Big Box of Tricks

Instructions

Installation



If you are running OS 10.2 or later, download and launch the file '**BigBoxofTricksInstall.pkg**' and follow the prompts of the install program.

If you are pre-OS 10.2 download the .Stuffit file '**BigBoxofTricks.sit**' and expand the file (get the free Stuffit expander from www.stuffit.com/mac/expander/). This will create a folder called 'Big Box of Tricks' that contains all the filters. Copy this folder into the Plugins folder on your hard drive.

The plugins folder is located at, from the root of your main hard drive:

/Library/Application Support/Final Cut Pro System Support/Plugins

Make sure that you have both read and write privileges to the plugins. Also, be sure to copy them to the correct place on your hard drive. There are multiple "Library" folders in OS X, but the one you need is the one at the root of your hard drive, not the one in your own home folder.
(Alternatively: Command "I" click on the FCP icon in the Finder. This opens an information window for the FCP application. Near the bottom of this is a "Plug-ins:" panel. Expand the panel and click "Add". This brings up a file browser, from which you can select the expanded 'Big Box of Tricks' folder. Click "Add" and all the plug-ins within the folder will be added.)

These filters have been tested with FCP5 under OS X. They should also function correctly in Final Cut Express, FCP3, and FCP HD. Please be aware that some of the filters do not render correctly in 10-bit mode. This appears to be a problem with FCP and out of our control, however all the filters render correctly in 8-bit mode.

Introduction

Nattress Big Box of Tricks includes the existing filters from *Nattress Set 1* and *Set 2,* as well as several new filters.

Using these filters, you can create unique visual treatments for your video, for example, using *G Beauty*, *G Tone Enhancer*, *G Saturator Balanced* or *G Super Levels*. Add special effects with *G Lens Flare*, *G Star*, *G Posterise*, *G H and V Blur Glow* and a whole suite of TV effects. Create smoother slow motion using *G 50 Percent* or the generator *G Field and Frames*. Explore a range of transitions that enable you to burn through one clip to the next, dissolve under a lens flare or bounce one clip over another. Use the powerful *Nattress Generators* to create animated bar graphs, laser beams, animated lines for maps and diagrams, video strips with multiple video sources displayed simultaneously and more!

The package consists of eight groups of filters, a group of generators and a group of transitions:

Filters	
Blurs: These filters give you several different ways to blur your image, or parts of your image.	**G Cool Blur** **G Directional Blur** **G Horizontal and Vertical Blur** **G H and V Blur Glow** **G Radial Blur**
Extra Touches: In this group you find filters that add a little special effect to your video.	**G Beauty** **G Bug Eye** **G Earthquaker** **G FBM Noise** **G Lens Flare** **G Reverberator** **G Split Screen** **G Star** **G Theatrical** **G Tone Enhancer**
FixIT Each of these filters addresses a specific problem, and fixes it: from tweaking alpha; smoothing DV artifacts; swapping colour channels; removing/reducing photo-flashes; eliminating still picture twitter; swapping and shifting fields in interlaced video; and making progressive video look interlaced.	**G Alpha Expander** **G Chroma Smoother** **G Copy Channel** **G Deflash** **G Deflicker** **G Field** **G Reinterlacer**

Filters

Image F/X This group of filters modifies the look of your video with special effects thats affect the whole image; softening the picture with diffusion; adding psychadelic colour; removing colour; stepping the levels with a posterisation filter; saturating or desaturating; sharpening; shifting and/or limiting levels; and adding colour tints.	**G Diffuse** **G False Colour** **G Monochrome** **G Posterise** **G Saturator** **G Saturator Balanced** **G Sharpen** **G Surreal** **G Threshold** **G Tint.**
Levels And Curves These filters are designed to give you precise control over the tones in your video, operating in either RGB or Y'CbCr space for creative control. Although Final Cut Pro has some in-built plugins for Levels and Contrast, the Nattress plug-ins are desinged to be easier to use and offer specific, as well as extensive, control over your video	**G Contrast** **G Detail Contrast** **G Detail Levels** **G Hyper Contrast** **G Levels** **G Simple Curves** **G Simple Levels** **G Super Levels.**
Noise Reduction Some useful filters to reduce/eliminate static and buzz.	**G Chroma Noise Reduction** **G Spatial Noise Reduction** **G Temporal Noise Reduction.**
Time Tools These filters are designed to improve the look of slow motion and time lapse footage. See also the generator *G Fields and Frames*.	**G 50 Percent** **G Timelapse.**
TV Effects When you need to create the look of television, with all its quirks and faults, these filters give you the tools you need.	**G Analogue** **G Chroma Shift** **G Digital** **G Head Clog** **G Resolution** **G RGB TV** **G Roll** **G Scratch** **G Shift** **G TV Lines**

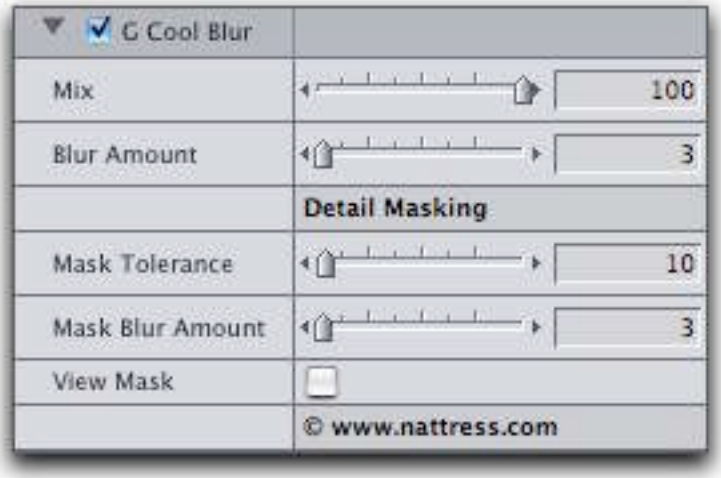
Transitions

Here you will find several innovative ways to get from shot A to shot B!	**G Burn** **G Directional Blur Dissolve** **G Dissolve** **G Horizontal and Vertical Blur Dissolve** **G Lens Flare Transition** **G Long Dissolve** **G Spring**

Generators	
Look here for plug-ins to create animated lines for your next Indianna Jones style epic, animated video strips, countdowns, bar graphs, laser beams, noise or static and random symbols for alien manuscripts. Use G Fields and Frames to map 30 fps video into 24 fps for a nice slow motion effect.	**G Bars** **G Countdown** **G FBM Noise Generator** **G Fields and Frames** **G Laser** **G Lines and G Long Lines** **G Random** **G Video Strip**

Blurs:

G Cool Blur



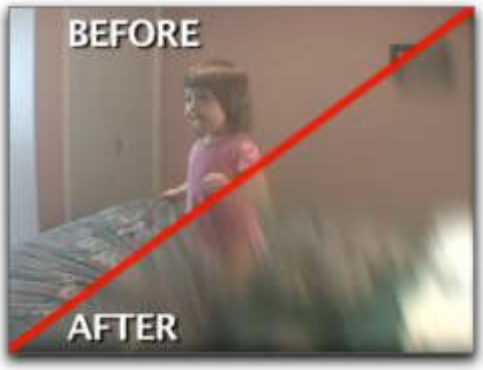
This filter blurs only the parts of an image that are already blurry. This is useful for enhancing depth of field effects. A mask is used to determine which areas of the original image are blurry or sharp based on the level of detail. The mask protects the sharp areas of the image, which remain unaffected by *G Cool Blur.*

Please note that *G Cool Blur* does not render correctly in High-precision YUV rendering. The work around is to render in 8-bit YUV mode.

