)

[TextureNoisePaintComp](#)

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TextureWeave

In the S_Textures Plugin.

Creates an abstract texture resembling perpendicular woven strands. The two sets of strands, horizontal and vertical, can be adjusted independently using frequency, octaves, and speed parameters.

Inputs:

None

Parameters:

Frequency: *Default:* 20, *Range:* 0.01 or greater.

The spatial frequency of the texture. Increase to zoom out, decrease to zoom in.

H Freq Rel X: *Default:* 0.2, *Range:* 0.01 or greater.

The relative horizontal frequency of the horizontal strands. Increase to make shorter, decrease to make longer.

H Octaves: *Integer, Default:* 2, *Range:* 1 to 10.

The number of noise octaves to use for the horizontal strands.

H Speed X: *Default:* 0, *Range:* any.

The horizontal speed of the horizontal strands. If non-zero, the horizontal strands will automatically crawl along their lengths at this rate.

Seed: *Default:* 0.123, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

V Frequency: *Default:* 1, *Range:* 0.01 or greater.

The relative frequency of the vertical strands. Increase to make smaller, decrease to make larger.

V Freq Rel Y: *Default:* 0.2, *Range:* 0.01 or greater.

The relative vertical frequency of the vertical strands. Increase to make shorter, decrease to make longer.

V Octaves: *Integer, Default:* 2, *Range:* 1 to 10.

The number of noise octaves to use for the vertical strands.

V Speed Y: *Default:* 0, *Range:* any.

The vertical speed of the vertical strands. If non-zero, the vertical strands will automatically crawl along their lengths at this rate.

Sharpen: *Default:* 1, *Range:* 0 or greater.

The amount of post-process sharpening applied.

Sharpen Width: *Default:* 0.1, *Range:* 0 or greater.

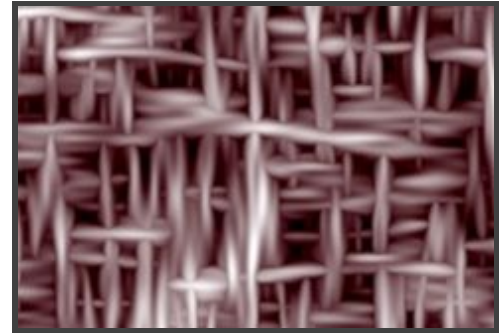
The width at which to apply the post-process sharpening filter, relative to the texture size. Higher values affect wider areas from the edges, lower values only affect areas near sharp edges.

Brightness1: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb:* [1 1 1].

The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between



Color0 and Color1.

Color0: *Default rgb:* [0 0 0].

The color of the 'darker' parts of the texture.

Offset0: *Default:* 0, *Range:* any.

Adds this value to color0. Decrease to a negative value for more contrast.

Params2:

Shift Start: *X & Y, Default:* [0 0], *Range:* any.

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Shift Speed: *X & Y, Default:* [0 0], *Range:* any.

Translation speed of the texture. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFolded](#)

[TexturePlasma](#)

[TextureNoiseEmboss](#)

[TextureNoisePaint](#)

[TextureSpots](#)

[TextureCells](#)

[TextureChromaSpiral](#)

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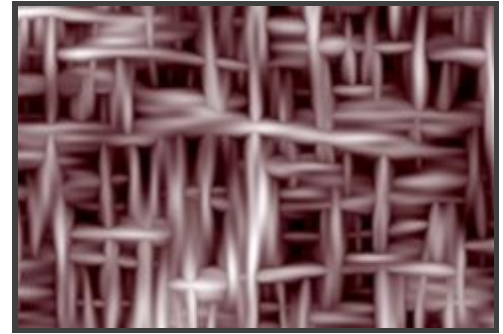
TextureWeaveComp

In the S_TexturesComp Plugin.

Creates an abstract texture resembling perpendicular woven strands, then combines the texture with a background clip.

Inputs:

Back: The clip to combine the texture image with. This may be ignored if the Combine option is set to Texture Only, but the output clip will default to the same length as this clip.



Parameters:

Frequency: *Default:* 20, *Range:* 0.01 or greater.

The spatial frequency of the texture. Increase to zoom out, decrease to zoom in.

H Freq Rel X: *Default:* 0.2, *Range:* 0.01 or greater.

The relative horizontal frequency of the horizontal strands. Increase to make shorter, decrease to make longer.

H Octaves: *Integer, Default:* 2, *Range:* 1 to 10.

The number of noise octaves to use for the horizontal strands.

H Speed X: *Default:* 0, *Range:* any.

The horizontal speed of the horizontal strands. If non-zero, the horizontal strands will automatically crawl along their lengths at this rate.

Seed: *Default:* 0.123, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

V Frequency: *Default:* 1, *Range:* 0.01 or greater.

The relative frequency of the vertical strands. Increase to make smaller, decrease to make larger.

V Freq Rel Y: *Default:* 0.2, *Range:* 0.01 or greater.

The relative vertical frequency of the vertical strands. Increase to make shorter, decrease to make longer.

V Octaves: *Integer, Default:* 2, *Range:* 1 to 10.

The number of noise octaves to use for the vertical strands.

V Speed Y: *Default:* 0, *Range:* any.

The vertical speed of the vertical strands. If non-zero, the vertical strands will automatically crawl along their lengths at this rate.

Sharpen: *Default:* 1, *Range:* 0 or greater.

The amount of post-process sharpening applied.

Sharpen Width: *Default:* 0.1, *Range:* 0 or greater.

The width at which to apply the post-process sharpening filter, relative to the texture size. Higher values affect wider areas from the edges, lower values only affect areas near sharp edges.

Brightness1: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of Color1. Increase for more contrast.

Color1: *Default rgb:* [1 1 1].

The color of the 'brighter' parts of the texture. The colors of the result are determined by an interpolation between Color0 and Color1.

Color0: *Default rgb:* [0 0 0].

The color of the 'darker' parts of the texture.

Offset0: *Default:* 0, *Range:* any.

Adds this value to color0. Decrease to a negative value for more contrast.

Combine: *Popup menu, Default:* Screen.

Determines how the texture is combined with the Background.

Texture Only: gives only the texture image with no Background.

Mult: the texture is multiplied by the Background.

Add: the texture is added to the Background.

Screen: the texture is blended with the Background using a screen operation.

Difference: the result is the difference between the texture and Background.

Overlay: the texture is combined with the Background using an overlay function.

Scale Back: *Default:* 1, *Range:* any, *Shared.*

The background brightness is scaled by this value before being combined with the texture.

Params2:

Shift Start: *X & Y, Default:* [0 0], *Range:* any.

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Shift Speed: *X & Y, Default:* [0 0], *Range:* any.

Translation speed of the texture. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TextureFoldedComp](#)

[TexturePlasmaComp](#)

[TextureNoiseEmbossCmp](#)

[TextureNoisePaintComp](#)

[TextureSpotsComp](#)

[TextureCellsComp](#)

[TextureChromaSpiralCmp](#)

[TextureMoireComp](#)

[TextureTilesComp](#)

[TextureNeuronsComp](#)

[TextureLoopsComp](#)

[TextureFluxComp](#)

[TextureWeave](#)

[Clouds](#)

[Sapphire Plug-ins](#)

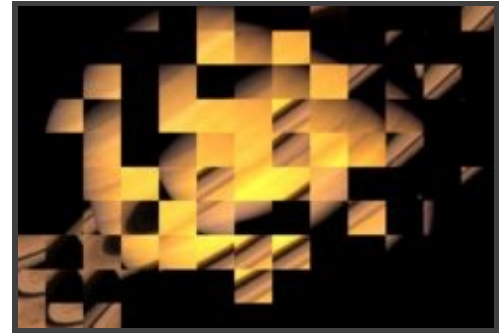
[Introduction](#)

TileScramble

Breaks the image into rectangular tiles and shifts the image within each tile to create an effect like a wall of small randomly oriented mirrors reflecting the source image. The amount and direction of shifting are controllable.

Inputs:

Source: The input clip to be warped.



Parameters:

Tiles: *Default:* 10, *Range:* 1 or greater.

How many tiles across the image. Increase for many tiny tiles; decrease for a few large ones.

Tile Rel Width: *Default:* 1, *Range:* 0.01 or greater.

Scales the height of each tile.

Tile Rel Height: *Default:* 1, *Range:* 0.01 or greater.

Scales the width of each tile.

Tile Shift: *X & Y, Default:* [0 0], *Range:* any.

shifts the edges of the tiles in X and Y. This doesn't shift the contents of the tiles, just the boundaries. Animate for an interesting effect.

Scramble Speed: *Default:* 0.1, *Range:* any.

How much scrambling to apply to each tile. Zero gives the original image.

Scramble Rel X: *Default:* 1, *Range:* 0 or greater.

Relative scramble amount in X. Set to zero to get only vertical scrambling.

Scramble Rel Y: *Default:* 1, *Range:* 0 or greater.

Relative scramble amount in Y. Set to zero to get only horizontal scrambling.

Rotate Warp Dir: *Default:* 0, *Range:* any.

Rotates the warping direction by this many degrees. Animate to rotate the tiles around for an interesting effect.

Z Dist: *Default:* 1, *Range:* 0.01 or greater.

Scales the distance of the image in each tile in or out from its center. Increase to zoom out, decrease to zoom in.

Seed: *Default:* 0.123, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Wrap: *Popup menu, Default:* No.

Determines the method for accessing outside the borders of the source image.

No: gives black beyond the borders.

Tile: repeats a copy of the image.

Reflect: repeats a mirrored copy. Edges are often less visible with this method.

Filter: *Check-box, Default:* off.

If enabled, the image is filtered when it is resampled smaller. This gives a better quality result when Z Dist is greater than 1. Has no effect when Z Dist is 1 or less.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[FlysEyeRect](#)

[TileScrambleMask](#)

[Sapphire Plug-ins](#)

[Mosaic](#)

[Introduction](#)

[KaleidoSquares](#)

[WipeTiles](#)

TileScrambleMask

Breaks the image into rectangular tiles and shifts the image within each tile to create an effect like a wall of small randomly oriented mirrors reflecting the source image. The amount of shifting is scaled by the brightness of the Mask input.

Inputs:

Source: The input clip to be warped.

Mask: The amplitude of warping is scaled by the values of this input clip. Gray values internally scale the warping amplitude rather than simply cross-fading between the effect and the original source to allow more continuous results at the Mask edges and more detailed control over the warping amounts. Only the red channel of this input is used. This input can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters.



Parameters:

Tiles: *Default:* 10, *Range:* 1 or greater.

How many tiles across the image. Increase for many tiny tiles; decrease for a few large ones.

Tile Rel Width: *Default:* 1, *Range:* 0.01 or greater.

Scales the height of each tile.

Tile Rel Height: *Default:* 1, *Range:* 0.01 or greater.

Scales the width of each tile.

Tile Shift: *X & Y, Default:* [0 0], *Range:* any.

shifts the edges of the tiles in X and Y. This doesn't shift the contents of the tiles, just the boundaries. Animate for an interesting effect.

Scramble Speed: *Default:* 0.1, *Range:* any.

How much scrambling to apply to each tile. Zero gives the original image.

Scramble Rel X: *Default:* 1, *Range:* 0 or greater.

Relative scramble amount in X. Set to zero to get only vertical scrambling.

Scramble Rel Y: *Default:* 1, *Range:* 0 or greater.

Relative scramble amount in Y. Set to zero to get only horizontal scrambling.

Rotate Warp Dir: *Default:* 0, *Range:* any.

Rotates the warping direction by this many degrees. Animate to rotate the tiles around for an interesting effect.

Z Dist: *Default:* 1, *Range:* 0.01 or greater.

Scales the distance of the image in each tile in or out from its center. Increase to zoom out, decrease to zoom in.

Seed: *Default:* 0.123, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Wrap: *Popup menu, Default:* No.

Determines the method for accessing outside the borders of the source image.

No: gives black beyond the borders.

Tile: repeats a copy of the image.

Reflect: repeats a mirrored copy. Edges are often less visible with this method.

Filter: *Check-box, Default:* off.

If enabled, the image is filtered when it is resampled smaller. This gives a better quality result when Z Dist is greater than 1. Has no effect when Z Dist is 1 or less.

Blur Mask: *Default:* 0, *Range:* 0 or greater.

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default:* off.

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TileScramble](#)

[FlysEyeRect](#)

[Mosaic](#)

[KaleidoSquares](#)

[WipeTiles](#)

[TileScramble](#)

[Sapphire Plug-ins](#)

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TimeDisplace

Displaces the Source clip by variable amounts in time depending on the brightness values of a Displace input.

Inputs:

Source: The input to process. In Batch, it is recommended that this input be a clip of frames rather than another node.

Displace: Determines the amount of time displacement. Where the Displace input is white the Source is time-shifted by a number of frames given by White Time Shift, and where it is black the Source is shifted by Black Time Shift. Gray areas are time-shifted by the appropriately interpolated amount. This input can be optionally blurred using the Blur Displace parameter. If this input is not provided, the Source input is used for the displacement matte instead.



Parameters:

Black Time Shift: *Default: -10, Range: any.*
Time shift by this many frames where the Displace input is black.

White Time Shift: *Default: 10, Range: any.*
Time shift by this many frames where the Displace input is white.

Shift Rel To: *Popup menu, Default: CurrentFrame.*
Selects relative or absolute time-shifting.

Frame 1: Time shift to an absolute frame number, relative to the first frame.
CurrentFrame: Time shift relative to the current frame.

Interp Frames: *Check-box, Default: off.*
Selects the method to use for non-integer frame number references. If disabled, the nearest integer frame number is used with no interpolation, which usually gives visible edges between the time slices. If enabled, a weighted interpolation is performed between the two nearest integer frame numbers, which smooths the results between the time slices.

Blur Displace: *Default: 0.1, Range: 0 or greater.*
Blurs the Displace input by this amount before using. This can be used to soften the edges or quantization artifacts of the Displace input, and smooth out the time displacements.

See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TimeDisplaceMask](#)

[GetFrame](#)

[Sapphire Plug-ins](#)

[TimeWarpRGB](#)

[Introduction](#)

[MotionDetect](#)

[TimeSlice](#)

[FreezeFrame](#)

[JitterFrames](#)

[RandomEdits](#)

ReverseEdits
ReverseClip

TimeDisplaceMask

Displaces the Source clip by variable amounts in time depending on the brightness values of a Displace input, and also scales the overall amount of displacement by a Mask input.

Inputs:

Source: The input to process. In Batch, it is recommended that this input be a clip of frames rather than another node.

Displace: Determines the amount of time displacement. Where the Displace input is white the Source is time-shifted by a number of frames given by White Time Shift, and where it is black the Source is shifted by Black Time Shift. Gray areas are time-shifted by the appropriately interpolated amount. This input can be optionally blurred using the Blur Displace parameter. If this input is not provided, the Source input is used for the displacement matte instead.

Mask: Scales the amount of time displacement. Where the Mask is black, no displacement is done, and where the Mask is white, the source is displaced by the full amount according to the Displace input. Use this input to fade out the effect in certain areas of the clip.

Parameters:

Black Time Shift: *Default: -10, Range: any.*
Time shift by this many frames where the Displace input is black.

White Time Shift: *Default: 10, Range: any.*
Time shift by this many frames where the Displace input is white.

Shift Rel To: *Popup menu, Default: CurrentFrame.*
Selects relative or absolute time-shifting.

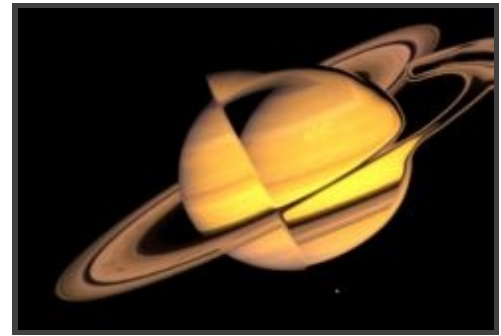
Frame 1: Time shift to an absolute frame number, relative to the first frame.
CurrentFrame: Time shift relative to the current frame.

Interp Frames: *Check-box, Default: off.*
Selects the method to use for non-integer frame number references. If disabled, the nearest integer frame number is used with no interpolation, which usually gives visible edges between the time slices. If enabled, a weighted interpolation is performed between the two nearest integer frame numbers, which smooths the results between the time slices.

Blur Displace: *Default: 0.1, Range: 0 or greater.*
Blurs the Displace input by this amount before using. This can be used to soften the edges or quantization artifacts of the Displace input, and smooth out the time displacements.

Blur Mask: *Default: 0, Range: 0 or greater.*
Blurs the Mask input by this amount before using. This can be used to soften the edges or quantization artifacts of the mask, and smooth out the time displacements.

Invert Mask: *Check-box, Default: off.*
If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.



See general info for: [Res](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[TimeDisplace](#)

[GetFrame](#)

[Sapphire Plug-ins](#)

[TimeWarpRGB](#)

[Introduction](#)

[MotionDetect](#)

[TimeSlice](#)

[FreezeFrame](#)

[JitterFrames](#)

[RandomEdits](#)

[ReverseEdits](#)

[ReverseClip](#)

Vignette

Darkens the border areas of the source clip to create a vignette effect. Use the Squareness, Radius, and Edge Softness parameters to affect the shape of the vignette. Use the Opacity and Color parameters to adjust its strength and color.

Inputs:

Source: The clip to be processed.



Parameters:

Center: *X & Y, Default: [0 0], Range: any.*

The center location of the vignette effect. This parameter can be adjusted using the Center Widget.

Rel Width: *Default: 1, Range: 0.05 or greater.*

The relative horizontal size of the vignette shape. Increase for a wider shape, decrease for a taller one.

Rel Height: *Default: 0.75, Range: 0.05 or greater.*

The relative vertical size of the vignette shape. Increase for a taller shape, decrease for a wider one.

Squareness: *Default: 0, Range: 0 to 1.*

Determines how square the vignette shape is. Set to 1.0 for a square or rectangle shape. Set to 0 for a circle or ellipse. Values in between give rectangles with rounded corners by varying amounts.

Rotate: *Default: 0, Range: any.*

Rotation in degrees of the vignette shape. Note that rotation will have no effect if Squareness is zero, and Rel Width and Rel Height are equal. This parameter can be adjusted using the Rotate Widget.

Radius: *Default: 0.9, Range: 0 or greater.*

Distance from the center to apply the vignette. This parameter can be adjusted using the Radius Widget.

Edge Softness: *Default: 1, Range: 0 or greater.*

The width of the vignette's soft edge. Larger values give softer, less visible edges.

Smooth Curve: *Default: 0.4, Range: 0 to 1.*

If zero, a linear gradient is used across the screen in the soft edge area. Increase this value to use a smoother 'S' shaped curve for interpolation which can reduce the visual perception of the gradient's start and end locations.

Color: *Default rgb: [0 0 0].*

The color of the vignette.

Opacity: *Default: 1, Range: 0 or greater.*

The opacity of the vignette; animate to 0 to fade the vignette out.

Source Bright: *Default: 1, Range: 0 or greater.*

Scales the brightness of the source clip. To see only the vignette, set this to zero.

Combine: *Popup menu, Default: Composite.*

Determines how the vignette is combined with the Source.

Composite: composites the vignette over the source clip.

Mult: the vignette color is multiplied by the source clip. If the Color is not black, this will selectively colorize the vignette area.

Add: the vignette color is added to the source clip. This will have no effect if the vignette color is black.

Screen: the vignette color is combined with the source clip using a screen operation. This will have no effect if the vignette color is black.

Subtract Inv: the inverse of the vignette color is subtracted from the source clip. Inverse means white for black, yellow for blue, and so on. This mode looks similar to Mult, but a bit more severe; it crushes the blacks and leaves the highlights more. This will have no effect if the vignette color is white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

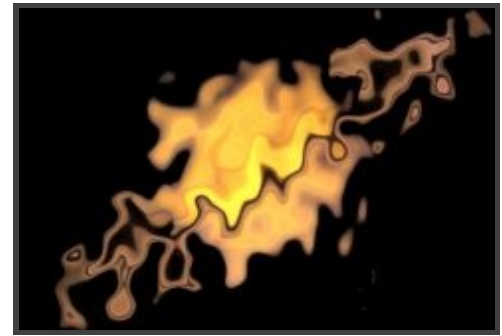
[SpotLight](#)
[GradientRadial](#)
[FilmDamage](#)
[TVDamage](#)

[Sapphire](#)
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WarpBubble

In the S_Warps Plugin.

Warp the source clip by a smooth noise function. This can be used to create heat diffusion or under water types of effects. The Shift Speed parameters cause the noise pattern to automatically translate over time. Adjust the Amplitude and Frequency parameters to give different types of distortions.



Inputs:

Source: The input clip to be warped.

Parameters:

Frequency: *Default:* 16, *Range:* 0.01 or greater.

The frequency of the noise pattern. Increase for more and smaller bubbles, decrease for fewer and larger bubbles.

Frequency Rel X: *Default:* 1, *Range:* 0.01 or greater.

The relative horizontal frequency of the bubble pattern. Increase for taller bubbles, decrease for wider ones.

Amplitude: *Default:* 0.25, *Range:* any.

Scales the amount of warping distortion. Increase for more severe distortion.

Octaves: *Integer, Default:* 1, *Range:* 1 to 10.

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default:* 0.23, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Shift Start: *X & Y, Default:* [0 0], *Range:* any.

The translation of the bubble pattern.

Shift Speed: *X & Y, Default:* [0.1 0], *Range:* any.

If non-zero, the bubble pattern is automatically animated to shift at this speed. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

Z Dist: *Default:* 1, *Range:* 0.01 or greater.

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Rotate Warp Dir: *Default:* 0, *Range:* any.

Rotation angle of the warping directions in counter-clockwise degrees.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransform](#)

[WarpVortex](#)

[WarpPerspective](#)

[WarpWaves](#)

[WarpWaves2](#)

[WarpPuddle](#)

[WarpBubble2](#)

[WarpFishEye](#)

[WarpPuff](#)

[WarpShrivel](#)

[WarpPolar](#)

[WarpRepeat](#)

[WarpChroma](#)

[WarpMagnify](#)

[WarpCornerPin](#)

[WarpBubbleMask](#)

[WarpBubbleComp](#)

[DissolveBubble](#)

[WipeBubble](#)

[Sapphire](#)

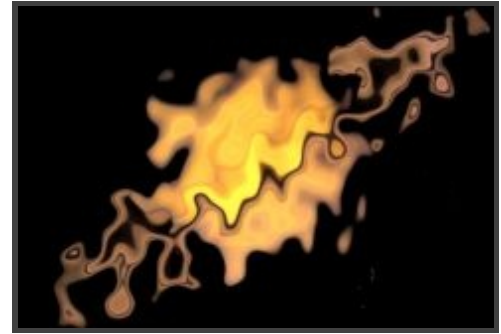
[Plug-ins](#)

[Introduction](#)

WarpBubbleComp

In the S_WarpsComp Plugin.

Warp the source clip by a smooth noise function. This can be used to create heat diffusion or under water types of effects. The Shift Speed parameters cause the noise pattern to automatically translate over time. Adjust the Amplitude and Frequency parameters to give different types of distortions.



Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip.

Parameters:

Frequency: *Default:* 16, *Range:* 0.01 or greater.

The frequency of the noise pattern. Increase for more and smaller bubbles, decrease for fewer and larger bubbles.

Frequency Rel X: *Default:* 1, *Range:* 0.01 or greater.

The relative horizontal frequency of the bubble pattern. Increase for taller bubbles, decrease for wider ones.

Amplitude: *Default:* 0.25, *Range:* any.

Scales the amount of warping distortion. Increase for more severe distortion.

Octaves: *Integer, Default:* 1, *Range:* 1 to 10.

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default:* 0.23, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Shift Start: *X & Y, Default:* [0 0], *Range:* any.

The translation of the bubble pattern.

Shift Speed: *X & Y, Default:* [0.1 0], *Range:* any.

If non-zero, the bubble pattern is automatically animated to shift at this speed. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

Z Dist: *Default:* 1, *Range:* 0.01 or greater.

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Rotate Warp Dir: *Default:* 0, *Range:* any.

Rotation angle of the warping directions in counter-clockwise degrees.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values.

This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformComp](#)

[WarpVortexComp](#)

[WarpPerspectiveComp](#)

[WarpWavesComp](#)

[WarpWaves2Comp](#)

[WarpPuddleComp](#)

[WarpBubble2Comp](#)

[WarpFishEyeComp](#)

[WarpPuffComp](#)

[WarpShrivelComp](#)

[WarpPolarComp](#)

[WarpRepeatComp](#)

[WarpChromaComp](#)

[WarpMagnifyComp](#)

[WarpCornerPinComp](#)

[WarpBubble](#)

[WarpBubbleMask](#)

[DissolveBubble](#)

[WipeBubble](#)

[Sapphire](#)

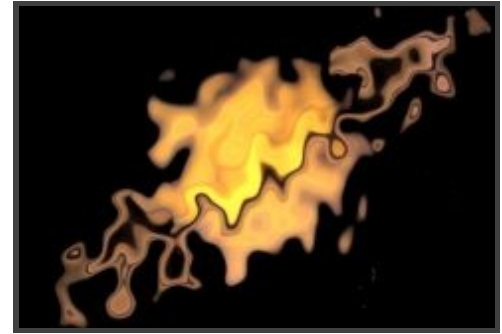
[Plug-ins](#)

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WarpBubbleMask

In the S_WarpsMask Plugin.

Warpes the source clip by a smooth noise function. This can be used to create heat diffusion or under water types of effects. The Shift Speed parameters cause the noise pattern to automatically translate over time. Adjust the Amplitude and Frequency parameters to give different types of distortions.



Inputs:

Source: The input clip to be warped.

Mask: The amplitude of warping is scaled by the values of this input clip. Gray values internally scale the warping amplitude rather than simply cross-fading between the effect and the original source to allow more continuous results at the Mask edges and more detailed control over the warping amounts. Only the red channel of this input is used. This input can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters.

Parameters:

Frequency: *Default:* 16, *Range:* 0.01 or greater.

The frequency of the noise pattern. Increase for more and smaller bubbles, decrease for fewer and larger bubbles.

Frequency Rel X: *Default:* 1, *Range:* 0.01 or greater.

The relative horizontal frequency of the bubble pattern. Increase for taller bubbles, decrease for wider ones.

Amplitude: *Default:* 0.25, *Range:* any.

Scales the amount of warping distortion. Increase for more severe distortion.

Octaves: *Integer, Default:* 1, *Range:* 1 to 10.

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default:* 0.23, *Range:* 0 or greater.

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Shift Start: *X & Y, Default:* [0 0], *Range:* any.

The translation of the bubble pattern.

Shift Speed: *X & Y, Default:* [0.1 0], *Range:* any.

If non-zero, the bubble pattern is automatically animated to shift at this speed. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

Z Dist: *Default:* 1, *Range:* 0.01 or greater.

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the

image are warped smaller.

Rotate Warp Dir: *Default: 0, Range: any.*

Rotation angle of the warping directions in counter-clockwise degrees.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Blur Mask: *Default: 0, Range: 0 or greater, Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformMask](#)

[WarpVortexMask](#)

[WarpWavesMask](#)

[WarpWaves2Mask](#)

[WarpPuddleMask](#)

[WarpBubble2Mask](#)

[WarpFishEyeMask](#)

[WarpPuffMask](#)

[WarpShrivelMask](#)

[WarpRepeatMask](#)

[WarpChromaMask](#)

[WarpMagnifyMask](#)

[WarpCornerPinMask](#)

[WarpBubble](#)

[WarpBubbleComp](#)

[DissolveBubble](#)

[WipeBubble](#)

[Sapphire](#)

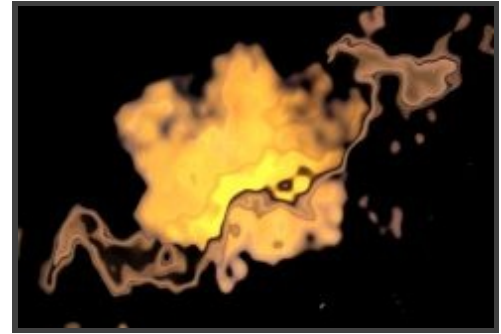
[Plug-ins](#)

[Introduction](#)

WarpBubble2

In the S_Warps Plugin.

Warp the source clip using two overlapping sets of bubble patterns. This can be used to create heat diffusion or under water types of effects. The Shift Speed parameters cause the noise pattern to automatically translate over time. Adjust the Amplitude and Frequency parameters to give different types of distortions.



Inputs:

Source: The input clip to be warped.

A Parameters:

A Frequency: *Default: 4, Range: 0.01 or greater.*
The frequency of the first set of bubbles.

A Amplitude: *Default: 0.25, Range: any.*
The distortion amplitude of the first set of bubbles.

A Octaves: *Integer, Default: 1, Range: 1 to 10.*
The number of noise octaves of the first set of bubbles.

A Seed: *Default: 0.23, Range: 0 or greater.*
The random number generator seed of the first set of bubbles.

A Shift Start: *X & Y, Default: [0 0], Range: any.*
The translation of the first set of bubbles.

A Speed: *X & Y, Default: [0.1 0], Range: any.*
Automatically animated shift for the first set of bubbles.

Other Parameters:

Z Dist: *Default: 1, Range: 0.01 or greater.*
Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Filter: *Check-box, Default: on.*
If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*
Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

B Parameters:

B Frequency: *Default: 4, Range: 0.01 or greater.*
The frequency of the second set of bubbles.

B Amplitude: *Default:* 0.25, *Range:* any.

The distortion amplitude of the second set of bubbles.

B Octaves: *Integer, Default:* 1, *Range:* 1 to 10.

The number of noise octaves of the second set of bubbles.

B Seed: *Default:* 0.34, *Range:* 0 or greater.

The random number generator seed of the second set of bubbles.

B Shift Start: *X & Y, Default:* [0 0], *Range:* any.

The translation of the second set of bubbles.

B Speed: *X & Y, Default:* [-0.1 0], *Range:* any.

Automatically animated shift for the second set of bubbles.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransform](#)

[WarpVortex](#)

[WarpPerspective](#)

[WarpWaves](#)

[WarpWaves2](#)

[WarpPuddle](#)

[WarpBubble](#)

[WarpFishEye](#)

[WarpPuff](#)

[WarpShrivel](#)

[WarpPolar](#)

[WarpRepeat](#)

[WarpChroma](#)

[WarpMagnify](#)

[WarpCornerPin](#)

[WarpBubble2Mask](#)

[WarpBubble2Comp](#)

[DissolveBubble](#)

[WipeBubble](#)

[Sapphire](#)

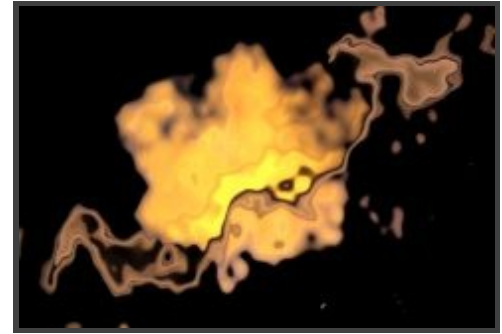
[Plug-ins](#)

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WarpBubble2Comp

In the S_WarpsComp Plugin.

Warp the source clip using two overlapping sets of bubble patterns. This can be used to create heat diffusion or under water types of effects. The Shift Speed parameters cause the noise pattern to automatically translate over time. Adjust the Amplitude and Frequency parameters to give different types of distortions.



Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip.

A Parameters:

A Frequency: *Default: 4, Range: 0.01 or greater.*
The frequency of the first set of bubbles.

A Amplitude: *Default: 0.25, Range: any.*
The distortion amplitude of the first set of bubbles.

A Octaves: *Integer, Default: 1, Range: 1 to 10.*
The number of noise octaves of the first set of bubbles.

A Seed: *Default: 0.23, Range: 0 or greater.*
The random number generator seed of the first set of bubbles.

A Shift Start: *X & Y, Default: [0 0], Range: any.*
The translation of the first set of bubbles.

A Speed: *X & Y, Default: [0.1 0], Range: any.*
Automatically animated shift for the first set of bubbles.

Other Parameters:

Z Dist: *Default: 1, Range: 0.01 or greater.*
Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Filter: *Check-box, Default: on.*
If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*
Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values.
This is also known as an 'additive' composite.

B Parameters:

B Frequency: *Default: 4, Range: 0.01 or greater.*

The frequency of the second set of bubbles.

B Amplitude: *Default: 0.25, Range: any.*

The distortion amplitude of the second set of bubbles.

B Octaves: *Integer, Default: 1, Range: 1 to 10.*

The number of noise octaves of the second set of bubbles.

B Seed: *Default: 0.34, Range: 0 or greater.*

The random number generator seed of the second set of bubbles.

B Shift Start: *X & Y, Default: [0 0], Range: any.*

The translation of the second set of bubbles.

B Speed: *X & Y, Default: [-0.1 0], Range: any.*

Automatically animated shift for the second set of bubbles.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformComp](#)

[WarpVortexComp](#)

[WarpPerspectiveComp](#)

[WarpWavesComp](#)

[WarpWaves2Comp](#)

[WarpPuddleComp](#)

[WarpBubbleComp](#)

[WarpFishEyeComp](#)

[WarpPuffComp](#)

[WarpShrivelComp](#)

[WarpPolarComp](#)

[WarpRepeatComp](#)

[WarpChromaComp](#)

[WarpMagnifyComp](#)

[WarpCornerPinComp](#)

[WarpBubble2](#)

[WarpBubble2Mask](#)

[DissolveBubble](#)

[WipeBubble](#)

[Sapphire](#)

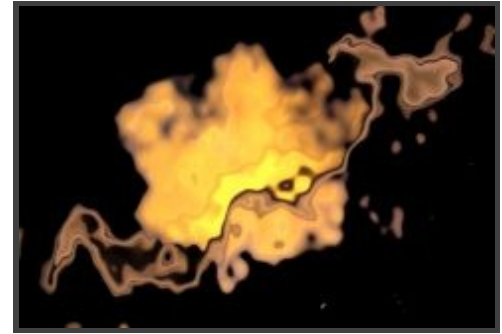
[Plug-ins](#)

[Introduction](#)

WarpBubble2Mask

In the S_WarpsMask Plugin.

Warp the source clip using two overlapping sets of bubble patterns. This can be used to create heat diffusion or under water types of effects. The Shift Speed parameters cause the noise pattern to automatically translate over time. Adjust the Amplitude and Frequency parameters to give different types of distortions.



Inputs:

Source: The input clip to be warped.

Mask: The amplitude of warping is scaled by the values of this input clip. Gray values internally scale the warping amplitude rather than simply cross-fading between the effect and the original source to allow more continuous results at the Mask edges and more detailed control over the warping amounts. Only the red channel of this input is used. This input can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters.

A Parameters:

A Frequency: *Default: 4, Range: 0.01 or greater.*
The frequency of the first set of bubbles.

A Amplitude: *Default: 0.25, Range: any.*
The distortion amplitude of the first set of bubbles.

A Octaves: *Integer, Default: 1, Range: 1 to 10.*
The number of noise octaves of the first set of bubbles.

A Seed: *Default: 0.23, Range: 0 or greater.*
The random number generator seed of the first set of bubbles.

A Shift Start: *X & Y, Default: [0 0], Range: any.*
The translation of the first set of bubbles.

A Speed: *X & Y, Default: [0.1 0], Range: any.*
Automatically animated shift for the first set of bubbles.

Other Parameters:

Z Dist: *Default: 1, Range: 0.01 or greater.*
Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Filter: *Check-box, Default: on.*
If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*
Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Blur Mask: *Default:* 0, *Range:* 0 or greater, *Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

B Parameters:

B Frequency: *Default:* 4, *Range:* 0.01 or greater.

The frequency of the second set of bubbles.

B Amplitude: *Default:* 0.25, *Range:* any.

The distortion amplitude of the second set of bubbles.

B Octaves: *Integer, Default:* 1, *Range:* 1 to 10.

The number of noise octaves of the second set of bubbles.

B Seed: *Default:* 0.34, *Range:* 0 or greater.

The random number generator seed of the second set of bubbles.

B Shift Start: *X & Y, Default:* [0 0], *Range:* any.

The translation of the second set of bubbles.

B Speed: *X & Y, Default:* [-0.1 0], *Range:* any.

Automatically animated shift for the second set of bubbles.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformMask](#)

[WarpVortexMask](#)

[WarpWavesMask](#)

[WarpWaves2Mask](#)

[WarpPuddleMask](#)

[WarpBubbleMask](#)

[WarpFishEyeMask](#)

[WarpPuffMask](#)

[WarpShrivelMask](#)

[WarpRepeatMask](#)

[WarpChromaMask](#)

[WarpMagnifyMask](#)

[WarpCornerPinMask](#)

[WarpBubble2](#)

[WarpBubble2Comp](#)

[DissolveBubble](#)

[WipeBubble](#)

[Sapphire](#)

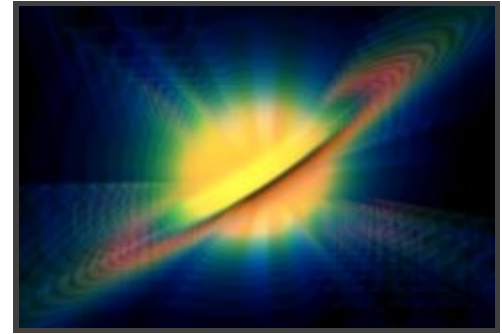
[Plug-ins](#)

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WarpChroma

In the S_Warps Plugin.

Separates the source clip into spectral bands and warps them by different amounts. The red is warped by the From transformation, the blue by the To transformation, with the other colors of the spectrum in between. The From and To parameters do not refer to time. They describe the two transformations in space that determine the sequence of warps applied to each color.



Inputs:

Source: The input clip to be warped.

Parameters:

From Z Dist: *Default:* 1, *Range:* 0.001 or greater.

The 'distance' of the From transformation. This zooms about the Center location when Shift is 0. Increase to zoom out, decrease to zoom in. This parameter can be adjusted using the From Transfm Widget.

From Rotate: *Default:* 0, *Range:* any.

The rotation angle of the From transformation, in degrees, about the center. This parameter can be adjusted using the From Transfm Widget.

From Shift: *X & Y, Default:* [0 0], *Range:* any.

The horizontal and vertical translations of the From transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the From Transfm Widget.

Steps: *Integer, Default:* 8, *Range:* 3 to 100.

The number of spectrum samples to include along the path between the From (red) and To (blue) transformations. More steps give a smoother result, but require more time to process.

