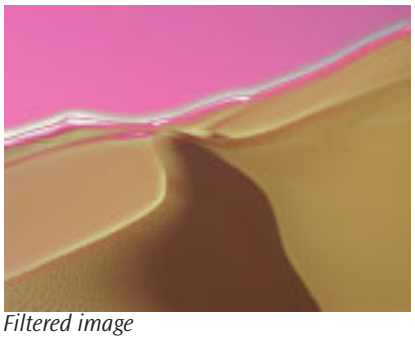
BCC Colorize Glow Filter

The Colorize Glow filter is similar to the Glow filter but it generates the glow from a single channel and then applies a gradient to the glow. The Colorized Glow can be composited with the original image or viewed by itself.

Source image



Filtered image

When the **Avoid Clipping checkbox** is enabled, the glow expands outside the borders of the original source. The **PixelChooser** is disabled if Avoid Clipping is selected.

The **Glow Channel menu** selects the channel in the source image from which the glow is derived. Pixels with higher values in the selected channel have higher intensities.

- ***Luma***, ***Red***, ***Green***, and ***Blue*** use the corresponding color channel and multiply it by the source alpha channel.
- ***Luma Inverse*** uses the inverted luma channel.
- ***Unmultiplied Luma*** and ***Alpha*** use the unmodified corresponding source channels.
- ***Luma Cartoon Edges*** and ***Alpha Cartoon Edges*** find edges in the corresponding source channel, apply outlines to the edges, and use the resulting image. When Luma Cartoon Edges or Alpha Cartoon Edges is selected, the Source Edges parameter group is available; **Cartoon Thickness** adjusts the width of the outlined edges, and **Cartoon Threshold** sets the value in the threshold above which pixels are considered fully on.
- ***Luma Edges*** and ***Alpha Edges*** find edges in the corresponding source channel and use the resulting image. When Luma Cartoon Edges or Alpha Cartoon Edges is selected, the **Source Edges** parameter group is available; **Edge Intensity** adjusts the width of the outlined edges.
- ***PixelChooser*** uses the region defined by the PixelChooser parameter group.

Source Edges Parameter Group

The Source Edges group provides additional control if either ***Alpha Edges***, ***Luma Edges***, ***Alpha Cartoon Edge*** or ***Luma Cartoon Edges*** is selected in the Glow From Channel menu.

Cartoon Thickness/Edge Intensity adjusts the width of the outlined edges

Edge Pre Blur blurs the source image before the filter searches for edges. This blur does not appear in the output; it is used only in edge detection.

Edge Post Blur blurs the edges before they are used to create the applied glow.

Cartoon Threshold sets the value in the threshold above which pixels are considered fully on. This parameter is only available when Luma Cartoon Edges or Alpha Cartoon Edges is selected in the Glow From channel menu.

Blur Amount controls the amount of blur applied to the image to produce the glow effect. At a value of 0, no blur is applied, so no glow is visible. Higher values produce more blur and, therefore, more glow.

Blur Amount=5 *Blur Amount=25* *Blur Amount=50*

Increasing **Spread** causes each point in the rendered output to be affected more by points farther away in the blur. Animating Spread can cause visible jumps in the animated effect.

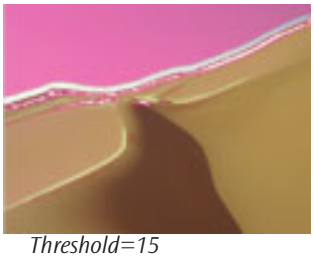
Spread=0 *Spread=50* *Spread=100*

The **Blur Quality menu** controls the quality of the post blur applied to the glow. Choose ***Low***, ***Medium***, ***High***, ***Higher*** or ***Highest***. Low and Medium are adequate for simple matte smoothing, but to blur the edges of a high-contrast image or animate the blur, you may need to use Highest. There is a significant rendering cost to using High, and considerably more for using Highest.