Control	Settings	Notes
Mix	`0 to 100`	Controls the blending of the raw image with the blurred image. Zero is no blurring and 100% is the full effect.
Blur Amount	`0 to 100`	This controls the amount of blurring applied to the non-masked part of the image.
Mask Tolerance	`0 to 255`	This controls the mask. The higher the number, the smaller the mask becomes and more of the image will be blurred.
Mask Blur Amount	`0 to 100`	This blurs the mask to make a smooth transition from protected/ masked areas to blurred areas. A larger number makes for a larger transition area.
View Mask	`on` `off`	This turns on a diagnostic tool for identifying which areas of the screen are masked (black) and therefor will not be affected by the blur.

G Directional Blur

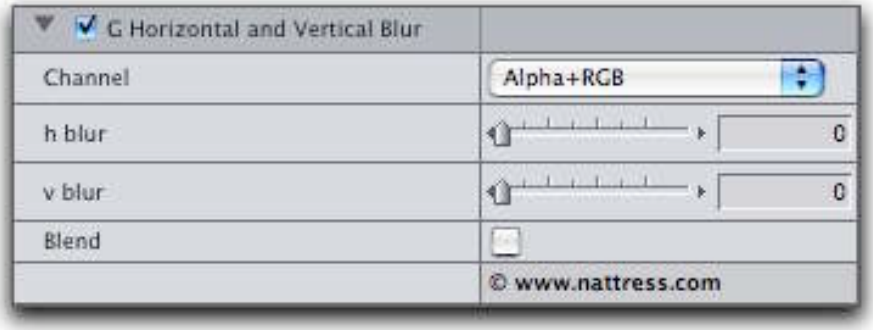
Use this filter to add a quick blur in the axis of your choosing. Great for creating a quick motion blur type effect.



Control	Settings	Notes
Amount	`0 to 100`	Controls the amount of the blur, with 100 being the maximum blur.
Blur Angle	`-360 to 360`	This sets the angle, in degrees, for the directional blur.

G Horizontal and Vertical Blur

This filter enables you to blur each of the vertical and horizontal axis individually. This filter also contains a channel selector so that you can blur just one of the colour channels, the alpha, or the luma channel in isolation. This filter is great for making soft focus backgrounds for graphics or pictures.



Control	Settings	Notes

Channel	`Alpha + RGB`
	`Alpha`
	`RGB`
	`Red`
	`Green`
	`Blue`
	`Luma`
		This selects which channel will be affected by the blur.

h blur	`0 to 100`	Controls the amount of the blur on the horizontal axis.
v blur	`0 to 100`	Controls the amount of the blur on the vertical axis.

Control	Settings	Notes
Blend	`on` `off`	When this is set to off, the filter calculates the horizontal blur, and then calculates the vertical blur, for the final result. When this is set to on, the filter blends the horizontal blur with the vertical blur and then calculates the final result.

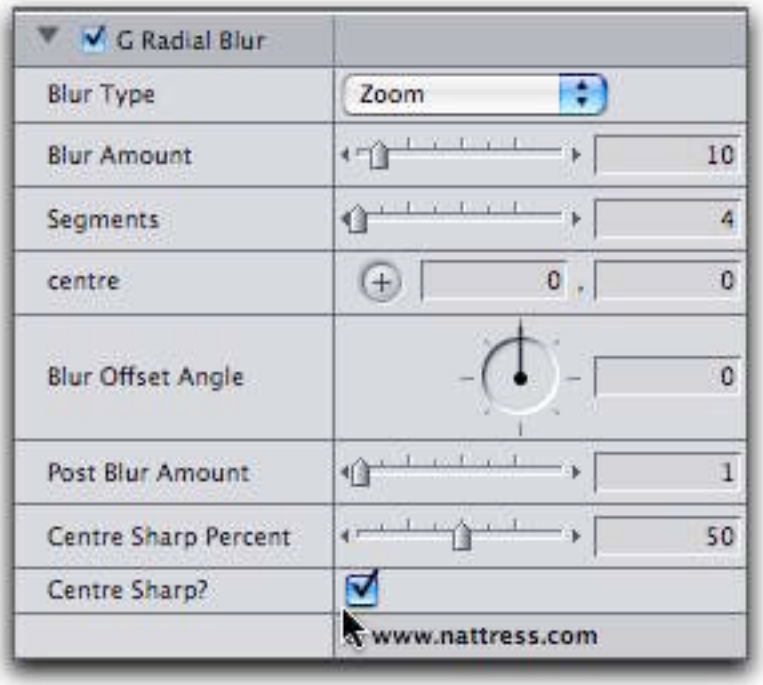
G Horizontal and Vertical Blur Glow

G H and V Blur Glow adds a glow effect with a highlight blur that can be set to either horizontal or vertical. When applied in low levels, a beautiful, dreamy look can be created. By adjusting the white point, you can create a saturated or desaturated look, as desired. Cranking the *Amount*, while keeping the white point around 125 and using the *Add* mode, can create some rather psychedelic effects if you wish to revisit the 70's.

Control	Settings	Notes
Amount	`0 to 200`	Controls the strength of the overall effect.
White Point	`0 to 255`	This sets what regions of the screen are considered white. This affects how the glow is applied to the image, as brights and darks are treated differently, to preserve the saturation of the dark regions.
Blur Type	`Horizontal` `Vertical`	Sets whether the blur is applied horizontally or vertically.
Blur Amount	`0 to 200`	Controls how much blur is applied to the highlights of the glow.
Mode	`Add` `Screen`	Sets how the modified image is blended with the original to create the final effect.

G Radial Blur

G Radial Blur is two different blurs in one: zoom blur; and spin blur. The *zoom blur* simulates the motion blur of tracking or zooming quickly into your subject. The *spin blur* distorts your image as if it were rotated quickly around the centre point. Unlike the Radial Blur filter that comes with FCP, the G Radial Blur filter offers additional controls for setting the amount of blur and for keeping the centre of the blur radius sharp.