Brightness: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the result.

To Z Dist: *Default:* 0.6, *Range:* 0.001 or greater.

The 'distance' of the To transformation. Increase to zoom out, or decrease to zoom in. This parameter can be adjusted using the To Transform Widget.

To Rotate: *Default:* 0, *Range:* any.

The rotation angle of the To transformation, in degrees, about the center. Note that if the From and To Rotate angles are very different, the interpolation between them will become less accurate. This parameter can be adjusted using the To Transform Widget.

To Shift: *X & Y, Default:* [0 0], *Range:* any.

The horizontal and vertical translations of the To transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the To Transform Widget.

Filter: *Check-box, Default:* off.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Center: *X & Y, Default: [0 0], Range: any.*

The center of rotation and zooming, in screen coordinates relative to the center of the frame. The shift values should be zero for this location to make sense. This parameter can be adjusted using the Center Widget.

Wrap: *X & Y, Popup menu, Default: [NO NO].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Params2:

Color1: *Default rgb: [1 0 0].*

The color at the From transformation.

Color2: *Default rgb: [0 1 0].*

The color midway between the From and To transformations.

Color3: *Default rgb: [0 0 1].*

The color at the To transformation.

White Balance: *Check-box, Default: off.*

When enabled, the three colors are adjusted internally so they sum to white. In this case, the colors of unwarped regions are not affected and the average color of the result remains the same.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransform](#)

[WarpVortex](#)

[WarpPerspective](#)

[WarpWaves](#)

[WarpWaves2](#)

[WarpPuddle](#)

[WarpBubble](#)

[WarpBubble2](#)

[WarpFishEye](#)

[WarpPuff](#)

[WarpShrivel](#)

[WarpPolar](#)

[WarpRepeat](#)

[WarpMagnify](#)

[WarpCornerPin](#)

[WarpChromaMask](#)

[WarpChromaComp](#)

[DistortChroma](#)

[DefocusPrism](#)

[BlurMotion](#)

[Streaks](#)

[EdgeRays](#)

[Sapphire](#)

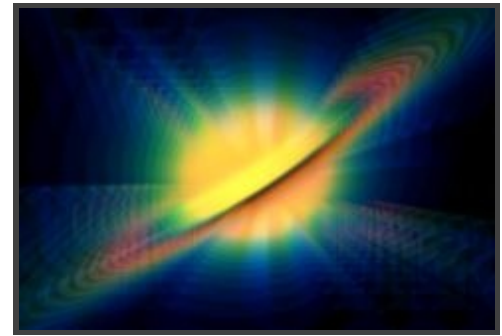
[Plug-ins](#)

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WarpChromaComp

In the S_WarpsComp Plugin.

Separates the source clip into spectral bands and warps them by different amounts. The red is warped by the From transformation, the blue by the To transformation, with the other colors of the spectrum in between. The From and To parameters do not refer to time. They describe the two transformations in space that determine the sequence of warps applied to each color.



Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip.

Parameters:

From Z Dist: *Default:* 1, *Range:* 0.001 or greater.

The 'distance' of the From transformation. This zooms about the Center location when Shift is 0. Increase to zoom out, decrease to zoom in. This parameter can be adjusted using the From Transform Widget.

From Rotate: *Default:* 0, *Range:* any.

The rotation angle of the From transformation, in degrees, about the center. This parameter can be adjusted using the From Transform Widget.

From Shift: *X & Y, Default:* [0 0], *Range:* any.

The horizontal and vertical translations of the From transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the From Transform Widget.

Steps: *Integer, Default:* 8, *Range:* 3 to 100.

The number of spectrum samples to include along the path between the From (red) and To (blue) transformations. More steps give a smoother result, but require more time to process.

Brightness: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the result.

To Z Dist: *Default:* 0.6, *Range:* 0.001 or greater.

The 'distance' of the To transformation. Increase to zoom out, or decrease to zoom in. This parameter can be adjusted using the To Transform Widget.

To Rotate: *Default:* 0, *Range:* any.

The rotation angle of the To transformation, in degrees, about the center. Note that if the From and To Rotate angles are very different, the interpolation between them will become less accurate. This parameter can be adjusted using the To Transform Widget.

To Shift: *X & Y, Default:* [0 0], *Range:* any.

The horizontal and vertical translations of the To transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the To Transform Widget.

Filter: *Check-box, Default: off.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Center: *X & Y, Default: [0 0], Range: any.*

The center of rotation and zooming, in screen coordinates relative to the center of the frame. The shift values should be zero for this location to make sense. This parameter can be adjusted using the Center Widget.

Wrap: *X & Y, Popup menu, Default: [NO NO].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Params2:

Color1: *Default rgb: [1 0 0].*

The color at the From transformation.

Color2: *Default rgb: [0 1 0].*

The color midway between the From and To transformations.

Color3: *Default rgb: [0 0 1].*

The color at the To transformation.

White Balance: *Check-box, Default: off.*

When enabled, the three colors are adjusted internally so they sum to white. In this case, the colors of unwarped regions are not affected and the average color of the result remains the same.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformComp](#)

[WarpVortexComp](#)

[WarpPerspectiveComp](#)

[WarpWavesComp](#)

[WarpWaves2Comp](#)

[WarpPuddleComp](#)

[WarpBubbleComp](#)

[WarpBubble2Comp](#)

[WarpFishEyeComp](#)

[WarpPuffComp](#)

[WarpShrivelComp](#)

[WarpPolarComp](#)

[WarpRepeatComp](#)

[WarpMagnifyComp](#)

[WarpCornerPinComp](#)

[WarpChroma](#)

[WarpChromaMask](#)

[DistortChroma](#)

[DefocusPrism](#)

[BlurMotion](#)

[Streaks](#)

[EdgeRays](#)

[Sapphire](#)

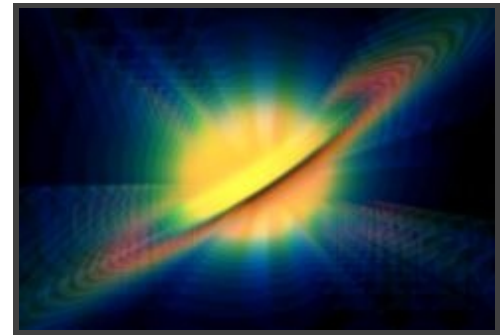
[Plug-ins](#)

[Introduction](#)

WarpChromaMask

In the S_WarpsMask Plugin.

Separates the source clip into spectral bands and warps them by different amounts. The red is warped by the From transformation, the blue by the To transformation, with the other colors of the spectrum in between. The From and To parameters do not refer to time. They describe the two transformations in space that determine the sequence of warps applied to each color.



Inputs:

Source: The input clip to be warped.

Mask: The amplitude of warping is scaled by the values of this input clip. Gray values internally scale the warping amplitude rather than simply cross-fading between the effect and the original source to allow more continuous results at the Mask edges and more detailed control over the warping amounts. Only the red channel of this input is used. This input can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters.

Parameters:

From Z Dist: *Default:* 1, *Range:* 0.001 or greater.

The 'distance' of the From transformation. This zooms about the Center location when Shift is 0. Increase to zoom out, decrease to zoom in. This parameter can be adjusted using the From Transfm Widget.

From Rotate: *Default:* 0, *Range:* any.

The rotation angle of the From transformation, in degrees, about the center. This parameter can be adjusted using the From Transfm Widget.

From Shift: *X & Y, Default:* [0 0], *Range:* any.

The horizontal and vertical translations of the From transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the From Transfm Widget.

Steps: *Integer, Default:* 8, *Range:* 3 to 100.

The number of spectrum samples to include along the path between the From (red) and To (blue) transformations. More steps give a smoother result, but require more time to process.

Brightness: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the result.

To Z Dist: *Default:* 0.6, *Range:* 0.001 or greater.

The 'distance' of the To transformation. Increase to zoom out, or decrease to zoom in. This parameter can be adjusted using the To Transform Widget.

To Rotate: *Default:* 0, *Range:* any.

The rotation angle of the To transformation, in degrees, about the center. Note that if the From and To Rotate angles are very different, the interpolation between them will become less accurate. This parameter can be adjusted using the To Transform Widget.

To Shift: *X & Y, Default: [0 0], Range: any.*

The horizontal and vertical translations of the To transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the To Transform Widget.

Filter: *Check-box, Default: off.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Center: *X & Y, Default: [0 0], Range: any.*

The center of rotation and zooming, in screen coordinates relative to the center of the frame. The shift values should be zero for this location to make sense. This parameter can be adjusted using the Center Widget.

Wrap: *X & Y, Popup menu, Default: [NO NO].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Blur Mask: *Default: 0, Range: 0 or greater, Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Params2:

Color1: *Default rgb: [1 0 0].*

The color at the From transformation.

Color2: *Default rgb: [0 1 0].*

The color midway between the From and To transformations.

Color3: *Default rgb: [0 0 1].*

The color at the To transformation.

White Balance: *Check-box, Default: off.*

When enabled, the three colors are adjusted internally so they sum to white. In this case, the colors of unwrapped regions are not affected and the average color of the result remains the same.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformMask](#)

[WarpVortexMask](#)

[WarpWavesMask](#)

[WarpWaves2Mask](#)

[WarpPuddleMask](#)

[WarpBubbleMask](#)

[WarpBubble2Mask](#)

[WarpFishEyeMask](#)

[WarpPuffMask](#)

[WarpShrivelMask](#)

[WarpChroma](#)

[WarpChromaComp](#)

[DistortChroma](#)

[DefocusPrism](#)

[BlurMotion](#)

[Streaks](#)

[EdgeRays](#)

[Sapphire](#)

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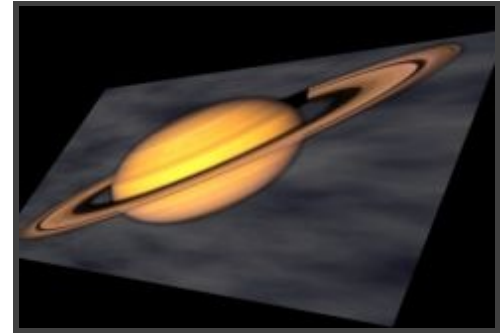
[Introduction](#)

WarpRepeatMask
WarpMagnifyMask
WarpCornerPinMask

WarpCornerPin

In the S_Warps Plugin.

Performs a 3D perspective warp of the source image to align the corners with the four indicated points. This can be useful for positioning the source over an object in another clip, such as a billboard or computer screen.



Inputs:

Source: The input clip to be warped.

Parameters:

Top Left: *X & Y, Default: [160 380], Range: any.*

Location of the upper-left corner of the source. This parameter can be adjusted using the Top Left Widget.

Bottom Left: *X & Y, Default: [70 200], Range: any.*

Location of the lower-left corner of the source. This parameter can be adjusted using the Bottom Left Widget.

Top Right: *X & Y, Default: [580 400], Range: any.*

Location of the upper-right corner of the source. This parameter can be adjusted using the Top Right Widget.

Bottom Right: *X & Y, Default: [500 55], Range: any.*

Location of the lower-right corner of the source. This parameter can be adjusted using the Bottom Right Widget.

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Bulge: *X & Y, Default: [0 0], Range: -1 to 1.*

Distorts the perspective of the warped image, so that it appears to bulge in one direction. A value of 1 gives no distortion. A value of less than one causes the image to stretch toward the upper/right corner, while a value of greater than one causes it to stretch to the lower/left corner.

Wrap: *X & Y, Popup menu, Default: [NO NO].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransform](#)

[WarpVortex](#)

[WarpPerspective](#)

[WarpWaves](#)

[WarpWaves2](#)

[WarpPuddle](#)

[WarpBubble](#)

[WarpBubble2](#)

[WarpCornerPinMask](#)

[WarpCornerPinComp](#)

[Sapphire Plug-ins](#)

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WarpFishEye

WarpPuff

WarpShrivel

WarpPolar

WarpRepeat

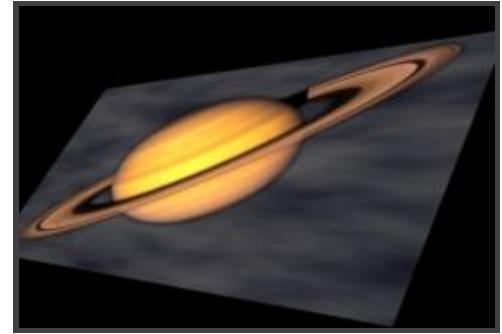
WarpChroma

WarpMagnify

WarpCornerPinComp

In the S_WarpsComp Plugin.

Performs a 3D perspective warp of the source image to align the corners with the four indicated points. This can be useful for positioning the source over an object in another clip, such as a billboard or computer screen.



Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip.

Parameters:

Top Left: *X & Y, Default: [160 380], Range: any.*

Location of the upper-left corner of the source. This parameter can be adjusted using the Top Left Widget.

Bottom Left: *X & Y, Default: [70 200], Range: any.*

Location of the lower-left corner of the source. This parameter can be adjusted using the Bottom Left Widget.

Top Right: *X & Y, Default: [580 400], Range: any.*

Location of the upper-right corner of the source. This parameter can be adjusted using the Top Right Widget.

Bottom Right: *X & Y, Default: [500 55], Range: any.*

Location of the lower-right corner of the source. This parameter can be adjusted using the Bottom Right Widget.

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Bulge: *X & Y, Default: [0 0], Range: -1 to 1.*

Distorts the perspective of the warped image, so that it appears to bulge in one direction. A value of 1 gives no distortion. A value of less than one causes the image to stretch toward the upper/right corner, while a value of greater than one causes it to stretch to the lower/left corner.

Wrap: *X & Y, Popup menu, Default: [NO NO].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformComp](#)
[WarpVortexComp](#)
[WarpPerspectiveComp](#)
[WarpWavesComp](#)
[WarpWaves2Comp](#)
[WarpPuddleComp](#)
[WarpBubbleComp](#)
[WarpBubble2Comp](#)
[WarpFishEyeComp](#)
[WarpPuffComp](#)
[WarpShrivelComp](#)
[WarpPolarComp](#)
[WarpRepeatComp](#)
[WarpChromaComp](#)
[WarpMagnifyComp](#)

[WarpCornerPin](#)
[WarpCornerPinMask](#)

[Sapphire Plug-ins](#)
[Introduction](#)

WarpCornerPinMask

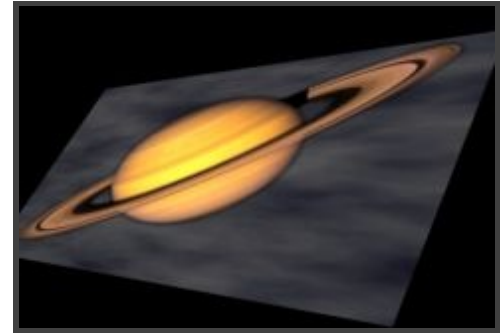
In the S_WarpsMask Plugin.

Performs a 3D perspective warp of the source image to align the corners with the four indicated points. This can be useful for positioning the source over an object in another clip, such as a billboard or computer screen.

Inputs:

Source: The input clip to be warped.

Mask: The amplitude of warping is scaled by the values of this input clip. Gray values internally scale the warping amplitude rather than simply cross-fading between the effect and the original source to allow more continuous results at the Mask edges and more detailed control over the warping amounts. Only the red channel of this input is used. This input can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters.



Parameters:

Top Left: *X & Y, Default: [160 380], Range: any.*

Location of the upper-left corner of the source. This parameter can be adjusted using the Top Left Widget.

Bottom Left: *X & Y, Default: [70 200], Range: any.*

Location of the lower-left corner of the source. This parameter can be adjusted using the Bottom Left Widget.

Top Right: *X & Y, Default: [580 400], Range: any.*

Location of the upper-right corner of the source. This parameter can be adjusted using the Top Right Widget.

Bottom Right: *X & Y, Default: [500 55], Range: any.*

Location of the lower-right corner of the source. This parameter can be adjusted using the Bottom Right Widget.

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Bulge: *X & Y, Default: [0 0], Range: -1 to 1.*

Distorts the perspective of the warped image, so that it appears to bulge in one direction. A value of 1 gives no distortion. A value of less than one causes the image to stretch toward the upper/right corner, while a value of greater than one causes it to stretch to the lower/left corner.

Wrap: *X & Y, Popup menu, Default: [NO NO].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Blur Mask: *Default: 0, Range: 0 or greater, Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformMask](#)

[WarpVortexMask](#)

[WarpWavesMask](#)

[WarpWaves2Mask](#)

[WarpPuddleMask](#)

[WarpBubbleMask](#)

[WarpBubble2Mask](#)

[WarpFishEyeMask](#)

[WarpPuffMask](#)

[WarpShrivelMask](#)

[WarpRepeatMask](#)

[WarpChromaMask](#)

[WarpMagnifyMask](#)

[WarpCornerPin](#)

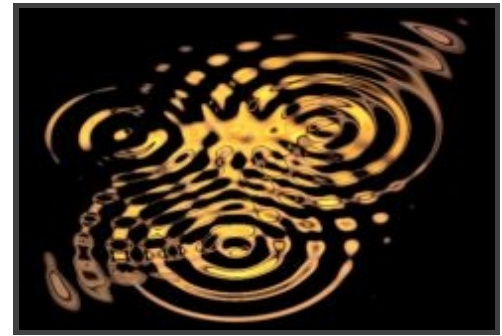
[WarpCornerPinComp](#)

[Sapphire Plug-ins](#)

[Introduction](#)

WarpDrops

WarpDrops warps the source clip by multiple patterns of concentric waves emanating from multiple center locations. Each area in the Centers input clip brighter than the value of Threshold Cntrs, generates an independent pattern of concentric waves, and the total brightness of each area scales the warping magnitude of those waves. If the Centers image is complex, the number and locations of resulting centers can be fairly sensitive to the threshold value. Try using just solid black with a few white dots for the Centers input. If you only need a single set of waves, you can use the WarpPuddle effect instead.



Inputs:

Source: The input clip to be warped.

Centers: Determines the centers of the wave patterns. Each area in this clip brighter than the value of Threshold Cntrs, generates an independent pattern of concentric waves. The total brightness of the area (brightness x area) scales the warping magnitude of those waves. This clip is often a painted image of dots of different sizes and brightnesses. If the painted centers move over time, the effect centers will move with them.

Parameters:

Amplitude: *Default:* 1, *Range:* 0 or greater.

Scales the amount of warping distortion. Increase for more severe distortion.

Frequency: *Default:* 10, *Range:* 0 or greater.

The frequency of the waves. Increase for more waves, decrease for fewer. This parameter can be adjusted using the Frequency Widget.

Rel Height: *Default:* 1, *Range:* 0 or greater.

The relative height of the concentric wave pattern.

Rotate Rel H: *Default:* 0, *Range:* any.

Rotation in degrees of the wave patterns, about each center. This has no effect if the Rel Height parameter is 1.0. This parameter can be adjusted using the Rotate Rel H Widget.

Threshold Cntrs: *Default:* 0.6, *Range:* 0 or greater.

Areas brighter than this value are used as centers for the waves. A center is generated from the centroid of each set of connected pixels above this value.

Max Centers: *Integer, Default:* 20, *Range:* 1 or greater.

The maximum total number of centers to use. This can be used for testing or to avoid overly large numbers of centers.

Inner Radius: *Default:* 0, *Range:* any.

The distance from the puddle center where the wave distortion is phased in. No waves are generated inside this radius. This parameter can be adjusted using the Inner Radius Widget.

Inner Softness: *Default:* 0.1, *Range:* 0.01 or greater.

The width of the region at the Inner Radius over which the wave distortion is phased in.

Outer Radius: *Default: 0.25, Range: 0 or greater.*

The distance from the puddle center where the wave distortion is phased out. No waves are generated outside this radius. This parameter can be adjusted using the Outer Radius Widget.

Outer Softness: *Default: 1, Range: 0.01 or greater.*

The width of the region at the Outer Radius over which the wave distortion is phased out.

Z Dist: *Default: 1, Range: 0 or greater.*

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Phase Start: *Default: 0, Range: any.*

The phase shift of the waves.

Phase Speed: *Default: 0, Range: any.*

The speed of the waves. If this is positive the waves automatically travel outwards from the center at this rate.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpDropsMask](#)
[WarpDropsComp](#)

[WarpPuddle](#)
[WarpWaves](#)

[Sapphire Plug-ins](#)
[Introduction](#)

WarpDropsComp

WarpDropsComp warps the source clip by multiple patterns of concentric waves emanating from multiple center locations. Each area in the Centers input clip brighter than the value of Threshold Cntrs, generates an independent pattern of concentric waves, and the total brightness of each area scales the warping magnitude of those waves. If the Centers image is complex, the number and locations of resulting centers can be fairly sensitive to the threshold value. Try using just solid black with a few white dots for the Centers input. If you only need a single set of waves, you can use the WarpPuddle effect instead.



Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip.

Centers: Determines the centers of the wave patterns. Each area in this clip brighter than the value of Threshold Cntrs, generates an independent pattern of concentric waves. The total brightness of the area (brightness x area) scales the warping magnitude of those waves. This clip is often a painted image of dots of different sizes and brightnesses. If the painted centers move over time, the effect centers will move with them.

Parameters:

Amplitude: *Default:* 1, *Range:* 0 or greater.

Scales the amount of warping distortion. Increase for more severe distortion.

Frequency: *Default:* 10, *Range:* 0 or greater.

The frequency of the waves. Increase for more waves, decrease for fewer. This parameter can be adjusted using the Frequency Widget.

Rel Height: *Default:* 1, *Range:* 0 or greater.

The relative height of the concentric wave pattern.

Rotate Rel H: *Default:* 0, *Range:* any.

Rotation in degrees of the wave patterns, about each center. This has no effect if the Rel Height parameter is 1.0. This parameter can be adjusted using the Rotate Rel H Widget.

Threshold Cntrs: *Default:* 0.6, *Range:* 0 or greater.

Areas brighter than this value are used as centers for the waves. A center is generated from the centroid of each set of connected pixels above this value.

Max Centers: *Integer, Default:* 20, *Range:* 1 or greater.

The maximum total number of centers to use. This can be used for testing or to avoid overly large numbers of centers.

Inner Radius: *Default:* 0, *Range:* any.

The distance from the puddle center where the wave distortion is phased in. No waves are generated inside this radius. This parameter can be adjusted using the Inner Radius Widget.

Inner Softness: *Default:* 0.1, *Range:* 0.01 or greater.

The width of the region at the Inner Radius over which the wave distortion is phased in.

Outer Radius: *Default:* 0.25, *Range:* 0 or greater.

The distance from the puddle center where the wave distortion is phased out. No waves are generated outside this radius. This parameter can be adjusted using the Outer Radius Widget.

Outer Softness: *Default:* 1, *Range:* 0.01 or greater.

The width of the region at the Outer Radius over which the wave distortion is phased out.

Z Dist: *Default:* 1, *Range:* 0 or greater.

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Phase Start: *Default:* 0, *Range:* any.

The phase shift of the waves.

Phase Speed: *Default:* 0, *Range:* any.

The speed of the waves. If this is positive the waves automatically travel outwards from the center at this rate.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Comp Premult: *Check-box, Default:* off.

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpDrops](#)

[WarpDropsMask](#)

[WarpPuddleComp](#)

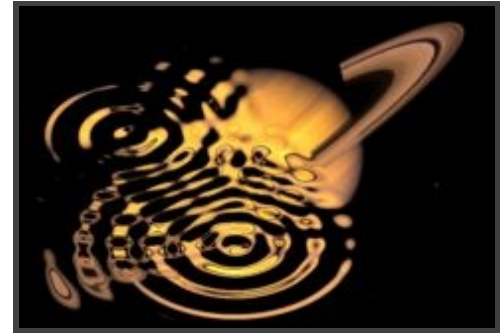
[WarpWavesComp](#)

[Sapphire Plug-ins](#)

[Introduction](#)

WarpDropsMask

WarpDropsMask warps the source clip by multiple patterns of concentric waves emanating from multiple center locations. Each area in the Centers input clip brighter than the value of Threshold Cntrs, generates an independent pattern of concentric waves, and the total brightness of each area scales the warping magnitude of those waves. If the Centers image is complex, the number and locations of resulting centers can be fairly sensitive to the threshold value. Try using just solid black with a few white dots for the Centers input. If you only need a single set of waves, you can use the WarpPuddle effect instead.



Inputs:

Source: The input clip to be warped.

Centers: Determines the centers of the wave patterns. Each area in this clip brighter than the value of Threshold Cntrs, generates an independent pattern of concentric waves. The total brightness of the area (brightness x area) scales the warping magnitude of those waves. This clip is often a painted image of dots of different sizes and brightnesses. If the painted centers move over time, the effect centers will move with them.

Mask: The amplitude of warping is scaled by the values of this input clip. Gray values internally scale the warping amplitude rather than simply cross-fading between the effect and the original source to allow more continuous results at the Mask edges and more detailed control over the warping amounts. Only the red channel of this input is used. This input can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters.

Parameters:

Amplitude: *Default:* 1, *Range:* 0 or greater.

Scales the amount of warping distortion. Increase for more severe distortion.

Frequency: *Default:* 10, *Range:* 0 or greater.

The frequency of the waves. Increase for more waves, decrease for fewer. This parameter can be adjusted using the Frequency Widget.

Rel Height: *Default:* 1, *Range:* 0 or greater.

The relative height of the concentric wave pattern.

Rotate Rel H: *Default:* 0, *Range:* any.

Rotation in degrees of the wave patterns, about each center. This has no effect if the Rel Height parameter is 1.0. This parameter can be adjusted using the Rotate Rel H Widget.

Threshold Cntrs: *Default:* 0.6, *Range:* 0 or greater.

Areas brighter than this value are used as centers for the waves. A center is generated from the centroid of each set of connected pixels above this value.

Max Centers: *Integer, Default:* 20, *Range:* 1 or greater.

The maximum total number of centers to use. This can be used for testing or to avoid overly large numbers of centers.

Inner Radius: *Default: 0, Range: any.*

The distance from the puddle center where the wave distortion is phased in. No waves are generated inside this radius. This parameter can be adjusted using the Inner Radius Widget.

Inner Softness: *Default: 0.1, Range: 0.01 or greater.*

The width of the region at the Inner Radius over which the wave distortion is phased in.

Outer Radius: *Default: 0.25, Range: 0 or greater.*

The distance from the puddle center where the wave distortion is phased out. No waves are generated outside this radius. This parameter can be adjusted using the Outer Radius Widget.

Outer Softness: *Default: 1, Range: 0.01 or greater.*

The width of the region at the Outer Radius over which the wave distortion is phased out.

Z Dist: *Default: 1, Range: 0 or greater.*

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Phase Start: *Default: 0, Range: any.*

The phase shift of the waves.

Phase Speed: *Default: 0, Range: any.*

The speed of the waves. If this is positive the waves automatically travel outwards from the center at this rate.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Blur Mask: *Default: 0, Range: 0 or greater.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpDrops](#)

[WarpDropsComp](#)

[WarpPuddleMask](#)

[WarpWavesMask](#)

[Sapphire Plug-ins](#)

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WarpFishEye

In the S_Warps Plugin.

Expands the center of the source clip as if viewed through a fish-eye lens. Adjust the Amount parameter to give more or less distortion. Turn off the Wrap options to give transparency beyond the borders of the input clip instead of reflected copies.



Inputs:

Source: The input clip to be warped.

Parameters:

Amount: *Default:* 1, *Range:* any.

The amplitude of the fish-eye warping. Try this negative with a large Z Dist for some wacky 'bug eye' distortions.

Z Dist: *Default:* 1, *Range:* 0.01 or greater.

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Rotate: *Default:* 0, *Range:* any.

Rotates the result about the center location by this many counter-clockwise degrees.

Center: *X & Y, Default:* [0 0], *Range:* any.

The center of the fish-eye warping function, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Shift: *X & Y, Default:* [0 0], *Range:* any.

Translates the source image before the fish-eye warping is applied.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransform](#)

[WarpVortex](#)

[WarpPerspective](#)

[WarpWaves](#)

[WarpWaves2](#)

[WarpPuddle](#)

[WarpBubble](#)

[WarpFishEyeMask](#)

[WarpFishEyeComp](#)

[Distort](#)

[Sapphire Plug-ins](#)

[Introduction](#)

WarpBubble2
WarpPuff
WarpShrivel
WarpPolar
WarpRepeat
WarpChroma
WarpMagnify
WarpCornerPin

WarpFishEyeComp

In the S_WarpsComp Plugin.

Expands the center of the source clip as if viewed through a fish-eye lens. Adjust the Amount parameter to give more or less distortion. Turn off the Wrap options to give transparency beyond the borders of the input clip instead of reflected copies.



Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip.

Parameters:

Amount: *Default:* 1, *Range:* any.

The amplitude of the fish-eye warping. Try this negative with a large Z Dist for some wacky 'bug eye' distortions.

Z Dist: *Default:* 1, *Range:* 0.01 or greater.

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Rotate: *Default:* 0, *Range:* any.

Rotates the result about the center location by this many counter-clockwise degrees.

Center: *X & Y, Default:* [0 0], *Range:* any.

The center of the fish-eye warping function, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Shift: *X & Y, Default:* [0 0], *Range:* any.

Translates the source image before the fish-eye warping is applied.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Comp Premult: *Check-box, Default:* off, *Shared.*

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformComp](#)

[WarpVortexComp](#)

[WarpPerspectiveComp](#)

[WarpWavesComp](#)

[WarpWaves2Comp](#)

[WarpPuddleComp](#)

[WarpBubbleComp](#)

[WarpBubble2Comp](#)

[WarpPuffComp](#)

[WarpShrivelComp](#)

[WarpPolarComp](#)

[WarpRepeatComp](#)

[WarpChromaComp](#)

[WarpMagnifyComp](#)

[WarpCornerPinComp](#)

[WarpFishEye](#)

[WarpFishEyeMask](#)

[Distort](#)

[Sapphire Plug-ins](#)

[Introduction](#)

WarpFishEyeMask

In the S_WarpsMask Plugin.

Expands the center of the source clip as if viewed through a fish-eye lens. Adjust the Amount parameter to give more or less distortion. Turn off the Wrap options to give transparency beyond the borders of the input clip instead of reflected copies.



Inputs:

Source: The input clip to be warped.

Mask: The amplitude of warping is scaled by the values of this input clip. Gray values internally scale the warping amplitude rather than simply cross-fading between the effect and the original source to allow more continuous results at the Mask edges and more detailed control over the warping amounts. Only the red channel of this input is used. This input can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters.

Parameters:

Amount: *Default:* 1, *Range:* any.

The amplitude of the fish-eye warping. Try this negative with a large Z Dist for some wacky 'bug eye' distortions.

Z Dist: *Default:* 1, *Range:* 0.01 or greater.

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Rotate: *Default:* 0, *Range:* any.

Rotates the result about the center location by this many counter-clockwise degrees.

Center: *X & Y, Default:* [0 0], *Range:* any.

The center of the fish-eye warping function, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Shift: *X & Y, Default:* [0 0], *Range:* any.

Translates the source image before the fish-eye warping is applied.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Blur Mask: *Default:* 0, *Range:* 0 or greater, *Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformMask](#)

[WarpVortexMask](#)

[WarpWavesMask](#)

[WarpWaves2Mask](#)

[WarpPuddleMask](#)

[WarpBubbleMask](#)

[WarpBubble2Mask](#)

[WarpPuffMask](#)

[WarpShrivelMask](#)

[WarpRepeatMask](#)

[WarpChromaMask](#)

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WarpMagnify

In the S_Warps Plugin.

Magnifies an elliptical region of the source to create a glass lens refraction effect.

Inputs:

Source: The input clip to be warped.



Parameters:

Magnify Amount: *Default: 2, Range: any.*

Amount to scale the image within the magnified region. Use values below 1.0 to shrink the image instead within the lens.

Magnify Rel: *X & Y, Default: [1 1], Range: 0 or greater.*

The relative horizontal and vertical magnification.

Center: *X & Y, Default: [0 0], Range: any.*

The center of the lens shape. This parameter can be adjusted using the Center Widget.

Lens Radius: *Default: 0.6, Range: 0 or greater.*

Radius of the inner part of the lens. Within this region, the source is scaled by the full magnify amount. This parameter can be adjusted using the Lens Radius Widget.

Lens Edge Width: *Default: 0.5, Range: 0 or greater.*

The width of the lens edge, as a fraction of the inner radius. In the edge area of the lens, magnification tapers off from the full magnify amount to no magnification. This parameter can be adjusted using the Lens Radius Widget.

Lens Rel Height: *Default: 1, Range: 0.1 or greater.*

The relative vertical size of the lens. Increase for a taller ellipse, decrease for a wider one.

Lens Rel Width: *Default: 1, Range: 0.1 or greater.*

The relative horizontal size of the lens. Increase for a wider ellipse, decrease for a taller one.

Lens Rotate: *Default: 0, Range: any.*

Rotation in degrees of the lens. Note that rotation will have no effect when Rel Width and Rel Height are equal and the shape is a perfect circle. This parameter can be adjusted using the Lens Rotate Widget.

Lens Edge Shape: *Default: 0.5, Range: any.*

Determines the curve of the magnification amount within the edge of the lens. If set to zero, magnification tapers off linearly. If set to one, magnification tapers off in a smoother curve, which can reduce the visual perception of the border of the lens. Other values interpolate between the two.

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransform](#)
[WarpVortex](#)
[WarpPerspective](#)
[WarpWaves](#)
[WarpWaves2](#)
[WarpPuddle](#)
[WarpBubble](#)
[WarpBubble2](#)
[WarpFishEye](#)
[WarpPuff](#)
[WarpShrivel](#)
[WarpPolar](#)
[WarpRepeat](#)
[WarpChroma](#)
[WarpCornerPin](#)

[WarpMagnifyMask](#)
[WarpMagnifyComp](#)

[Distort](#)
[Sapphire Plug-ins](#)
[Introduction](#)

WarpMagnifyComp

In the S_WarpsComp Plugin.

Magnifies an elliptical region of the source to create a glass lens refraction effect.

Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip.



Parameters:

Magnify Amount: *Default: 2, Range: any.*

Amount to scale the image within the magnified region. Use values below 1.0 to shrink the image instead within the lens.

Magnify Rel: *X & Y, Default: [1 1], Range: 0 or greater.*

The relative horizontal and vertical magnification.

Center: *X & Y, Default: [0 0], Range: any.*

The center of the lens shape. This parameter can be adjusted using the Center Widget.

Lens Radius: *Default: 0.6, Range: 0 or greater.*

Radius of the inner part of the lens. Within this region, the source is scaled by the full magnify amount. This parameter can be adjusted using the Lens Radius Widget.

Lens Edge Width: *Default: 0.5, Range: 0 or greater.*

The width of the lens edge, as a fraction of the inner radius. In the edge area of the lens, magnification tapers off from the full magnify amount to no magnification. This parameter can be adjusted using the Lens Radius Widget.

Lens Rel Height: *Default: 1, Range: 0.1 or greater.*

The relative vertical size of the lens. Increase for a taller ellipse, decrease for a wider one.

Lens Rel Width: *Default: 1, Range: 0.1 or greater.*

The relative horizontal size of the lens. Increase for a wider ellipse, decrease for a taller one.

Lens Rotate: *Default: 0, Range: any.*

Rotation in degrees of the lens. Note that rotation will have no effect when Rel Width and Rel Height are equal and the shape is a perfect circle. This parameter can be adjusted using the Lens Rotate Widget.

Lens Edge Shape: *Default: 0.5, Range: any.*

Determines the curve of the magnification amount within the edge of the lens. If set to zero, magnification tapers off linearly. If set to one, magnification tapers off in a smoother curve, which can reduce the visual perception of the border of the lens. Other values interpolate between the two.

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values.

This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformComp](#)

[WarpVortexComp](#)

[WarpPerspectiveComp](#)

[WarpWavesComp](#)

[WarpWaves2Comp](#)

[WarpPuddleComp](#)

[WarpBubbleComp](#)

[WarpBubble2Comp](#)

[WarpFishEyeComp](#)

[WarpPuffComp](#)

[WarpShrivelComp](#)

[WarpPolarComp](#)

[WarpRepeatComp](#)

[WarpChromaComp](#)

[WarpCornerPinComp](#)

[WarpMagnify](#)

[WarpMagnifyMask](#)

[Distort](#)

[Sapphire Plug-ins](#)

[Introduction](#)

WarpMagnifyMask

In the S_WarpsMask Plugin.

Magnifies an elliptical region of the source to create a glass lens refraction effect.

Inputs:

Source: The input clip to be warped.

Mask: The amplitude of warping is scaled by the values of this input clip. Gray values internally scale the warping amplitude rather than simply cross-fading between the effect and the original source to allow more continuous results at the Mask edges and more detailed control over the warping amounts. Only the red channel of this input is used. This input can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters.



Parameters:

Magnify Amount: *Default: 2, Range: any.*

Amount to scale the image within the magnified region. Use values below 1.0 to shrink the image instead within the lens.

Magnify Rel: *X & Y, Default: [1 1], Range: 0 or greater.*

The relative horizontal and vertical magnification.

Center: *X & Y, Default: [0 0], Range: any.*

The center of the lens shape. This parameter can be adjusted using the Center Widget.

Lens Radius: *Default: 0.6, Range: 0 or greater.*

Radius of the inner part of the lens. Within this region, the source is scaled by the full magnify amount. This parameter can be adjusted using the Lens Radius Widget.

Lens Edge Width: *Default: 0.5, Range: 0 or greater.*

The width of the lens edge, as a fraction of the inner radius. In the edge area of the lens, magnification tapers off from the full magnify amount to no magnification. This parameter can be adjusted using the Lens Radius Widget.

Lens Rel Height: *Default: 1, Range: 0.1 or greater.*

The relative vertical size of the lens. Increase for a taller ellipse, decrease for a wider one.

Lens Rel Width: *Default: 1, Range: 0.1 or greater.*

The relative horizontal size of the lens. Increase for a wider ellipse, decrease for a taller one.

Lens Rotate: *Default: 0, Range: any.*

Rotation in degrees of the lens. Note that rotation will have no effect when Rel Width and Rel Height are equal and the shape is a perfect circle. This parameter can be adjusted using the Lens Rotate Widget.

Lens Edge Shape: *Default: 0.5, Range: any.*

Determines the curve of the magnification amount within the edge of the lens. If set to zero, magnification tapers off linearly. If set to one, magnification tapers off in a smoother curve, which can reduce the visual perception of the border of the lens. Other values interpolate between the two.