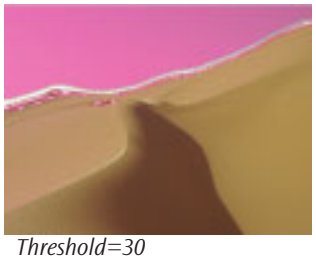
Threshold adjusts the sensitivity of the filter to edges in the image. Increasing Threshold reduces the amount of glow created by weaker edges in the image, so less glow appears on smaller details in the source image.

Reducing this value to 0 tends to add noise to the image. For best results, use Threshold settings of 1 or above.

Threshold=1



Threshold=15



Threshold=30

Overdrive Amount adjusts the overall intensity of the glow created by the blur. Lower values producing a softer glow, mixing the blurred image with the resulting glow. Higher values produce a harder, more dramatic glow effect.

Overdrive=10

Overdrive=210

The **Overdrive Soften** control softens the glow produced by the Overdrive parameter and pulls its edges in. Higher values of Overdrive Soften sharply reduce the edges of the glow. Negative values gently increase and soften the edges.

The **Overdrive menu** controls how the glow portion of the effect composites over the blurred portion of the effect. The resulting filtered image is then composited with the source image using the chosen Apply Mode. For information on the available apply modes, see Appendix A in the User Guide.

Softness controls a blur that is applied to the glow after the first blur and the overdrive mix.

Intensity scales the intensity of the glow.

The **Glow Offset** parameter offsets the glow. A positive value pushes some of the negative values positive and makes them visible in the output. A negative value reduces all the glow values, causing only the most glowing pixels to appear in the output.

The **Color Preset menu** allows you to choose a Colorize preset (a gradient of up to six colors to tone the effect). If the Mode menu is not set to Colorize, the presets have no affect.

Colorize Parameter Group

The **Gradient color ramp** displays a preview of the gradient you are creating. The Gradient Preview will not update while you drag sliders.

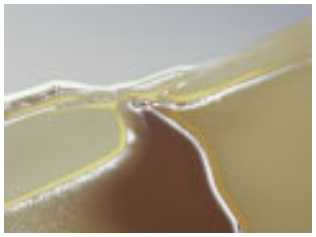
The **Color Space menu** determines whether the gradient is created in ***RGB, HSL,*** or ***HSV*** color space. Choose HSL or HSV is you want to animate the colors in the gradient while maintaining the level of saturation.

The Color 1 and Color 6 colors are always used. Each of the remaining colors includes a **Color On checkbox**. Select this option to add the corresponding color to the gradient. Deselect this option to remove the corresponding color from the gradient.

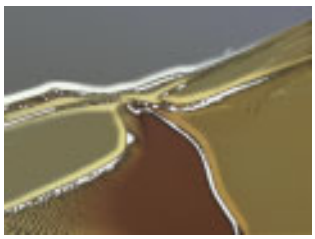
The **Color 1**, **Color 2**, **Color 3**, **Color 4**, **Color 5**, and **Color 6** controls choose six different colors to add to the gradient.

Black Point adjusts the value in the Input Channel which is treated as the pure Color 1 level in the output. All pixels whose Input Channel value is lower that the Black Point value are mapped to the Color 1. Increasing positive Black Point values cause more pixels to be purely Color 1 in the output. Decreasing negative values cause fewer pixels to be purely Color 1. The following illustrations show the affect of adjusting the Black Point in with a simple two-color gradient from black (Color 1) to white (Color 6).

Black Point= –75



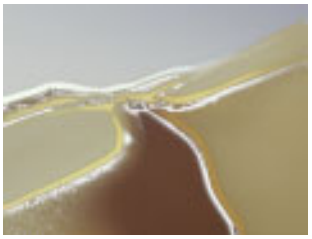
Black Point=0



Black Point=75

White Point adjusts the value in the Input Channel which is mapped to the pure Color 6 in the output. Decreasing White Point causes more pixels to be purely Color 6 in the output.

The illustrations below show the affect of adjusting the White Point in with a simple two-color gradient from black (Color 1) to white (Color 6).