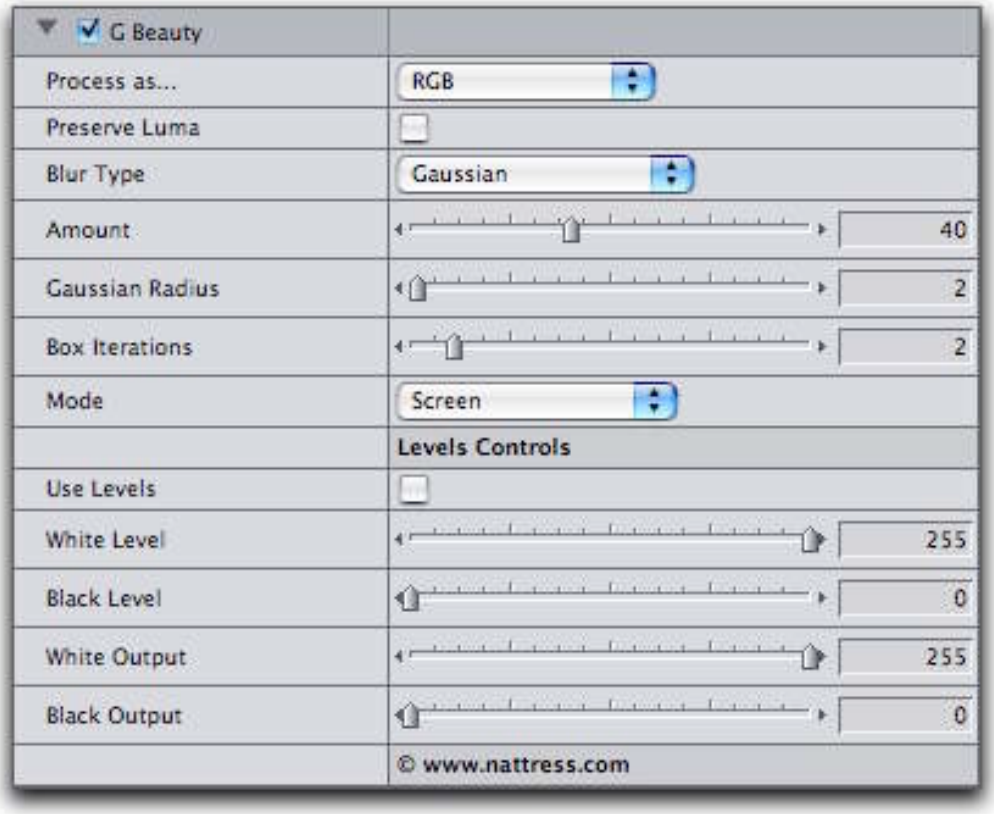


Control	Settings	Notes
Blur Type	`Zoom` `Spin`	Zoom blur sends the direction of the blur outwards from the centre point. Spin blur orients the blur in a circular path around the centre point.
Blur Amount	`0 to 100`	This controls the intensity of the blur.
Segments	`4 to 20`	Sets the number of sections into which the screen is subdivided to calculate the blur. The larger the number, the smoother the blur, but at increased render times.
Centre	`point picker (x,y)`	The default is the centre of your screen, but the point can be set anywhere of your choosing. Click on the '+' to activate the point picker. Then click anywhere within the *canvas* to set your point.
Blur Offset Angle	`-360 to 360`	This controls where the segment divisions appear on screen.
Post Blur Amount	`0 to 100`	This is a blur applied after the zoom or spin blur, to soften any artifacts or screen breakup that may occur. A small amount of Post Blur goes a long way to smoothing out your radial blur.
Centre Sharp Percent	`0 to 100`	This creates an area around the centre point that is *not* blurred. The larger the number, the larger the area that is protected. This prevents both the zoom or spin and the post blur from affecting the region.
Centre Sharp?	`on` `off`	This turns on or off the Centre Sharp, whose amount is set above.

Extra Touches:

G Beauty

Use *G Beauty* to add a classic "beauty" glow to your footage, reminiscent of 1940's films. This filter can also be used to create lovely tonalities in your video. Experiment with the different *Modes* to find a look that suits your footage.

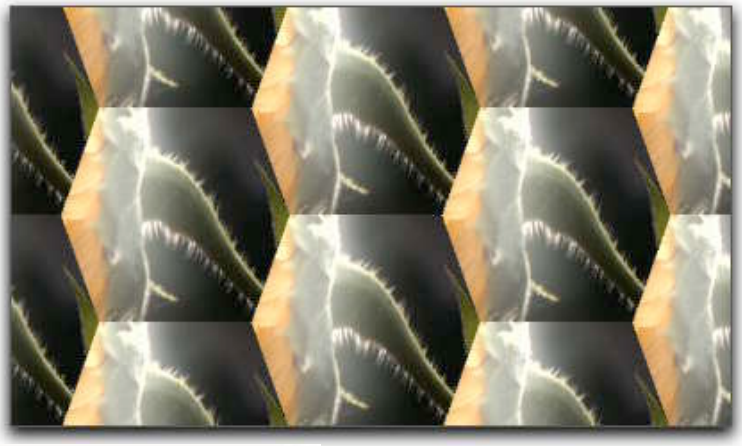


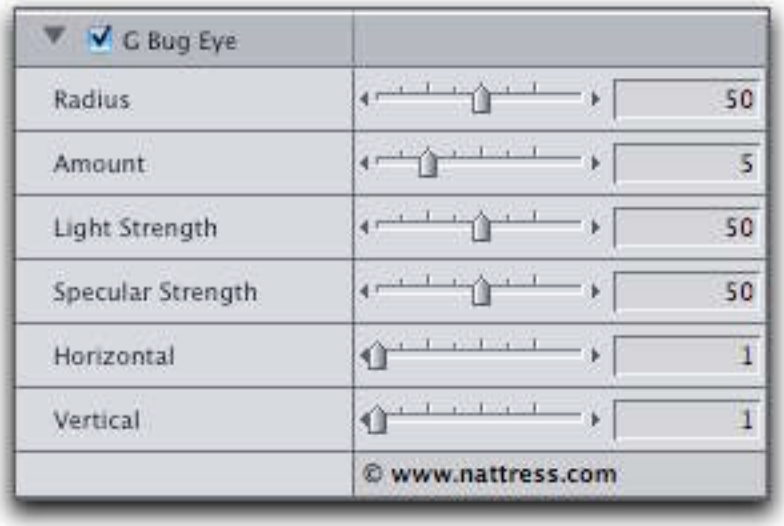
Control	Settings	Notes
Process as...	RGB Y'CbCr	Allows you to set the filter to work in RGB or Y'CbCr colour space. RGB generally works well, but Y'CbCr can produce some interesting results.
Preserve Luma	on off	Turning *Preserve Luma* on makes the filter only affect the colours in the image, not the brightness.

Control	Settings	Notes
Blur Type	Gaussian Box	Both of these blurs have subtly different effects on the footage. In RGB space, the Gaussian blur desaturates the colours slightly more than the box blur and has a more diffuse feel to its blur while maintaining detail. In Y'CbCr space, the Box blur gives your footage a slightly cooler feel, while the Gaussian blur shifts the colours to the warmer tones in your image.
Amount	0 to 100	Controls the intensity of the blur, and thus the overall 'beauty' effect.
Gaussian Radius	0 to 100	This control modifies the blur only when Blur Type is set to Gaussian. The larger the radius, the larger the area used to calculate the Gaussian blur.
Box Iterations	1 to 10	This control modifies the blur only when the Blur Type is set to Box. The more iterations, the blurrier the image becomes, Note this effect is quite subtle if *Preserve Luma* is set to *on*.
Mode	Normal Multiply Screen Overlay Lighten Darken Add Blur	Selects how the effect is combined with the original footage. Normal: the effect replaces original. Multiply: combination results in the final image being darker. Screen: the opposite of multiply, brighter image. Usually gives the best result. Overlay: makes brights brighter and darks darker.*** Lighten: makes brights brighter.*** . Darken: Makes darks darker.*** Add: another way of brighting the brights. Blur: This is for diagnostics purposes. It shows the blurred image before being processed by the other modes. This is useful for getting a consistent look across diverse shots. ***Only works in RGB colour space.
Use Levels	on off	Setting this control to *on* allows you to adjust the blurred image (as viewed with *Mode* set to *Blur*), which in turn modifies the finally 'beauty' look. The effects of Levels is muted if *Preserve Luma* is set to *on.*
White Level	0 to 255	Lowering White Level will brighten image
Black Level	0 to 255	Raising Black Level will darken image
White Output	0 to 255	Lowering White Output will make the whole image dimmer by limiting the maximum brightness of the image
Black Output	0 to 255	Raising Black Output will make the dark areas of the image brighter, making the image look foggy

G Bug Eye

G Bug Eye divides the screen into an array of hexagons to make the image appear like it is being viewed through a bug's compound eye. The horizontal and vertical controls govern the number of hexagons that make up the compound eye. To enhance the buggy eye effect, the other controls produce a fish-eye effect on the video.