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Blur Mask: *Default: 0, Range: 0 or greater, Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformMask](#)

[WarpVortexMask](#)

[WarpWavesMask](#)

[WarpWaves2Mask](#)

[WarpPuddleMask](#)

[WarpBubbleMask](#)

[WarpBubble2Mask](#)

[WarpFishEyeMask](#)

[WarpPuffMask](#)

[WarpShrivelMask](#)

[WarpRepeatMask](#)

[WarpChromaMask](#)

[WarpCornerPinMask](#)

[WarpMagnify](#)

[WarpMagnifyComp](#)

[Distort](#)

[Sapphire Plug-ins](#)

[Introduction](#)

WarpPerspective

In the S_Warps Plugin.

Transforms the source clip onto a 3D plane with perspective. Adjust the Latitude, Swing, and Roll parameters to rotate the image on various axes, and adjust Shift and Z Dist to translate and zoom. Turn off the Wrap options to give a single non-repeated copy of the image.



Inputs:

Source: The input clip to be warped.

Parameters:

Shift: *X & Y, Default: [0 0], Range: any.*
Translates the image in its initial frame.

Latitude: *Default: 35, Range: any.*
Tilts the image up or down in 3D. Positive latitude tilts the image down and negative tilts it up.

Swing: *Default: 0, Range: any.*
Rotation of the image in degrees in its initial frame.

Roll: *Default: 0, Range: any.*
Tilts the result from side to side, in counter-clockwise degrees.

Wrap Above Horizon: *Check-box, Default: off.*
When the image is sufficiently tilted using the Latitude parameter, a horizon can be seen. When Wrap Above Horizon is check, the image is repeated on both sides of the horizon.

Z Dist: *Default: 3, Range: any.*
Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it.

Tele Lens Width: *Default: 1, Range: 0.2 or greater.*
The amount of lens telescoping. Increase to zoom in with less perspective, decrease for a wider viewing angle with more perspective.

Filter: *Check-box, Default: on.*
If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default: [TILE TILE].*
Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransform](#)

[WarpVortex](#)

[WarpWaves](#)

[WarpWaves2](#)

[WarpPuddle](#)

[WarpBubble](#)

[WarpBubble2](#)

[WarpFishEye](#)

[WarpPuff](#)

[WarpShrivel](#)

[WarpPolar](#)

[WarpRepeat](#)

[WarpChroma](#)

[WarpMagnify](#)

[WarpCornerPin](#)

[WarpPerspectiveComp](#)

[CloudsPerspective](#)

[Sapphire Plug-ins](#)

[Introduction](#)

WarpPerspectiveComp

In the S_WarpsComp Plugin.

Transforms the source clip onto a 3D plane with perspective. Adjust the Latitude, Swing, and Roll parameters to rotate the image on various axes, and adjust Shift and Z Dist to translate and zoom. Turn off the Wrap options to give a single non-repeated copy of the image.



Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip.

Parameters:

Shift: *X & Y, Default: [0 0], Range: any.*

Translates the image in its initial frame.

Latitude: *Default: 35, Range: any.*

Tilts the image up or down in 3D. Positive latitude tilts the image down and negative tilts it up.

Swing: *Default: 0, Range: any.*

Rotation of the image in degrees in its initial frame.

Roll: *Default: 0, Range: any.*

Tilts the result from side to side, in counter-clockwise degrees.

Wrap Above Horizon: *Check-box, Default: off.*

When the image is sufficiently tilted using the Latitude parameter, a horizon can be seen. When Wrap Above Horizon is check, the image is repeated on both sides of the horizon.

Z Dist: *Default: 3, Range: any.*

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it.

Tele Lens Width: *Default: 1, Range: 0.2 or greater.*

The amount of lens telescoping. Increase to zoom in with less perspective, decrease for a wider viewing angle with more perspective.

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default: [TILE TILE].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values.

This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformComp](#)

[WarpVortexComp](#)

[WarpWavesComp](#)

[WarpWaves2Comp](#)

[WarpPuddleComp](#)

[WarpBubbleComp](#)

[WarpBubble2Comp](#)

[WarpFishEyeComp](#)

[WarpPuffComp](#)

[WarpShrivelComp](#)

[WarpPolarComp](#)

[WarpRepeatComp](#)

[WarpChromaComp](#)

[WarpMagnifyComp](#)

[WarpCornerPinComp](#)

[WarpPerspective](#)

[CloudsPerspective](#)

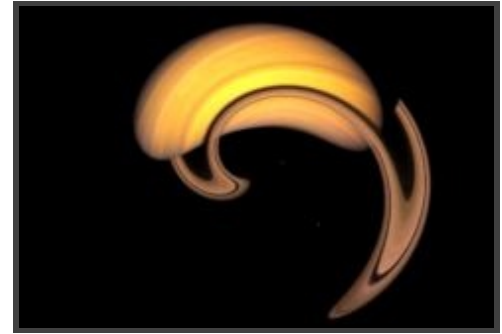
[Sapphire Plug-ins](#)

[Introduction](#)

WarpPolar

In the S_Warps Plugin.

Warms the source clip into a rounded disk shape. The vertical direction of the source image is mapped between the Inner Radius and Outer Radius, and the horizontal direction is rotated about the center based on the number of Angle Repeats and offset by Angle.



Inputs:

Source: The input clip to be warped.

Parameters:

Inner Radius: *Default:* 0.25, *Range:* any.

The distance from the center where the bottom edge of the source clip is mapped.

Outer Radius: *Default:* 0.75, *Range:* any.

The distance from the center where the top edge of the input clip is mapped.

Angle: *Default:* 0, *Range:* any.

Rotation of the result, in counter-clockwise degrees.

Angle Repeats: *Default:* 1, *Range:* 0.01 or greater.

The number of copies of the source image to wrap around. This should be an integer to avoid a seam where the first copy connects to the last.

Center: *X & Y, Default:* [0 0], *Range:* any.

The center of the disk, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Stretch: *X & Y, Default:* [1 1], *Range:* 0.01 or greater.

Scales the horizontal or vertical size of the disk shape.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default:* [TILE NO].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransform](#)

[WarpPolarComp](#)

[KaleidoPolar](#)

[WarpVortex](#)

[Sapphire Plug-ins](#)

[WarpPerspective](#)

[Introduction](#)

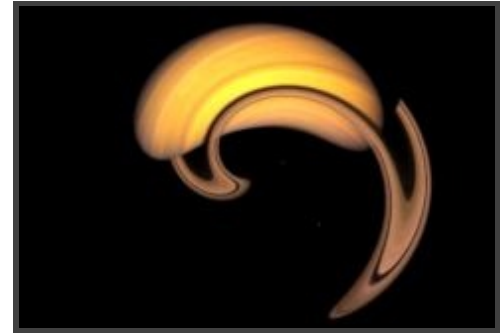
[WarpWaves](#)

WarpWaves2
WarpPuddle
WarpBubble
WarpBubble2
WarpFishEye
WarpPuff
WarpShrivel
WarpRepeat
WarpChroma
WarpMagnify
WarpCornerPin

WarpPolarComp

In the S_WarpsComp Plugin.

Warms the source clip into a rounded disk shape. The vertical direction of the source image is mapped between the Inner Radius and Outer Radius, and the horizontal direction is rotated about the center based on the number of Angle Repeats and offset by Angle.



Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip.

Parameters:

Inner Radius: *Default:* 0.25, *Range:* any.

The distance from the center where the bottom edge of the source clip is mapped.

Outer Radius: *Default:* 0.75, *Range:* any.

The distance from the center where the top edge of the input clip is mapped.

Angle: *Default:* 0, *Range:* any.

Rotation of the result, in counter-clockwise degrees.

Angle Repeats: *Default:* 1, *Range:* 0.01 or greater.

The number of copies of the source image to wrap around. This should be an integer to avoid a seam where the first copy connects to the last.

Center: *X & Y, Default:* [0 0], *Range:* any.

The center of the disk, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Stretch: *X & Y, Default:* [1 1], *Range:* 0.01 or greater.

Scales the horizontal or vertical size of the disk shape.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default:* [TILE NO].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Comp Premult: *Check-box, Default:* off, *Shared.*

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformComp](#)
[WarpVortexComp](#)
[WarpPerspectiveComp](#)
[WarpWavesComp](#)
[WarpWaves2Comp](#)
[WarpPuddleComp](#)
[WarpBubbleComp](#)
[WarpBubble2Comp](#)
[WarpFishEyeComp](#)
[WarpPuffComp](#)
[WarpShrivelComp](#)
[WarpRepeatComp](#)
[WarpChromaComp](#)
[WarpMagnifyComp](#)
[WarpCornerPinComp](#)

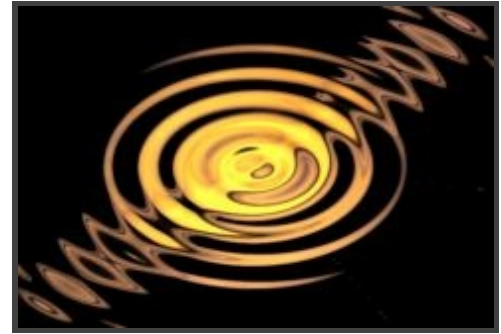
[WarpPolar](#)

[KaleidoPolar](#)
[Sapphire Plug-ins](#)
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WarpPuddle

In the S_Warps Plugin.

Warp the source clip by a pattern of concentric waves. The Phase Speed parameter causes the waves to automatically move outwards from the center over time. Adjust the Inner and Outer Radius parameters to limit the area where the waves appear. Increase the Inner and Outer softness for smoother transitions between where the waves appear and do not appear.



Inputs:

Source: The input clip to be warped.

Parameters:

Center: *X & Y, Default: [0 0], Range: any.*

The center of the puddle, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Frequency: *Default: 10, Range: 0.01 or greater.*

The frequency of the waves. Increase for more waves, decrease for fewer. This parameter can be adjusted using the Frequency Widget.

Rel Height: *Default: 0.75, Range: 0.01 or greater.*

The relative height of the concentric wave pattern.

Amplitude: *Default: 0.1, Range: any.*

Scales the amount of warping distortion. Increase for more severe distortion.

Rotate Puddle: *Default: 0, Range: any.*

Rotates the puddle pattern by this many counter-clockwise degrees after the Rel Height stretching has been applied. This has no effect when Rel Height is 1. This parameter can be adjusted using the Rotate Widget.

Inner Radius: *Default: 0, Range: any.*

The distance from the puddle center where the wave distortion is phased in. No waves are generated inside this radius. This parameter can be adjusted using the Inner Radius Widget.

Inner Softness: *Default: 0.1, Range: 0.01 or greater.*

The width of the region at the Inner Radius over which the wave distortion is phased in.

Outer Radius: *Default: 1.5, Range: 0 or greater.*

The distance from the puddle center where the wave distortion is phased out. No waves are generated outside this radius. This parameter can be adjusted using the Outer Radius Widget.

Outer Softness: *Default: 0.4, Range: 0.01 or greater.*

The width of the region at the Outer Radius over which the wave distortion is phased out.

Z Dist: *Default: 1, Range: 0.01 or greater.*

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Phase Start: *Default: 0, Range: any.*

The phase shift of the waves.

Phase Speed: *Default: 1, Range: any.*

The speed of the waves. If this is positive the waves automatically travel outwards from the center at this rate.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransform](#)

[WarpVortex](#)

[WarpPerspective](#)

[WarpWaves](#)

[WarpWaves2](#)

[WarpBubble](#)

[WarpBubble2](#)

[WarpFishEye](#)

[WarpPuff](#)

[WarpShrivel](#)

[WarpPolar](#)

[WarpRepeat](#)

[WarpChroma](#)

[WarpMagnify](#)

[WarpCornerPin](#)

[WarpPuddleMask](#)

[WarpPuddleComp](#)

[DissolvePuddle](#)

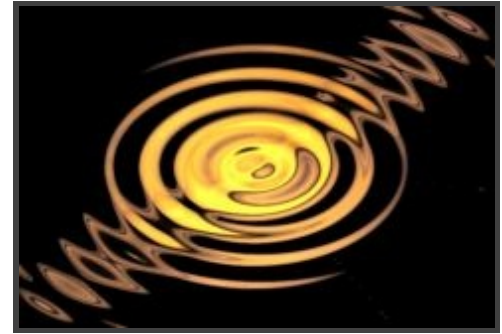
[Sapphire Plug-ins](#)

[Introduction](#)

WarpPuddleComp

In the S_WarpsComp Plugin.

Warp the source clip by a pattern of concentric waves. The Phase Speed parameter causes the waves to automatically move outwards from the center over time. Adjust the Inner and Outer Radius parameters to limit the area where the waves appear. Increase the Inner and Outer softness for smoother transitions between where the waves appear and do not appear.



Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip.

Parameters:

Center: *X & Y, Default: [0 0], Range: any.*

The center of the puddle, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Frequency: *Default: 10, Range: 0.01 or greater.*

The frequency of the waves. Increase for more waves, decrease for fewer. This parameter can be adjusted using the Frequency Widget.

Rel Height: *Default: 0.75, Range: 0.01 or greater.*

The relative height of the concentric wave pattern.

Amplitude: *Default: 0.1, Range: any.*

Scales the amount of warping distortion. Increase for more severe distortion.

Rotate Puddle: *Default: 0, Range: any.*

Rotates the puddle pattern by this many counter-clockwise degrees after the Rel Height stretching has been applied. This has no effect when Rel Height is 1. This parameter can be adjusted using the Rotate Widget.

Inner Radius: *Default: 0, Range: any.*

The distance from the puddle center where the wave distortion is phased in. No waves are generated inside this radius. This parameter can be adjusted using the Inner Radius Widget.

Inner Softness: *Default: 0.1, Range: 0.01 or greater.*

The width of the region at the Inner Radius over which the wave distortion is phased in.

Outer Radius: *Default: 1.5, Range: 0 or greater.*

The distance from the puddle center where the wave distortion is phased out. No waves are generated outside this radius. This parameter can be adjusted using the Outer Radius Widget.

Outer Softness: *Default: 0.4, Range: 0.01 or greater.*

The width of the region at the Outer Radius over which the wave distortion is phased out.

Z Dist: *Default: 1, Range: 0.01 or greater.*

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Phase Start: *Default: 0, Range: any.*

The phase shift of the waves.

Phase Speed: *Default: 1, Range: any.*

The speed of the waves. If this is positive the waves automatically travel outwards from the center at this rate.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values.

This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformComp](#)

[WarpVortexComp](#)

[WarpPerspectiveComp](#)

[WarpWavesComp](#)

[WarpWaves2Comp](#)

[WarpBubbleComp](#)

[WarpBubble2Comp](#)

[WarpFishEyeComp](#)

[WarpPuffComp](#)

[WarpShrivelComp](#)

[WarpPolarComp](#)

[WarpRepeatComp](#)

[WarpChromaComp](#)

[WarpMagnifyComp](#)

[WarpCornerPinComp](#)

[WarpPuddle](#)

[WarpPuddleMask](#)

[DissolvePuddle](#)

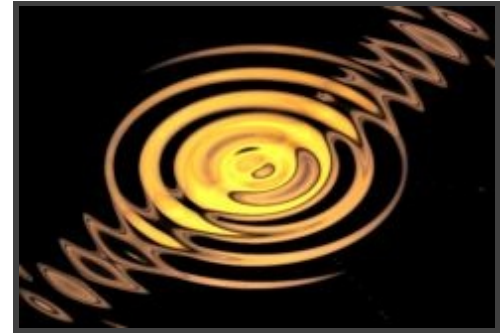
[Sapphire Plug-ins](#)

[Introduction](#)

WarpPuddleMask

In the S_WarpsMask Plugin.

Warp the source clip by a pattern of concentric waves. The Phase Speed parameter causes the waves to automatically move outwards from the center over time. Adjust the Inner and Outer Radius parameters to limit the area where the waves appear. Increase the Inner and Outer softness for smoother transitions between where the waves appear and do not appear.



Inputs:

Source: The input clip to be warped.

Mask: The amplitude of warping is scaled by the values of this input clip. Gray values internally scale the warping amplitude rather than simply cross-fading between the effect and the original source to allow more continuous results at the Mask edges and more detailed control over the warping amounts. Only the red channel of this input is used. This input can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters.

Parameters:

Center: *X & Y, Default: [0 0], Range: any.*

The center of the puddle, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Frequency: *Default: 10, Range: 0.01 or greater.*

The frequency of the waves. Increase for more waves, decrease for fewer. This parameter can be adjusted using the Frequency Widget.

Rel Height: *Default: 0.75, Range: 0.01 or greater.*

The relative height of the concentric wave pattern.

Amplitude: *Default: 0.1, Range: any.*

Scales the amount of warping distortion. Increase for more severe distortion.

Rotate Puddle: *Default: 0, Range: any.*

Rotates the puddle pattern by this many counter-clockwise degrees after the Rel Height stretching has been applied. This has no effect when Rel Height is 1. This parameter can be adjusted using the Rotate Widget.

Inner Radius: *Default: 0, Range: any.*

The distance from the puddle center where the wave distortion is phased in. No waves are generated inside this radius. This parameter can be adjusted using the Inner Radius Widget.

Inner Softness: *Default: 0.1, Range: 0.01 or greater.*

The width of the region at the Inner Radius over which the wave distortion is phased in.

Outer Radius: *Default: 1.5, Range: 0 or greater.*

The distance from the puddle center where the wave distortion is phased out. No waves are generated outside this radius. This parameter can be adjusted using the Outer Radius Widget.

Outer Softness: *Default: 0.4, Range: 0.01 or greater.*

The width of the region at the Outer Radius over which the wave distortion is phased out.

Z Dist: *Default: 1, Range: 0.01 or greater.*

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Phase Start: *Default: 0, Range: any.*

The phase shift of the waves.

Phase Speed: *Default: 1, Range: any.*

The speed of the waves. If this is positive the waves automatically travel outwards from the center at this rate.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Blur Mask: *Default: 0, Range: 0 or greater, Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformMask](#)

[WarpVortexMask](#)

[WarpWavesMask](#)

[WarpWaves2Mask](#)

[WarpBubbleMask](#)

[WarpBubble2Mask](#)

[WarpFishEyeMask](#)

[WarpPuffMask](#)

[WarpShrivelMask](#)

[WarpRepeatMask](#)

[WarpChromaMask](#)

[WarpMagnifyMask](#)

[WarpCornerPinMask](#)

[WarpPuddle](#)

[WarpPuddleComp](#)

[DissolvePuddle](#)

[Sapphire Plug-ins](#)

[Introduction](#)

WarpPuff

In the S_Warps Plugin.

Warp the source clip based on its gradient. Brighter areas are puffed out and darker areas are shrunk. This is similar to Lensing an image using itself as the lens.



Inputs:

Source: The input clip to be warped.

Parameters:

Amount: *Default:* 0.5, *Range:* any.

Scales the amount of distortion. This can also be negative to turn puffs into shrivels and vice versa.

Smoothness: *Default:* 0.5, *Range:* 0 or greater.

Blurs the source clip by this amount before determining the warp directions and amounts.

Rotate Warp Dir: *Default:* 0, *Range:* any.

Rotates the direction of the warping. This can cause areas of similar brightness to be twisted instead of just expanded or shrunk.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransform](#)

[WarpVortex](#)

[WarpPerspective](#)

[WarpWaves](#)

[WarpWaves2](#)

[WarpPuddle](#)

[WarpBubble](#)

[WarpBubble2](#)

[WarpFishEye](#)

[WarpShrivel](#)

[WarpPolar](#)

[WarpRepeat](#)

[WarpChroma](#)

[WarpMagnify](#)

[WarpCornerPin](#)

[WarpPuffMask](#)

[WarpPuffComp](#)

[Distort](#)

[Sapphire Plug-ins](#)

[Introduction](#)

WarpPuffComp

In the S_WarpsComp Plugin.

Warp the source clip based on its gradient. Brighter areas are puffed out and darker areas are shrunk. This is similar to Lensing an image using itself as the lens.



Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip.

Parameters:

Amount: *Default:* 0.5, *Range:* any.

Scales the amount of distortion. This can also be negative to turn puffs into shrivels and vice versa.

Smoothness: *Default:* 0.5, *Range:* 0 or greater.

Blurs the source clip by this amount before determining the warp directions and amounts.

Rotate Warp Dir: *Default:* 0, *Range:* any.

Rotates the direction of the warping. This can cause areas of similar brightness to be twisted instead of just expanded or shrunk.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Comp Premult: *Check-box, Default:* off, *Shared.*

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformComp](#)

[WarpVortexComp](#)

[WarpPerspectiveComp](#)

[WarpWavesComp](#)

[WarpWaves2Comp](#)

[WarpPuddleComp](#)

[WarpBubbleComp](#)

[WarpPuff](#)

[WarpPuffMask](#)

[Distort](#)

[Sapphire Plug-ins](#)

[Introduction](#)

WarpBubble2Comp
WarpFishEyeComp
WarpShrivelComp
WarpPolarComp
WarpRepeatComp
WarpChromaComp
WarpMagnifyComp
WarpCornerPinComp

WarpPuffMask

In the S_WarpsMask Plugin.

Warp the source clip based on its gradient. Brighter areas are puffed out and darker areas are shrunk. This is similar to Lensing an image using itself as the lens.

Inputs:

Source: The input clip to be warped.

Mask: The amplitude of warping is scaled by the values of this input clip. Gray values internally scale the warping amplitude rather than simply cross-fading between the effect and the original source to allow more continuous results at the Mask edges and more detailed control over the warping amounts. Only the red channel of this input is used. This input can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters.



Parameters:

Amount: *Default:* 0.5, *Range:* any.

Scales the amount of distortion. This can also be negative to turn puffs into shrivels and vice versa.

Smoothness: *Default:* 0.5, *Range:* 0 or greater.

Blurs the source clip by this amount before determining the warp directions and amounts.

Rotate Warp Dir: *Default:* 0, *Range:* any.

Rotates the direction of the warping. This can cause areas of similar brightness to be twisted instead of just expanded or shrunk.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Blur Mask: *Default:* 0, *Range:* 0 or greater, *Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformMask](#)

[WarpVortexMask](#)

[WarpWavesMask](#)

[WarpWaves2Mask](#)

[WarpPuddleMask](#)

[WarpBubbleMask](#)

[WarpBubble2Mask](#)

[WarpFishEyeMask](#)

[WarpShrivelMask](#)

[WarpRepeatMask](#)

[WarpChromaMask](#)

[WarpMagnifyMask](#)

[WarpCornerPinMask](#)

[WarpPuff](#)

[WarpPuffComp](#)

[Distort](#)

[Sapphire Plug-ins](#)

[Introduction](#)

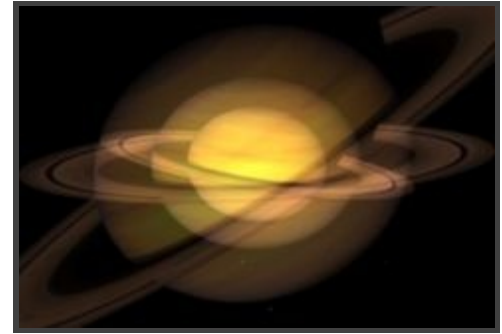
WarpRepeat

In the S_Warps Plugin.

Transforms the source input multiple times and averages the results. The From and To parameters do not refer to time. They describe the two transformations in space that determine the sequence of repeated warps applied to each frame.

Inputs:

Source: The input clip to be warped.



Parameters:

From Z Dist: *Default: 1, Range: 0.001 or greater.*

The 'distance' of the From transformation. This zooms about the Center location when Shift is 0. Increase to zoom out, decrease to zoom in. This parameter can be adjusted using the From Transfm Widget.

From Rotate: *Default: 0, Range: any.*

The rotation angle of the From transformation, in degrees, about the center. This parameter can be adjusted using the From Transfm Widget.

From Shift: *X & Y, Default: [0 0], Range: any.*

The horizontal and vertical translations of the From transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the From Transfm Widget.

Exposure Bias: *Default: 0.5, Range: 0 to 1.*

Determines the variable amount of exposure along the path between the From and To transformations. A value of 0 causes more exposure at the From end, 0.5 causes equal exposure along the path, and 1.0 causes more exposure at the To end. If you have bright spots on a dark background, a 0 value would cause the processed spots to be brighter at the From end and dark at the To end, and a 1.0 value would cause the opposite.

Steps: *Integer, Default: 3, Range: 2 to 100.*

The number of times the input image is sampled along the path between the From and To transformations. More steps require more processing time.

To Z Dist: *Default: 1.5, Range: 0.001 or greater.*

The 'distance' of the To transformation. Increase to zoom out, or decrease to zoom in. This parameter can be adjusted using the To Transform Widget.

To Rotate: *Default: 0, Range: any.*

The rotation angle of the To transformation, in degrees, about the center. Note that if the From and To Rotate angles are very different, the interpolation between them will become less accurate. This parameter can be adjusted using the To Transform Widget.

To Shift: *X & Y, Default: [0 0], Range: any.*

The horizontal and vertical translations of the To transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the To Transform Widget.

Filter: *Check-box, Default: off.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Center: *X & Y, Default: [0 0], Range: any.*

The center of rotation and zooming, in screen coordinates relative to the center of the frame. The shift values should be zero for this location to make sense. This parameter can be adjusted using the Center Widget.

Wrap: *X & Y, Popup menu, Default: [NO NO].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransform](#)

[WarpVortex](#)

[WarpPerspective](#)

[WarpWaves](#)

[WarpWaves2](#)

[WarpPuddle](#)

[WarpBubble](#)

[WarpBubble2](#)

[WarpFishEye](#)

[WarpPuff](#)

[WarpShrivel](#)

[WarpPolar](#)

[WarpChroma](#)

[WarpMagnify](#)

[WarpCornerPin](#)

[WarpRepeatMask](#)

[WarpRepeatComp](#)

[BlurMotion](#)

[Streaks](#)

[EdgeRays](#)

[Sapphire](#)

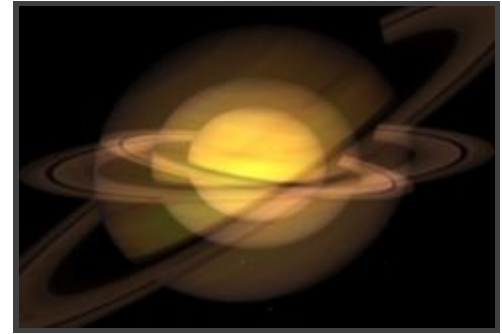
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WarpRepeatComp

In the S_WarpsComp Plugin.

Transforms the source input multiple times and averages the results. The From and To parameters do not refer to time. They describe the two transformations in space that determine the sequence of repeated warps applied to each frame.



Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip.

Parameters:

From Z Dist: *Default:* 1, *Range:* 0.001 or greater.

The 'distance' of the From transformation. This zooms about the Center location when Shift is 0. Increase to zoom out, decrease to zoom in. This parameter can be adjusted using the From Transfm Widget.

From Rotate: *Default:* 0, *Range:* any.

The rotation angle of the From transformation, in degrees, about the center. This parameter can be adjusted using the From Transfm Widget.

From Shift: *X & Y, Default:* [0 0], *Range:* any.

The horizontal and vertical translations of the From transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the From Transfm Widget.

Exposure Bias: *Default:* 0.5, *Range:* 0 to 1.

Determines the variable amount of exposure along the path between the From and To transformations. A value of 0 causes more exposure at the From end, 0.5 causes equal exposure along the path, and 1.0 causes more exposure at the To end. If you have bright spots on a dark background, a 0 value would cause the processed spots to be brighter at the From end and dark at the To end, and a 1.0 value would cause the opposite.

Steps: *Integer, Default:* 3, *Range:* 2 to 100.

The number of times the input image is sampled along the path between the From and To transformations. More steps require more processing time.

To Z Dist: *Default:* 1.5, *Range:* 0.001 or greater.

The 'distance' of the To transformation. Increase to zoom out, or decrease to zoom in. This parameter can be adjusted using the To Transform Widget.

To Rotate: *Default:* 0, *Range:* any.

The rotation angle of the To transformation, in degrees, about the center. Note that if the From and To Rotate angles are very different, the interpolation between them will become less accurate. This parameter can be adjusted using the To Transform Widget.

To Shift: *X & Y, Default:* [0 0], *Range:* any.

The horizontal and vertical translations of the To transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the To Transform Widget.

Filter: *Check-box, Default: off.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Center: *X & Y, Default: [0 0], Range: any.*

The center of rotation and zooming, in screen coordinates relative to the center of the frame. The shift values should be zero for this location to make sense. This parameter can be adjusted using the Center Widget.

Wrap: *X & Y, Popup menu, Default: [NO NO].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformComp](#)

[WarpRepeat](#)

[BlurMotion](#)

[Sapphire](#)

[WarpVortexComp](#)

[WarpRepeatMask](#)

[Streaks](#)

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[WarpWavesComp](#)

[WarpWaves2Comp](#)

[WarpPuddleComp](#)

[WarpBubbleComp](#)

[WarpBubble2Comp](#)

[WarpFishEyeComp](#)

[WarpPuffComp](#)

[WarpShrivelComp](#)

[WarpPolarComp](#)

[WarpChromaComp](#)

[WarpMagnifyComp](#)

[WarpCornerPinComp](#)

WarpRepeatMask

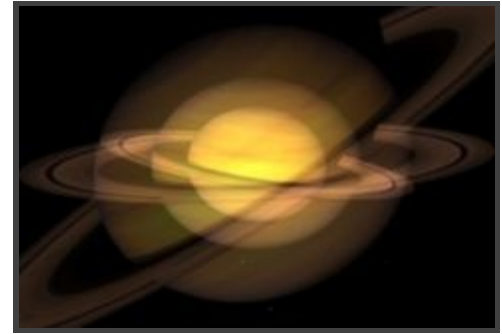
In the S_WarpsMask Plugin.

Transforms the source input multiple times and averages the results. The From and To parameters do not refer to time. They describe the two transformations in space that determine the sequence of repeated warps applied to each frame.

Inputs:

Source: The input clip to be warped.

Mask: The amplitude of warping is scaled by the values of this input clip. Gray values internally scale the warping amplitude rather than simply cross-fading between the effect and the original source to allow more continuous results at the Mask edges and more detailed control over the warping amounts. Only the red channel of this input is used. This input can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters.



Parameters:

From Z Dist: *Default:* 1, *Range:* 0.001 or greater.

The 'distance' of the From transformation. This zooms about the Center location when Shift is 0. Increase to zoom out, decrease to zoom in. This parameter can be adjusted using the From Transfm Widget.

From Rotate: *Default:* 0, *Range:* any.

The rotation angle of the From transformation, in degrees, about the center. This parameter can be adjusted using the From Transfm Widget.

From Shift: *X & Y, Default:* [0 0], *Range:* any.

The horizontal and vertical translations of the From transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the From Transfm Widget.

Exposure Bias: *Default:* 0.5, *Range:* 0 to 1.

Determines the variable amount of exposure along the path between the From and To transformations. A value of 0 causes more exposure at the From end, 0.5 causes equal exposure along the path, and 1.0 causes more exposure at the To end. If you have bright spots on a dark background, a 0 value would cause the processed spots to be brighter at the From end and dark at the To end, and a 1.0 value would cause the opposite.

Steps: *Integer, Default:* 3, *Range:* 2 to 100.

The number of times the input image is sampled along the path between the From and To transformations. More steps require more processing time.

To Z Dist: *Default:* 1.5, *Range:* 0.001 or greater.

The 'distance' of the To transformation. Increase to zoom out, or decrease to zoom in. This parameter can be adjusted using the To Transform Widget.

To Rotate: *Default:* 0, *Range:* any.

The rotation angle of the To transformation, in degrees, about the center. Note that if the From and To Rotate angles are very different, the interpolation between them will become less accurate. This parameter can be adjusted using the To Transform Widget.

To Shift: *X & Y, Default: [0 0], Range: any.*

The horizontal and vertical translations of the To transformation. This can be used for directional motion. If it is non-zero the center location becomes less meaningful. This parameter can be adjusted using the To Transform Widget.

Filter: *Check-box, Default: off.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Center: *X & Y, Default: [0 0], Range: any.*

The center of rotation and zooming, in screen coordinates relative to the center of the frame. The shift values should be zero for this location to make sense. This parameter can be adjusted using the Center Widget.

Wrap: *X & Y, Popup menu, Default: [NO NO].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Blur Mask: *Default: 0, Range: 0 or greater, Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformMask](#)

[WarpVortexMask](#)

[WarpWavesMask](#)

[WarpWaves2Mask](#)

[WarpPuddleMask](#)

[WarpBubbleMask](#)

[WarpBubble2Mask](#)

[WarpFishEyeMask](#)

[WarpPuffMask](#)

[WarpShrivelMask](#)

[WarpChromaMask](#)

[WarpMagnifyMask](#)

[WarpCornerPinMask](#)

[WarpRepeat](#)

[WarpRepeatComp](#)

[BlurMotion](#)

[Streaks](#)

[EdgeRays](#)

[Sapphire](#)

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WarpShrivel

In the S_Warps Plugin.

Warp the source clip based on its gradient. Brighter areas are shriveled and darker areas expanded. This is similar to Lensing an image using itself as the lens, and with a negative Lens amount.

Inputs:

Source: The input clip to be warped.



Parameters:

Amount: *Default:* 0.5, *Range:* any.

Scales the amount of distortion. This can also be negative to turn puffs into shrivels and vice versa.

Smoothness: *Default:* 0.5, *Range:* 0 or greater.

Blurs the source clip by this amount before determining the warp directions and amounts.

Rotate Warp Dir: *Default:* 0, *Range:* any.

Rotates the direction of the warping. This can cause areas of similar brightness to be twisted instead of just expanded or shrunk.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransform](#)

[WarpVortex](#)

[WarpPerspective](#)

[WarpWaves](#)

[WarpWaves2](#)

[WarpPuddle](#)

[WarpBubble](#)

[WarpBubble2](#)

[WarpFishEye](#)

[WarpPuff](#)

[WarpPolar](#)

[WarpRepeat](#)

[WarpChroma](#)

[WarpMagnify](#)

[WarpCornerPin](#)

[WarpShrivelMask](#)

[WarpShrivelComp](#)

[Distort](#)

[Sapphire Plug-ins](#)

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WarpShrivelComp

In the S_WarpsComp Plugin.

Warpes the source clip based on its gradient. Brighter areas are shriveled and darker areas expanded. This is similar to Lensing an image using itself as the lens, and with a negative Lens amount.



Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip.

Parameters:

Amount: *Default:* 0.5, *Range:* any.

Scales the amount of distortion. This can also be negative to turn puffs into shrivels and vice versa.

Smoothness: *Default:* 0.5, *Range:* 0 or greater.

Blurs the source clip by this amount before determining the warp directions and amounts.

Rotate Warp Dir: *Default:* 0, *Range:* any.

Rotates the direction of the warping. This can cause areas of similar brightness to be twisted instead of just expanded or shrunk.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Comp Premult: *Check-box, Default:* off, *Shared.*

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformComp](#)

[WarpVortexComp](#)

[WarpPerspectiveComp](#)

[WarpWavesComp](#)

[WarpWaves2Comp](#)

[WarpPuddleComp](#)

[WarpBubbleComp](#)

[WarpShrivel](#)

[WarpShrivelMask](#)

[Distort](#)

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[Introduction](#)

WarpBubble2Comp
WarpFishEyeComp
WarpPuffComp
WarpPolarComp
WarpRepeatComp
WarpChromaComp
WarpMagnifyComp
WarpCornerPinComp

WarpShrivelMask

In the S_WarpsMask Plugin.

Warp the source clip based on its gradient. Brighter areas are shriveled and darker areas expanded. This is similar to Lensing an image using itself as the lens, and with a negative Lens amount.

Inputs:

Source: The input clip to be warped.

Mask: The amplitude of warping is scaled by the values of this input clip. Gray values internally scale the warping amplitude rather than simply cross-fading between the effect and the original source to allow more continuous results at the Mask edges and more detailed control over the warping amounts. Only the red channel of this input is used. This input can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters.



Parameters:

Amount: *Default:* 0.5, *Range:* any.

Scales the amount of distortion. This can also be negative to turn puffs into shrivels and vice versa.

Smoothness: *Default:* 0.5, *Range:* 0 or greater.

Blurs the source clip by this amount before determining the warp directions and amounts.

Rotate Warp Dir: *Default:* 0, *Range:* any.

Rotates the direction of the warping. This can cause areas of similar brightness to be twisted instead of just expanded or shrunk.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Blur Mask: *Default:* 0, *Range:* 0 or greater, *Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformMask](#)

[WarpVortexMask](#)

[WarpWavesMask](#)

[WarpWaves2Mask](#)

[WarpPuddleMask](#)

[WarpBubbleMask](#)

[WarpBubble2Mask](#)

[WarpFishEyeMask](#)

[WarpPuffMask](#)

[WarpRepeatMask](#)

[WarpChromaMask](#)

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[WarpCornerPinMask](#)

[WarpShrivel](#)

[WarpShrivelComp](#)

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WarpTransform

In the S_Warps Plugin.

Warps the source clip by a combination of linear transformations including scale, shear, zoom, rotation, and translation.

Inputs:

Source: The input clip to be warped.



Parameters:

Scale: *X & Y, Default: [1 1], Range: any.*

Scales the relative horizontal or vertical size of the source image.

Shear: *X & Y, Default: [0 0], Range: any.*

Shears the source image horizontally or vertically.

Shift: *X & Y, Default: [0 0], Range: any.*

Translates the source image. This parameter can be adjusted using the Shift Widget.

Z Dist: *Default: 1, Range: 0 or greater.*

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Note that Scale X and Y also scale the size of the image, but in an inverse way and on each axis.

Rotate: *Default: 0, Range: any.*

Rotates the source image by the specified angle in counter-clockwise degrees.

Swivel: *Default: 0, Range: any.*

Rotates the image left or right in 3D about the vertical axis.

Tilt: *Default: 0, Range: any.*

Rotates the image up or down in 3D about the horizontal axis. You can use Swivel and Tilt together to rotate about arbitrary diagonal axes.

Perspective Amt: *Default: 1, Range: 0.25 to 4.*

Controls the amount of lens telescoping while applying Swivel and Tilt. Increase for more 3D perspective.