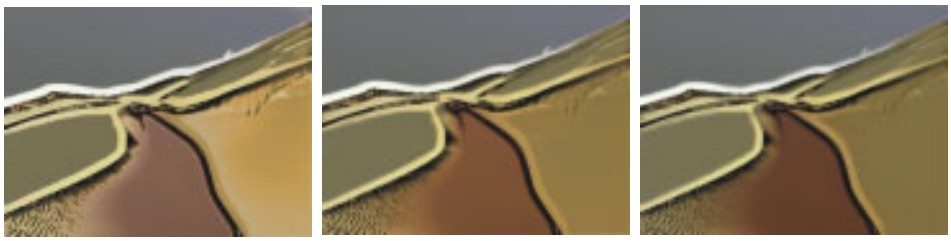


White Point=100

White Point=50

White Point=25

Negative **Squeeze** values compress and shift the gradient towards the left (Color 1) side. Increasing positive values compress and shift the gradient towards the right (Color 6) side.



Squeeze= –75 *Squeeze=0* *Squeeze=75*

Advanced Gradient Controls Parameter Group

The Advanced Gradient Controls parameter group is located inside the Colorize parameter group.

The **Loop Mode menu** affects the output when either Loop Count or Gradient Offset are changed from their default values.

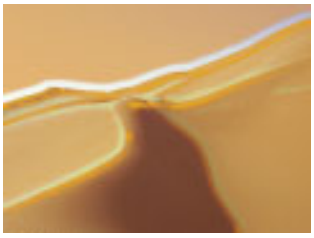
- **Forward Loop** is the most useful choice and is the default value. When you choose Forward Loop, increase **Loop Count** to create a gradient that loops back to Color 1 after it passes **Color 6**. Change **Gradient Offset** to move the mapping through this loop.

  When you use Forward Loop, increase **Crossfade End Colors** to a value other than 0 so that the final image does not appear to jump.
- When you choose **Back & Forth Loop**, the color mapping goes from 1 to 6 to 6 to 1, etc. An advantage to this choice is that your final image will not jump.
- When **Off** is chosen, going past the end of the gradient will use the end color.

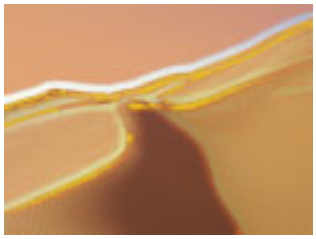
Loop Count sets the number of times that the gradient loops. Values less than one use less of the gradient, and negative values loop backwards, which will only have a different appearance from a positive value if **Gradient Offset** is not set to 0. Set Crossfade End Colors to a value other than zero when you use Loop Count. This will prevent the rendered image from jumping.

Gradient Offset offsets the starting point of the gradient. This can be animated to create palette-shifting effects. A value of 100 offsets the gradient by one full cycle. Since the gradient loops back and forth, setting Gradient Offset to 100 or 300 simply reverses the direction of the gradient. Set Crossfade End Colors to a value other than zero when you use Gradient Offset. This will prevent the rendered image from jumping.

Color Ease adjusts the softness of the transitions between pure colors in the gradient. Increasing positive values cause the transitions to be more abrupt. Decreasing negative values soften the transitions.



Color Ease= –100



Color Ease=100

Gradient HSL Parameter Group

The Gradient HSL parameter group is located inside the Colorize parameter group.

Hue cycles the colors in the gradient around the color wheel in the HSL color space.

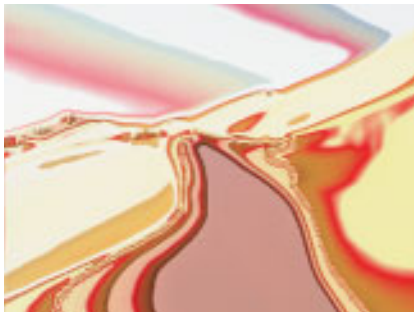
Saturation adjusts the intensity of each color's hue in the gradient. Negative values desaturate the gradient, while positive values increase the saturation of the gradient.

Lightness controls the brightness of the colors in the gradient. Higher values lighten the colors, while lower values darken the colors.