Please note that *G Bug Eye* does not render correctly in High-precision YUV rendering. The work around is to render in 8-bit YUV mode.

Control	Settings	Notes
Radius	`0 to 100`	The radius of the fish eye effect.
Amount	`0 to 20`	The amount of curvature of the fish eye effect.
Light Strength	`0 to 100`	Controls the brightness of the diffuse highlight that makes the eye elements look curved.
Specular Strength	`0 to 100`	Controls the brightness of the specular highlight that makes the eye elements look curved.
Horizontal	`1 to 16`	The number of hexagons across the screen
Vertical	`1 to 16`	The number of hexagons up and down the screen.

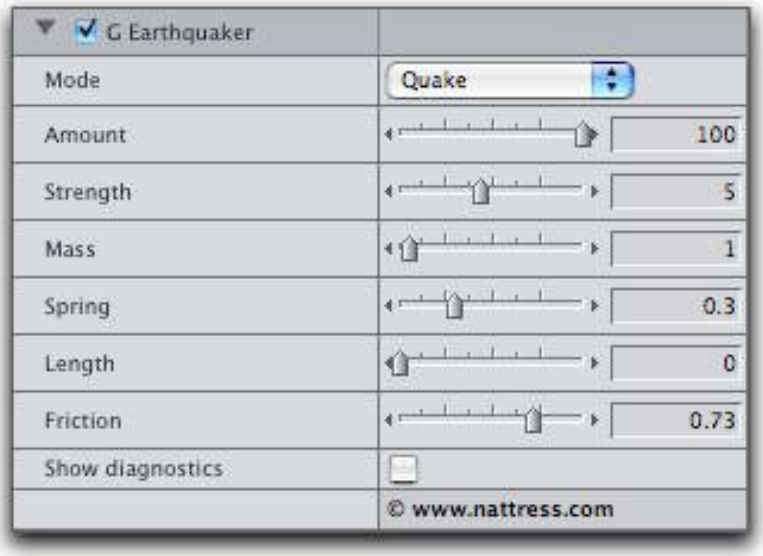
G Earthquaker

G Earthquaker is a physics based simulation designed to *shake* or *quake* the screen. The image is attached by a spring to a randomly vibrating point. By varying the pa-

rameters of the spring, it is possible to simulate the chaos of an earthquake or make your beautiful footage look like a wobbly handheld home movie.

There are two modes: the *shake* mode just shakes the screen, but this can cause the edges of the screen to become visible; *quake* mode compensates for this by scaling the screen as it moves, producing some lovely distortions.

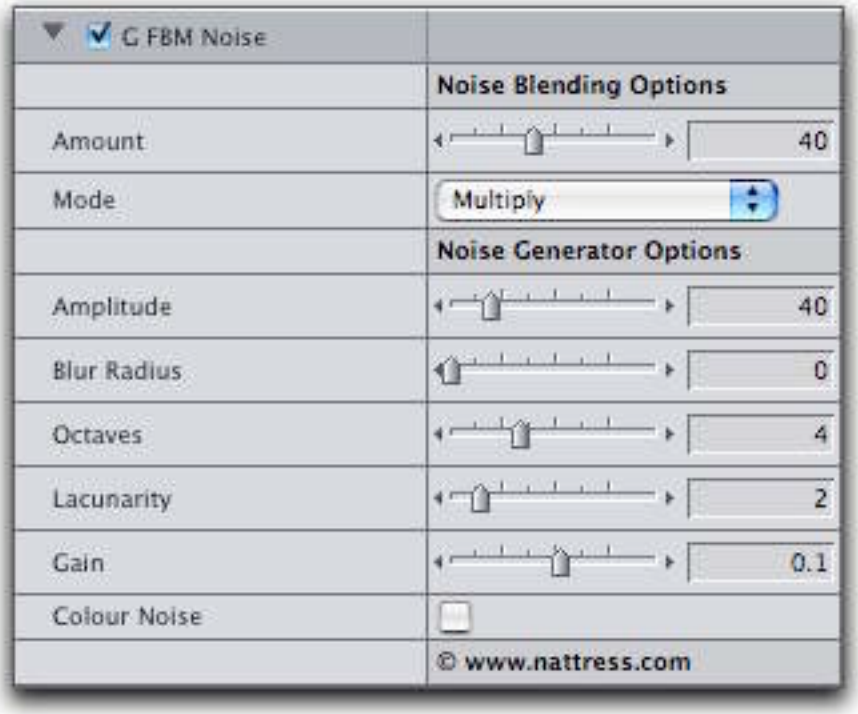
To help work with the effect, the diagnostics mode shows the randomly vibrating point and the centre of the image as coloured dots.



Control	Settings	Notes
Mode	Quake Shake	Selects wether Shake or Quake mode is to be used.
Amount	0 to 100	The overall amount of the effect - use keyframes to bring the effect in or out.
Strength	1 to 10	The strength of the randomly vibrating point that drives the spring simulation system, not unlike the Richter scale.
Mass	0.5 to 10	The mass of the screen - increasing mass will slow the movement of the screen, but also give it greater inertia.
Spring	0 to 1	The spring constant of the simulation - increasing the spring constant will make the spring stronger and springier - decreasing it will make the spring looser and pull less on the screen.
Length	0 to 10	This is the "natural length" of the spring. This can be increased to allow the screen to move around further.
Friction	0 to 1	Friction acts like a viscous force that retards the motion of the screen. A friction of zero will send the screen in to chaos as there will be nothing stopping the spring stretching and the screen moving. Increasing the friction will dampen the movement.
Show diagnostics	on off	This turns on the coloured dots that show the randomly vibrating dot (green), and the centre point of the screen (red).

G FBM Noise

This filter is great for adding grain to your video. FBM stands for Fractional Brownian Motion, a type of noise that is often used in 2D and 3D computer graphics. This filter blends the noise with your video image. There is also a generator that just creates the noise. FBM is a controllable type of noise that produces interesting results. FBM works by adding together a number of sets of noise of different scales.



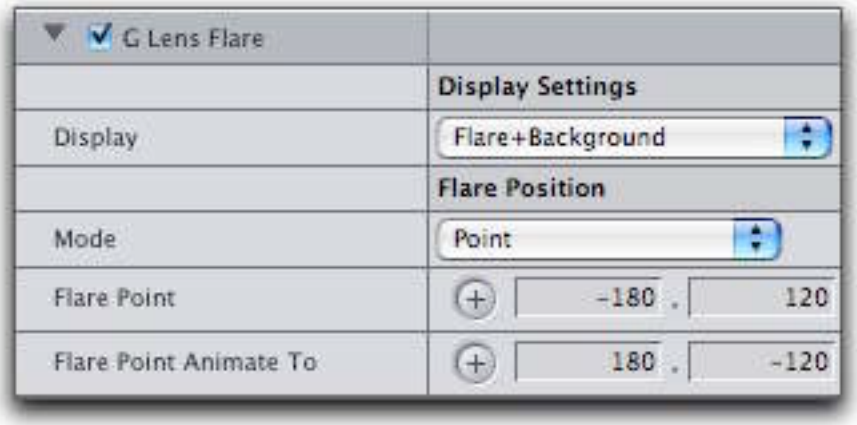
Control	Settings	Notes
Amount	`0 to 100`	The percentage of noise to blend with the video image.