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default: [NO NO].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpVortex](#)
[WarpPerspective](#)
[WarpWaves](#)
[WarpWaves2](#)
[WarpPuddle](#)
[WarpBubble](#)
[WarpBubble2](#)
[WarpFishEye](#)
[WarpPuff](#)
[WarpShrivel](#)
[WarpPolar](#)
[WarpRepeat](#)
[WarpChroma](#)
[WarpMagnify](#)
[WarpCornerPin](#)

[WarpTransformMask](#)
[WarpTransformComp](#)

[Shake](#)
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WarpTransformComp

In the S_WarpsComp Plugin.

Warps the source clip by a combination of linear transformations including scale, shear, zoom, rotation, and translation.

Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip.



Parameters:

Scale: *X & Y, Default: [1 1], Range: any.*

Scales the relative horizontal or vertical size of the source image.

Shear: *X & Y, Default: [0 0], Range: any.*

Shears the source image horizontally or vertically.

Shift: *X & Y, Default: [0 0], Range: any.*

Translates the source image. This parameter can be adjusted using the Shift Widget.

Z Dist: *Default: 1, Range: 0 or greater.*

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Note that Scale X and Y also scale the size of the image, but in an inverse way and on each axis.

Rotate: *Default: 0, Range: any.*

Rotates the source image by the specified angle in counter-clockwise degrees.

Swivel: *Default: 0, Range: any.*

Rotates the image left or right in 3D about the vertical axis.

Tilt: *Default: 0, Range: any.*

Rotates the image up or down in 3D about the horizontal axis. You can use Swivel and Tilt together to rotate about arbitrary diagonal axes.

Perspective Amt: *Default: 1, Range: 0.25 to 4.*

Controls the amount of lens telescoping while applying Swivel and Tilt. Increase for more 3D perspective.

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default: [NO NO].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values.
This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpVortexComp](#)

[WarpPerspectiveComp](#)

[WarpWavesComp](#)

[WarpWaves2Comp](#)

[WarpPuddleComp](#)

[WarpBubbleComp](#)

[WarpBubble2Comp](#)

[WarpFishEyeComp](#)

[WarpPuffComp](#)

[WarpShrivelComp](#)

[WarpPolarComp](#)

[WarpRepeatComp](#)

[WarpChromaComp](#)

[WarpMagnifyComp](#)

[WarpCornerPinComp](#)

[WarpTransform](#)

[WarpTransformMask](#)

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WarpTransformMask

In the S_WarpsMask Plugin.

Warps the source clip by a combination of linear transformations including scale, shear, zoom, rotation, and translation.

Inputs:

Source: The input clip to be warped.

Mask: The amplitude of warping is scaled by the values of this input clip. Gray values internally scale the warping amplitude rather than simply cross-fading between the effect and the original source to allow more continuous results at the Mask edges and more detailed control over the warping amounts. Only the red channel of this input is used. This input can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters.

Parameters:

Scale: *X & Y, Default: [1 1], Range: any.*

Scales the relative horizontal or vertical size of the source image.

Shear: *X & Y, Default: [0 0], Range: any.*

Shears the source image horizontally or vertically.

Shift: *X & Y, Default: [0 0], Range: any.*

Translates the source image. This parameter can be adjusted using the Shift Widget.

Z Dist: *Default: 1, Range: 0 or greater.*

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Note that Scale X and Y also scale the size of the image, but in an inverse way and on each axis.

Rotate: *Default: 0, Range: any.*

Rotates the source image by the specified angle in counter-clockwise degrees.

Swivel: *Default: 0, Range: any.*

Rotates the image left or right in 3D about the vertical axis.

Tilt: *Default: 0, Range: any.*

Rotates the image up or down in 3D about the horizontal axis. You can use Swivel and Tilt together to rotate about arbitrary diagonal axes.

Perspective Amt: *Default: 1, Range: 0.25 to 4.*

Controls the amount of lens telescoping while applying Swivel and Tilt. Increase for more 3D perspective.

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default: [NO NO].*

Determines the method for accessing outside the borders of the source image.



NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Blur Mask: *Default:* 0, *Range:* 0 or greater, *Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpVortexMask](#)

[WarpWavesMask](#)

[WarpWaves2Mask](#)

[WarpPuddleMask](#)

[WarpBubbleMask](#)

[WarpBubble2Mask](#)

[WarpFishEyeMask](#)

[WarpPuffMask](#)

[WarpShrivelMask](#)

[WarpRepeatMask](#)

[WarpChromaMask](#)

[WarpMagnifyMask](#)

[WarpCornerPinMask](#)

[WarpTransform](#)

[WarpTransformComp](#)

[Shake](#)

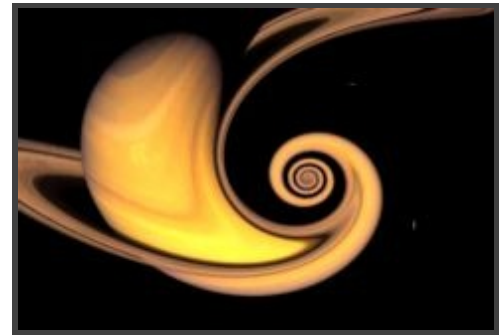
[Sapphire Plug-ins](#)

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WarpVortex

In the S_Warps Plugin.

Twists the source clip into a vortex, about a given Center location. Use the Vortex Start parameter to adjust the amount of vortexing, and use Angle Offset to also apply a normal rotation. Vortex Speed can be used to automatically animate the amount of vortexing.



Inputs:

Source: The input clip to be warped.

Parameters:

Vortex Start: *Default:* 36, *Range:* any.

The amount of vortex rotation, in approximate counter-clockwise degrees at the edge of the frame.

Vortex Speed: *Default:* 0, *Range:* any.

The speed of the vortex rotation, in approximate degrees per second at the edge of the frame. If non-zero, the vortexing is automatically animated at this rate.

Inner Radius: *Default:* 0.04, *Range:* 0 or greater.

The radius from the center at which the vortexing is phased in. This can be used to reduce excessive distortion and aliasing at the very center of the vortex.

Angle Offset: *Default:* 0, *Range:* any.

If non-zero, a rotation is combined with the vortex. Make negative to rotate the inner and outer regions in opposite directions.

Center: *X & Y, Default:* [0 0], *Range:* any.

The center of the vortex, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Z Dist: *Default:* 1, *Range:* any.

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransform](#)
[WarpPerspective](#)
[WarpWaves](#)
[WarpWaves2](#)
[WarpPuddle](#)
[WarpBubble](#)
[WarpBubble2](#)
[WarpFishEye](#)
[WarpPuff](#)
[WarpShrivel](#)
[WarpPolar](#)
[WarpRepeat](#)
[WarpChroma](#)
[WarpMagnify](#)
[WarpCornerPin](#)

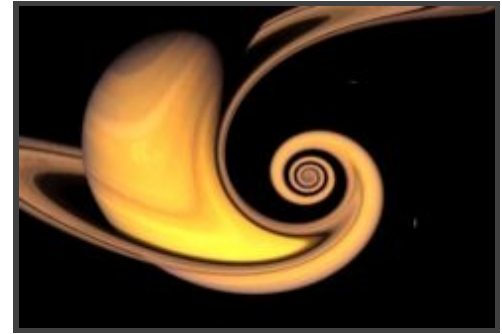
[WarpVortexMask](#)
[WarpVortexComp](#)

[DissolveVortex](#)
[Sapphire](#)
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WarpVortexComp

In the S_WarpsComp Plugin.

Twists the source clip into a vortex, about a given Center location. Use the Vortex Start parameter to adjust the amount of vortexing, and use Angle Offset to also apply a normal rotation. Vortex Speed can be used to automatically animate the amount of vortexing.



Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip.

Parameters:

Vortex Start: *Default:* 36, *Range:* any.

The amount of vortex rotation, in approximate counter-clockwise degrees at the edge of the frame.

Vortex Speed: *Default:* 0, *Range:* any.

The speed of the vortex rotation, in approximate degrees per second at the edge of the frame. If non-zero, the vortexing is automatically animated at this rate.

Inner Radius: *Default:* 0.04, *Range:* 0 or greater.

The radius from the center at which the vortexing is phased in. This can be used to reduce excessive distortion and aliasing at the very center of the vortex.

Angle Offset: *Default:* 0, *Range:* any.

If non-zero, a rotation is combined with the vortex. Make negative to rotate the inner and outer regions in opposite directions.

Center: *X & Y, Default:* [0 0], *Range:* any.

The center of the vortex, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Z Dist: *Default:* 1, *Range:* any.

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Comp Premult: *Check-box, Default:* off, *Shared.*

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformComp](#)

[WarpPerspectiveComp](#)

[WarpWavesComp](#)

[WarpWaves2Comp](#)

[WarpPuddleComp](#)

[WarpBubbleComp](#)

[WarpBubble2Comp](#)

[WarpFishEyeComp](#)

[WarpPuffComp](#)

[WarpShrivelComp](#)

[WarpPolarComp](#)

[WarpRepeatComp](#)

[WarpChromaComp](#)

[WarpMagnifyComp](#)

[WarpCornerPinComp](#)

[WarpVortex](#)

[WarpVortexMask](#)

[DissolveVortex](#)

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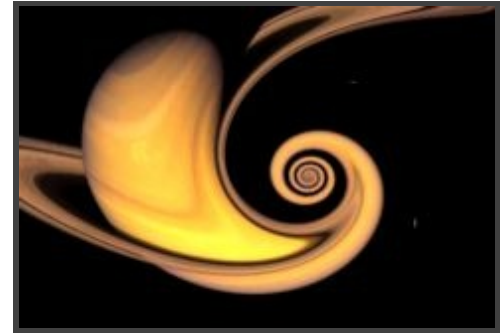
[Plug-ins](#)

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WarpVortexMask

In the S_WarpsMask Plugin.

Twists the source clip into a vortex, about a given Center location. Use the Vortex Start parameter to adjust the amount of vortexing, and use Angle Offset to also apply a normal rotation. Vortex Speed can be used to automatically animate the amount of vortexing.



Inputs:

Source: The input clip to be warped.

Mask: The amplitude of warping is scaled by the values of this input clip. Gray values internally scale the warping amplitude rather than simply cross-fading between the effect and the original source to allow more continuous results at the Mask edges and more detailed control over the warping amounts. Only the red channel of this input is used. This input can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters.

Parameters:

Vortex Start: *Default:* 36, *Range:* any.

The amount of vortex rotation, in approximate counter-clockwise degrees at the edge of the frame.

Vortex Speed: *Default:* 0, *Range:* any.

The speed of the vortex rotation, in approximate degrees per second at the edge of the frame. If non-zero, the vortexing is automatically animated at this rate.

Inner Radius: *Default:* 0.04, *Range:* 0 or greater.

The radius from the center at which the vortexing is phased in. This can be used to reduce excessive distortion and aliasing at the very center of the vortex.

Angle Offset: *Default:* 0, *Range:* any.

If non-zero, a rotation is combined with the vortex. Make negative to rotate the inner and outer regions in opposite directions.

Center: *X & Y, Default:* [0 0], *Range:* any.

The center of the vortex, in screen coordinates relative to the center of the frame. This parameter can be adjusted using the Center Widget.

Z Dist: *Default:* 1, *Range:* any.

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Blur Mask: *Default:* 0, *Range:* 0 or greater, *Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformMask](#)

[WarpWavesMask](#)

[WarpWaves2Mask](#)

[WarpPuddleMask](#)

[WarpBubbleMask](#)

[WarpBubble2Mask](#)

[WarpFishEyeMask](#)

[WarpPuffMask](#)

[WarpShrivelMask](#)

[WarpRepeatMask](#)

[WarpChromaMask](#)

[WarpMagnifyMask](#)

[WarpCornerPinMask](#)

[WarpVortex](#)

[WarpVortexComp](#)

[DissolveVortex](#)

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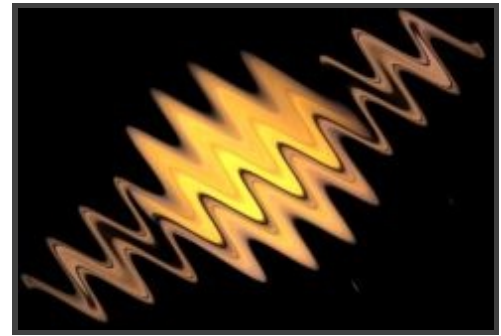
WarpWaves

In the S_Warps Plugin.

Warpes the source clip by a wave pattern. You can make the waves move over time by increasing the Phase Speed parameter, or by animating the value of Phase Start.

Inputs:

Source: The input clip to be warped.



Parameters:

Frequency: *Default:* 8, *Range:* 0 or greater.

The frequency of the waves. Increase for more waves, decrease for fewer.

Amplitude: *Default:* 0.1, *Range:* any.

Scales the amount of warping distortion. Increase for more severe distortion.

Angle: *Default:* 45, *Range:* any.

The rotation angle of the wave pattern in counter-clockwise degrees. If angle is 0, the waves move to the right and are aligned vertically.

Displace Angle: *Default:* 90, *Range:* any.

The warping direction in degrees relative to the angle of the waves. 0 gives compression-expansion waves, and 90 gives side to side waves.

Phase Start: *Default:* 0, *Range:* any.

The phase shift of the waves. The wave pattern is translated in the direction of Angle by this amount.

Phase Speed: *Default:* 0, *Range:* any.

The phase speed of the waves. If this is non-zero the wave pattern automatically travels at this rate.

Z Dist: *Default:* 1, *Range:* 0.01 or greater.

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransform](#)
[WarpVortex](#)
[WarpPerspective](#)
[WarpWaves2](#)
[WarpPuddle](#)
[WarpBubble](#)
[WarpBubble2](#)
[WarpFishEye](#)
[WarpPuff](#)
[WarpShrivel](#)
[WarpPolar](#)
[WarpRepeat](#)
[WarpChroma](#)
[WarpMagnify](#)
[WarpCornerPin](#)

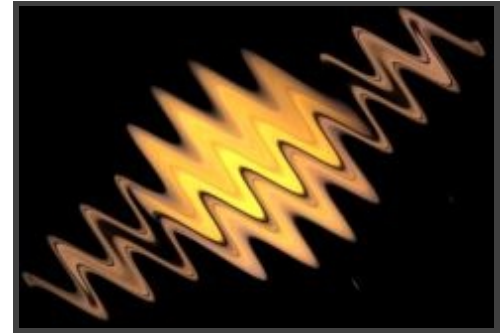
[WarpWavesMask](#)
[WarpWavesComp](#)

[DissolveWaves](#)
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WarpWavesComp

In the S_WarpsComp Plugin.

Warp the source clip by a wave pattern. You can make the waves move over time by increasing the Phase Speed parameter, or by animating the value of Phase Start.



Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip.

Parameters:

Frequency: *Default:* 8, *Range:* 0 or greater.

The frequency of the waves. Increase for more waves, decrease for fewer.

Amplitude: *Default:* 0.1, *Range:* any.

Scales the amount of warping distortion. Increase for more severe distortion.

Angle: *Default:* 45, *Range:* any.

The rotation angle of the wave pattern in counter-clockwise degrees. If angle is 0, the waves move to the right and are aligned vertically.

Displace Angle: *Default:* 90, *Range:* any.

The warping direction in degrees relative to the angle of the waves. 0 gives compression-expansion waves, and 90 gives side to side waves.

Phase Start: *Default:* 0, *Range:* any.

The phase shift of the waves. The wave pattern is translated in the direction of Angle by this amount.

Phase Speed: *Default:* 0, *Range:* any.

The phase speed of the waves. If this is non-zero the wave pattern automatically travels at this rate.

Z Dist: *Default:* 1, *Range:* 0.01 or greater.

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Comp Premult: *Check-box, Default:* off, *Shared.*

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformComp](#)

[WarpVortexComp](#)

[WarpPerspectiveComp](#)

[WarpWaves2Comp](#)

[WarpPuddleComp](#)

[WarpBubbleComp](#)

[WarpBubble2Comp](#)

[WarpFishEyeComp](#)

[WarpPuffComp](#)

[WarpShrivelComp](#)

[WarpPolarComp](#)

[WarpRepeatComp](#)

[WarpChromaComp](#)

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WarpWavesMask

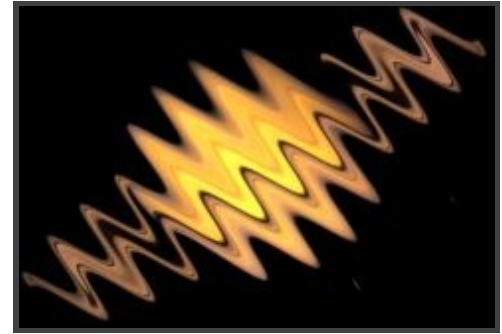
In the S_WarpsMask Plugin.

Warp the source clip by a wave pattern. You can make the waves move over time by increasing the Phase Speed parameter, or by animating the value of Phase Start.

Inputs:

Source: The input clip to be warped.

Mask: The amplitude of warping is scaled by the values of this input clip. Gray values internally scale the warping amplitude rather than simply cross-fading between the effect and the original source to allow more continuous results at the Mask edges and more detailed control over the warping amounts. Only the red channel of this input is used. This input can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters.



Parameters:

Frequency: *Default:* 8, *Range:* 0 or greater.

The frequency of the waves. Increase for more waves, decrease for fewer.

Amplitude: *Default:* 0.1, *Range:* any.

Scales the amount of warping distortion. Increase for more severe distortion.

Angle: *Default:* 45, *Range:* any.

The rotation angle of the wave pattern in counter-clockwise degrees. If angle is 0, the waves move to the right and are aligned vertically.

Displace Angle: *Default:* 90, *Range:* any.

The warping direction in degrees relative to the angle of the waves. 0 gives compression-expansion waves, and 90 gives side to side waves.

Phase Start: *Default:* 0, *Range:* any.

The phase shift of the waves. The wave pattern is translated in the direction of Angle by this amount.

Phase Speed: *Default:* 0, *Range:* any.

The phase speed of the waves. If this is non-zero the wave pattern automatically travels at this rate.

Z Dist: *Default:* 1, *Range:* 0.01 or greater.

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Blur Mask: *Default:* 0, *Range:* 0 or greater, *Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default:* off, *Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformMask](#)

[WarpVortexMask](#)

[WarpWaves2Mask](#)

[WarpPuddleMask](#)

[WarpBubbleMask](#)

[WarpBubble2Mask](#)

[WarpFishEyeMask](#)

[WarpPuffMask](#)

[WarpShrivelMask](#)

[WarpRepeatMask](#)

[WarpChromaMask](#)

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WarpWaves2

In the S_Warps Plugin.

Warp the source clip using two sets of overlapping wave patterns. You can make the waves move over time by increasing the Phase Speed parameters, or by animating the value of the Phase Start parameters.

Inputs:

Source: The input clip to be warped.



A Parameters:

A Frequency: *Default: 6, Range: 0 or greater.*

The frequency of the first set of waves. Increase for more waves, decrease for fewer.

A Amplitude: *Default: 0.06, Range: any.*

The amplitude of the first set of waves.

A Angle: *Default: 45, Range: any.*

The rotation angle of the first set of waves in degrees.

A Displace Angle: *Default: 0, Range: any.*

The warping direction of the first set of waves in degrees relative to their angle.

A Phase Start: *Default: 0, Range: any.*

The phase shift of the first set of waves.

A Phase Speed: *Default: 1, Range: any.*

If non-zero, the first set of wave automatically travels at this rate.

B Parameters:

B Frequency: *Default: 3, Range: 0 or greater.*

The frequency of the second set of waves. Increase for more waves, decrease for fewer.

B Amplitude: *Default: 0.12, Range: any.*

The amplitude of the second set of waves.

B Angle: *Default: 15, Range: any.*

The rotation angle of the second set of waves in degrees.

B Displace Angle: *Default: 0, Range: any.*

The warping direction of the second set of waves in degrees relative to their angle.

B Phase Start: *Default: 0, Range: any.*

The phase shift of the second set of waves.

B Phase Speed: *Default: -1, Range: any.*

If non-zero, the second set of wave automatically travels at this rate.

Other Parameters:

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Z Dist: *Default:* 1, *Range:* 0.01 or greater.

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Wrap: *X & Y, Popup menu, Default:* [REFLECT REFLECT].

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransform](#)

[WarpVortex](#)

[WarpPerspective](#)

[WarpWaves](#)

[WarpPuddle](#)

[WarpBubble](#)

[WarpBubble2](#)

[WarpFishEye](#)

[WarpPuff](#)

[WarpShrivel](#)

[WarpPolar](#)

[WarpRepeat](#)

[WarpChroma](#)

[WarpMagnify](#)

[WarpCornerPin](#)

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[WarpWaves2Comp](#)

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WarpWaves2Comp

In the S_WarpsComp Plugin.

Warpes the source clip using two sets of overlapping wave patterns. You can make the waves move over time by increasing the Phase Speed parameters, or by animating the value of the Phase Start parameters.



Inputs:

Front: The clip to use as foreground.

Back: The clip to use as background.

Matte: Specifies the opacities of the Front clip.

A Parameters:

A Frequency: *Default: 6, Range: 0 or greater.*

The frequency of the first set of waves. Increase for more waves, decrease for fewer.

A Amplitude: *Default: 0.06, Range: any.*

The amplitude of the first set of waves.

A Angle: *Default: 45, Range: any.*

The rotation angle of the first set of waves in degrees.

A Displace Angle: *Default: 0, Range: any.*

The warping direction of the first set of waves in degrees relative to their angle.

A Phase Start: *Default: 0, Range: any.*

The phase shift of the first set of waves.

A Phase Speed: *Default: 1, Range: any.*

If non-zero, the first set of wave automatically travels at this rate.

B Parameters:

B Frequency: *Default: 3, Range: 0 or greater.*

The frequency of the second set of waves. Increase for more waves, decrease for fewer.

B Amplitude: *Default: 0.12, Range: any.*

The amplitude of the second set of waves.

B Angle: *Default: 15, Range: any.*

The rotation angle of the second set of waves in degrees.

B Displace Angle: *Default: 0, Range: any.*

The warping direction of the second set of waves in degrees relative to their angle.

B Phase Start: *Default: 0, Range: any.*

The phase shift of the second set of waves.

B Phase Speed: *Default: -1, Range: any.*

If non-zero, the second set of wave automatically travels at this rate.

Other Parameters:

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Z Dist: *Default: 1, Range: 0.01 or greater.*

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Comp Premult: *Check-box, Default: off, Shared.*

Enable this for a better composite if the Foreground pixel values have been pre-multiplied by the Matte pixel values. This is also known as an 'additive' composite.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformComp](#)

[WarpVortexComp](#)

[WarpPerspectiveComp](#)

[WarpWavesComp](#)

[WarpPuddleComp](#)

[WarpBubbleComp](#)

[WarpBubble2Comp](#)

[WarpFishEyeComp](#)

[WarpPuffComp](#)

[WarpShrivelComp](#)

[WarpPolarComp](#)

[WarpRepeatComp](#)

[WarpChromaComp](#)

[WarpMagnifyComp](#)

[WarpCornerPinComp](#)

[WarpWaves2](#)

[WarpWaves2Mask](#)

[DissolveWaves](#)

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WarpWaves2Mask

In the S_WarpsMask Plugin.

Warpes the source clip using two sets of overlapping wave patterns. You can make the waves move over time by increasing the Phase Speed parameters, or by animating the value of the Phase Start parameters.

Inputs:

Source: The input clip to be warped.

Mask: The amplitude of warping is scaled by the values of this input clip. Gray values internally scale the warping amplitude rather than simply cross-fading between the effect and the original source to allow more continuous results at the Mask edges and more detailed control over the warping amounts. Only the red channel of this input is used. This input can optionally be blurred or inverted using the Blur Mask or Invert Mask parameters.



A Parameters:

A Frequency: *Default: 6, Range: 0 or greater.*

The frequency of the first set of waves. Increase for more waves, decrease for fewer.

A Amplitude: *Default: 0.06, Range: any.*

The amplitude of the first set of waves.

A Angle: *Default: 45, Range: any.*

The rotation angle of the first set of waves in degrees.

A Displace Angle: *Default: 0, Range: any.*

The warping direction of the first set of waves in degrees relative to their angle.

A Phase Start: *Default: 0, Range: any.*

The phase shift of the first set of waves.

A Phase Speed: *Default: 1, Range: any.*

If non-zero, the first set of wave automatically travels at this rate.

B Parameters:

B Frequency: *Default: 3, Range: 0 or greater.*

The frequency of the second set of waves. Increase for more waves, decrease for fewer.

B Amplitude: *Default: 0.12, Range: any.*

The amplitude of the second set of waves.

B Angle: *Default: 15, Range: any.*

The rotation angle of the second set of waves in degrees.

B Displace Angle: *Default: 0, Range: any.*

The warping direction of the second set of waves in degrees relative to their angle.

B Phase Start: *Default: 0, Range: any.*
The phase shift of the second set of waves.

B Phase Speed: *Default: -1, Range: any.*
If non-zero, the second set of wave automatically travels at this rate.

Other Parameters:

Filter: *Check-box, Default: on.*

If enabled, the image is adaptively filtered when it is resampled. This gives a better quality result when parts of the image are warped smaller.

Z Dist: *Default: 1, Range: 0.01 or greater.*

Scales the 'distance' of the image. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. Zooming in slightly can sometimes be used to hide edge artifacts.

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source image.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Blur Mask: *Default: 0, Range: 0 or greater, Shared.*

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default: off, Shared.*

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WarpTransformMask](#)

[WarpVortexMask](#)

[WarpWavesMask](#)

[WarpPuddleMask](#)

[WarpBubbleMask](#)

[WarpBubble2Mask](#)

[WarpFishEyeMask](#)

[WarpPuffMask](#)

[WarpShrivelMask](#)

[WarpRepeatMask](#)

[WarpChromaMask](#)

[WarpMagnifyMask](#)

[WarpCornerPinMask](#)

[WarpWaves2](#)

[WarpWaves2Comp](#)

[DissolveWaves](#)

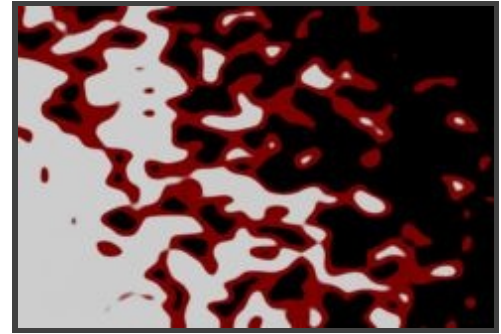
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WipeBlobs

In the S_Wipes Plugin.

Performs a wipe transition between two input clips using a pattern of blobs generated by a noise function. The Wipe Amt parameter should be animated to control the transition speed. Increase the Grad Add parameter to make the timing of the blobs pattern move across the screen during the wipe. Increase the Border Width parameter to draw a border at the wipe transition edges.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Frequency: *Default: 8, Range: 0.1 or greater.*

The frequency of the blobs pattern. Increase for more and smaller elements, or decrease for fewer and larger.

Rel Width: *Default: 1, Range: 0.01 or greater.*

The relative horizontal size of the blobs. Increase for wider blobs, decrease for taller ones.

Octaves: *Integer, Default: 1, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.432, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Edge Softness: *Default: 0, Range: 0 or greater, Shared.*

The width of the transition edges. Larger values will cause softer, less visible edges in the wipe pattern.

Grad Add: *Default: 0, Range: 0 to 10.*

If positive, a gradient will be added to the timing of the transition pattern so it moves across the screen during the wipe. This parameter can be adjusted using the Wipe Widget if enabled, but the value must be positive to make this widget visible.

Grad Angle: *Default: 0, Range: any.*

The direction of the wipe gradient in counter-clockwise degrees. This will have no effect unless Grad Add is positive. The Wipe Widget also allows adjusting this parameter.

Shift: *X & Y, Default: [0 0], Range: any.*

Translation of the blobs pattern.

Border Width: *Default: 0, Range: 0 or greater, Shared.*

If positive, a colored border is drawn at the wipe transition edges, using the border color, opacity, softness, and shift parameters below.

Border Color: *Default rgb: [0.75 0.75 0.75], Shared.*

The color of the border. This has no effect unless Border Width is positive.

Border Opacity: *Default: 1, Range: 0 to 1, Shared.*

The opacity of the border. Decrease to make the border transparent and allow the image under it to show through. This has no effect unless Border Width is positive.

Border Softness: *Default: 0, Range: 0 or greater, Shared.*

The softness of the border edges. This has no effect unless Border Width is positive.

Border Shift: *Default: 0, Range: any, Shared.*

Shifts the border ahead of or behind the transition edge. This has no effect unless Border Width is positive.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeLine](#)

[WipeCircle](#)

[WipeRectangle](#)

[WipeStar](#)

[WipeClock](#)

[WipeWedge](#)

[WipeDoubleWedge](#)

[WipeFourWedges](#)

[WipeDots](#)

[WipeChecker](#)

[WipeStripes](#)

[WipeRings](#)

[WipeCells](#)

[WipeTiles](#)

[WipePixelate](#)

[WipeDiffuse](#)

[WipeBubble](#)

[WipeClouds](#)

[WipeMoire](#)

[WipePlasma](#)

[WipePointalize](#)

[WipeWeave](#)

[Clouds](#)

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WipeBubble

In the S_Wipes Plugin.

Wipes between two input clips with a bubble-warp process performed within the transition area. The Wipe Amt parameter should be animated to control the transition speed.

Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.



Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Angle: *Default: 0, Range: any.*

The angle of the wipe direction in counter-clockwise degrees from the right. This can be adjusted using the Wipe Widget.

Frequency: *Default: 8, Range: 0.01 or greater.*

The frequency of the bubble pattern. Increase to zoom out, decrease to zoom in.

Frequency Rel X: *Default: 1, Range: 0.01 or greater.*

The relative horizontal frequency of the bubble pattern. Increase for taller bubbles, decrease for wider bubbles.

Octaves: *Integer, Default: 8, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.23, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Edge Width: *Default: 0.8, Range: 0.01 or greater.*

The width of the transition area. This can be adjusted using the Wipe Widget.

Bubble Amount: *Default: 0.5, Range: 0 or greater.*

The magnitude of the bubble distortion.

Params2:

Wrap: *X & Y, Popup menu, Default: [REFLECT REFLECT].*

Determines the method for accessing outside the borders of the source images.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeLine](#)

[WipeCircle](#)

[WipeRectangle](#)

[WipeStar](#)

[WipeClock](#)

[WipeWedge](#)

[WipeDoubleWedge](#)

[WipeFourWedges](#)

[WipeDots](#)

[WipeChecker](#)

[WipeStripes](#)

[WipeRings](#)

[WipeBlobs](#)

[WipeCells](#)

[WipeTiles](#)

[WipePixelate](#)

[WipeDiffuse](#)

[WipeClouds](#)

[WipeMoire](#)

[WipePlasma](#)

[WipePointalize](#)

[WipeWeave](#)

[WarpBubble](#)

[DissolveBubble](#)

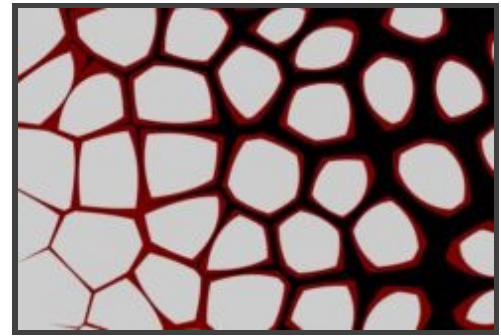
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WipeCells

In the S_Wipes Plugin.

Performs a wipe transition between two input clips using a pattern of procedurally generated cellular shapes. The Wipe Amt parameter should be animated to control the transition speed. Increase the Grad Add parameter to make the timing of the cells pattern move across the screen during the wipe. Increase the Border Width parameter to draw a border at the wipe transition edges.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Frequency: *Default: 8, Range: 0.01 or greater.*

The frequency of the cells pattern. Increase for more and smaller elements, or decrease for fewer and larger.

Rel Width: *Default: 1, Range: 0.1 or greater.*

The relative horizontal size of the cells. Increase for wider cells, decrease for taller ones.

Seed: *Default: 0.432, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Cells: *Popup menu, Default: OUT.*

The direction of the cells transition.

IN: the cells start large and shrink inwards.

OUT: the cells start small and grow outwards.

Edge Softness: *Default: 0, Range: 0 or greater, Shared.*

The width of the transition edges. Larger values will cause softer, less visible edges in the wipe pattern.

Grad Add: *Default: 0, Range: 0 to 10.*

If positive, a gradient will be added to the timing of the transition pattern so it moves across the screen during the wipe. This parameter can be adjusted using the Wipe Widget if enabled, but the value must be positive to make this widget visible.

Grad Angle: *Default: 0, Range: any.*

The direction of the wipe gradient in counter-clockwise degrees. This will have no effect unless Grad Add is positive. The Wipe Widget also allows adjusting this parameter.

Shift: *X & Y, Default: [0 0], Range: any.*

Translation of the cells pattern.

Border Width: *Default: 0, Range: 0 or greater, Shared.*

If positive, a colored border is drawn at the wipe transition edges, using the border color, opacity, softness, and shift

parameters below.

Border Color: *Default rgb: [0.75 0.75 0.75], Shared.*

The color of the border. This has no effect unless Border Width is positive.

Border Opacity: *Default: 1, Range: 0 to 1, Shared.*

The opacity of the border. Decrease to make the border transparent and allow the image under it to show through. This has no effect unless Border Width is positive.

Border Softness: *Default: 0, Range: 0 or greater, Shared.*

The softness of the border edges. This has no effect unless Border Width is positive.

Border Shift: *Default: 0, Range: any, Shared.*

Shifts the border ahead of or behind the transition edge. This has no effect unless Border Width is positive.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeLine](#)

[WipeCircle](#)

[WipeRectangle](#)

[WipeStar](#)

[WipeClock](#)

[WipeWedge](#)

[WipeDoubleWedge](#)

[WipeFourWedges](#)

[WipeDots](#)

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[WipeClouds](#)

[WipeMoire](#)

[WipePlasma](#)

[WipePointalize](#)

[WipeWeave](#)

[TextureCells](#)

[Sapphire](#)

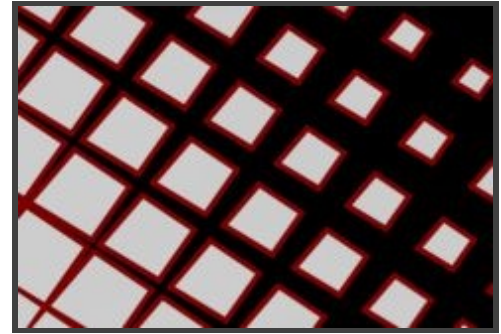
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WipeChecker

In the S_Wipes Plugin.

Performs a wipe transition between two input clips using a grid of growing or shrinking checkers. The Wipe Amt parameter should be animated to control the transition speed. Increase the Grad Add parameter to make the timing of the checker pattern move across the screen during the wipe. Increase the Border Width parameter to draw a border at the wipe transition edges.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Angle: *Default: 45, Range: any.*

The rotation of the overall checker pattern used for the wipe, in counter-clockwise degrees.

Frequency: *Default: 6, Range: 0.1 or greater.*

The frequency of the checker pattern. Increase for more and smaller elements, or decrease for fewer and larger.

Rel Width: *Default: 1, Range: 0.1 or greater.*

The relative horizontal size of the checkers. Increase for wider checkers, decrease for taller ones.

Rel Wid Pre Rot: *Default: 1, Range: 0.1 or greater.*

The relative size of the checkers in the direction of the current rotation angle. If the Angle parameter is zero this will have the same effect as Rel Width.

Checkers: *Popup menu, Default: GROW.*

The direction of the checkers transition.

SHRINK: the squares start large and shrink inwards.

GROW: the squares start small and grow outwards.

Edge Softness: *Default: 0, Range: 0 or greater, Shared.*

The width of the transition edges. Larger values will cause softer, less visible edges in the wipe pattern.

Grad Add: *Default: 0, Range: 0 to 10.*

If positive, a gradient will be added to the timing of the transition pattern so it moves across the screen during the wipe. This parameter can be adjusted using the Wipe Widget if enabled, but the value must be positive to make this widget visible.

Grad Angle: *Default: 0, Range: any.*

The direction of the wipe gradient in counter-clockwise degrees. This will have no effect unless Grad Add is positive. The Wipe Widget also allows adjusting this parameter.

Shift: *X & Y, Default: [0 0], Range: any.*

Translation of the checker pattern.

Border Width: *Default: 0, Range: 0 or greater, Shared.*

If positive, a colored border is drawn at the wipe transition edges, using the border color, opacity, softness, and shift parameters below.

Border Color: *Default rgb: [0.75 0.75 0.75], Shared.*

The color of the border. This has no effect unless Border Width is positive.

Border Opacity: *Default: 1, Range: 0 to 1, Shared.*

The opacity of the border. Decrease to make the border transparent and allow the image under it to show through.

This has no effect unless Border Width is positive.

Border Softness: *Default: 0, Range: 0 or greater, Shared.*

The softness of the border edges. This has no effect unless Border Width is positive.

Border Shift: *Default: 0, Range: any, Shared.*

Shifts the border ahead of or behind the transition edge. This has no effect unless Border Width is positive.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeLine](#)

[WipeCircle](#)

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[WipeClouds](#)

[WipeMoire](#)

[WipePlasma](#)

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[Sapphire](#)

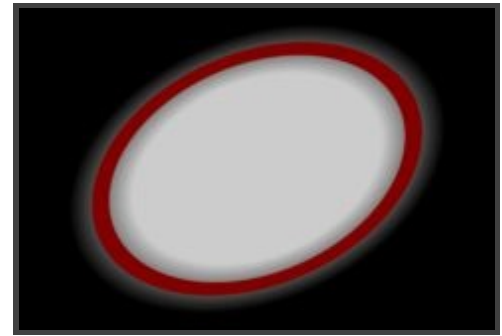
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WipeCircle

In the S_Wipes Plugin.

Performs a wipe transition between two input clips using a growing or shrinking circle. The Wipe Amt parameter should be animated to control the transition speed. Increase the Border Width parameter to draw a border at the wipe transition edges.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Center: *X & Y, Default: [0 0], Range: any.*

The location of the circle center in screen coordinates relative to the center of the frame. This parameter can be set by enabling and moving the Center Widget. Note that moving the circle center can also cause the circle size to change so that the current value of Wipe Amt remains correct.

Rel Width: *Default: 1, Range: 0.1 or greater.*

The relative width of the 'circle' shape. Increase to make a wider oval, decrease to make a taller one.