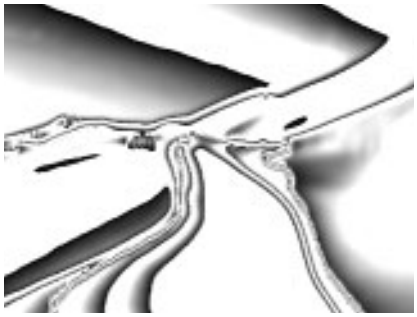
Composite Parameter Group

The Composite parameter group contains controls that select the output of the effect and how it is composited with the source.

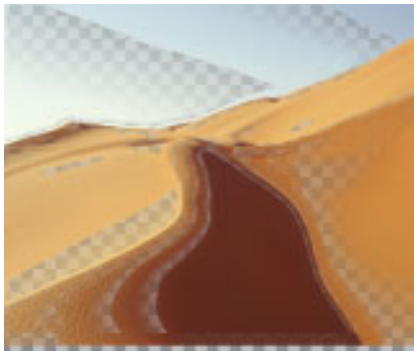
The **Output menu** sets the output of the effect.



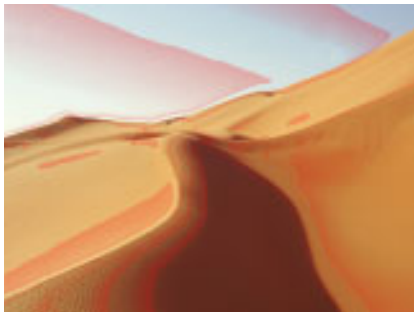
- The default is ***Colorize,*** which displays the colorized glow effect composited with the source layer.



- ***Glow Map*** displays the glow map in black and white.



- When ***Matte with Glow*** is selected, an alpha channel is created from the glow. Transparent and semi-transparent areas display a checkerboard image.



- ***Mask Outside Glow*** allows you to view the source with a ruby mask over the pixels that are not affect by the colorize glow effect.

- *View Source* views the channel from which the glow is derived.

When the **Opaque Glow checkbox** is deselected, the glow is composited with its own intensity before it is composited with the source. This makes colors at the left end of the gradient preview ramp more transparent. When this is enabled, the glow itself is opaque. Leave Opaque Glow deselected when the filter is applied to a layer with an alpha channel.

If Opaque Glow is off, **Glow Opacity** scales the opacity of the glow. Raising Glow Opacity causes more of the glow to be opaque, and the colors at the left end of the gradient will appear more prominently in the output.

The **Apply Mode menu** determines how the filter is composited over the source image.

For information on the available apply modes, see Appendix A in the User Guide.

Apply Mix controls the mix of the specified Apply Mode with the ***Normal*** apply mode. If the Apply Mode is Normal, Apply Mix has no affect. If Apply Mix is 0, Apply Mode has no affect. Increase Apply Mix to blend the Apply Mode setting with the Normal apply mode.

Many hosts process media one field at a time which can cause flickering to occur on filtered effects. The **Reduce Flicker menu** allows you to reduce flicker in the rendered image. The only way to evaluate a deflicker setting is to render and play back the effect on an NTSC monitor. Choose from the following options in the Reduce Flicker menu.

- ***1-2-1*** mixes each pixel with the pixels above and below it, with the input pixel getting twice the weight as the ones above and below. For After Effects users, this works the same as applying the AE Reduce Flicker filter at a setting of 0.5.
- ***2-3-2*** provides more softening than 1-2-1.
- ***1-1-1*** provides the most softening for effects that still contain flicker with the above options.
- ***Off*** is the default. If Off is chosen, no deflickering will be done.

Mix with Original blends the source and filtered images.

Motion Tracker Parameter Group

The Motion Tracker parameter group allows you to track the motion of an object, then use the motion path data to control another aspect of the effect. The parameters that can be affected depend upon the filter. For example, apply the Colorize Glow filter and use the Motion Tracker parameters to track a logo on a t-shirt. Apply the Colorize Glow effect to the logo in an oval area using the PixelChooser's Distance to Point choice. For more information, see Chapter 1 in the User Guide.

The PixelChooser Parameter Group

The PixelChooser is included in many Boris filters and provides several methods to selectively filter an image.

For more information on the PixelChooser, see Chapter 10, “The PixelChooser” in the User Guide, or open the help file for the standalone PixelChooser filter.