Mode	`Blend`
	`Multiply`
	`Screen`
	`Overlay`
	`Lighten`
	`Darken`
	`Add`
	`Just Noise`
		Selects how the effect is combined with the original footage.
		Blend: a simple percentage mix using *Amount*
		Multiply: combination results in the final image being darker.
		Screen: the opposite of multiply, brighter image.
		Overlay: makes brights brighter and darks darker.
		Lighten: makes brights brighter.
		Darken: Makes darks darker.
		Add: another way of brighting the brights.
		Just Noise: useful for diagnostics.

Control	Settings	Notes
Amplitude	`0 to 200`	Lower number makes darker noise; higher number makes whiter noise.
Blur Radius	`0 to 10`	The noise can be blurred to soften it.
Octaves	`1 to 10`	The number of layers of noise that get added together - increasing will produce more interesting effects and longer render times.
Lacunarity	`1 to 8`	The scale difference between the layers of noise - adjusts the granularity of the noise.
Gain	`-1 to 1`	The amplitude difference between the layers of noise.
Colour Noise	`on` `off`	Produces RGB colour FBM noise instead of monochrome FBM noise.

G Lens Flare

G Lens Flare is a fully controllable lens flare filter for Final Cut Pro. Every parameter of the flare can be adjusted, however there are a selection of presets to get you off to a good start. As part of this filter, there is an artificial intelligence control that determines the brightest area in your shot and places the Lens Flare at the centre of that point.



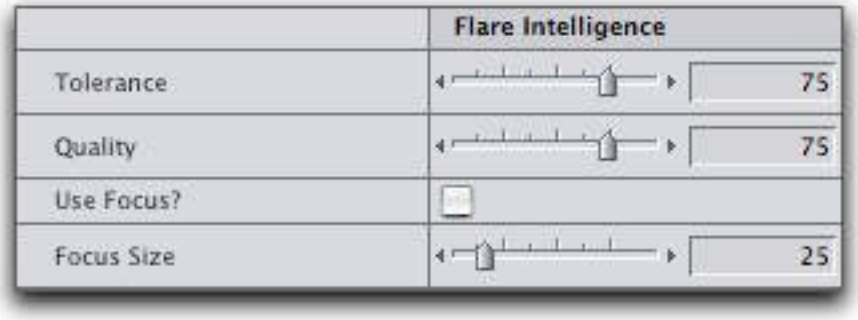
Control	Settings	Notes

Display	`Flare+Background`
	`Just Flare`
	`Mask`
	`Masked Flare`
	`Background`
	`Intelligent Diagnostics`
		Flare+Background: the default which shows the flare blended with the background video,
		Just Flare: see the flare by itself with no background
		Mask: see the mask if you're using it
		Masked Flare: see the flare masked by the mask, if you're using it
		Background: see just the background
		Intelligent Diagnostics: see the intelligent mode work to tweak it's settings

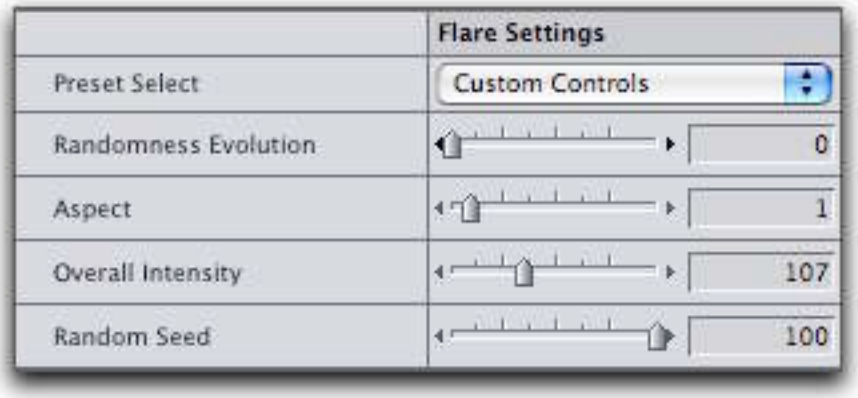
Mode	`Point`
	`Intelligent`
	`Animate`
		Point: the default - the flare appears at the point selected and does not move unless you keyframe the animation of the Flare Point parameter below
		Intelligent: Engages "Intelligent" mode where FCP tries to guess the brightest part of the scene
		Animate: animates the flare from the "Flare Point" to the "Flare Point Animate To" point, set below.

Flare Point	`point picker (x,y)`	The bright centre of the flare.
Flare Point Animate To	`point picker (x,y)`	The destination point in *animate* mode.

The parameters for *Flare Intelligence* are used only if you select "Intelligent" mode above. This mode attempts to guess the centre of the brightest region in the video image. The flare point will animate with the video. To help use this mode, temporarily turn on the display of *Intelligent Diagnostics* above. Make sure to turn it back to show the effect before rendering.



Control	Settings	Notes
Tolerance	`1 to 100`	Defines what is "bright" and what is "dark." Lower the Tolerance to include more of the image as "Light".
Quality	`1 to 100`	Higher quality uses a sharper picture to select the “Light”. Lower quality eliminates small points of light that are confusing the *Intelligence.*
Use Focus?	`on` `off`	The focus allows you isolate one area of the video image for consideration by the *Intelligence*. The centre of that area is defined by the *Flare Point* above, and its size by the *Focus Size* Control below .
Focus Size	`1 to 150`	Controls the size of the focus area.

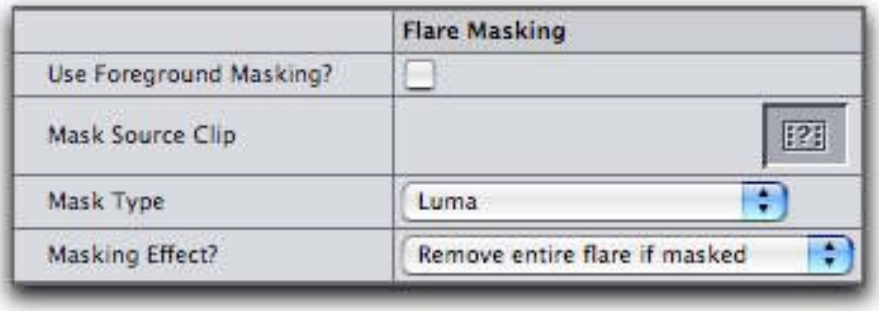


Control	Settings	Notes

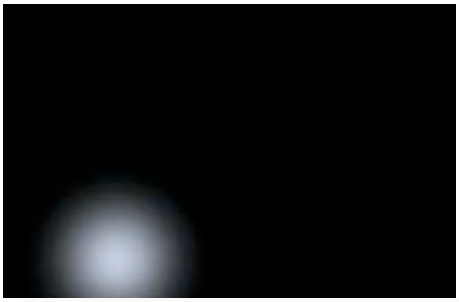
Preset Select	`Custom Controls`
	`Other End of the Rainbow`
	`Photon`
	`Gaudy`
		Select either to use the custom controls to design your own lens flare or use a preset. Note when using a preset, the controls for *Bloom, Starburst,* and *Rainbow* will have no affect.