Rotate: *Default: 0, Range: any.*

The rotation angle of the 'circle' in counter-clockwise degrees. This has no effect if the Rel Width parameter is 1.0.

Wipe Direction: *Popup menu, Default: IN.*

The direction of the circle wipe.

IN: the circle contains the first image and shrinks inwards.

OUT: the circle contains the second image and grows outwards.

Edge Softness: *Default: 0, Range: 0 or greater, Shared.*

The width of the transition edges. Larger values will cause softer, less visible edges in the wipe pattern.

Border Width: *Default: 0, Range: 0 or greater, Shared.*

If positive, a colored border is drawn at the wipe transition edges, using the border color, opacity, softness, and shift parameters below.

Border Color: *Default rgb: [0.75 0.75 0.75], Shared.*

The color of the border. This has no effect unless Border Width is positive.

Border Opacity: *Default: 1, Range: 0 to 1, Shared.*

The opacity of the border. Decrease to make the border transparent and allow the image under it to show through. This has no effect unless Border Width is positive.

Border Softness: *Default: 0, Range: 0 or greater, Shared.*

The softness of the border edges. This has no effect unless Border Width is positive.

Border Shift: *Default: 0, Range: any, Shared.*

Shifts the border ahead of or behind the transition edge. This has no effect unless Border Width is positive.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeLine](#)

[WipeRectangle](#)

[WipeStar](#)

[WipeClock](#)

[WipeWedge](#)

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[WipeFourWedges](#)

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[WipeClouds](#)

[WipeMoire](#)

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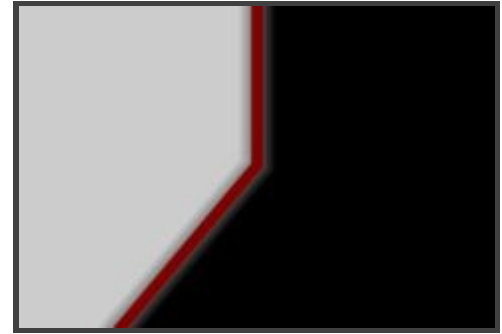
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WipeClock

In the S_Wipes Plugin.

Performs a clock wipe transition between two input clips. The Wipe Amt parameter should be animated to control the transition speed. Increase the Border Width parameter to draw a border at the wipe transition edges.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Center: *X & Y, Default: [0 0], Range: any.*

The location of the clock center in screen coordinates relative to the center of the frame. This parameter can be set by enabling and moving the Center Widget.

Angle Open: *Default: 0, Range: any.*

The angle in degrees at which the wipe opens at the start.

Angle Close: *Default: 0, Range: any.*

The angle in degrees at which the wipe closes at the finish. If Angle Open and Close are not equal, both edges will rotate. For example for a double edged clock wipe set Angle Close to 180.

Direction: *Popup menu, Default: Clockwise.*

Selects the direction of the edge rotation.

Clockwise: wipes with an edge rotating clockwise.

CounterCW: wipes with an edge rotating counter clockwise.

Edge Softness: *Default: 0, Range: 0 or greater, Shared.*

The width of the transition edges. Larger values will cause softer, less visible edges in the wipe pattern.

Border Width: *Default: 0, Range: 0 or greater, Shared.*

If positive, a colored border is drawn at the wipe transition edges, using the border color, opacity, softness, and shift parameters below.

Border Color: *Default rgb: [0.75 0.75 0.75], Shared.*

The color of the border. This has no effect unless Border Width is positive.

Border Opacity: *Default: 1, Range: 0 to 1, Shared.*

The opacity of the border. Decrease to make the border transparent and allow the image under it to show through. This has no effect unless Border Width is positive.

Border Softness: *Default: 0, Range: 0 or greater, Shared.*

The softness of the border edges. This has no effect unless Border Width is positive.

Border Shift: *Default: 0, Range: any, Shared.*

Shifts the border ahead of or behind the transition edge. This has no effect unless Border Width is positive. For the

clock wipe pattern, the shift amount is limited to within the area of Edge Softness.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeLine](#)

[WipeCircle](#)

[WipeRectangle](#)

[WipeStar](#)

[WipeWedge](#)

[WipeDoubleWedge](#)

[WipeFourWedges](#)

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[WipePointalize](#)

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WipeClouds

In the S_Wipes Plugin.

Transitions from the first clip to the second using a moving cloud texture. The Wipe Amt parameter should be animated to control the transition speed.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Frequency: *Default: 2, Range: 0.01 or greater.*

The frequency of the clouds pattern. Increase for more and smaller elements, or decrease for fewer and larger.

Frequency Rel X: *Default: 0.4, Range: 0.01 or greater.*

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Octaves: *Integer, Default: 8, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.23, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Grad Add: *Default: 0, Range: 0 to 10.*

If positive, a gradient will be added to the timing of the transition pattern so it moves across the screen during the wipe. This parameter can be adjusted using the Wipe Widget if enabled, but the value must be positive to make this widget visible.

Grad Angle: *Default: 0, Range: any.*

The direction of the wipe gradient in counter-clockwise degrees. This will have no effect unless Grad Add is positive. The Wipe Widget also allows adjusting this parameter.

Params2:

Shift Start: *X & Y, Default: [0 0], Range: any.*

Translation offset of the texture. Since the texture is procedurally generated it can be shifted with no repeating units or seams occurring.

Shift Speed: *X & Y, Default: [2 0], Range: any.*

Translation speed of the texture. If non-zero, the result is automatically animated to shift at this rate. The result of animated Speed values may not be intuitive, so for variable speed motion it is usually best to set this to 0 and animate the Shift Start values instead.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

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[WipeCircle](#)
[WipeRectangle](#)
[WipeStar](#)
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WipeDiffuse

In the S_Wipes Plugin.

Wipes between two input clips with a pixel-diffusion process performed within the transition area. The Wipe Amt parameter should be animated to control the transition speed. The pixelated look of this effect depends on the image resolution, so it is recommended to test your final resolution before processing.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Angle: *Default: 0, Range: any.*

The angle of the wipe direction in counter-clockwise degrees from the right. This can be adjusted using the Wipe Widget.

Diffuse Amount: *Default: 0.5, Range: 0 or greater.*

The magnitude of the pixel diffusion.

Wrap: *Popup menu, Default: REFLECT.*

Determines the method for accessing outside the borders of the source images.

NO: gives black beyond the borders.

TILE: repeats a copy of the image.

REFLECT: repeats a mirrored copy. Edges are often less visible with this method.

Edge Width: *Default: 0.8, Range: 0.01 or greater.*

The width of the transition area. This can be adjusted using the Wipe Widget.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeLine](#)

[WipeCircle](#)

[WipeRectangle](#)

[WipeStar](#)

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[WipeDots](#)

[WipeChecker](#)

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[DissolveDiffuse](#)

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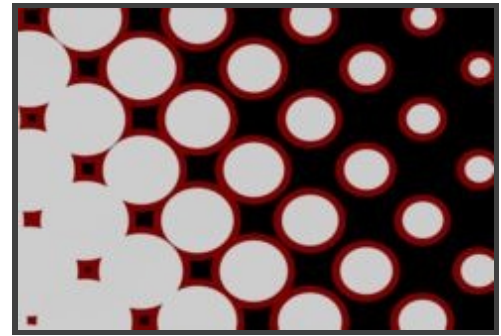
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WipeBlobs
WipeCells
WipeTiles
WipePixelate
WipeBubble
WipeClouds
WipeMoire
WipePlasma
WipePointalize
WipeWeave

WipeDots

In the S_Wipes Plugin.

Performs a wipe transition between two input clips using a grid of growing or shrinking dots. The Wipe Amt parameter should be animated to control the transition speed. Increase the Grad Add parameter to make the timing of the dots pattern move across the screen during the wipe. Increase the Border Width parameter to draw a border at the wipe transition edges.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Angle: *Default: 45, Range: any.*

The rotation of the overall dots pattern used for the wipe, in counter-clockwise degrees.

Frequency: *Default: 6, Range: 0.1 or greater.*

The frequency of the dots pattern. Increase for more and smaller elements, or decrease for fewer and larger.

Rel Width: *Default: 1, Range: 0.1 or greater.*

The relative horizontal size of the dots. Increase for wider dots, decrease for taller ones.

Rel Wid Pre Rot: *Default: 1, Range: 0.1 or greater.*

The relative size of the dots in the direction of the current rotation angle. If the Angle parameter is zero this will have the same effect as Rel Width.

Dots: *Popup menu, Default: GROW.*

The direction of the dots transition.

SHRINK: the dots start large and shrink inwards.

GROW: the dots start small and grow outwards.

Edge Softness: *Default: 0, Range: 0 or greater, Shared.*

The width of the transition edges. Larger values will cause softer, less visible edges in the wipe pattern.

Grad Add: *Default: 0, Range: 0 to 10.*

If positive, a gradient will be added to the timing of the transition pattern so it moves across the screen during the wipe. This parameter can be adjusted using the Wipe Widget if enabled, but the value must be positive to make this widget visible.

Grad Angle: *Default: 0, Range: any.*

The direction of the wipe gradient in counter-clockwise degrees. This will have no effect unless Grad Add is positive. The Wipe Widget also allows adjusting this parameter.

Shift: *X & Y, Default: [0 0], Range: any.*

Translation of the dots pattern.

Border Width: *Default: 0, Range: 0 or greater, Shared.*

If positive, a colored border is drawn at the wipe transition edges, using the border color, opacity, softness, and shift parameters below.

Border Color: *Default rgb: [0.75 0.75 0.75], Shared.*

The color of the border. This has no effect unless Border Width is positive.

Border Opacity: *Default: 1, Range: 0 to 1, Shared.*

The opacity of the border. Decrease to make the border transparent and allow the image under it to show through.

This has no effect unless Border Width is positive.

Border Softness: *Default: 0, Range: 0 or greater, Shared.*

The softness of the border edges. This has no effect unless Border Width is positive.

Border Shift: *Default: 0, Range: any, Shared.*

Shifts the border ahead of or behind the transition edge. This has no effect unless Border Width is positive.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeLine](#)

[WipeCircle](#)

[WipeRectangle](#)

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[WipeMoire](#)

[WipePlasma](#)

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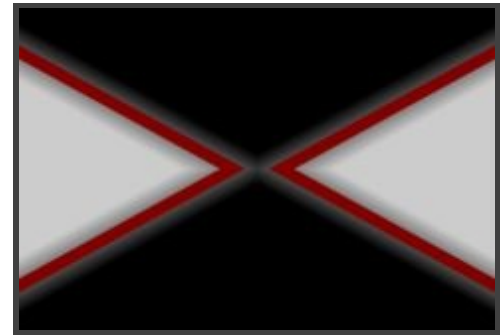
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WipeDoubleWedge

In the S_Wipes Plugin.

Performs a wipe transition between two input clips using two wedge shapes. The Wipe Amt parameter should be animated to control the transition speed. Increase the Border Width parameter to draw a border at the wipe transition edges.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Angle: *Default: 0, Range: any.*

The rotation angle of the wedge shapes in counter-clockwise degrees.

Sharpness: *Default: 2, Range: 0 or greater.*

The sharpness of the point of the wedges.

Wipe Direction: *Popup menu, Default: IN.*

Selects the direction of the motion of the wedges.

IN: the two wedges described by angle and sharpness move inwards to perform the transition.

OUT: the wedges move outwards to perform the transition. Note that wedges moving out from the sides is equivalent to wedges moving in from the top and bottom (with the sharpness complemented).

Edge Softness: *Default: 0, Range: 0 or greater, Shared.*

The width of the transition edges. Larger values will cause softer, less visible edges in the wipe pattern.

Border Width: *Default: 0, Range: 0 or greater, Shared.*

If positive, a colored border is drawn at the wipe transition edges, using the border color, opacity, softness, and shift parameters below.

Border Color: *Default rgb: [0.75 0.75 0.75], Shared.*

The color of the border. This has no effect unless Border Width is positive.

Border Opacity: *Default: 1, Range: 0 to 1, Shared.*

The opacity of the border. Decrease to make the border transparent and allow the image under it to show through. This has no effect unless Border Width is positive.

Border Softness: *Default: 0, Range: 0 or greater, Shared.*

The softness of the border edges. This has no effect unless Border Width is positive.

Border Shift: *Default: 0, Range: any, Shared.*

Shifts the border ahead of or behind the transition edge. This has no effect unless Border Width is positive.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeLine](#)
[WipeCircle](#)
[WipeRectangle](#)
[WipeStar](#)
[WipeClock](#)
[WipeWedge](#)
[WipeFourWedges](#)
[WipeDots](#)
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WipeFourWedges

In the S_Wipes Plugin.

Performs a wipe transition between two input clips using a pattern of four wedges merging into an 'X' shape. The Wipe Amt parameter should be animated to control the transition speed. Increase the Border Width parameter to draw a border at the wipe transition edges.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Angle: *Default: 0, Range: any.*

The rotation angle in counter-clockwise degrees of the wedge pattern.

Aspect Scale: *Default: 1, Range: 0.01 or greater.*

Scales the aspect ratio of the wedge pattern. Increase to stretch the shapes in the horizontal direction.

Wipe Direction: *Popup menu, Default: IN.*

Selects the direction of motion of the wedges.

IN: wedges move inwards making an 'X' shape.

OUT: starts with an 'X' and widens outwards.

Edge Softness: *Default: 0, Range: 0 or greater, Shared.*

The width of the transition edges. Larger values will cause softer, less visible edges in the wipe pattern.

Border Width: *Default: 0, Range: 0 or greater, Shared.*

If positive, a colored border is drawn at the wipe transition edges, using the border color, opacity, softness, and shift parameters below.

Border Color: *Default rgb: [0.75 0.75 0.75], Shared.*

The color of the border. This has no effect unless Border Width is positive.

Border Opacity: *Default: 1, Range: 0 to 1, Shared.*

The opacity of the border. Decrease to make the border transparent and allow the image under it to show through. This has no effect unless Border Width is positive.

Border Softness: *Default: 0, Range: 0 or greater, Shared.*

The softness of the border edges. This has no effect unless Border Width is positive.

Border Shift: *Default: 0, Range: any, Shared.*

Shifts the border ahead of or behind the transition edge. This has no effect unless Border Width is positive.

See general info for: [Res.](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeLine](#)
[WipeCircle](#)
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WipeLine

In the S_Wipes Plugin.

Performs a simple line wipe transition between two input clips. The Wipe Amt parameter should be animated to control the transition speed. Increase the Border Width parameter to draw a border at the wipe transition edges.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Angle: *Default: 45, Range: any.*

The angle of the wipe direction in degrees. Use 0 for a wipe from left to right, 90 or -90 for a vertical wipe, 180 for a wipe from right to left.

Edge Softness: *Default: 0, Range: 0 or greater, Shared.*

The width of the transition edges. Larger values will cause softer, less visible edges in the wipe pattern.

Border Width: *Default: 0, Range: 0 or greater, Shared.*

If positive, a colored border is drawn at the wipe transition edges, using the border color, opacity, softness, and shift parameters below.

Border Color: *Default rgb: [0.75 0.75 0.75], Shared.*

The color of the border. This has no effect unless Border Width is positive.

Border Opacity: *Default: 1, Range: 0 to 1, Shared.*

The opacity of the border. Decrease to make the border transparent and allow the image under it to show through. This has no effect unless Border Width is positive.

Border Softness: *Default: 0, Range: 0 or greater, Shared.*

The softness of the border edges. This has no effect unless Border Width is positive.

Border Shift: *Default: 0, Range: any, Shared.*

Shifts the border ahead of or behind the transition edge. This has no effect unless Border Width is positive.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeCircle](#)

[WipeRectangle](#)

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WipePixelate

WipeDiffuse

WipeBubble

WipeClouds

WipeMoire

WipePlasma

WipePointalize

WipeWeave

WipeMoire

In the S_Wipes Plugin.

Performs a wipe transition between two input clips using a pattern of combined concentric rings. The Wipe Amt parameter should be animated to control the transition speed. The Phase Speed and Moire Speed parameters cause the rings to automatically animate over time. Increase the Grad Add parameter to make the timing of the pattern move across the screen during the wipe. Increase the Border Width parameter to draw a border at the wipe transition edges.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

A Center: *X & Y, Default: [-0.2 -0.2], Range: any.*

The center location of the A ring pattern.

B Center: *X & Y, Default: [0.2 0.2], Range: any.*

The center location of the B ring pattern.

Frequency: *Default: 5, Range: 0.5 or greater.*

The frequency of the moire pattern. Increase for more and smaller elements, or decrease for fewer and larger.

Edge Softness: *Default: 0, Range: 0 or greater, Shared.*

The width of the transition edges. Larger values will cause softer, less visible edges in the wipe pattern.

Grad Add: *Default: 0, Range: any.*

If positive, a gradient will be added to the timing of the transition pattern so it moves across the screen during the wipe. This parameter can be adjusted using the Wipe Widget if enabled, but the value must be positive to make this widget visible.

Grad Angle: *Default: 0, Range: any.*

The direction of the wipe gradient in counter-clockwise degrees. This will have no effect unless Grad Add is positive. The Wipe Widget also allows adjusting this parameter.

Border Width: *Default: 0, Range: 0 or greater, Shared.*

If positive, a colored border is drawn at the wipe transition edges, using the border color, opacity, softness, and shift parameters below.

Border Color: *Default rgb: [0.75 0.75 0.75], Shared.*

The color of the border. This has no effect unless Border Width is positive.

Border Opacity: *Default: 1, Range: 0 to 1, Shared.*

The opacity of the border. Decrease to make the border transparent and allow the image under it to show through. This has no effect unless Border Width is positive.

Border Softness: *Default: 0, Range: 0 or greater, Shared.*

The softness of the border edges. This has no effect unless Border Width is positive.

Border Shift: *Default: 0, Range: any, Shared.*

Shifts the border ahead of or behind the transition edge. This has no effect unless Border Width is positive.

Params2:

A Rel Freq: *Default: 1, Range: 0.1 or greater.*

Scales the ring frequencies of the A ring pattern.

A Rel Width: *Default: 1, Range: 0.2 or greater.*

The relative horizontal size of the A ring pattern. Increase for wider ring shapes, decrease for taller ones.

A Rotate: *Default: 0, Range: any.*

Rotation in degrees of the A ring pattern. Note that this will have no effect when A Rel Width is 1.

B Rel Freq: *Default: 1, Range: 0.1 or greater.*

Scales the ring frequencies of the B ring pattern.

B Rel Width: *Default: 1, Range: 0.2 or greater.*

The relative horizontal size of the B ring pattern. Increase for wider ring shapes, decrease for taller ones.

B Rotate: *Default: 0, Range: any.*

Rotation in degrees of the B ring pattern. Note that this will have no effect when A Rel Width is 1.

Phase Start: *Default: 0, Range: any.*

The phase of the ring patterns. Increase to shift outwards from the centers, or decrease to shift inwards toward the centers. The phase parameters are relative to the period of the rings (1/frequency) so changing any by exactly 1 should give the same result again.

Phase Speed: *Default: 1, Range: any.*

The automatic change in phase during the transition period.

Moire Phase: *Default: 0, Range: any.*

The relative start phase of the two ring patterns. Shifts the A ring pattern out and the B ring pattern in by the same amount, causing changes in the moire pattern itself.

Moire Speed: *Default: 0, Range: any.*

Automatic change in the relative phase of the two ring patterns during the transition.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeLine](#)

[WipeCircle](#)

[WipeRectangle](#)

[WipeStar](#)

[WipeClock](#)

[WipeWedge](#)

[WipeDoubleWedge](#)

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[WipeDots](#)

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WipePixelate

In the S_Wipes Plugin.

Transitions between two input clips by adding blocks of pixels of one clip onto another in a semi-random order. The Wipe Amt parameter should be animated to control the transition speed. Adjust the Edge Width and Chunky parameters for different pixelated patterns.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Pixel Frequency: *Default: 20, Range: 0.01 or greater.*

Increase for smaller and more pixels, decrease for fewer and larger pixels.

Pixel Rel Width: *Default: 1, Range: 0.01 or greater.*

The relative horizontal size of the pixels. Increase for wide pixels, decrease for tall ones.

Seed: *Default: 0.23, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Chunky: *Default: 0, Range: 0 or greater.*

Increase to cause the pixels to be added with a more clustered ordering.

Grad Add: *Default: 0.75, Range: 0 to 5.*

If positive, a gradient will be added to the timing of the transition pattern so it moves across the screen during the wipe. This parameter can be adjusted using the Wipe Widget if enabled, but the value must be positive to make this widget visible.

Grad Angle: *Default: 0, Range: any.*

The direction of the wipe gradient in counter-clockwise degrees. This will have no effect unless Grad Add is positive. The Wipe Widget also allows adjusting this parameter.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeLine](#)

[WipeCircle](#)

[WipeRectangle](#)

[WipeStar](#)

[WipeClock](#)

[WipeWedge](#)

[WipeDoubleWedge](#)

[Mosaic](#)

[DissolvePixelate](#)

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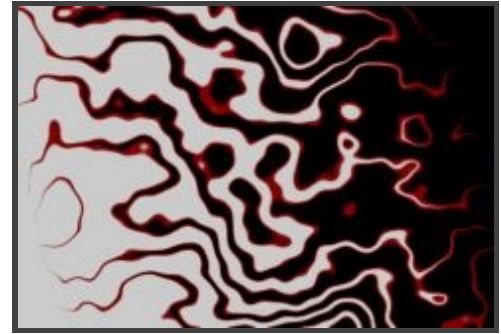
[Introduction](#)

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WipePlasma

In the S_Wipes Plugin.

Performs a wipe transition between two input clips using a plasma texture with moving tendrils. The Wipe Amt parameter should be animated to control the transition speed. Increase the Grad Add parameter to make the timing of the plasma pattern move across the screen during the wipe. Increase the Border Width parameter to draw a border at the wipe transition edges.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Frequency: *Default: 4, Range: 0.01 or greater.*

The frequency of the plasma pattern. Increase for more and smaller elements, or decrease for fewer and larger.

Freq Rel X: *Default: 1, Range: 0.01 or greater.*

The relative horizontal frequency of the texture. Increase to stretch it vertically or decrease to stretch it horizontally.

Octaves: *Integer, Default: 4, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.12, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Layers: *Default: 8, Range: 1 or greater.*

The number of layers of plasma lines. Increase for a more striped effect.

Edge Softness: *Default: 0, Range: 0 or greater, Shared.*

The width of the transition edges. Larger values will cause softer, less visible edges in the wipe pattern.

Grad Add: *Default: 0.5, Range: any.*

If positive, a gradient will be added to the timing of the transition pattern so it moves across the screen during the wipe. This parameter can be adjusted using the Wipe Widget if enabled, but the value must be positive to make this widget visible.

Grad Angle: *Default: 0, Range: any.*

The direction of the wipe gradient in counter-clockwise degrees. This will have no effect unless Grad Add is positive. The Wipe Widget also allows adjusting this parameter.

Shift: *X & Y, Default: [0 0], Range: any.*

Translation of the plasma pattern.

Border Width: *Default: 0, Range: 0 or greater, Shared.*

If positive, a colored border is drawn at the wipe transition edges, using the border color, opacity, softness, and shift parameters below.

Border Color: *Default rgb: [0.75 0.75 0.75], Shared.*

The color of the border. This has no effect unless Border Width is positive.

Border Opacity: *Default: 1, Range: 0 to 1, Shared.*

The opacity of the border. Decrease to make the border transparent and allow the image under it to show through. This has no effect unless Border Width is positive.

Border Softness: *Default: 0, Range: 0 or greater, Shared.*

The softness of the border edges. This has no effect unless Border Width is positive.

Border Shift: *Default: 0, Range: any, Shared.*

Shifts the border ahead of or behind the transition edge. This has no effect unless Border Width is positive.

Params2:

Plasma Grad: *Default: 0, Range: 0 or greater.*

The amplitude of a gradient which aligns the plasma tendrils. Increase for a more zebra-like striped effect.

Plasma Grad Angle: *Default: 0, Range: any.*

Orients the gradient of the plasma lines. This only has an affect if the Plasma Grad parameter is positive.

Phase Start: *Default: 0, Range: any.*

Phase offset of the plasma lines.

Phase Speed: *Default: 2, Range: any.*

Phase speed of the plasma lines. If non-zero, the lines are automatically animated to undulate at this rate.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeLine](#)

[WipeCircle](#)

[WipeRectangle](#)

[WipeStar](#)

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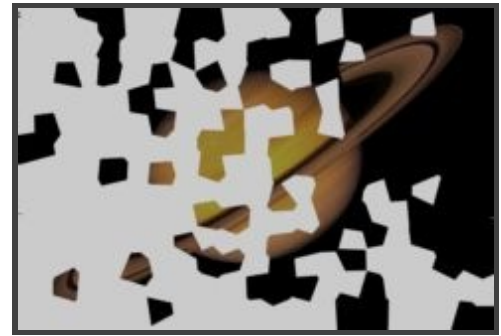
[Introduction](#)

WipeWeave

WipePointitalize

In the S_Wipes Plugin.

Transitions between two input clips by adding brush-like polygon shapes from one clip onto another in a semi-random order. The Wipe Amt parameter should be animated to control the transition speed. Adjust the Frequency to change the size of the shapes, and adjust the Edge Width and Chunky parameters for different patterns.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Edge Width: *Default: 2, Range: 0.1 or greater.*

The width of the transition area.

Angle: *Default: 0, Range: any.*

The angle of the wipe direction in degrees. Use 0 for a wipe from left to right, 90 or -90 for a vertical wipe, 180 for a wipe from right to left.

Frequency: *Default: 20, Range: 5 or greater.*

Increase for smaller and more polygon shapes, decrease for fewer and larger.

Chunky: *Default: 0.2, Range: 0 or greater.*

Increase to cause the shapes to be added with a more clustered ordering.

Stroke Length: *Default: 0, Range: any.*

Determines the length of the brush stroke shapes. A zero value gives regular polygon shapes. Increase for longer more random shapes. Negative values cause the strokes to orient in the other direction. Note that when this parameter is non-zero, the stroke shapes will also vary over time as if being re-painted.

Stroke Align: *Default: 0.5, Range: 0 or greater.*

Increase to smooth out the directions of the strokes so nearby strokes are more parallel.

Seed: *Default: 0.23, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeLine](#)

[WipeCircle](#)

[WipeRectangle](#)

[Pointitalize](#)

[Sapphire](#)

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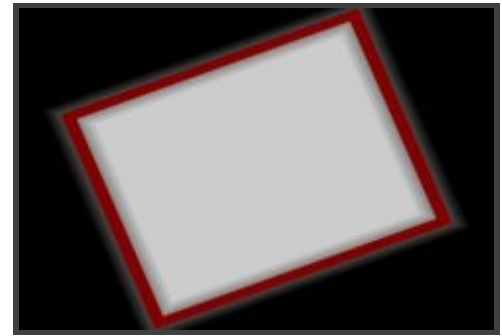
WipeStar
WipeClock
WipeWedge
WipeDoubleWedge
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WipeRectangle

In the S_Wipes Plugin.

Performs a wipe transition between two input clips using a growing or shrinking rectangle. The Wipe Amt parameter should be animated to control the transition speed. Increase the Border Width parameter to draw a border at the wipe transition edges.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Center: *X & Y, Default: [0 0], Range: any.*

The location of the rectangle center in screen coordinates relative to the center of the frame. This parameter can be set by enabling and moving the Center Widget. Note that moving the rectangle center can also cause the rectangle size to change so that the current value of Wipe Amt remains correct.

Angle: *Default: 0, Range: any.*

The rotation angle of the rectangle in counter-clockwise degrees.

Rel Width: *Default: 1.25, Range: 0.02 or greater.*

The relative width of the rectangle. Increase to make wider, decrease to make thinner.

Wipe Direction: *Popup menu, Default: IN.*

The direction of the rectangle wipe.

IN: the rectangle contains the first image and shrinks inwards.

OUT: the rectangle contains the second image and grows outwards.

Edge Softness: *Default: 0, Range: 0 or greater, Shared.*

The width of the transition edges. Larger values will cause softer, less visible edges in the wipe pattern.

Border Width: *Default: 0, Range: 0 or greater, Shared.*

If positive, a colored border is drawn at the wipe transition edges, using the border color, opacity, softness, and shift parameters below.

Border Color: *Default rgb: [0.75 0.75 0.75], Shared.*

The color of the border. This has no effect unless Border Width is positive.

Border Opacity: *Default: 1, Range: 0 to 1, Shared.*

The opacity of the border. Decrease to make the border transparent and allow the image under it to show through. This has no effect unless Border Width is positive.

Border Softness: *Default: 0, Range: 0 or greater, Shared.*

The softness of the border edges. This has no effect unless Border Width is positive.

Border Shift: *Default: 0, Range: any, Shared.*

Shifts the border ahead of or behind the transition edge. This has no effect unless Border Width is positive.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeLine](#)

[WipeCircle](#)

[WipeStar](#)

[WipeClock](#)

[WipeWedge](#)

[WipeDoubleWedge](#)

[WipeFourWedges](#)

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WipeRings

In the S_Wipes Plugin.

Performs a wipe transition between two input clips using a pattern of concentric rings. The Wipe Amt parameter should be animated to control the transition speed. Increase the Grad Add parameter to make the timing of the rings pattern move across the screen during the wipe. Increase the Border Width parameter to draw a border at the wipe transition edges.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Frequency: *Default: 4, Range: 0.1 or greater.*

The frequency of the rings pattern. Increase for more and smaller elements, or decrease for fewer and larger.

Rel Width: *Default: 1, Range: 0.1 or greater.*

The relative horizontal size of the rings. Increase for wider rings, decrease for taller ones.

Shift Stripes: *Default: 0, Range: any.*

Translation of the stripe pattern.

Bulge: *Default: 0, Range: -1 to 1.*

Increase to make the inner rings thicker than the outer rings, or set negative to make the outer rings thicker.

Rotate: *Default: 0, Range: any.*

The rotation angle of the ring pattern in counter-clockwise degrees. Note that you will not notice any rotation when the Rel Width value is 1.

Edge Softness: *Default: 0, Range: 0 or greater, Shared.*

The width of the transition edges. Larger values will cause softer, less visible edges in the wipe pattern.

Grad Add: *Default: 0, Range: any.*

If positive, a gradient will be added to the timing of the transition pattern so it moves across the screen during the wipe. This parameter can be adjusted using the Wipe Widget if enabled, but the value must be positive to make this widget visible.

Grad Angle: *Default: 0, Range: any.*

The direction of the wipe gradient in counter-clockwise degrees. This will have no effect unless Grad Add is positive. The Wipe Widget also allows adjusting this parameter.

Center: *X & Y, Default: [0 0], Range: any.*

The center location of the ring pattern.

Radial Grad: *Default: 0, Range: any.*

If non-zero, a radial gradient will be added to the timing of the rings pattern so it moves outwards from the center during the wipe. If negative, it moves inwards towards the center.

Border Width: *Default: 0, Range: 0 or greater, Shared.*

If positive, a colored border is drawn at the wipe transition edges, using the border color, opacity, softness, and shift parameters below.

Border Color: *Default rgb: [0.75 0.75 0.75], Shared.*

The color of the border. This has no effect unless Border Width is positive.

Border Opacity: *Default: 1, Range: 0 to 1, Shared.*

The opacity of the border. Decrease to make the border transparent and allow the image under it to show through.

This has no effect unless Border Width is positive.

Border Softness: *Default: 0, Range: 0 or greater, Shared.*

The softness of the border edges. This has no effect unless Border Width is positive.

Border Shift: *Default: 0, Range: any, Shared.*

Shifts the border ahead of or behind the transition edge. This has no effect unless Border Width is positive.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeLine](#)

[WipeCircle](#)

[WipeRectangle](#)

[WipeStar](#)

[WipeClock](#)

[WipeWedge](#)

[WipeDoubleWedge](#)

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[WipePixelate](#)

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WipeStar

In the S_Wipes Plugin.

Performs a wipe transition between two input clips using a star shape. The Wipe Amt parameter should be animated to control the transition speed. Increase the Border Width parameter to draw a border at the wipe transition edges.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Center: *X & Y, Default: [0 0], Range: any.*

The location of the star center in screen coordinates relative to the center of the frame. This parameter can be set by enabling and moving the Center Widget. Note that moving the star center can also cause the star size to change so that the current value of Wipe Amt remains correct.

Points: *Integer, Default: 5, Range: 3 or greater.*

The number of points in the star.

Pointiness: *Default: 1.1, Range: 0 or greater.*

The pointiness of the star. Increase for sharp spikes, decrease for more regular polygonal shapes.

Angle: *Default: 0, Range: any.*

The rotation angle of the star in counter-clockwise degrees.

Wipe Direction: *Popup menu, Default: IN.*

The direction of the star wipe.

IN: the star contains the first image and shrinks inwards.

OUT: the star contains the second image and grows outwards.

Edge Softness: *Default: 0, Range: 0 or greater, Shared.*

The width of the transition edges. Larger values will cause softer, less visible edges in the wipe pattern.

Rel Width: *Default: 1, Range: 0.02 or greater.*

The relative horizontal size of the star. Increase for wider star, decrease for taller ones.

Border Width: *Default: 0, Range: 0 or greater, Shared.*

If positive, a colored border is drawn at the wipe transition edges, using the border color, opacity, softness, and shift parameters below.

Border Color: *Default rgb: [0.75 0.75 0.75], Shared.*

The color of the border. This has no effect unless Border Width is positive.

Border Opacity: *Default: 1, Range: 0 to 1, Shared.*

The opacity of the border. Decrease to make the border transparent and allow the image under it to show through.

This has no effect unless Border Width is positive.

Border Softness: *Default: 0, Range: 0 or greater, Shared.*

The softness of the border edges. This has no effect unless Border Width is positive.

Border Shift: *Default: 0, Range: any, Shared.*

Shifts the border ahead of or behind the transition edge. This has no effect unless Border Width is positive.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeLine](#)

[WipeCircle](#)

[WipeRectangle](#)

[WipeClock](#)

[WipeWedge](#)

[WipeDoubleWedge](#)

[WipeFourWedges](#)

[WipeDots](#)

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[WipeWeave](#)

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WipeStripes

In the S_Wipes Plugin.

Performs a wipe transition between two input clips using a series of stripes. The Wipe Amt parameter should be animated to control the transition speed. Increase the Grad Add parameter to make the timing of the stripe pattern move across the screen during the wipe. Increase the Border Width parameter to draw a border at the wipe transition edges.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Angle: *Default: 0, Range: any.*

The rotation of the overall stripes pattern used for the wipe, in counter-clockwise degrees.

Frequency: *Default: 6, Range: 0 or greater.*

The frequency of the stripes pattern. Increase for more and smaller elements, or decrease for fewer and larger.

Shift: *Default: 0, Range: any.*

Translation of the stripes pattern.

Edge Softness: *Default: 0, Range: 0 or greater, Shared.*

The width of the transition edges. Larger values will cause softer, less visible edges in the wipe pattern.

Grad Add: *Default: 0, Range: 0 to 10.*

If positive, a gradient will be added to the timing of the transition pattern so it moves across the screen during the wipe. This parameter can be adjusted using the Wipe Widget if enabled, but the value must be positive to make this widget visible.

Grad Angle: *Default: 0, Range: any.*

The direction of the wipe gradient in counter-clockwise degrees. This will have no effect unless Grad Add is positive. The Wipe Widget also allows adjusting this parameter.

Border Width: *Default: 0, Range: 0 or greater, Shared.*

If positive, a colored border is drawn at the wipe transition edges, using the border color, opacity, softness, and shift parameters below.

Border Color: *Default rgb: [0.75 0.75 0.75], Shared.*

The color of the border. This has no effect unless Border Width is positive.

Border Opacity: *Default: 1, Range: 0 to 1, Shared.*

The opacity of the border. Decrease to make the border transparent and allow the image under it to show through. This has no effect unless Border Width is positive.

Border Softness: *Default: 0, Range: 0 or greater, Shared.*

The softness of the border edges. This has no effect unless Border Width is positive.

Border Shift: *Default: 0, Range: any, Shared.*

Shifts the border ahead of or behind the transition edge. This has no effect unless Border Width is positive.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeLine](#)

[WipeCircle](#)

[WipeRectangle](#)

[WipeStar](#)

[WipeClock](#)

[WipeWedge](#)

[WipeDoubleWedge](#)

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[WipeClouds](#)

[WipeMoire](#)

[WipePlasma](#)

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[Sapphire](#)

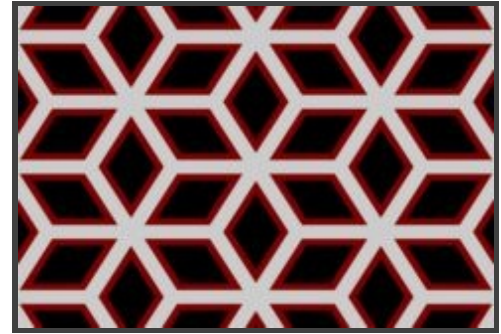
[Plug-ins](#)

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WipeTiles

In the S_Wipes Plugin.

Performs a wipe transition between two input clips using a pattern of growing or shrinking hexagons, triangles, diamonds, or stars. The Wipe Amt parameter should be animated to control the transition speed. Increase the Grad Add parameter to make the timing of the tile pattern move across the screen during the wipe. Increase the Border Width parameter to draw a border at the wipe transition edges.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Angle: *Default: 0, Range: any.*

The rotation of the overall tiles pattern used for the wipe, in counter-clockwise degrees.

Frequency: *Default: 4, Range: 0.1 or greater.*

The frequency of the tiles pattern. Increase for more and smaller elements, or decrease for fewer and larger.

Rel Width: *Default: 1, Range: 0.1 or greater.*

The relative horizontal size of the tiles. Increase for wider tiles, decrease for taller ones.

Rel Wid Pre Rot: *Default: 1, Range: 0.1 or greater.*

The relative size of the tiles in the direction of the current rotation angle. If the Angle parameter is zero this will have the same effect as Rel Width.

Morph Shapes: *Default: 0, Range: any.*

The angle in degrees to rotate the sides of the shapes. This can be used to transform one shape into another, or generate new different tile patterns.

Tile Shapes: *Popup menu, Default: Hexagons.*

The tile shapes used to generate the pattern. Note that the Morph Shapes parameter can transform the shapes away from this setting.

Hexagons: A honeycomb pattern of hexagons

Triangles: A triangle mesh

Diamonds: A pattern made of diamonds

Stars: Six-pointed stars merge to make a pattern of squares.

Edge Softness: *Default: 0, Range: 0 or greater, Shared.*

The width of the transition edges. Larger values will cause softer, less visible edges in the wipe pattern.

Grad Add: *Default: 0, Range: any.*

If positive, a gradient will be added to the timing of the transition pattern so it moves across the screen during the wipe. This parameter can be adjusted using the Wipe Widget if enabled, but the value must be positive to make this widget visible.

Grad Angle: *Default: 0, Range: any.*

The direction of the wipe gradient in counter-clockwise degrees. This will have no effect unless Grad Add is positive. The Wipe Widget also allows adjusting this parameter.

Shift: *X & Y, Default: [0 0], Range: any.*

Translation of the tiles pattern.

Border Width: *Default: 0, Range: 0 or greater, Shared.*

If positive, a colored border is drawn at the wipe transition edges, using the border color, opacity, softness, and shift parameters below.

Border Color: *Default rgb: [0.75 0.75 0.75], Shared.*

The color of the border. This has no effect unless Border Width is positive.

Border Opacity: *Default: 1, Range: 0 to 1, Shared.*

The opacity of the border. Decrease to make the border transparent and allow the image under it to show through. This has no effect unless Border Width is positive.

Border Softness: *Default: 0, Range: 0 or greater, Shared.*

The softness of the border edges. This has no effect unless Border Width is positive.

Border Shift: *Default: 0, Range: any, Shared.*

Shifts the border ahead of or behind the transition edge. This has no effect unless Border Width is positive.

Params2:

Shapes Dir: *Popup menu, Default: GROW.*

The direction of change of the tile sizes.

SHRINK: the tiles start large and shrink inwards.

GROW: the tiles start small and grow outwards.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeLine](#)

[WipeCircle](#)

[WipeRectangle](#)

[WipeStar](#)

[WipeClock](#)

[WipeWedge](#)

[WipeDoubleWedge](#)

[WipeFourWedges](#)

[WipeDots](#)

[WipeChecker](#)

[WipeStripes](#)

[WipeRings](#)

[WipeBlobs](#)

[WipeCells](#)

[WipePixelate](#)

[WipeDiffuse](#)

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[WipeClouds](#)

[WipeMoire](#)

[WipePlasma](#)

[HalfTone](#)

[TextureTiles](#)

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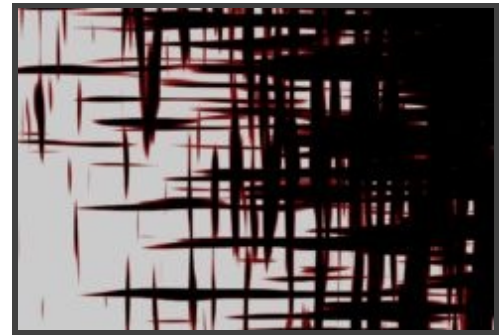
WipePointalize

WipeWeave

WipeWeave

In the S_Wipes Plugin.

Performs a wipe transition between two input clips using a texture resembling perpendicular woven strands. The Wipe Amt parameter should be animated to control the transition speed. Increase the Grad Add parameter to make the timing of the weave pattern move across the screen during the wipe. Increase the Border Width parameter to draw a border at the wipe transition edges.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Frequency: *Default: 20, Range: 0.05 or greater.*

The frequency of the weave pattern. Increase for more and smaller elements, or decrease for fewer and larger.

Rel Length: *Default: 10, Range: 0.1 or greater.*

The relative length of the strands. Increase for longer thinner strands. Decrease for shorter thicker strands.

Octaves: *Integer, Default: 2, Range: 1 to 10.*

The number of summed layers of noise. Each octave is twice the frequency and half the amplitude of the previous. A single octave gives a smooth texture. Adding octaves makes the result approach a fractal (1/f) noise texture.

Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different results and the same value should give a repeatable result.

Strands: *Popup menu, Default: Grow.*

The direction of the weave pattern transition.

Shrink: The strands start large and shrink inwards.

Grow: The strands start small and grow outwards.

Edge Softness: *Default: 0, Range: 0 or greater, Shared.*

The width of the transition edges. Larger values will cause softer, less visible edges in the wipe pattern.

Grad Add: *Default: 0, Range: any.*

If positive, a gradient will be added to the timing of the transition pattern so it moves across the screen during the wipe. This parameter can be adjusted using the Wipe Widget if enabled, but the value must be positive to make this widget visible.

Grad Angle: *Default: 0, Range: any.*

The direction of the wipe gradient in counter-clockwise degrees. This will have no effect unless Grad Add is positive. The Wipe Widget also allows adjusting this parameter.

Shift: *X & Y, Default: [0 0], Range: any.*

Translation of the weave pattern.

H Speed X: *Default: 0, Range: any.*

The horizontal speed of the horizontal strands. If non-zero, the horizontal strands will automatically crawl along their lengths at this rate.

V Speed Y: *Default: 0, Range: any.*

The vertical speed of the vertical strands. If non-zero, the vertical strands will automatically crawl along their lengths at this rate.

Border Width: *Default: 0, Range: 0 or greater, Shared.*

If positive, a colored border is drawn at the wipe transition edges, using the border color, opacity, softness, and shift parameters below.

Border Color: *Default rgb: [0.75 0.75 0.75], Shared.*

The color of the border. This has no effect unless Border Width is positive.

Border Opacity: *Default: 1, Range: 0 to 1, Shared.*

The opacity of the border. Decrease to make the border transparent and allow the image under it to show through. This has no effect unless Border Width is positive.

Border Softness: *Default: 0, Range: 0 or greater, Shared.*

The softness of the border edges. This has no effect unless Border Width is positive.

Border Shift: *Default: 0, Range: any, Shared.*

Shifts the border ahead of or behind the transition edge. This has no effect unless Border Width is positive.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeLine](#)

[WipeCircle](#)

[WipeRectangle](#)

[WipeStar](#)

[WipeClock](#)

[WipeWedge](#)

[WipeDoubleWedge](#)

[WipeFourWedges](#)

[WipeDots](#)

[WipeChecker](#)

[WipeStripes](#)

[WipeRings](#)

[WipeBlobs](#)

[WipeCells](#)

[WipeTiles](#)

[WipePixelate](#)

[WipeDiffuse](#)

[WipeBubble](#)

[WipeClouds](#)

[WipeMoire](#)

[WipePlasma](#)

[WipePointalize](#)

[TextureWeave](#)

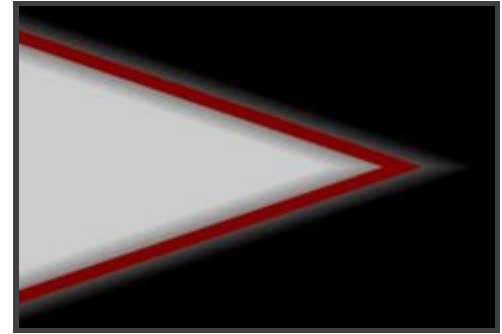
[Sapphire Plug-ins](#)

[Introduction](#)

WipeWedge

In the S_Wipes Plugin.

Performs a wipe transition between two input clips using a wedge shape. The Wipe Amt parameter should be animated to control the transition speed. Increase the Border Width parameter to draw a border at the wipe transition edges.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Wipe Amt: *AutoTransition, Default: 0, Range: -0.5 to 1.5, Shared.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Angle: *Default: 0, Range: any.*

The rotation angle of the wedge shape in counter-clockwise degrees.

Sharpness: *Default: 2, Range: 0 or greater.*

The sharpness of the point of the wedge.

Wipe Direction: *Popup menu, Default: IN.*

Selects the direction of the wedge motion.

IN: the wedge moves in, point first.

OUT: the wedge moves out, point last.

Edge Softness: *Default: 0, Range: 0 or greater, Shared.*

The width of the transition edges. Larger values will cause softer, less visible edges in the wipe pattern.

Border Width: *Default: 0, Range: 0 or greater, Shared.*

If positive, a colored border is drawn at the wipe transition edges, using the border color, opacity, softness, and shift parameters below.

Border Color: *Default rgb: [0.75 0.75 0.75], Shared.*

The color of the border. This has no effect unless Border Width is positive.

Border Opacity: *Default: 1, Range: 0 to 1, Shared.*

The opacity of the border. Decrease to make the border transparent and allow the image under it to show through. This has no effect unless Border Width is positive.

Border Softness: *Default: 0, Range: 0 or greater, Shared.*

The softness of the border edges. This has no effect unless Border Width is positive.

Border Shift: *Default: 0, Range: any, Shared.*

Shifts the border ahead of or behind the transition edge. This has no effect unless Border Width is positive.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[WipeLine](#)
[WipeCircle](#)
[WipeRectangle](#)
[WipeStar](#)
[WipeClock](#)
[WipeDoubleWedge](#)
[WipeFourWedges](#)
[WipeDots](#)
[WipeChecker](#)
[WipeStripes](#)
[WipeRings](#)
[WipeBlobs](#)
[WipeCells](#)
[WipeTiles](#)
[WipePixelate](#)
[WipeDiffuse](#)
[WipeBubble](#)
[WipeClouds](#)
[WipeMoire](#)
[WipePlasma](#)
[WipePointalize](#)
[WipeWeave](#)

[Sapphire](#)
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Wipes: Swish3D

In the S_Wipes Plugin.

Dissolves between two input clips while performing 3D moves on each. During the transition the From clip is transformed by the Zdist, Rotate, Swivel, Tilt, Shift, Scale, and Shear parameters, and the To clip is transformed by the opposite of these values. The overall amount of motion for each image can be scaled by the Rel Amp From and Rel Amp To parameters.



Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.

Parameters:

Amount: *AutoTransition, Default: 0, Range: -0.5 to 1.5.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Motion Blur: *Default: 1, Range: 0 or greater.*

Scales the amount of motion blur to use.

Center: *X & Y, Default: [0 0], Range: any.*

The center position about which to zoom, scale, or rotate.

Z Dist: *Default: 0.1, Range: -1 or greater.*

The 'distance' to transform the From clip. Values greater than 1.0 move it farther away and make it smaller. Values less than 1.0 move the image closer and enlarge it. By default, the To clip is also transformed by the opposite of this value.

Rotate: *Default: 0, Range: any.*

Rotates by the specified angle in counter-clockwise degrees.

Fade: *Popup menu, Default: From and To.*

Determines which clips are faded in or out during the transition.

From and To: Cross fades both clips during the transition.

Only From: Fades out the From clip and composites that over the To clip. This causes the To clip to remain fully opaque in areas where the From clip does not overlap with it.

Only To: Fades in the To clip and composites that over the From clip. This causes the From clip to remain fully opaque in areas where the To clip does not overlap with it.

Slow In: *Default: 0.5, Range: 0 or greater.*

If positive, causes the transition to start more gradually.

Slow Out: *Default: 0.5, Range: 0 or greater.*

If positive, causes the transition to end more gradually.

Shift: *X & Y, Default: [0 0], Range: any.*

Translates horizontally or vertically.

Scale: *Default:* 1, *Range:* 0 or greater.

Scales the size of the clips.

Fade Mid Time: *Default:* 0.5, *Range:* 0 to 1.

The midpoint in time of the image dissolve. Decrease for an earlier dissolve or increase for a later dissolve. If this is 1.0 the From clip will remain fully opaque for the entire transition. You can use this in combination with the Combine parameter to create various reveals without fading either clip. For example set Dissolve Mid Time to 1.0, Combine to Fade From, and then Shift and/or Rotate to cause the From clip to move off the screen.

Swivel: *Default:* 0, *Range:* -90 to 90.

Rotates left or right in 3D about a vertical axis.

Tilt: *Default:* 0, *Range:* -90 to 90.

Rotates up or down in 3D about a horizontal axis. You can use Swivel and Tilt together to rotate about arbitrary diagonal axes.

Perspective Amt: *Default:* 1, *Range:* 0.25 to 4.

Controls the amount of lens telescoping while applying Swivel and Tilt. Increase for more 3D perspective.

Brightness: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the result. This can be animated to brighten the result during the transition, but should typically start and end at 1.0 to avoid any pop at the start or end of the transition.

Mid Brightness: *Default:* 1, *Range:* 0 or greater.

Scales the brightness of the result at the middle of the transition by this amount. Automatically ramps to this brightness and then back again during the transition.

Params2:

Rel Amp From: *Default:* 1, *Range:* any.

Scales the amount of transformation applied to the From clip. Set to zero to disable moving the From clip. Make negative to reverse the motion.

Rel Amp To: *Default:* -1, *Range:* any.

Scales the amount of transformation applied to the To clip. By default, the To clip is transformed in the opposite direction of the From clip. Set to zero to disable moving the To clip. Make positive to move the To clip in the same direction as the From clip.

Scale Rel: *X & Y, Default:* [1 1], *Range:* 0 or greater.

Scales the relative horizontal or vertical size of the clips.

Shear: *X & Y, Default:* [0 0], *Range:* any.

Shears horizontally or vertically.

Wrap From: *X & Y, Popup menu, Default:* [No No].

Determines the method for accessing outside the borders of the From image.

No: gives black beyond the borders.

Tile: repeats a copy of the image.

Reflect: repeats a mirrored copy. Edges are often less visible with this method.

Filter: *Check-box, Default:* on.

If enabled, the image is adaptively filtered when it is resampled. This gives better quality results when the image is warped smaller.

Wrap To: *X & Y, Popup menu, Default:* [No No].

Determines the method for accessing outside the borders of the To image.

No: gives black beyond the borders.

Tile: repeats a copy of the image.

Reflect: repeats a mirrored copy. Edges are often less visible with this method.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[SwishPan](#)

[BlurMotion](#)

[WarpTransform](#)

[WarpCornerPin](#)

[Sapphire Plug-ins](#)

[Introduction](#)

Wipes: SwishPan

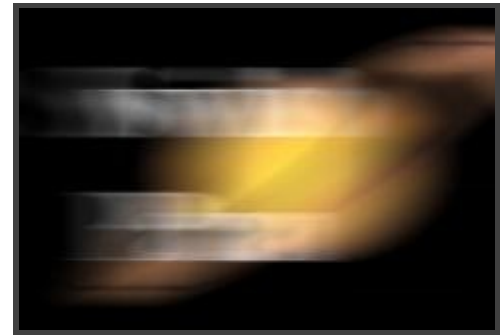
In the S_Wipes Plugin.

Transitions between two input clips by sliding one clip off the frame and the other clip on, and adding motion blur to give the appearance of a quick pan. This works best when the duration of the transition is short.

Inputs:

From: Starts the transition with this clip.

To: Ends the transition with this clip.



Parameters:

Amount: *AutoTransition, Default: 0, Range: -0.5 to 1.5.*

The transition ratio between the From and To inputs. A value of 0 gives only the From input and a value of 1 gives only the To input. By default this parameter will automatically animate from 0 to 1 to perform a complete wipe.

Blur Amount: *Default: 2, Range: 0 or greater.*

Amount of motion blur to use. If the direction is left or right, the blur is horizontal. If the direction is up or down, the blur is vertical.

Overlap: *Default: 0, Range: any.*

Amount to overlap the two clips. Where the clips overlap, they will be screened together. This is useful for eliminating bad edges.

Direction: *Popup menu, Default: LEFT.*

Direction that the clips move during the transition.

LEFT: Moves right-to-left

RIGHT: Moves left-to-right

UP: Moves upward.

DOWN: Moves downward.

Slow In: *Default: 0.5, Range: 0 or greater.*

If positive, causes the transition to start more gradually.

Slow Out: *Default: 0.5, Range: 0 or greater.*

If positive, causes the transition to end more gradually.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Swish3D](#)

[Blur](#)

[Sapphire Plug-ins](#)

[Introduction](#)

ZComp

Layers a source input over or under a second source input based on the difference of two depth images. The DepthA input should be a 'z' depth image corresponding to the objects in the first input, and DepthB should be a 'z' depth image corresponding to the objects in the second input.

Inputs:

SourceA: The first input image.

SourceB: The second input image.

DepthA: The depth image corresponding to the objects in SourceA

DepthB: The depth image corresponding to the objects in SourceB

Parameters:

Anti Alias: *Default: 0, Range: 0 or greater.*

The amount of depth difference over which to interpolate the source inputs instead of taking just the closer one. Specified as a fraction of the entire depth range: 0 does no antialiasing, 1 interpolates over the entire depth range.

Z Buffer: *Popup menu, Default: White is Near.*

How to interpret the values in the Z buffer.

Black is Near: Black pixels in the Z buffer indicate that the object at that point is near (close to you), and white means far away.

White is Near: White pixels in the Z buffer indicate that the object at that point is near (close to you), and black means far away.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[ZBlur](#)

[ZGlow](#)

[ZFogLinear](#)

[Sapphire Plug-ins](#)

[Introduction](#)



ZBlur

In the S_ZBlurs Plugin.

Blurs areas of the source clip by different amounts using depth values from a ZBuffer input. Separates the input into a number of layers in depth and blurs them by different amounts depending on each layer's depth. Linear fog can also be mixed into the result. To use this effect, first set ZBuffer:Black Is Near or White Is Near according to your Z buffer, then adjust the focus depth and depth of field parameters to get the look you want. To help set the focus depth, you can use Show: In Focus Zone.



Inputs:

Source: The clip to be processed.

ZBuffer: The input clip containing depth values for each Source pixel. These values should be in the range of black to white, and it is best if not anti-aliased. Normally black corresponds to the farthest objects and white to the nearest, though this can be adjusted using Z Buffer parameter.

Parameters:

Focal Depth: *Default: 0, Range: any, Shared.*

The depth of the focus plane; 0 is near and 1 is far. Areas with this Z value will be in focus. Objects near this depth may be in focus depending on the Depth of Field parameter. You can use Show: In Focus Zone to show the Focal Depth when adjusting. If the effect of this parameter seems backwards, you can invert the depth values using the Z Buffer parameter.

Depth Of Field: *Default: 0.1, Range: 0 to 1, Shared.*

Specifies how wide a range of depths near the Focal Depth will be in focus. If the Focal Depth is 0.5 and Depth of Field is 0.2, all objects with Z values from 0.4 to 0.6 will be in focus. Set to zero to have only objects exactly at the Focal Depth in focus. You can use Show: In Focus Zone to show this when adjusting.

Layers: *Integer, Default: 5, Range: 2 to 50, Shared.*

The number of depth layers to separate the source into. More layers require more processing but give smoother results in Z. More layers are sometimes needed to avoid visible seams between the layers.

Mode: *Popup menu, Default: Interp Layers.*

Determines how the differently blurred layers are combined.

Comp Layers: the closer layers are composited over the farther layers. This method often gives better results if you have objects at different depths overlapping each other with discontinuous values in your depth image. However, this option can be slower, and sometimes artifacts between layers are visible.

Interp Layers: the layers are interpolated using depth image values. This method gives smoother transitions between layers, and is usually better if there are no sharp changes in your depth image.

Z Buffer: *Popup menu, Default: White is Near.*

How to interpret the values in the Z buffer.

Black is Near: Black pixels in the Z buffer indicate that the object at that point is near (close to you), and white means far away.

White is Near: White pixels in the Z buffer indicate that the object at that point is near (close to you), and black means far away.

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the normal result of the effect.

In Focus Zone: Highlights the in-focus areas of the clip to make it easier to select the focal point and depth.

Width: *Default: 0.2, Range: 0 or greater, Shared.*

Scales the overall amount of blur. This parameter can be adjusted using the Width Widget.

Width Rel: *X & Y, Default: [1 1], Range: 0 or greater, Shared.*

The relative horizontal and vertical blur widths. Set Blur Rel X to 0 for a vertical-only blur, or set Blur Rel Y to 0 for a horizontal-only blur. This parameter can be adjusted using the Width Widget.

Params2:

Width Rel Near: *Default: 1, Range: 0 or greater, Shared.*

Scales the blur width for parts of the image that are nearer than the focal plane.

Width Rel Far: *Default: 1, Range: 0 or greater, Shared.*

Scales the blur width for parts of the image that are farther away than the focal plane.

Fog Near: *Default: 0, Range: 0 to 1, Shared.*

The amount of fog to add to nearby (close) objects.

Fog Far: *Default: 0, Range: 0 to 1, Shared.*

The amount of fog to add to far away objects.

Fog Color: *Default rgb: [0.5 0.5 0.5], Shared.*

The fog color should normally match the sky or background color of the source clip. Use gray for mist, brown for smog, blue for underwater, etc.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[ZDefocus](#)

[ZGlow](#)

[ZConvolve](#)

[Sapphire](#)

[Plug-ins](#)

[Introduction](#)

ZConvolve

Convolves areas of the source clip using a kernel which is made larger or smaller using depth values from a ZBuffer input. Separates the input into a number of layers and applies different sized convolution blurs depending on the distance from the focal depth, and depth of field. This is similar to ZDefocus but with an iris shape (or Kernel) that comes from a clip.



Inputs:

Source: The clip to be processed.

Kernel: The filter kernel or shape for the convolution. This should normally be all black around the edges (outside the specified Kernel Crop region), with a non-black central part. A larger shape normally produces blurrier results. Only the part of the kernel within the two Kernel Crop params is considered; the part outside that boundary is ignored.

ZBuffer: The input clip containing depth values for each Source pixel. These values should be in the range of black to white, and it is best if not anti-aliased. Normally black corresponds to the farthest objects and white to the nearest, though this can be adjusted using Z Buffer parameter.

Parameters:

Focal Depth: *Default: 0, Range: any.*

The depth of the focus plane; 0 is near and 1 is far. Areas with this Z value will be in focus. Objects near this depth may be in focus depending on the Depth of Field parameter. You can use Show: In Focus Zone to show the Focal Depth when adjusting. If the effect of this parameter seems backwards, you can invert the depth values using the Z Buffer parameter.

Depth Of Field: *Default: 0.1, Range: 0 to 1.*

Specifies how wide a range of depths near the Focal Depth will be in focus. If the Focal Depth is 0.5 and Depth of Field is 0.2, all objects with Z values from 0.4 to 0.6 will be in focus. Set to zero to have only objects exactly at the Focal Depth in focus. You can use Show: In Focus Zone to show this when adjusting.

Size: *Default: 1, Range: 0 or greater.*

The maximum amount to resize the kernel larger or smaller. 1.0 is the original size. This parameter can be adjusted using the Size Widget.

Layers: *Integer, Default: 5, Range: 2 to 50.*

The number of depth layers to separate the source into. More layers require more processing but give smoother results in Z. More layers are sometimes needed to avoid visible seams between the layers.

Mode: *Popup menu, Default: Interp Layers.*

Determines how the differently blurred layers are combined.

Comp Layers: the closer layers are composited over the farther layers. This method often gives better results if you have objects at different depths overlapping each other with discontinuous values in your depth image. However, this option can be slower, and sometimes artifacts between layers are visible.

Interp Layers: the layers are interpolated using depth image values. This method gives smoother transitions between layers, and is usually better if there are no sharp changes in your depth image.

Z Buffer: *Popup menu, Default: White is Near.*

How to interpret the values in the Z buffer.

Black is Near: Black pixels in the Z buffer indicate that the object at that point is near (close to you), and white means far away.

White is Near: White pixels in the Z buffer indicate that the object at that point is near (close to you), and black means far away.

Show: *Popup menu, Default: Result.*

Selects the type of output.

Result: Show the final output.

Kernel: Show the convolve kernel over the final output. Use this to adjust the kernel cropping and threshold parameters.

In Focus Zone: Show the in-focus zone highlighted over the original image. Use this to adjust the focal depth and depth of field.

Size Rel X: *Default: 1, Range: 0 or greater.*

Increase to make the kernel fatter or wider without changing its height. Decrease to shrink it horizontally, making it thinner.

Size Rel Y: *Default: 1, Range: 0 or greater.*

Increase to make the kernel taller without changing its weight. Decrease to shrink it vertically, making it flatter.

Autoscale: *Popup menu, Default: Luma.*

In convolution, either a larger or brighter kernel will make the result image brighter. The kernel must be auto-scaled or normalized so the result is, on average, as bright as the input. The autoscaling can be done in several ways, each of which is best in certain circumstances. With a monochrome kernel or with Color Kernel turned off, Max Channel, Luma, and Indep Channels all give the same result.

Luma: Autoscales the kernel by summing the luminances of each kernel pixel. This method preserves changes in the kernel's hue, but normalizes the luma, so a brighter or darker kernel will have no effect. Use the Scale parameter to adjust the result brightness.

Count Nonzero: Count how many kernel pixels are nonzero (brighter than black), but otherwise ignore how bright they are. This method is best if you want variations in kernel hue and luma to show up in the result. But blurring the kernel will give a dimmer result, since there will be more nonzero pixels.

Kernel Threshold: *Default: 0.001, Range: 0 or greater.*

Any kernel value below this will be treated as black. It's important for the edges of the kernel image to be completely black, or the result will have a grayish cast to it. If your kernel image may have a little noise in the black areas, turn up threshold a little to remove that background noise.

Clamp Below Threshold: *Check-box, Default: on.*

When turned on, values below the threshold are clamped to zero. This usually gives the best result. For certain special cases with partially-negative kernels, turning this off gives you additional flexibility in designing your kernel.

Edge Mode: *X & Y, Popup menu, Default: [BLACK BLACK].*

Determines the behavior when accessing areas outside the source image.

BLACK: Areas outside the source image are treated as black, which can produce dark areas around the edges of the image. Select this for fastest rendering.

REPEAT: Repeats the last pixel outside the border of the image.

REFLECT: Reflects the image outside the border.

Kernel Center: *X & Y, Default: [0 0], Range: any.*

The center point of the kernel; if you think of convolution as repeated stamping of the kernel at each point of the source, the center is where the stamp aligns with the source pixels it's stamped over. If you move the center to the

right in the kernel, the whole result image will move to the left, and similarly up and down. This parameter is ignored if AutoCenter is on. It may be helpful to turn on Show Kernel while adjusting this parameter. Note that if Autocenter is off, the center point is always included in the kernel no matter what this param is set to. This parameter can be adjusted using the Kernel Center Widget.

Combine: *Popup menu, Default: Convolve Only.*

Determines how the convolved image is combined with the original source.

Convolve Only: Only show the convolved image. Use this option for a blur or defocus-like effect

Screen: Screen the convolved image with the original source. Use this option for a glow or glare-like effect.

Add: Add the convolved image to the original source.

Difference: Show the difference between the convolved image and the source.

Autocenter: *Check-box, Default: on.*

Automatically finds the center of the kernel image. Turning this on makes the effect ignore the Kernel Center parameter.

Size Rel Near: *Default: 1, Range: 0 or greater.*

Scales the kernel size for parts of the image that are nearer than the focal plane.

Size Rel Far: *Default: 1, Range: 0 or greater.*

Scales the kernel size for parts of the image that are farther away than the focal plane.

Use Gamma: *Default: 1, Range: 0.1 or greater.*

Values above 1 cause highlights in the source clip to keep their brightness after the convolution filter is applied.

Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of the result.

Mix With Source: *Default: 0, Range: 0 to 1.*

Interpolates between the convolved result (0) and the original source (1). 0.1 can give a nice misty effect since it mixes only a little of the source in.

Params2:

Threshold: *Default: 0, Range: 0 or greater.*

Any source value below this will be treated as black. When combining the convolved result with the original, you can increase this value to only convolve bright areas of the source. Typically when using this parameter, you will also set Combine to Screen or Add to get a glare-like effect.

Kernel Crop1 X: *Default: 0, Range: any, Shared.*

With Kernel Crop1 Y, forms upper left corner of the kernel area. Parts of the kernel image outside the rectangle defined by Kernel Crop1 and Kernel Crop2 are assumed to be black. Making this area smaller to avoid processing the kernel's black edges can speed up the convolution somewhat. It may be helpful to turn on Show Kernel while adjusting this parameter. Note that if Autocenter is off, the center point is always included in the kernel no matter what this param is set to.

Kernel Crop1 Y: *Default: 0, Range: any, Shared.*

Upper left Y coord of kernel crop rect.

Kernel Crop2 X: *Default: 1e+04, Range: any, Shared.*

The lower right X corner of the kernel area; see Kernel Crop1.

Kernel Crop2 Y: *Default: 1e+04, Range: any, Shared.*

The lower right Y corner of the kernel area; see Kernel Crop1.

Boost Highlights: *Default:* 0, *Range:* 0 or greater.

The amount to increase the luma of the highlights in the source clip. Increase this parameter to blow out the highlights without affecting the darks or mid-tones.

Threshold Add Color: *Default rgb:* [0 0 0].

This can be used to raise the threshold on a specific color and thereby reduce the convolved result generated on areas of the source clip containing that color.

Hilite Threshold: *Default:* 0.9, *Range:* 0 or greater.

The minimum luma value for highlights. Pixels brighter than this will be brightened according to the Boost Highlights parameter.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[ZDefocus](#)

[ZBlur](#)

[ZGlow](#)

[ZFogLinear](#)

[Convolve](#)

[RackDefocus](#)

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ZDefocus

In the S_ZBlurs Plugin.

Defocuses areas of the source clip by different amounts using depth values from a ZBuffer input. Separates the input into a number of depth layers and applies different amounts of defocus depending on each layer's depth. To use this effect, first set ZBuffer:Black Is Near or White Is Near according to your Z buffer, then adjust the Focus Depth and Depth Of Field parameters to get the look you want. To help set the Focus Depth, you can use Show: In Focus Zone.



Inputs:

Source: The clip to be processed.

ZBuffer: The input clip containing depth values for each Source pixel. These values should be in the range of black to white, and it is best if not anti-aliased. Normally black corresponds to the farthest objects and white to the nearest, though this can be adjusted using Z Buffer parameter.

Parameters:

Focal Depth: *Default: 0, Range: any, Shared.*

The depth of the focus plane; 0 is near and 1 is far. Areas with this Z value will be in focus. Objects near this depth may be in focus depending on the Depth of Field parameter. You can use Show: In Focus Zone to show the Focal Depth when adjusting. If the effect of this parameter seems backwards, you can invert the depth values using the Z Buffer parameter.

Depth Of Field: *Default: 0.1, Range: 0 to 1, Shared.*

Specifies how wide a range of depths near the Focal Depth will be in focus. If the Focal Depth is 0.5 and Depth of Field is 0.2, all objects with Z values from 0.4 to 0.6 will be in focus. Set to zero to have only objects exactly at the Focal Depth in focus. You can use Show: In Focus Zone to show this when adjusting.

Layers: *Integer, Default: 5, Range: 2 to 50, Shared.*

The number of depth layers to separate the source into. More layers require more processing but give smoother results in Z. More layers are sometimes needed to avoid visible seams between the layers.

Mode: *Popup menu, Default: Interp Layers.*

Determines how the differently blurred layers are combined.

Comp Layers: the closer layers are composited over the farther layers. This method often gives better results if you have objects at different depths overlapping each other with discontinuous values in your depth image. However, this option can be slower, and sometimes artifacts between layers are visible.

Interp Layers: the layers are interpolated using depth image values. This method gives smoother transitions between layers, and is usually better if there are no sharp changes in your depth image.

Z Buffer: *Popup menu, Default: White is Near.*

How to interpret the values in the Z buffer.

Black is Near: Black pixels in the Z buffer indicate that the object at that point is near (close to you), and white means far away.

White is Near: White pixels in the Z buffer indicate that the object at that point is near (close to you), and black means far away.

Show: *Popup menu, Default: Result.*

Selects the type of output

Result: Shows the final result of the effect.

In Focus Zone: Highlights the in-focus areas of the clip to make it easier to select the focal point and depth.

Shape: Show the iris shape instead of the defocused image.

Width: *Default: 0.2, Range: 0 or greater, Shared.*

Scales the overall defocus width. This parameter can be adjusted using the Width Widget.

Rel Height: *Default: 1, Range: 0.01 or greater, Shared.*

The relative height of the iris shape. If it is not 1, circles become ellipses, etc.

Roundness: *Default: 0, Range: any, Shared.*

Modifies the shape of the simulated camera iris. A value of 1 produces a circle; 0 gives a flat-sided polygon with a number of sides given by the Shape parameter. Less than 0 causes the sides to squeeze inward giving a star shape, while a value greater than 1 causes the corners to squeeze inward, giving a flowery shape. Has no effect if the Shape is set to Circle.

Shape: *Popup menu, Default: Circle.*

Determines the shape of the simulated camera iris.

Circle: round.

3 sides: triangle.

4 sides: square.

5 sides: pentagon.

6 sides: hexagon.

7 sides: etc.

Rotate: *Default: 0, Range: any, Shared.*

Rotates the iris shape.

Bokeh: *Default: 0, Range: any, Shared.*

Softens the outer edge of the iris shape, which gives a softer look to the defocused highlights. A negative value darkens the center of the iris shape, producing a ring-like defocus shape.

Use Gamma: *Default: 1, Range: 0.1 or greater, Shared.*

Values above 1 cause highlights in the source clip to keep their brightness after the defocus is applied.

Scale Result: *Default: 1, Range: 0 or greater, Shared.*

Scales the brightness of the result.

Offset Darks: *Default: 0, Range: any, Shared.*

Adds this gray value to the darker regions of the result. This can be negative to increase contrast.

Edge Mode: *Popup menu, Default: REFLECT.*

Determines the behavior when accessing areas outside the source image.

BLACK: Areas outside the source image are treated as black, which can produce dark areas around the edges of the image. Select this for fastest rendering.

REPEAT: Repeats the last pixel outside the border of the image.

REFLECT: Reflects the image outside the border.

Mix With Source: *Default: 0, Range: 0 to 1, Shared.*

Interpolates between the defocused result and the original source. Set this to 1 for the original source.

Boost Highlights: *Default: 0, Range: 0 or greater, Shared.*

The amount to increase the luma of the highlights in the source clip. Increase this parameter to blow out the highlights without affecting the darks or mid-tones.

Hilite Threshold: *Default: 0.9, Range: 0 or greater, Shared.*

The minimum luma value for highlights. Pixels brighter than this will be brightened according to the Boost Highlights parameter.

Params2:

Lens Noise: *Default: 0, Range: 0 or greater, Shared.*

Increase to add noise to the iris shape, dirtying up the defocus a little. Can make the result more realistic. Turn up past 1 for a more stylistic result.

Noise Freq: *Default: 10, Range: 0.01 or greater, Shared.*

The frequency of the added noise. Ignored if Lens Noise is zero.

Noise Freq Rel X: *Default: 1, Range: 0.01 or greater, Shared.*

The relative horizontal frequency of the added iris noise. Increase to stretch it vertically or decrease to stretch it horizontally.

Noise Seed: *Default: 0.123, Range: 0 or greater, Shared.*

The seed value for the added noise. To make the noise appear different on each frame, animate this to be different on each frame. The actual value doesn't matter; only that it's different.

Width Rel Near: *Default: 1, Range: 0 or greater, Shared.*

Scales the defocus width for parts of the image that are nearer than the focal plane.

Width Rel Far: *Default: 1, Range: 0 or greater, Shared.*

Scales the defocus width for parts of the image that are farther away than the focal plane.

Fog Near: *Default: 0, Range: 0 to 1, Shared.*

The amount of fog to add to nearby (close) objects.

Fog Far: *Default: 0, Range: 0 to 1, Shared.*

The amount of fog to add to far away objects.

Fog Color: *Default rgb: [0.5 0.5 0.5], Shared.*

The fog color should normally match the sky or background color of the source clip. Use gray for mist, brown for smog, blue for underwater, etc.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[RackDefocus](#)

[ZBlur](#)

[ZGlow](#)

[ZConvolve](#)

[ZFogLinear](#)

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ZFogExponential

In the S_ZFog Plugin.

Mixes a fog color into the source clip using depth values from a ZBuffer input. The fog starts at the nearest depth and increases exponentially to the farthest depth at a rate depending on the Fog Density.

Inputs:

Source: The clip to be processed.

ZBuffer: The input clip containing depth values for each Source pixel. These values should be in the range of black to white, and it is best if not anti-aliased. Normally black corresponds to the farthest objects and white to the nearest, though this can be adjusted using Z Buffer parameter.

Parameters:

Fog Density: *Default: 0.7, Range: 0 to 1.*
The density of the fog.

Z Buffer: *Popup menu, Default: White is Near.*
How to interpret the values in the Z buffer.

Black is Near: Black pixels in the Z buffer indicate that the object at that point is near (close to you), and white means far away.

White is Near: White pixels in the Z buffer indicate that the object at that point is near (close to you), and black means far away.

Fog Color: *Default rgb: [0.5 0.5 0.5].*

The fog color should normally match the sky or background color of the source clip. Use gray for mist, brown for smog, blue for underwater, etc.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[ZFogLinear](#)

[ZBlur](#)

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ZFogLinear

In the S_ZFog Plugin.

Mixes a fog color into the source clip using depth values from a ZBuffer input. The fog amount varies linearly between Fog Near and Fog Far depending on the depth.

Inputs:

Source: The clip to be processed.

ZBuffer: The input clip containing depth values for each Source pixel. These values should be in the range of black to white, and it is best if not anti-aliased. Normally black corresponds to the farthest objects and white to the nearest, though this can be adjusted using Z Buffer parameter.

Parameters:

Fog Near: *Default:* 0, *Range:* 0 to 1.
The amount of fog to add to nearby (close) objects.

Fog Far: *Default:* 0.8, *Range:* 0 to 1.
The amount of fog to add to far away objects.

Z Buffer: *Popup menu, Default:* White is Near.
How to interpret the values in the Z buffer.

Black is Near: Black pixels in the Z buffer indicate that the object at that point is near (close to you), and white means far away.

White is Near: White pixels in the Z buffer indicate that the object at that point is near (close to you), and black means far away.

Fog Color: *Default rgb:* [0.5 0.5 0.5].
The fog color should normally match the sky or background color of the source clip. Use gray for mist, brown for smog, blue for underwater, etc.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[ZFogExponential](#)

[ZBlur](#)

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ZGlow

Glow areas of the source clip with varying widths depending on the depth values from a ZBuffer input. Separates the input into a number of layers and applies different amounts of glow depending on Width Near, Width Far, Brightness Near, and Brightness Far parameters.

Inputs:

Source: The clip to be processed.

ZBuffer: The input clip containing depth values for each Source pixel. These values should be in the range of black to white, and it is best if not anti-aliased. Normally black corresponds to the farthest objects and white to the nearest, though this can be adjusted using Z Buffer parameter.



Parameters:

Brightness: *Default: 2, Range: 0 or greater.*
Scales the brightness of all the glows.

Brightness Near: *Default: 1, Range: 0 or greater.*
Scales the glow brightness for near objects.