Randomness Evolution	`0 to 1.00`	Use a small number to change the randomness of the bloom and starburst slowly over time. A higher number will animate the changes rapidly. A setting of zero will make result in no change over time.
Aspect	`0.1 to 10`	Change the aspect ratio of the lens flares. Low numbers are long and thin. Higher numbers are stretched wide.
Overall Intensity	`0 to 300`	Master control of intensity of the whole affect. Individual intensity controls can be adjusted below.
Random Seed	`0 to 100`	This filter makes great use of random numbers - this control sets the "seed" for the random numbers. If you don't quite like the flare you've created, try adjusting the random seed to see if you can get a more pleasing pattern.

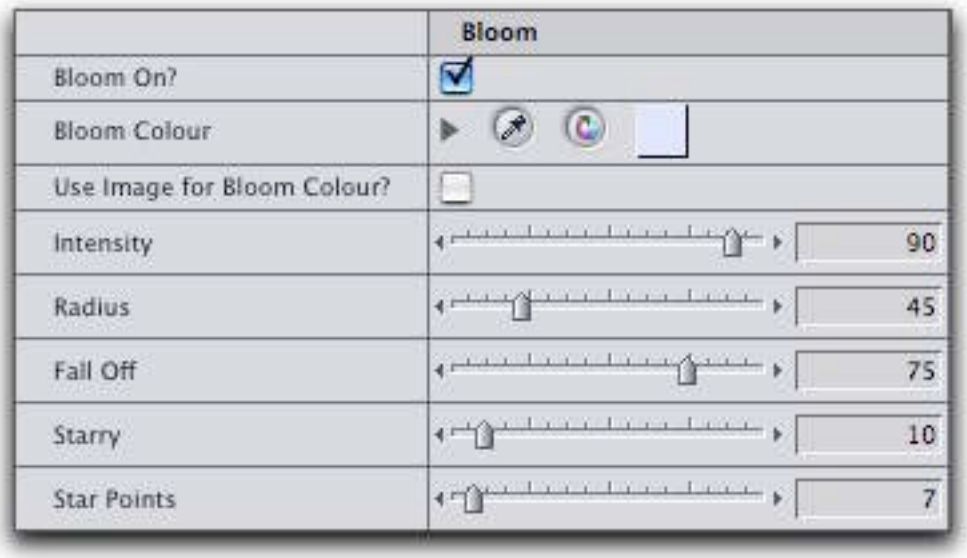
To save an extra compositing step, you can choose to use an image or another movie to "mask" the lens flare. There are two modes - one which will make the entire flare invisible if masked, and another which will just mask those bits of the flare covered by the mask. Use the display option to see the mask to help you select the correct settings.



Control	Settings	Notes
Use Foreground Masking?	on off	Turn on to use masking.
Mask Source Clip	Image Well	Drop the clip or mask image here
Mask Type	Luma Inverse Luma Alpha Inverse Alpha	Choose from a luma mask or an alpha mask, and also select wether you wish to invert the mask or not.
Masking Effect?	Remove entire flare if masked Only Remove masked sections	Selects wether the whole flare is masked, or just the section covered by the mask



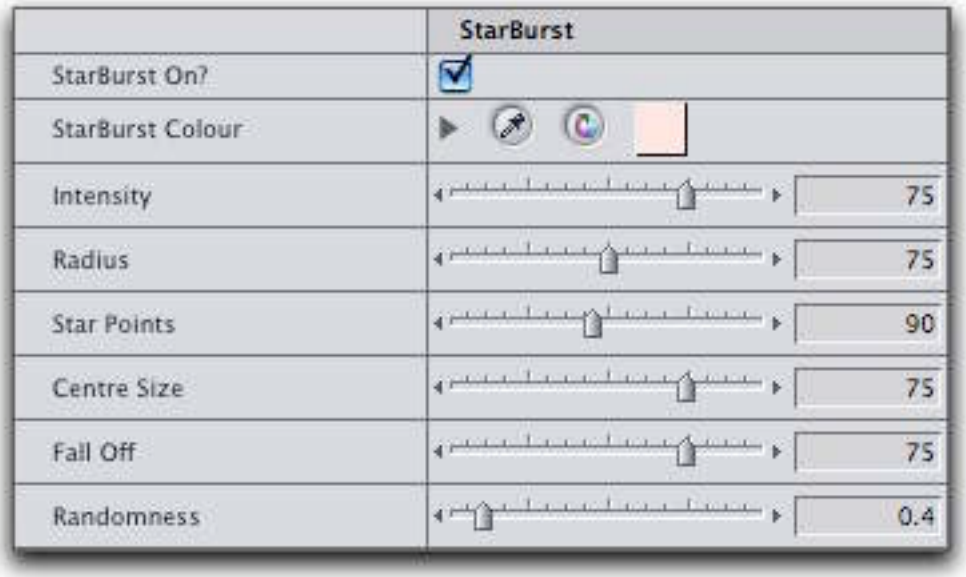
The *Bloom* is the basic glow that surrounds the Flare Point. The bloom can either be a user-defined colour, or the filter can pick the colour from the point on-screen where the flare is placed.



Control	Settings	Notes
Bloom On?	on off	Turns on the bloom effect.
Bloom Colour	colour picker	Picks the colour of the bloom.
Use Image for Bloom Colour?	on off	Tells the filter to look at the original image and use that for the colour of the bloom. Setting this to *on* overrides the user selected colour.

Control	Settings	Notes
Intensity	`0 to 100`	Controls the brightness of the bloom.
Radius	`0 to 200`	The size of the bloom.
Fall Off	`0 to 100`	A lower number gives the bloomer a sharper edge, while a higher number gives it a softer edge.
Starry	`0 to 100`	Breaks up the edge of the bloom with a star effect. The higher the number, the more pronounced the star affect.
Star Points	`0 to 100`	The number of points on the star effect.

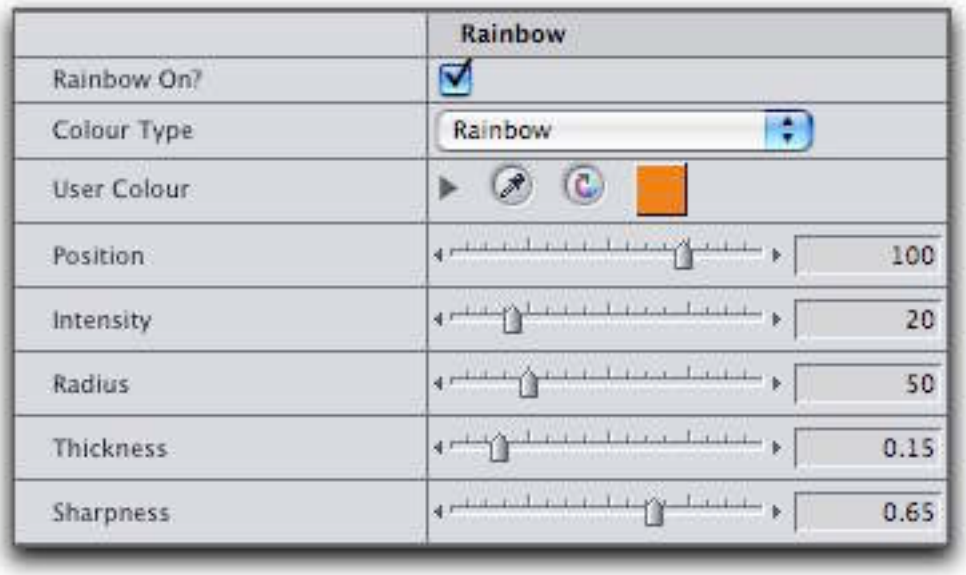
The StarBurst is the "starry" lines that come out from the Flare Point.