Brightness Far: *Default: 1, Range: 0 or greater.*
Scales the glow brightness for far objects.

Layers: *Integer, Default: 5, Range: 2 to 50, Shared.*
The number of depth layers to separate the source into. More layers require more processing but give smoother results in Z. More layers are sometimes needed to avoid visible seams between the layers.

Z Buffer: *Popup menu, Default: White is Near.*
How to interpret the values in the Z buffer.

Black is Near: Black pixels in the Z buffer indicate that the object at that point is near (close to you), and white means far away.

White is Near: White pixels in the Z buffer indicate that the object at that point is near (close to you), and black means far away.

Width Near: *Default: 0.05, Range: 0 or greater.*
The glow width of near (close) objects.

Width Far: *Default: 0.5, Range: 0 or greater.*
The glow width of far away objects.

Width X: *Default: 1, Range: 0 or greater.*
Scales the horizontal glow width. Set to 0 for vertical only.

Width Y: *Default: 1, Range: 0 or greater.*
Scales the vertical glow width. Set to 0 for horizontal only.

Width Red: *Default: 1, Range: 0 or greater.*
Scales the red glow width. If the red, green, and blue widths are equal, the glows will match the color of the source clip. If they are not equal, the glows will vary in color with distance.

Width Green: *Default:* 1.2, *Range:* 0 or greater.

Scales the green glow width.

Width Blue: *Default:* 1.4, *Range:* 0 or greater.

Scales the blue glow width.

Color: *Default rgb:* [1 1 1].

Scales the color of the glow. The colors and brightnesses of the glow are also affected by the Source input.

Threshold: *Default:* 0, *Range:* 0 or greater.

Glow is generated from locations in the source clip that are brighter than this value. A value of 0.9 causes glows at only the brightest spots. A value of 0 causes glows for every non-black area.

Threshold Add Color: *Default rgb:* [0 0 0].

This can be used to raise the threshold on a specific color and thereby reduce the glow generated on areas of the source clip containing that color.

Scale Source: *Default:* 1, *Range:* 0 to 1.

Scales the brightness of the Source input when combining with the glow. This does not affect the generation of the glow itself.

Z Min: *Default:* 0, *Range:* 0 to 1.

Clamps all Z values to this minimum bound. Use this parameter to create a constant glow on all parts of the image nearer than Z Min.

Z Max: *Default:* 1, *Range:* 0 to 1.

Clamps all Z values to this maximum bound. Use this parameter to create a constant glow on all parts of the image farther than Z Max.

Params2:

Width Red Near: *Default:* 1, *Range:* 0 or greater.

Scales the red glow width for near objects.

Width Green Near: *Default:* 1, *Range:* 0 or greater.

Scales the green glow width for near objects.

Width Blue Near: *Default:* 1, *Range:* 0 or greater.

Scales the blue glow width for near objects.

Width Red Far: *Default:* 1, *Range:* 0 or greater.

Scales the red glow width for far objects.

Width Green Far: *Default:* 1, *Range:* 0 or greater.

Scales the green glow width for far objects.

Width Blue Far: *Default:* 1, *Range:* 0 or greater.

Scales the blue glow width for far objects.

Color Near: *Default rgb:* [1 1 1].

Scales the glow color for near objects.

Color Far: *Default rgb:* [1 1 1].

Scales the glow color for far objects.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[ZBlur](#)

[ZDefocus](#)

[ZConvolve](#)

[ZFogLinear](#)

[Glow](#)

[Glint](#)

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Zap

Generates lightning bolts between two points, and renders them over a background. Increase the number of bolts to give a electrical plasma effect. Increase Vary Endpoint to spread out the ends of the bolts. Adjust the Glow Color for differently colored results. The Wiggle Speed parameter causes the bolts to automatically undulate over time.



Inputs:

Back: The clip to use as background.

Parameters:

Bolts: *Integer, Default: 1, Range: 1 to 1000.*

The number of lightning bolts to draw, each between the Start and End location.

Start: *X & Y, Default: [180 420], Range: any.*

The starting point of the bolts.

End: *X & Y, Default: [540 60], Range: any.*

The end point of the bolts. This parameter can be adjusted using the End Widget.

Vary Endpoint: *Default: 0, Range: 0 or greater.*

Offsets the End location by a random amount within a circle of this radius. If Bolts is greater than 1, this can be useful to spread out the different End points. For example, you can create multiple radiating bolts by increasing this radius and placing the End point near the Start point. This parameter can also be adjusted using the End Widget, after it is made positive.

Width: *Default: 0.1, Range: 0 or greater.*

The width of the lightning bolts.

Vary Width: *Default: 0, Range: 0 to 1.*

The amount of random variation in the width of the bolts along their lengths.

End Pointiness: *Default: 0.1, Range: 0 to 1.*

Determines how pointed the end of the bolts are. If 0, the entire bolt will have equal width. If 1, the bolts will thin out along their entire length for a pointed end. If it is .5, the bolts will start thinning out half way between the start and end points.

Wiggle Start: *Default: 0, Range: 0 or greater.*

By default the bolts automatically wiggle over time. This parameter provides a starting offset for these bolt perturbations.

Wiggle Speed: *Default: 1, Range: 0 or greater.*

The speed at which the bolts are perturbed automatically over time. To animate changes in speed, set this to zero and animate the Wiggle Start parameter instead.

Jitter Frames: *Integer, Default: 0, Range: 0 or greater.*

If this is 0, the same random lightning will be used for every frame processed. If it is 1, different random lightning is used for each frame. If it is 2, new random lightning is used for every other frame, and so on.

Rand Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different random lightning bolts, and the same value should give a repeatable result.

Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of the lightning bolts.

Color: *Default rgb: [1 1 1].*

The color of the lightning. If you want to keep the lightning bolt itself bright white, you can still affect the perceived color by adjusting the Glow Color instead.

Wrinkle Amp: *Default: 1, Range: 0 or greater.*

Scales the amount of wrinkles in the bolts. Decrease for straighter smoother bolts or increase for more kinky bolts.

Curve Amp: *Default: 0.5, Range: 0 or greater.*

Similar to Wrinkle Amp but affects the general path of the bolt. If decreased, the bolt will stay closer to the line between the Start and End points. If increased it can wander further away from this line. This differs from the Wrinkle Amp parameter in that it can be used to make straighter bolts while still keeping the wrinkles at the detailed level.

Branchiness: *Default: 1, Range: 0 to 20.*

Scales the number of additional bolts that branch from the main bolt. Set this to 0 for basic bolts with no extra branches.

Branch Angle: *Default: 65, Range: 0 to 180.*

The maximum angle of the random branches relative to the bolt they are branching off of. If this is 0 the branches will be more lined up with the main bolt. With larger values the branches will be more perpendicular to the main bolt.

Branch Length: *Default: 0.5, Range: 0 to 1.*

The maximum length of the branches relative to the distance between the Start and End points.

Scale Back: *Default: 1, Range: 0 or greater.*

Scales the brightness of the background before combining with the lightning. If 0, the result will contain only the lightning image over black.

Combine: *Popup menu, Default: Screen.*

Determines how the lightning and glow are combined with the Background.

Screen: performs a blend function which can help prevent overly bright results.

Add: causes the lightning to be added to the background. This gives brighter glows over light backgrounds.

Params2:

Start Offset: *Default: 0, Range: 0 to 1.*

The offset from the start point to begin drawing the bolts. This can be useful for animating a lightning strike.

Length: *Default: 1, Range: 0 to 1.*

The length of the bolts, beginning at Start Offset. If less than 1, the bolts will not be drawn all the way from start to end. This can be useful for animating a lightning strike.

Glow Parameters:

Glow Bright: *Default: 2, Range: 0 or greater.*

Scales the brightness of the glow applied to the lightning.

Glow Color: *Default rgb: [0.5 0.5 1].*

The color of the glow applied to the lightning.

Glow Width: *Default: 0.2, Range: 0 or greater.*

The width of the glow applied to the lightning.

Glow Width Red: *Default:* 0.5, *Range:* 0 or greater.
The relative red width of the glow.

Glow Width Grn: *Default:* 1, *Range:* 0 or greater.
The relative green width of the glow.

Glow Width Blue: *Default:* 1.5, *Range:* 0 or greater.
The relative blue width of the glow.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

ZapTo	Sapphire Plug-ins
ZapFrom	Introduction

ZapFrom

Generates multiple lightning bolts outwards from the edges of objects in the FromObj input clip, and renders them over a background input. Use the Show:Edges option to view the source edges while adjusting the Threshold and Blur From Obj parameters.

Inputs:

FromObj: The edges of objects in this clip are extracted, and the lightning starts at points along these edges.

Back: The clip to use as background.



Parameters:

Surface Bolts: *Integer, Default: 25, Range: 1 or greater.*

The number of points along the edges to generate lightning bolts from. These surface bolts are divided up amongst the isolated shapes in the FromObj input, proportionally to the sizes of the shapes.

Threshold: *Default: 0.5, Range: 0 or greater.*

The value used to determine the edge locations. Objects darker than this value are ignored. On smooth objects, larger threshold values move the edges inwards to make smaller shapes, and smaller values move the edges outwards. You can use the Show Edges option to view the edge image directly while adjusting this parameter.

Blur From Obj: *Default: 0.1, Range: 0 or greater.*

Blurs the FromObj input clip before finding the edges. This can help remove noise, and reduce the number of separate shapes. You can use the Show Edges option to view the edge image directly while adjusting this parameter.

Show: *Popup menu, Default: Result.*

Selects the output option.

Result: shows the normal lightning result over the background.

Over FromObj: shows the lightning over the FromObj input instead of the Back. This can be useful while adjusting the number of surface bolts.

Edges: shows the edge image. This can be useful to view while adjusting the Threshold and Blur From Obj parameters.

Max Length: *Default: 0.25, Range: 0 or greater.*

Scales the length of the bolts.

Vary Length: *Default: 0.5, Range: 0 to 1.*

The amount to randomly vary the length of each bolt. A value of 0 makes all bolt lengths equal to Max Length, and a value of 1 makes bolt lengths between zero and Max Length.

Vary Spacing: *Default: 0.5, Range: 0 or greater.*

The amount to randomly vary the starting point of each bolt along the edges. A value of 0 makes the bolts regularly spaced, and value of 1 make the bolts randomly spaced.

Width: *Default: 0.1, Range: 0 or greater.*

The width of the lightning bolts.

Vary Width: *Default: 0, Range: 0 to 1.*

The amount of random variation in the width of the bolts along their lengths.

End Pointiness: *Default: 1, Range: 0 to 1.*

Determines how pointed the end of the bolts are. If 0, the entire bolt will have equal width. If 1, the bolts will thin out along their entire length for a pointed end. If it is .5, the bolts will start thinning out half way between the start and end points.

Wiggle Start: *Default: 0, Range: 0 or greater.*

By default the bolts automatically wiggle over time. This parameter provides a starting offset for these bolt perturbations.

Wiggle Speed: *Default: 1, Range: 0 or greater.*

The speed at which the bolts are perturbed automatically over time. To animate changes in speed, set this to zero and animate the Wiggle Start parameter instead.

Jitter Frames: *Integer, Default: 0, Range: 0 or greater.*

If this is 0, the same random lightning will be used for every frame processed. If it is 1, different random lightning is used for each frame. If it is 2, new random lightning is used for every other frame, and so on.

Rand Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different random lightning bolts, and the same value should give a repeatable result.

Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of the lightning bolts.

Color: *Default rgb: [1 1 1].*

The color of the lightning. If you want to keep the lightning bolt itself bright white, you can still affect the perceived color by adjusting the Glow Color instead.

Wrinkle Amp: *Default: 1, Range: 0 or greater.*

Scales the amount of wrinkles in the bolts. Decrease for straighter smoother bolts or increase for more kinky bolts.

Curve Amp: *Default: 0.5, Range: 0 or greater.*

Similar to Wrinkle Amp but affects the general path of the bolt. If decreased, the bolt will stay closer to the line between the Start and End points. If increased it can wander further away from this line. This differs from the Wrinkle Amp parameter in that it can be used to make straighter bolts while still keeping the wrinkles at the detailed level.

Branchiness: *Default: 1, Range: 0 to 10.*

Scales the number of additional bolts that branch from the main bolt. Set this to 0 for basic bolts with no extra branches.

Branch Angle: *Default: 65, Range: 0 to 180.*

The maximum angle of the random branches relative to the bolt they are branching off of. If this is 0 the branches will be more lined up with the main bolt. With larger values the branches will be more perpendicular to the main bolt.

Branch Length: *Default: 0.5, Range: 0 to 1.*

The maximum length of the branches relative to the distance between the Start and End points.

Scale Back: *Default: 1, Range: 0 or greater.*

Scales the brightness of the background before combining with the lightning. If 0, the result will contain only the lightning image over black.

Combine: *Popup menu, Default: Screen.*

Determines how the lightning and glow are combined with the Background.

Screen: performs a blend function which can help prevent overly bright results.

Add: causes the lightning to be added to the background. This gives brighter glows over light backgrounds.

Params2:

Start Offset: *Default: 0, Range: 0 to 1.*

The offset from the start point to begin drawing the bolts. This can be useful for animating a lightning strike.

Length: *Default: 1, Range: 0 to 1.*

The length of the bolts, beginning at Start Offset. If less than 1, the bolts will not be drawn all the way from start to end. This can be useful for animating a lightning strike.

Glow Parameters:

Glow Bright: *Default: 2, Range: 0 or greater.*

Scales the brightness of the glow applied to the lightning.

Glow Color: *Default rgb: [0.5 0.5 1].*

The color of the glow applied to the lightning.

Glow Width: *Default: 0.2, Range: 0 or greater.*

The width of the glow applied to the lightning.

Glow Width Red: *Default: 0.5, Range: 0 or greater.*

The relative red width of the glow.

Glow Width Grn: *Default: 1, Range: 0 or greater.*

The relative green width of the glow.

Glow Width Blue: *Default: 1.5, Range: 0 or greater.*

The relative blue width of the glow.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[ZapFromMask](#)

[Zap](#)

[Sapphire](#)

[ZapTo](#)

[Plug-ins](#)

[Introduction](#)

ZapFromMask

Generates multiple lightning bolts outwards from the edges of objects in the FromObj input clip where the Mask input is non-black, and renders them over a background input.

Inputs:

FromObj: The edges of objects in this clip are extracted, and the lightning starts at points along these edges.

Back: The clip to use as background.

Mask: The lengths of the bolts in each area are scaled by this input. White areas generate normal bolts, gray areas generate shorter bolts, and black areas cause no bolts to be made.



Parameters:

Surface Bolts: *Integer, Default: 25, Range: 1 or greater.*

The number of points along the edges to generate lightning bolts from. These surface bolts are divided up amongst the isolated shapes in the FromObj input, proportionally to the sizes of the shapes.

Threshold: *Default: 0.5, Range: 0 or greater.*

The value used to determine the edge locations. Objects darker than this value are ignored. On smooth objects, larger threshold values move the edges inwards to make smaller shapes, and smaller values move the edges outwards. You can use the Show Edges option to view the edge image directly while adjusting this parameter.

Blur From Obj: *Default: 0.1, Range: 0 or greater.*

Blurs the FromObj input clip before finding the edges. This can help remove noise, and reduce the number of separate shapes. You can use the Show Edges option to view the edge image directly while adjusting this parameter.

Show: *Popup menu, Default: Result.*

Selects the output option.

Result: shows the normal lightning result over the background.

Over FromObj: shows the lightning over the FromObj input instead of the Back. This can be useful while adjusting the number of surface bolts.

Edges: shows the edge image. This can be useful to view while adjusting the Threshold and Blur From Obj parameters.

Max Length: *Default: 0.25, Range: 0 or greater.*

Scales the length of the bolts.

Vary Length: *Default: 0.5, Range: 0 to 1.*

The amount to randomly vary the length of each bolt. A value of 0 makes all bolt lengths equal to Max Length, and a value of 1 makes bolt lengths between zero and Max Length.

Vary Spacing: *Default: 0.5, Range: 0 or greater.*

The amount to randomly vary the starting point of each bolt along the edges. A value of 0 makes the bolts regularly spaced, and value of 1 make the bolts randomly spaced.

Width: *Default: 0.1, Range: 0 or greater.*

The width of the lightning bolts.

Vary Width: *Default: 0, Range: 0 to 1.*

The amount of random variation in the width of the bolts along their lengths.

End Pointiness: *Default: 1, Range: 0 to 1.*

Determines how pointed the end of the bolts are. If 0, the entire bolt will have equal width. If 1, the bolts will thin out along their entire length for a pointed end. If it is .5, the bolts will start thinning out half way between the start and end points.

Wiggle Start: *Default: 0, Range: 0 or greater.*

By default the bolts automatically wiggle over time. This parameter provides a starting offset for these bolt perturbations.

Wiggle Speed: *Default: 1, Range: 0 or greater.*

The speed at which the bolts are perturbed automatically over time. To animate changes in speed, set this to zero and animate the Wiggle Start parameter instead.

Jitter Frames: *Integer, Default: 0, Range: 0 or greater.*

If this is 0, the same random lightning will be used for every frame processed. If it is 1, different random lightning is used for each frame. If it is 2, new random lightning is used for every other frame, and so on.

Rand Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different random lightning bolts, and the same value should give a repeatable result.

Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of the lightning bolts.

Color: *Default rgb: [1 1 1].*

The color of the lightning. If you want to keep the lightning bolt itself bright white, you can still affect the perceived color by adjusting the Glow Color instead.

Wrinkle Amp: *Default: 1, Range: 0 or greater.*

Scales the amount of wrinkles in the bolts. Decrease for straighter smoother bolts or increase for more kinky bolts.

Curve Amp: *Default: 0.5, Range: 0 or greater.*

Similar to Wrinkle Amp but affects the general path of the bolt. If decreased, the bolt will stay closer to the line between the Start and End points. If increased it can wander further away from this line. This differs from the Wrinkle Amp parameter in that it can be used to make straighter bolts while still keeping the wrinkles at the detailed level.

Branchiness: *Default: 1, Range: 0 to 10.*

Scales the number of additional bolts that branch from the main bolt. Set this to 0 for basic bolts with no extra branches.

Branch Angle: *Default: 65, Range: 0 to 180.*

The maximum angle of the random branches relative to the bolt they are branching off of. If this is 0 the branches will be more lined up with the main bolt. With larger values the branches will be more perpendicular to the main bolt.

Branch Length: *Default: 0.5, Range: 0 to 1.*

The maximum length of the branches relative to the distance between the Start and End points.

Scale Back: *Default: 1, Range: 0 or greater.*

Scales the brightness of the background before combining with the lightning. If 0, the result will contain only the lightning image over black.

Combine: *Popup menu, Default: Screen.*

Determines how the lightning and glow are combined with the Background.

Screen: performs a blend function which can help prevent overly bright results.

Add: causes the lightning to be added to the background. This gives brighter glows over light backgrounds.

Params2:

Start Offset: *Default:* 0, *Range:* 0 to 1.

The offset from the start point to begin drawing the bolts. This can be useful for animating a lightning strike.

Length: *Default:* 1, *Range:* 0 to 1.

The length of the bolts, beginning at Start Offset. If less than 1, the bolts will not be drawn all the way from start to end. This can be useful for animating a lightning strike.

Blur Mask: *Default:* 0, *Range:* 0 or greater.

Blurs the Mask input by this amount before using. This can provide a smoother transition between the masked and unmasked areas.

Invert Mask: *Check-box, Default:* off.

If enabled, inverts the mask input so the effect is applied to areas where the Mask is black instead of white.

Glow Parameters:

Glow Bright: *Default:* 2, *Range:* 0 or greater.

Scales the brightness of the glow applied to the lightning.

Glow Color: *Default rgb:* [0.5 0.5 1].

The color of the glow applied to the lightning.

Glow Width: *Default:* 0.2, *Range:* 0 or greater.

The width of the glow applied to the lightning.

Glow Width Red: *Default:* 0.5, *Range:* 0 or greater.

The relative red width of the glow.

Glow Width Grn: *Default:* 1, *Range:* 0 or greater.

The relative green width of the glow.

Glow Width Blue: *Default:* 1.5, *Range:* 0 or greater.

The relative blue width of the glow.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[ZapFrom](#)

[Zap](#)

[Sapphire](#)

[ZapTo](#)

[Plug-ins](#)

[ZapFrom](#)

[Introduction](#)

ZapTo

Generates a forked lightning bolt from a given point to the edges of objects in the ToObj input clip, and renders it over a background input.

Inputs:

ToObj: The edges of objects in this clip are extracted, and the lightning connects to points along these edges facing towards the starting point.

Back: The clip to use as background.



Parameters:

Surface Points: *Integer, Default: 10, Range: 1 or greater.*

The number of points along the edges to connect the lightning to. These surface points are divided up amongst the shapes in the ToObj input. If the number of requested surface points is equal to the number of separate shapes in the ToObj input, one lightning fork will connect to each.

Start: *X & Y, Default: [360 242], Range: any.*

The starting position of the lightning.

Max Dist: *Default: 1, Range: 0 or greater.*

The maximum distance of surface points from the Start position. Edges outside this distance are ignored.

Threshold: *Default: 0.5, Range: 0 or greater.*

The value used to determine the edge locations. Objects darker than this value are ignored. On smooth objects, larger threshold values move the edges inwards to make smaller shapes, and smaller values move the edges outwards. You can use the Show Edges option to view the edge image directly while adjusting this parameter.

Blur To Obj: *Default: 0.025, Range: 0 or greater.*

Blurs the ToObj input clip before finding the edges. This can help remove noise, and reduce the number of separate shapes. You can use the Show Edges option to view the edge image directly while adjusting this parameter.

Show: *Popup menu, Default: Result.*

Selects what the effect will output.

Result: shows the normal lightning result over the background.

Over ToObj: shows the lightning over the ToObj input instead of the Back. This can be useful to view while adjusting the Surface Points, Start, and Max Dist parameters.

Edges: shows the target edge image. This can be useful to view while adjusting the Threshold and Blur To Obj parameters.

Width: *Default: 0.1, Range: 0 or greater.*

The width of the lightning bolts.

Vary Width: *Default: 0, Range: 0 to 1.*

The amount of random variation in the width of the bolts along their lengths.

End Pointiness: *Default: 0.25, Range: 0 to 1.*

Determines how pointed the end of the bolts are. If 0, the entire bolt will have equal width. If 1, the bolts will thin out along their entire length for a pointed end. If it is .5, the bolts will start thinning out half way between the start and end points.

Wiggle Start: *Default: 0, Range: 0 or greater.*

By default the bolts automatically wiggle over time. This parameter provides a starting offset for these bolt perturbations.

Wiggle Speed: *Default: 1, Range: 0 or greater.*

The speed at which the bolts are perturbed automatically over time. To animate changes in speed, set this to zero and animate the Wiggle Start parameter instead.

Jitter Frames: *Integer, Default: 0, Range: 0 or greater.*

If this is 0, the same random lightning will be used for every frame processed. If it is 1, different random lightning is used for each frame. If it is 2, new random lightning is used for every other frame, and so on.

Rand Seed: *Default: 0.123, Range: 0 or greater.*

Used to initialize the random number generator. The actual seed value is not significant, but different seeds give different random lightning bolts, and the same value should give a repeatable result.

Brightness: *Default: 1, Range: 0 or greater.*

Scales the brightness of the lightning bolts.

Color: *Default rgb: [1 1 1].*

The color of the lightning. If you want to keep the lightning bolt itself bright white, you can still affect the perceived color by adjusting the Glow Color instead.

Wrinkle Amp: *Default: 1, Range: 0 or greater.*

Scales the amount of wrinkles in the bolts. Decrease for straighter smoother bolts or increase for more kinky bolts.

Branchiness: *Default: 1, Range: 0 to 20.*

Scales the number of additional bolts that branch from the main bolt. Set this to 0 for basic bolts with no extra branches.

Branch Angle: *Default: 65, Range: 0 to 180.*

The maximum angle of the random branches relative to the bolt they are branching off of. If this is 0 the branches will be more lined up with the main bolt. With larger values the branches will be more perpendicular to the main bolt.

Branch Length: *Default: 0.5, Range: 0 to 1.*

The maximum length of the branches relative to the distance between the Start and End points.

Scale Back: *Default: 1, Range: 0 or greater.*

Scales the brightness of the background before combining with the lightning. If 0, the result will contain only the lightning image over black.

Combine: *Popup menu, Default: Screen.*

Determines how the lightning and glow are combined with the Background.

***Screen:** performs a blend function which can help prevent overly bright results.*

***Add:** causes the lightning to be added to the background. This gives brighter glows over light backgrounds.*

Params2:

Start Offset: *Default: 0, Range: 0 to 1.*

The offset from the start point to begin drawing the bolts. This can be useful for animating a lightning strike.

Length: *Default: 1, Range: 0 to 1.*

The length of the bolts, beginning at Start Offset. If less than 1, the bolts will not be drawn all the way from start to end. This can be useful for animating a lightning strike.

Bolts: *Integer, Default: 1, Range: 1 to 1000.*

The number of independent forked lightning bolts to draw, each connecting the Start position with the edge points.

Glow Parameters:

Glow Bright: *Default: 2, Range: 0 or greater.*

Scales the brightness of the glow applied to the lightning.

Glow Color: *Default rgb: [0.5 0.5 1].*

The color of the glow applied to the lightning.

Glow Width: *Default: 0.2, Range: 0 or greater.*

The width of the glow applied to the lightning.

Glow Width Red: *Default: 0.5, Range: 0 or greater.*

The relative red width of the glow.

Glow Width Grn: *Default: 1, Range: 0 or greater.*

The relative green width of the glow.

Glow Width Blue: *Default: 1.5, Range: 0 or greater.*

The relative blue width of the glow.

See general info for: [Res](#), [On Fields](#), [Redraw](#), [Undo](#), [Load Defaults](#), [Crop](#), [Add Noise](#), and [Use Gamma](#).

See Also:

[Zap](#)

[ZapFrom](#)

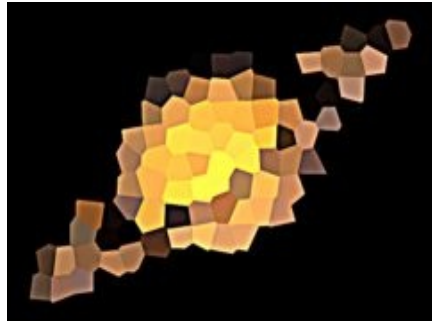
[Sapphire Plug-ins](#)

[Introduction](#)

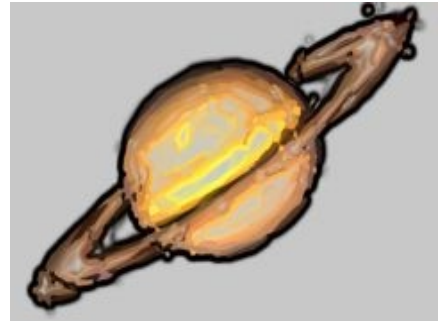
List of Effects With Pictures



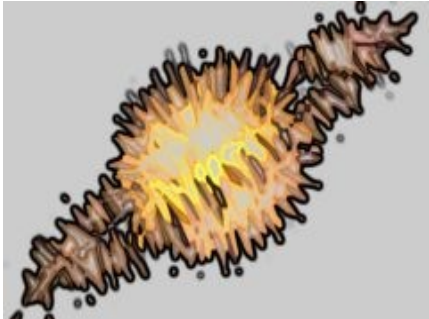
AutoPaint:HairyPaint



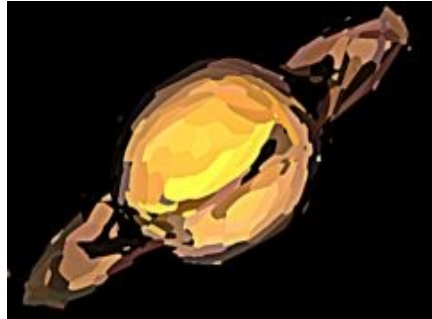
AutoPaint:Pointalizer



AutoPaint:Sketch



AutoPaint:SketchBumpy



AutoPaint:VanGogh



BandPass



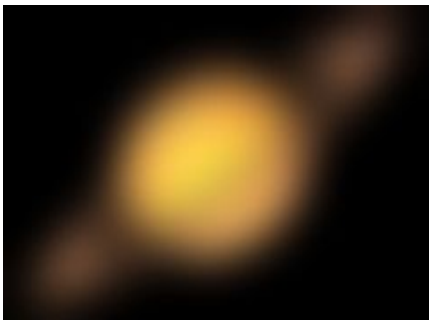
BleachBypass



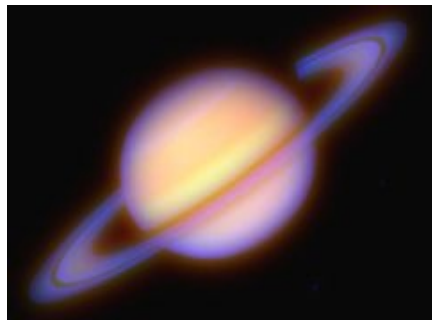
BlurMotion Mask



BlurMotionCurves



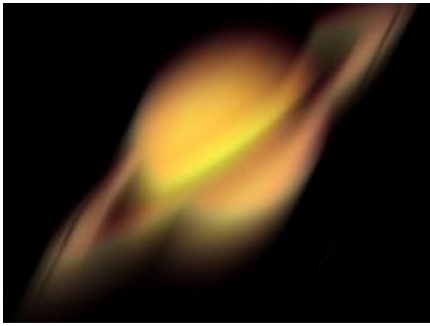
Blur Mask



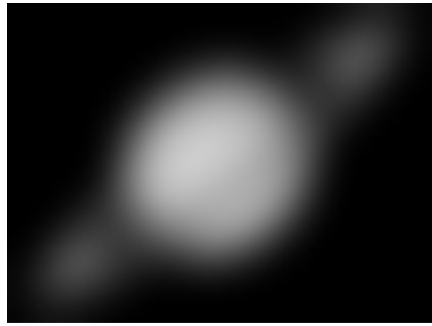
BlurChannels Mask



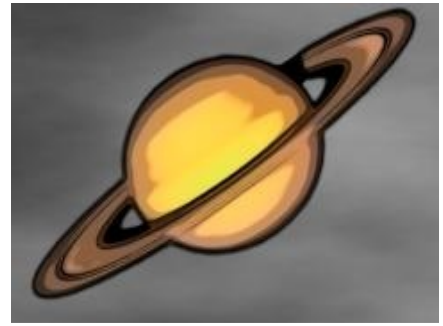
BlurChroma Mask



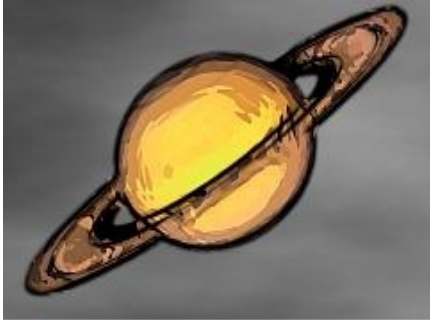
BlurDirectional Mask



BlurMonochrome Mask



Cartoon



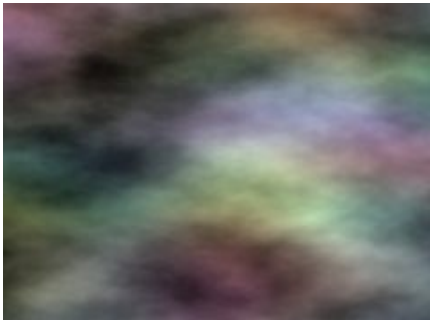
CartoonPaint



Clouds Comp



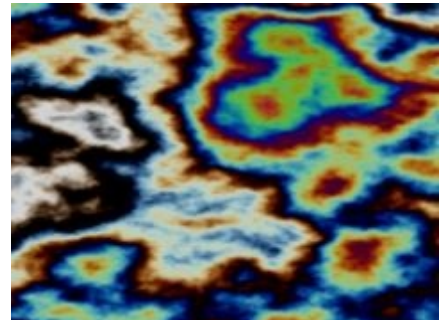
CloudsColorSmooth Comp



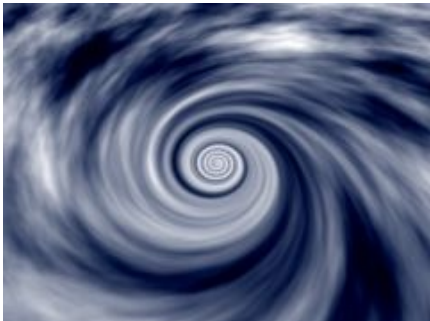
CloudsMultiColor Comp



CloudsPerspective Comp



CloudsPsyko Comp



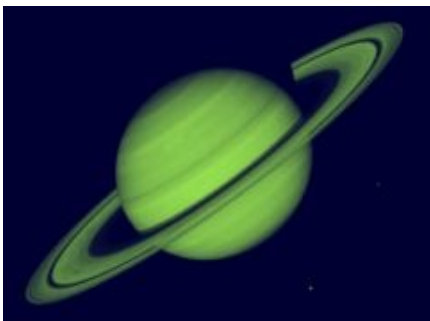
CloudsVortex Comp



ColorOps:ChannelSwitcher



ColorOps:ClampChroma



ColorOps:DuoTone



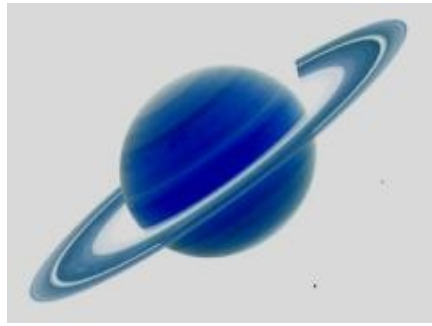
ColorOps:Gamma



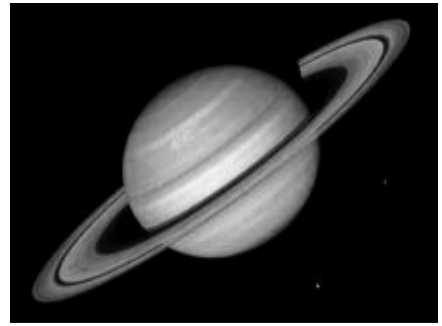
ColorOps:Hotspots



ColorOps:HueSatBright



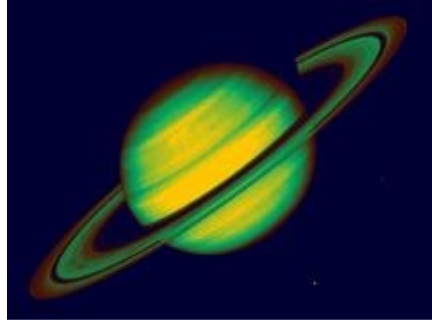
ColorOps:Invert



ColorOps:Monochrome



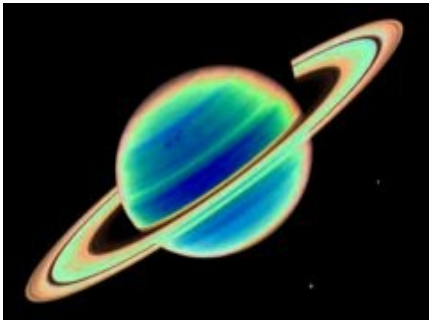
ColorOps:PseudoColor



ColorOps:QuadTone



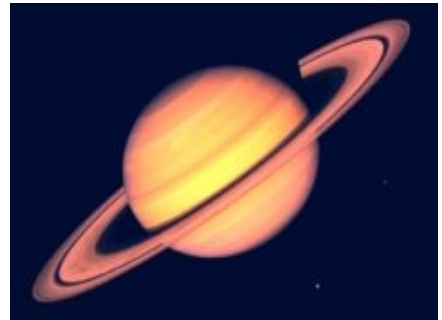
ColorOps:ShowBadColors



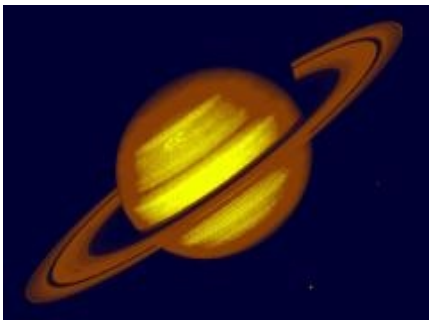
ColorOps:Solarize



ColorOps:Threshold



ColorOps:Tint



ColorOps:TriTone



Convolve



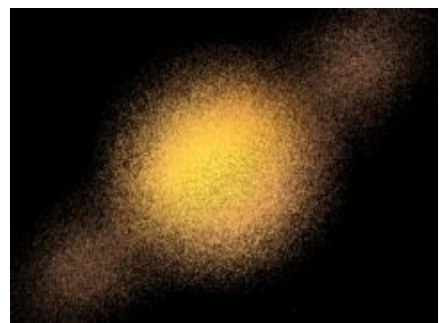
ConvolveComp



Deband



DeinterlaceAuto



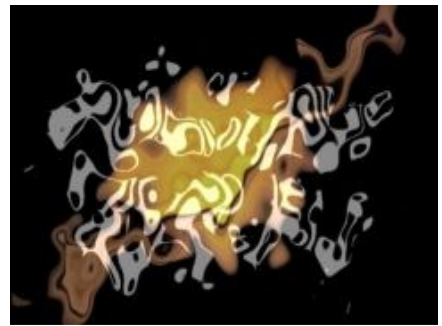
Diffuse Mask



Dissolve



DissolveBlur



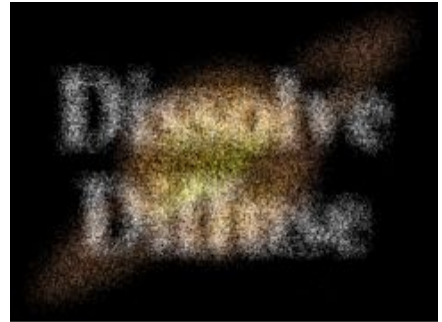
DissolveBubble



DissolveClouds



DissolveDefocus



DissolveDiffuse



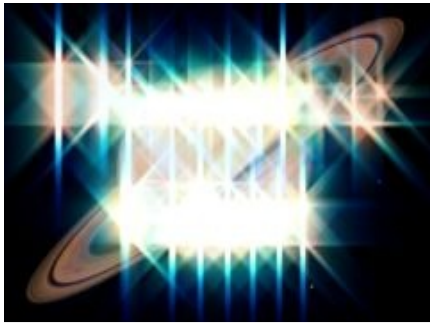
DissolveDistort



DissolveEdgeRays



DissolveFilm



DissolveGlint



DissolveGlintRainbow



DissolveGlow



DissolveLensFlare



DissolveLuma



DissolvePixelate



DissolvePuddle



DissolveSpeckle



DissolveStatic



DissolveTiles



DissolveVortex



DissolveWaves



Distort Mask



DistortBlur Mask



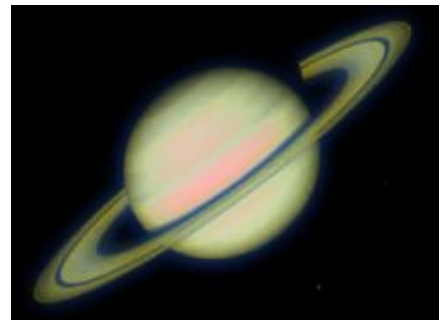
DistortChroma Mask



DistortFine Mask



DistortRGB Mask



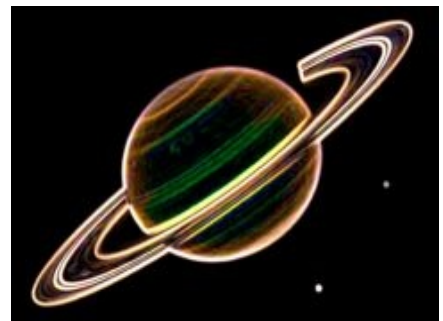
DogVision



DropShadow



EdgeBlur



EdgeDetect Mono



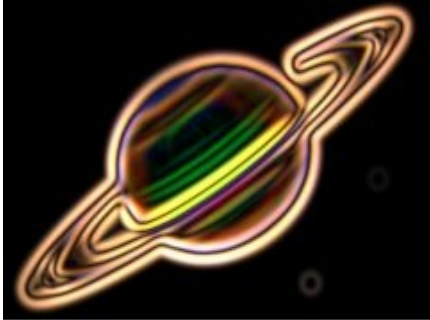
EdgeDetect:Blips



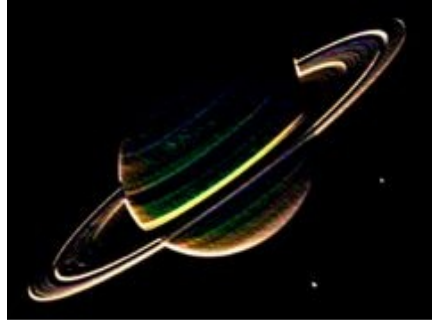
EdgeDetectChroma



EdgeDetect:Colorize



EdgeDetectDouble



EdgeDetect:InDirection



EdgeFlash



EdgeRays Mask Comp MC



Emboss Mask



EmbossDistort Mask



EmbossGlass Mask



EmbossShiny Mask



Feedback Matte



FeedbackBubble Matte



Feedback:NearestColor



Feedback:TimeAverage



Feedback:Trails Matte



Feedback:TrailsDiffuse Matte



FeedbackDistort Matte



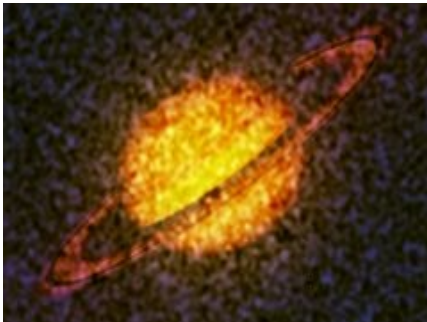
FieldRemove NTSCtoFilm Deint.



FieldTool



FilmDamage



FilmEffect



Flicker



FlickerMatch Matte



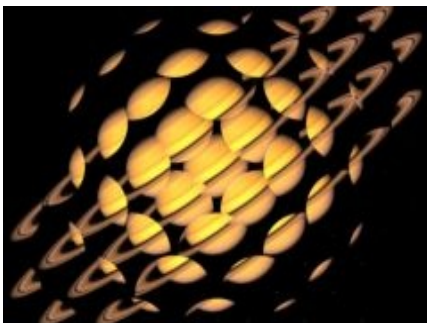
FlickerMatchColor Matte



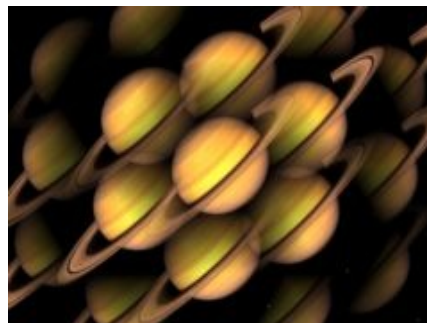
FlickerRemove Matte



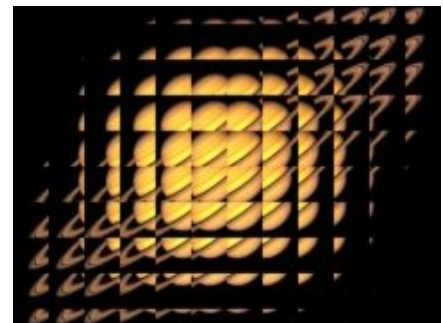
FlickerRemoveColor Matte



FlysEyeCircles



FlysEyeHex



FlysEyeRect



[Glare](#) [Mask](#) [Comp](#) [MC](#)



[Glint](#) [Mask](#) [Comp](#) [MC](#)



[GlintRainbow](#) [Mask](#) [Comp](#) [MC](#)



[Glow](#) [Mask](#) [Comp](#) [MC](#)



[GlowAura](#) [Mask](#) [Comp](#) [MC](#)



[GlowDarks](#) [Mask](#) [Comp](#) [MC](#)



[GlowDist](#) [Mask](#) [Comp](#) [MC](#)



[GlowEdges](#) [Mask](#) [Comp](#) [MC](#)



[GlowNoise](#) [Mask](#) [Comp](#) [MC](#)



[GlowOrthicon](#) [Mask](#) [Comp](#) [MC](#)



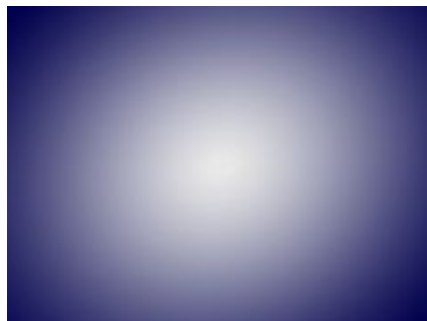
[GlowRainbow](#) [Mask](#) [Comp](#) [MC](#)



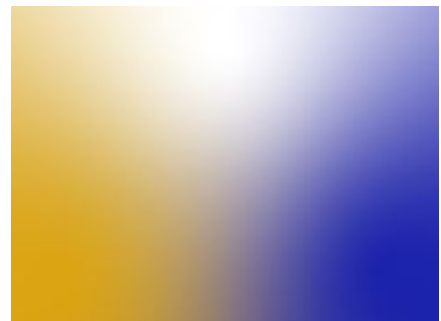
[GlowRings](#) [Mask](#) [Comp](#) [MC](#)



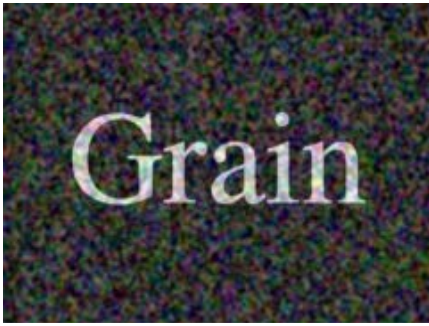
[Gradient](#)



[GradientRadial](#)



[GradientMulti](#)



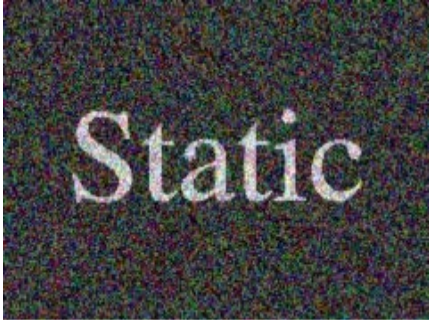
[GrainColor](#) [Mask](#) [Comp](#)



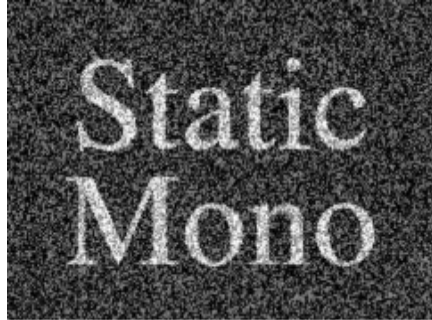
[GrainMono](#) [Mask](#) [Comp](#)



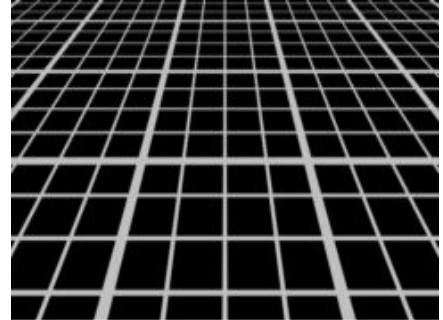
[GrainRemove](#) [Mask](#) [Comp](#)



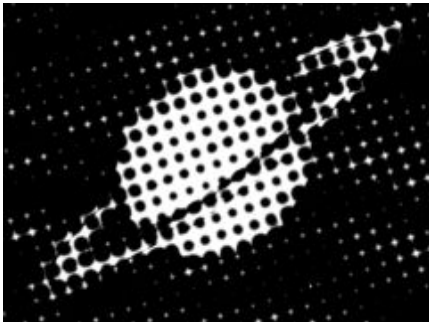
[Grain:StaticColor](#) [Mask](#) [Comp](#)



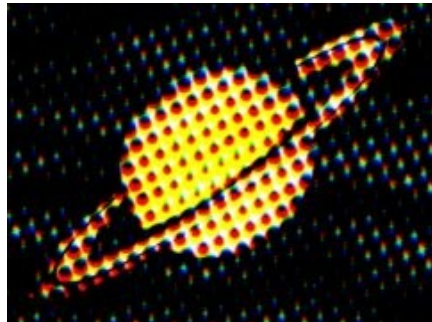
[Grain:StaticMono](#) [Mask](#) [Comp](#)



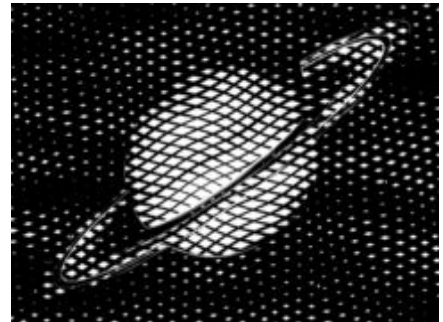
[Grid](#)



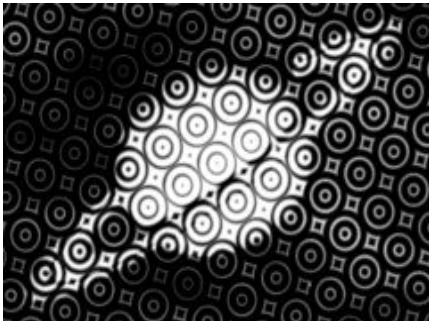
[HalfTone](#)



[HalfToneColor](#)



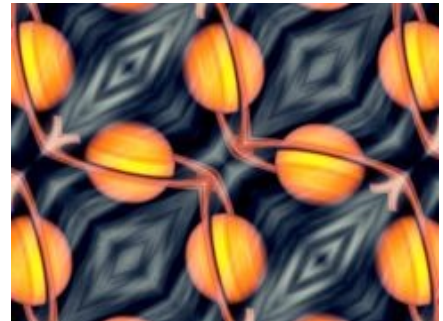
[HalfTone:Etching](#)



[HalfToneRings](#)



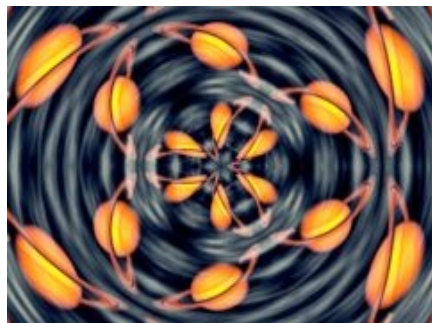
[JpegDamage](#)



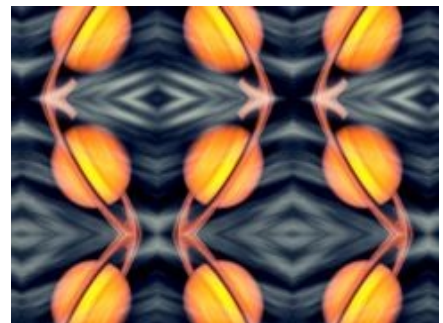
[KaleidoDiamonds](#)



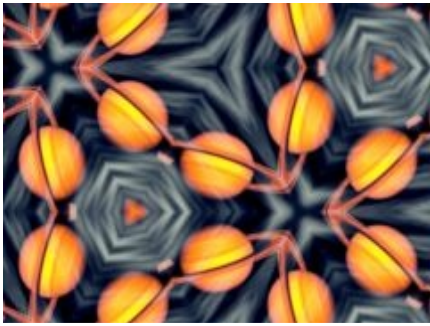
[KaleidoOct](#)



[KaleidoPolar](#)



[KaleidoSquares](#)



[KaleidoTriangles](#)



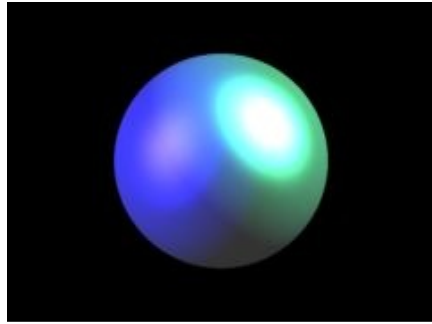
[Layer Comp](#)



[LensFlare AutoTrack Mask](#)
[AutoTrackMask](#)



[LensFlareTrack Mask](#)



[Light3D Mask](#)



[MathOps](#)



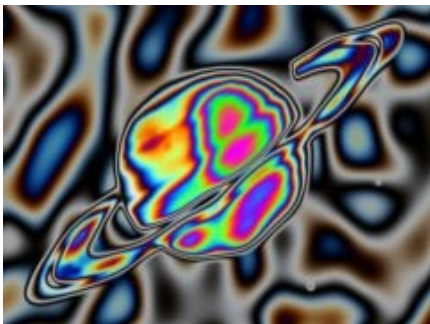
[MatteOps Mask Comp](#)



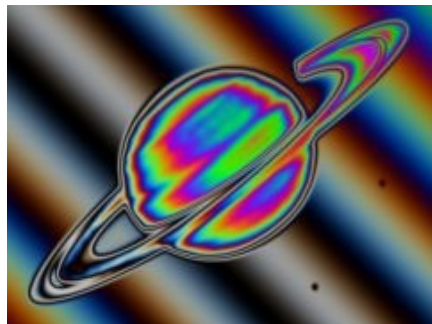
[Mosaic Mask](#)



[Posterize](#)



[PsykoBlobs](#)



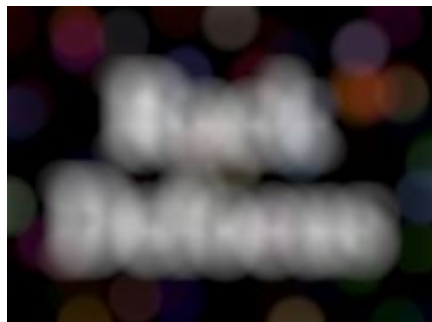
[PsykoStripes](#)



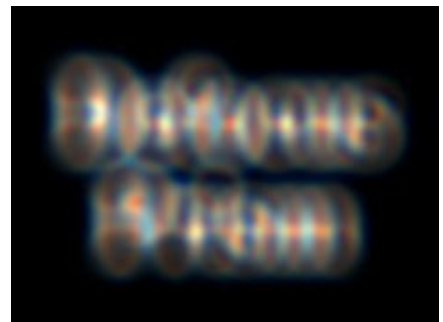
[Psyko:Zebrafy](#)



[Psyko:ZebrafyColor](#)



[RackDefocus Mono](#)



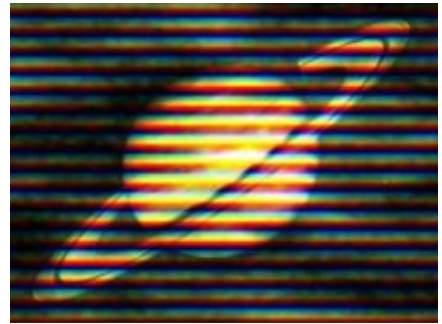
[RackDefocus:Prism](#)



RackDfComp



Rays Mask Comp MC



ScanLines Mono



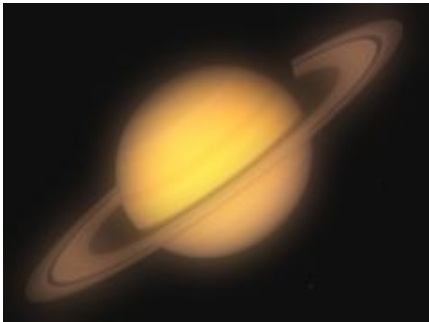
Shake



Shape Comp



Sharpen Mask



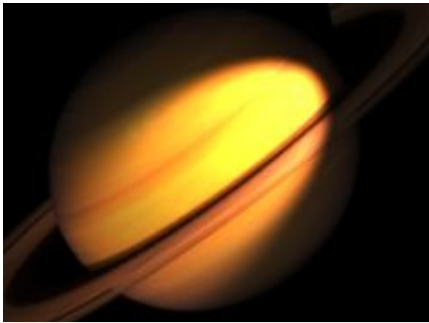
SoftFocus



Sparkles Mask Comp MC



SparklesColor Mask Comp MC



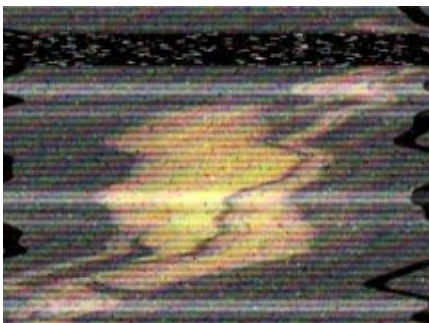
SpotLight



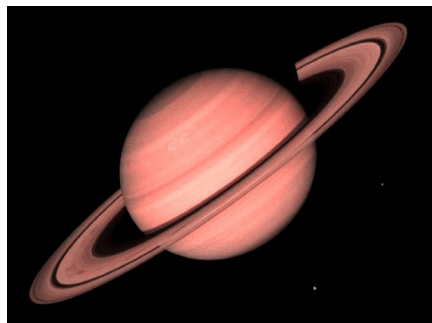
Streaks Mask Comp MC



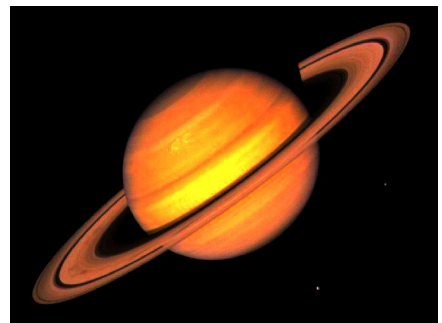
TVChannelChange



TVDamage



Technicolor2Strip



Technicolor3Strip



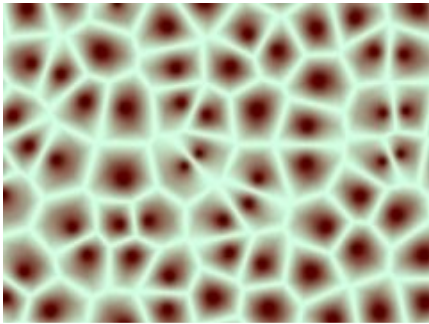
[Temporal:MotionDetect](#)
[Temporal:FreezeFrame](#)
[Temporal:RandomEdits](#)



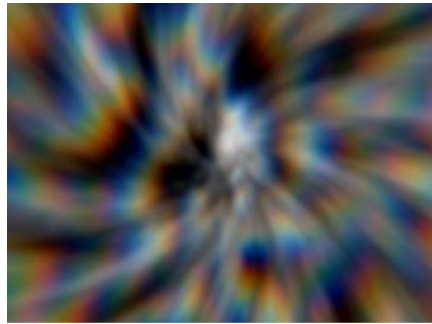
[Temporal:TimeSlice](#)
[Temporal:GetFrame](#)
[Temporal:ReverseClip](#)



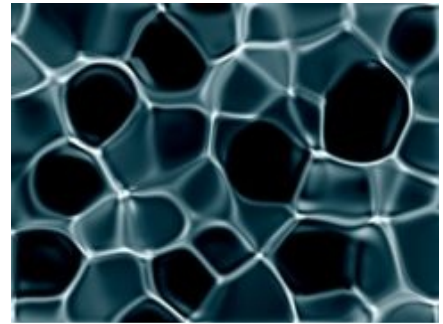
[Temporal:TimeWarpRGB](#)
[Temporal:JitterFrames](#)
[Temporal:ReverseEdits](#)



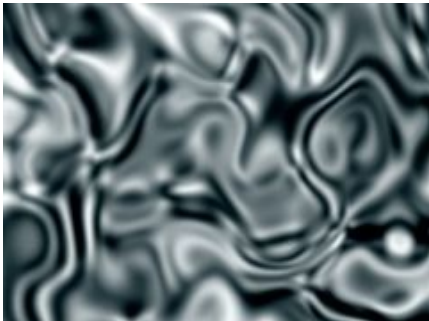
[TextureCells](#) [Comp](#)



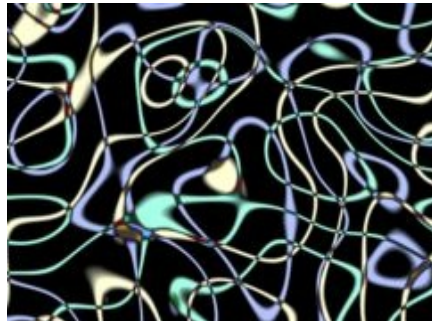
[TextureChromaSpiral](#) [Cmp](#)



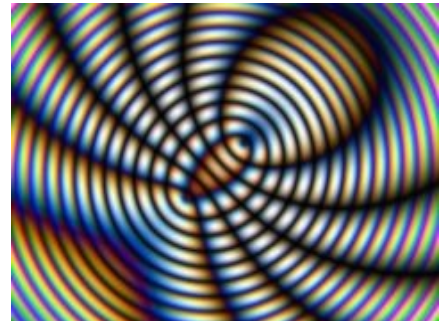
[TextureFlux](#) [Comp](#)



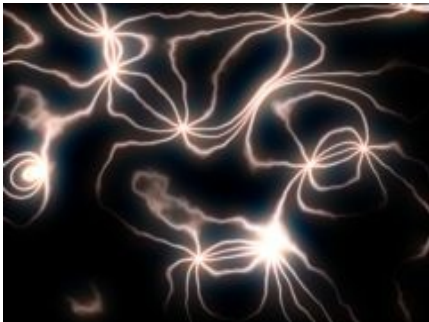
[TextureFolded](#) [Comp](#)



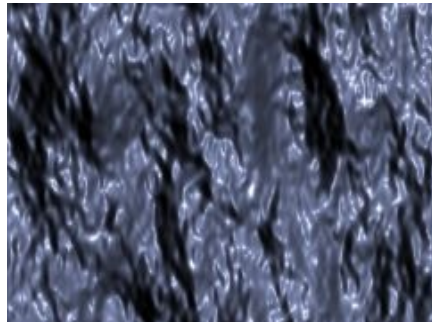
[TextureLoops](#) [Comp](#)



[TextureMoire](#) [Comp](#)



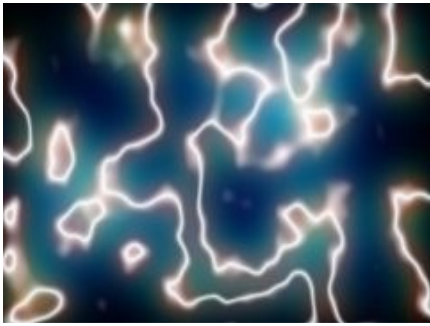
[TextureNeurons](#) [Comp](#)



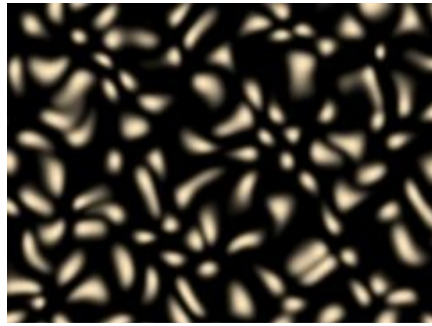
[TextureNoiseEmboss](#) [Cmp](#)



[TextureNoisePaint](#) [Comp](#)



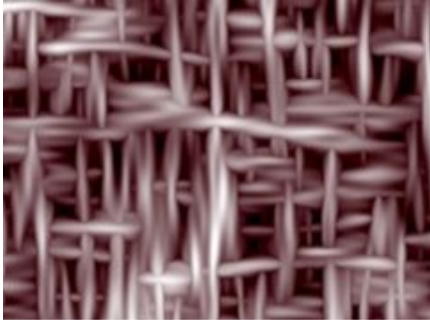
TexturePlasma Comp



TextureSpots Comp



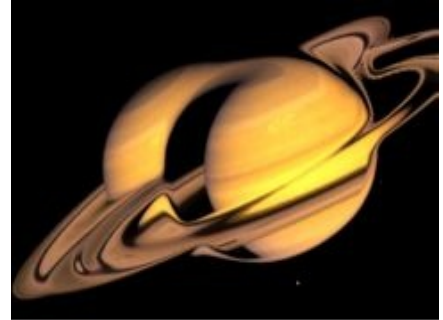
TextureTiles Comp



TextureWeave Comp



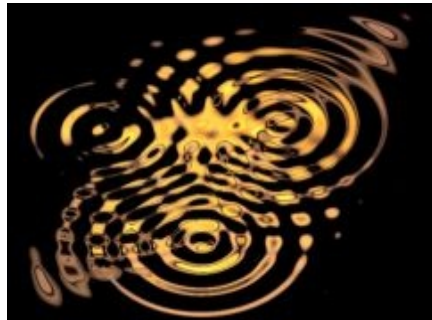
TileScramble Mask



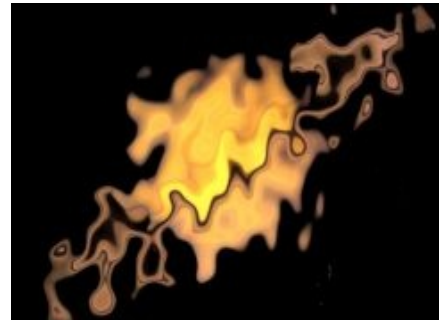
TimeDisplace Mask



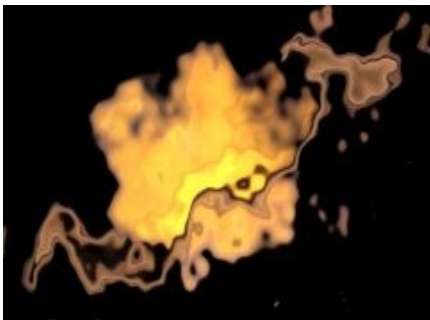
Vignette



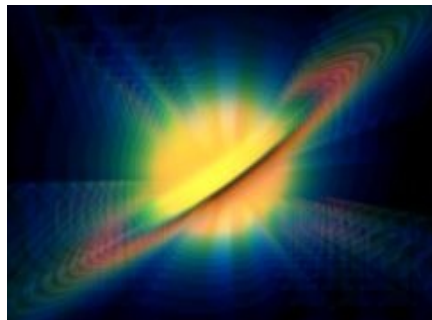
WarpDrops Mask Comp



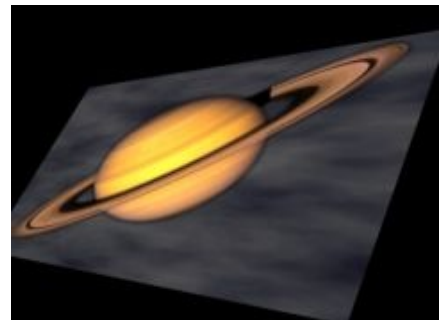
WarpBubble Mask Comp



WarpBubble2 Mask Comp



WarpChroma Mask Comp



WarpCornerPin Mask Comp



WarpFishEye Mask Comp



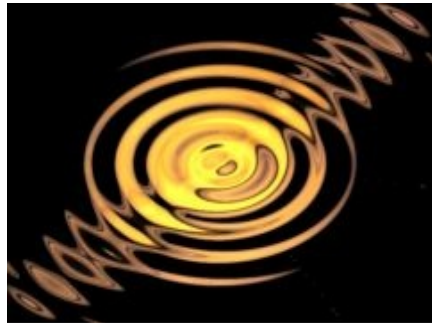
WarpMagnify Mask Comp



WarpPerspective Comp



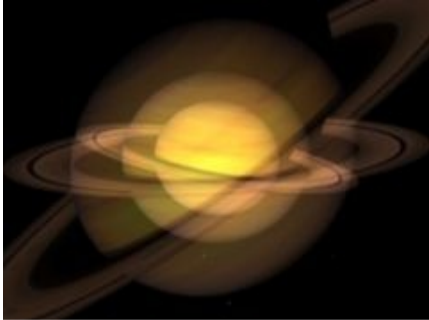
WarpPolar Comp



WarpPuddle Mask Comp



WarpPuff Mask Comp



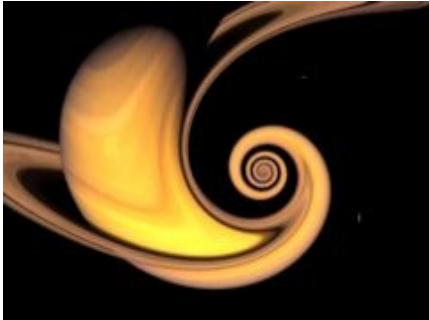
WarpRepeat Mask Comp



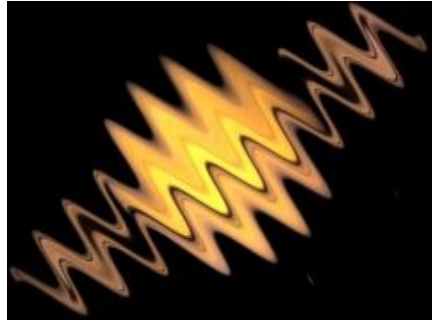
WarpShrivel Mask Comp



WarpTransform Mask Comp



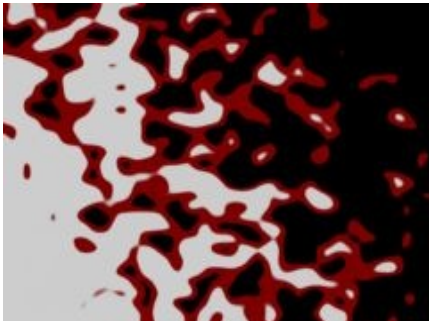
WarpVortex Mask Comp



WarpWaves Mask Comp



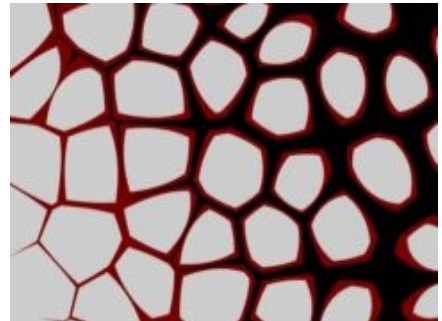
WarpWaves2 Mask Comp



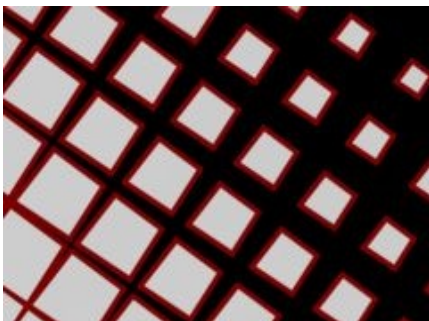
WipeBlobs



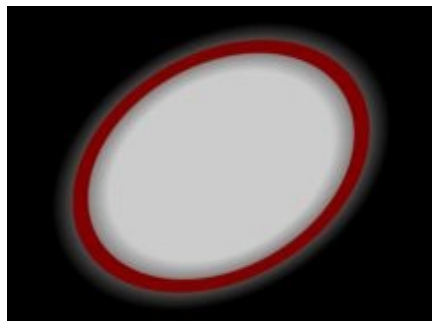
WipeBubble



WipeCells



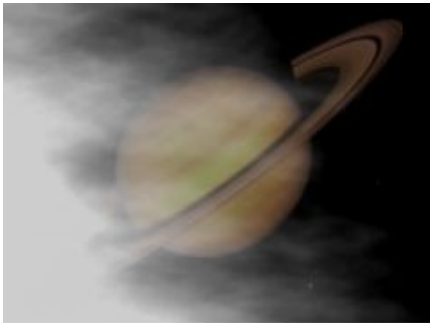
WipeChecker



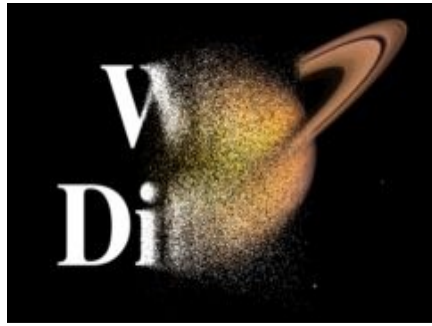
WipeCircle



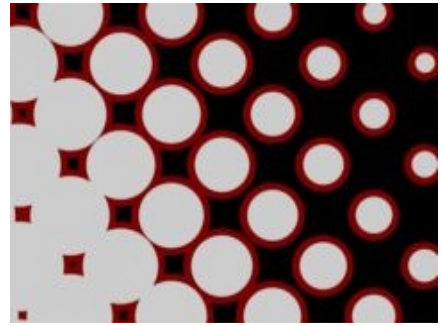
WipeClock



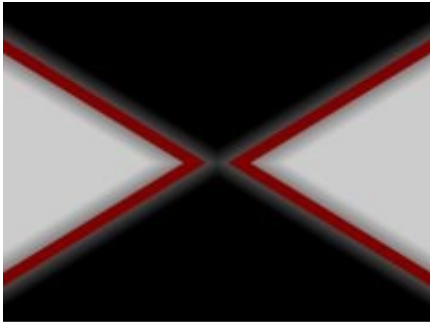
WipeClouds



WipeDiffuse



WipeDots



WipeDoubleWedge



WipeFourWedges



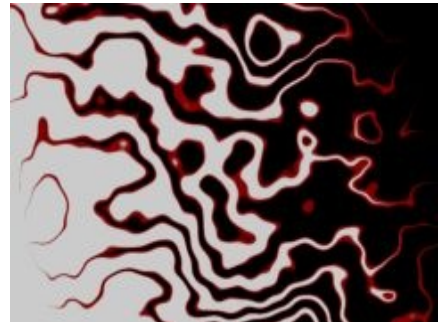
WipeLine



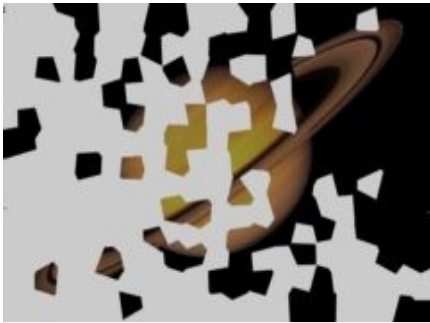
WipeMoire



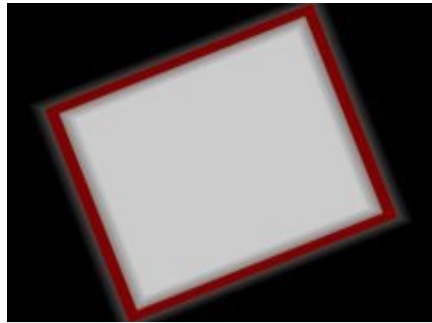
WipePixelate



WipePlasma



WipePointalize



WipeRectangle



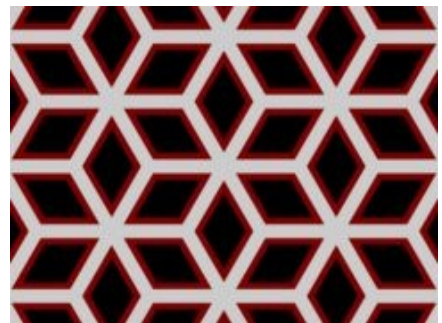
WipeRings



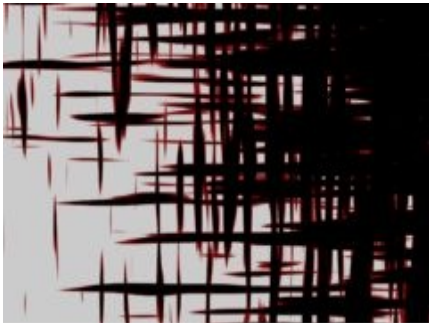
WipeStar



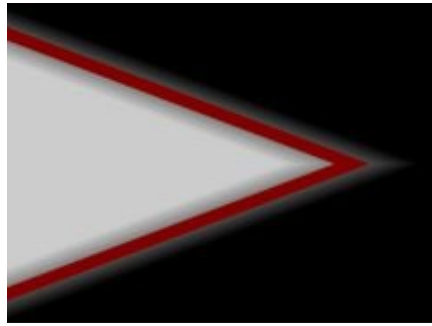
WipeStripes



WipeTiles



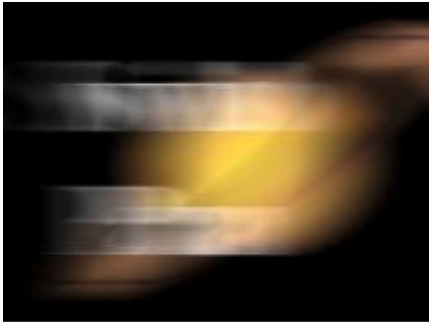
WipeWeave



WipeWedge



Wipes:Swish3D



Wipes:SwishPan



ZBlur



ZDefocus



ZComp



ZConvolve



ZFogExponential



ZFogLinear



ZGlow



Zap



ZapFrom Mask



ZapTo

Appendix A: 3rd Party Licenses

Half-float conversion

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