Control	Settings	Notes
StarBurst On?	`on` `off`	Turns on the StarBurst effect.
StarBurst Colour	`colour picker`	Selects the colour of the StarBurst effect.

Control	Settings	Notes
Intensity	`0 to 100`	The brightness of the bloom.
Radius	`0 to 150`	The size of the StarBurst.
Star Points	`0 to 200`	The number of points on the StarBurst.
Centre Size	`0 to 100`	Wether the star meets at a small or large circle around the flare point.
Fall Off	`0 to 100`	Wether the StarBurst has a fade off towards the outer edge.
Randomness	`0 to 4.00`	Governs how random the placement of the star points is.

The Rainbow is a circular rainbow often found around the flare centre, although it can be moved to any point along the flare.



Control	Settings	Notes
Rainbow On?	`on` `off`	Turns on the Rainbow effect.
Colour Type	`Rainbow` `User Colour`	Allows you to select from the Rainbow colours, or from a single user colour.

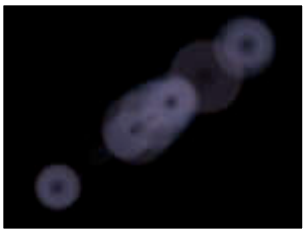
Control	Settings	Notes
User Colour	`Colour Picker`	The user colour when not using the Rainbow colours.
Position	`-200 to 200`	Position along the line of the lens flare. Negative numbers come forward from the screen and positive numbers go deeper into the screen.
Intensity	`0 to 100`	The brightness of the rainbow or user colour.
Radius	`0 to 200`	Controls the radius of the rainbow.
Thickness	`0 to 1`	Sets the thickness of the rainbow band.
Sharpness	`0 to 1.00`	How the bands of the rainbow blend into each other. Zero is sharpest and 1.00 is smoothest.

The Spots of the lens flare lie along the flare line from the flare itself, through the centre of the image to the opposite corner of the image. The appearance of the spots is heavily influenced by the randomness in the filter. Changing any of the random parameters will affect the random nature of the spots.

There are four types of spot: Disk; Ring; Blot; and Bloon.

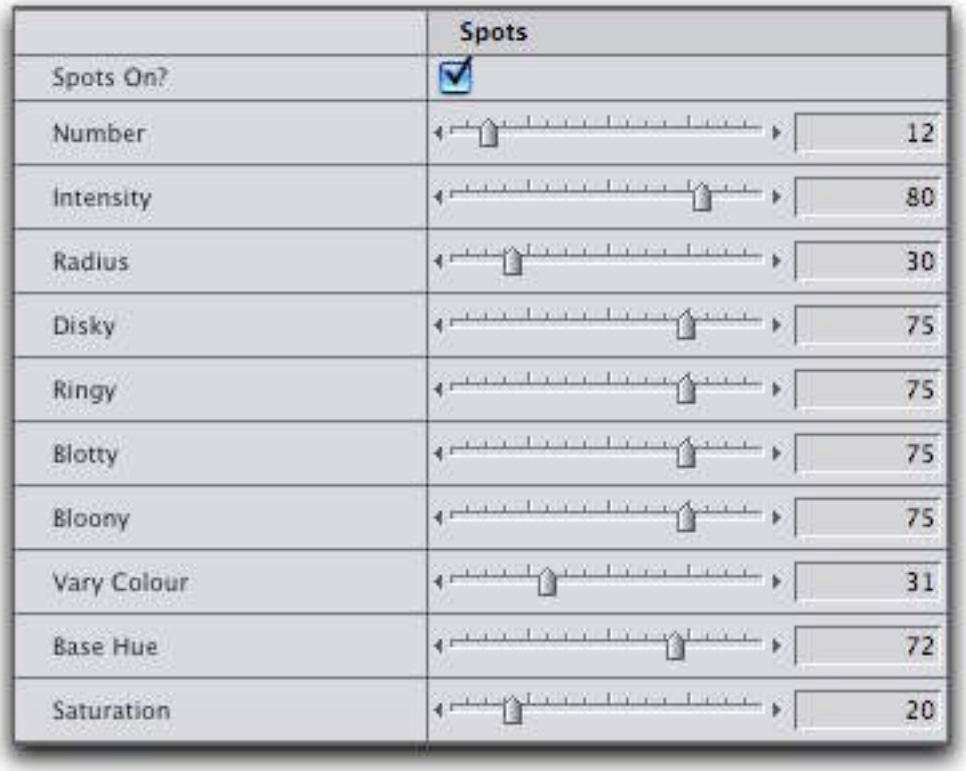
Disk

Ring



Blot

Bloon

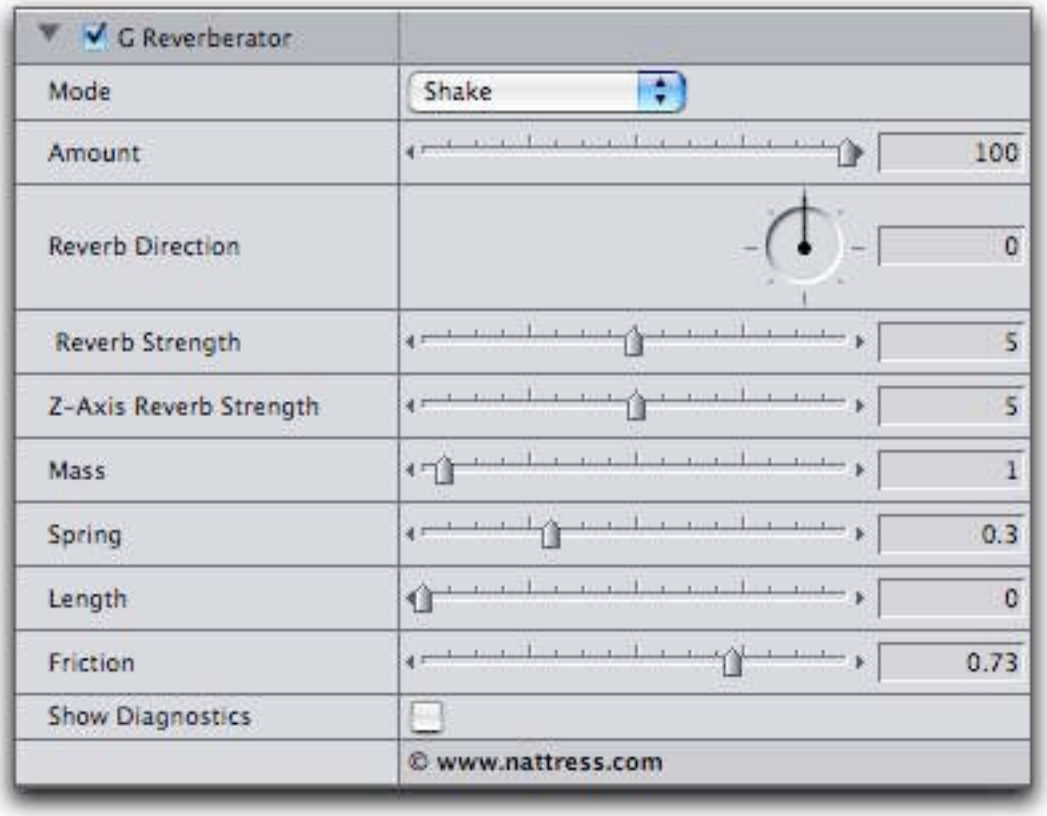


Control	Settings	Notes
Spots On?	on off	Turns on the flare spots
Number	0 to 100	Sets the amount of spots.
Intensity	0 to 100	The overall brightness of the spots.
Radius	0 to 150	The radius of the spots.
Disky	0 to 100	Relative percentage of "Disk" type spots.
Ringy	0 to 100	Relative percentage of "Ring" type spots.
Blotty	0 to 100	Relative percentage of "Blot" type spots.
Bloony	0 to 100	Relative percentage of "Bloon" type spots.
Vary Colour	0 to 100	How widely the colour of the spots varies from the base hue.
Base Hue	0 to 100	The base colour of the spots.
Saturation	0 to 100	The saturation of the colour of the spots.

G Reverberator

Using the same physics simulator as G Earthquaker, this filter allows you to pick the axis or angle in which the screen will reverberate. On top of this, you can have a z-axis

or rotation reverberation. Keyframe animating the *Amount* allows you to bounce the screen in time with music or monster footsteps, etc..

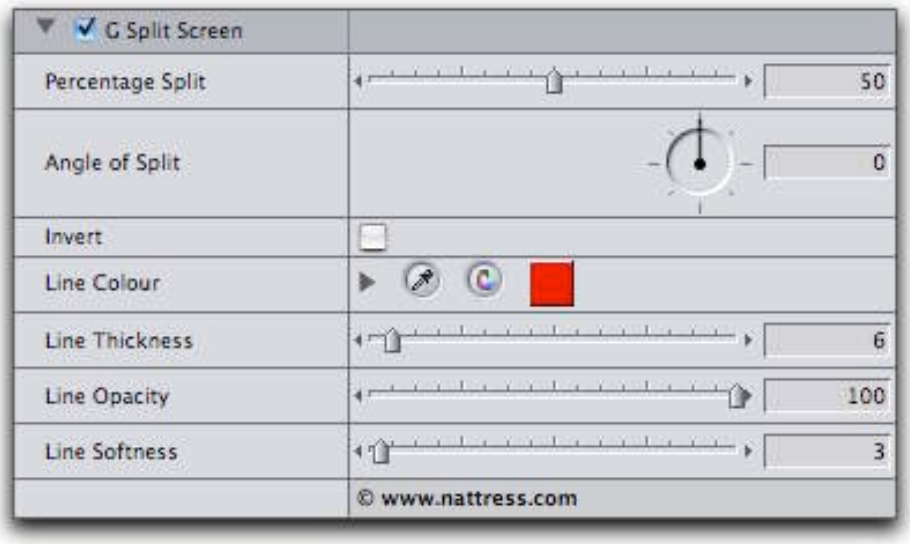


Control	Settings	Notes
Mode	Quake Shake	Selects wether Shake or Quake mode is to be used. Shake enlarges the image to prevent screen edges from appearing, while Quake stretches and distorts the image.
Amount	`0 to 100`	The overall amount of the effect - keyframe this parameter to bring the effect in or out.
Reverb Direction	`-360 to 360`	Selects the angle in which direction the screen will move.
Reverb Strength	`0.1 to 10`	The strength of the randomly vibrating point that drives the spring simulation system, not unlike the Richter scale.
Z-Axis Reverb Strength	`0 to 10`	Controls the strength of the screen rotation. Zero is no rotation.
Mass	`0.5 to 10`	The mass of the screen - increasing mass will slow the movement of the screen, but also give it greater inertia.
Spring	`0 to 1`	The spring constant of the simulation - increasing the spring constant will make the spring stronger and springier - decreasing it will make the spring looser and pull less on the screen.

Control	Settings	Notes
Length	`0 to 10`	This is the "natural length" of the spring. This can be increased to allow the screen to move around further.
Friction	`0 to 1`	Friction acts like a viscous force that retards the motion of the screen. A friction of zero will send the screen in to chaos as there will be nothing stopping the spring stretching and the screen moving. Increasing the friction will dampen the movement.
Show diagnostics	`on` `off`	This turns on the coloured dots that show the randomly vibrating dot (green), and the centre point of the screen (red).

G Split Screen

Use this filter to create split screen telephone conversations, before and after visuals, or anything else that requires cropping one layer of video to show through the layer below. *G Split Screen* is more than just a crop function; it also draws in a line along the division; and can divide the screen horizontally, vertically, or along any angle you choose. FCP sometimes creates some strange results when *G Split Screen* is used in conjunction with other filters, so it is best to use this filter in isolation. If you get strange artifacts, try turning the filter off and then on again to clear the image buffer.



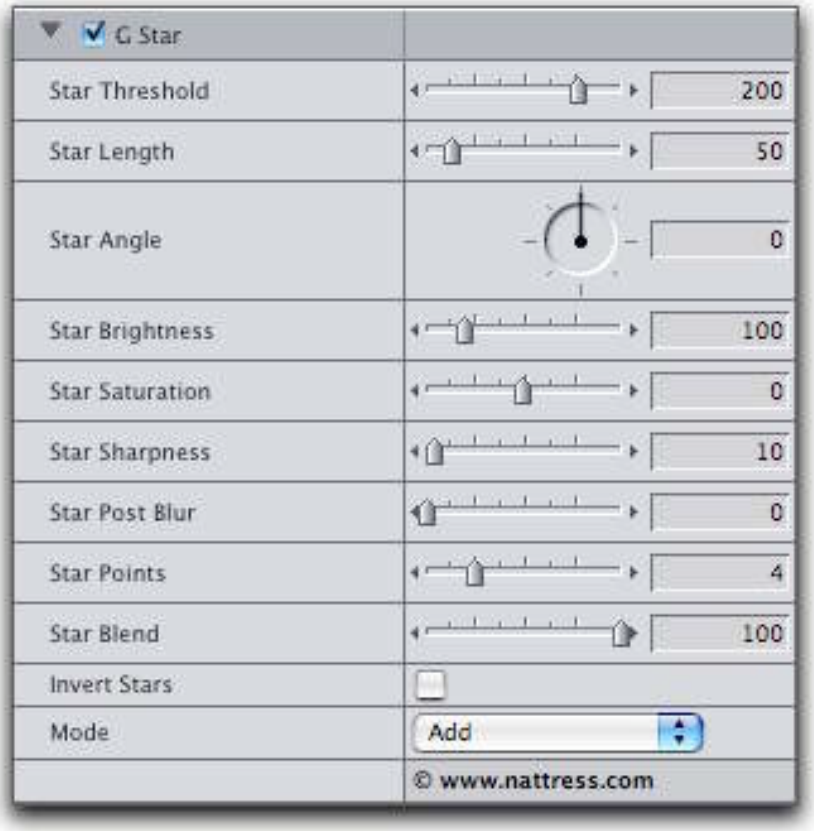
This filter will not render properly in High-precision YUV mode (unless *Line Opacity* is set to zero), so use 8-bit mode when rendering.

Control	Settings	Notes
Percentage Split	`0 to 100`	What percentage of the screen is revealed.

Angle of Split	-360 to 360	Sets the angle of the split.
Invert	on off	What is hidden becomes revealed, and vice versa.
Line Colour	Colour Picker	Selects the colour of the line.
Line Thickness	0 to 100	Sets the thickness of the line. A setting of 0 is no line.
Line Opacity	0 to 100	Controls the opacity of the line.
Line Softness	0 to 100	Controls how hard or soft the line is.

G Star

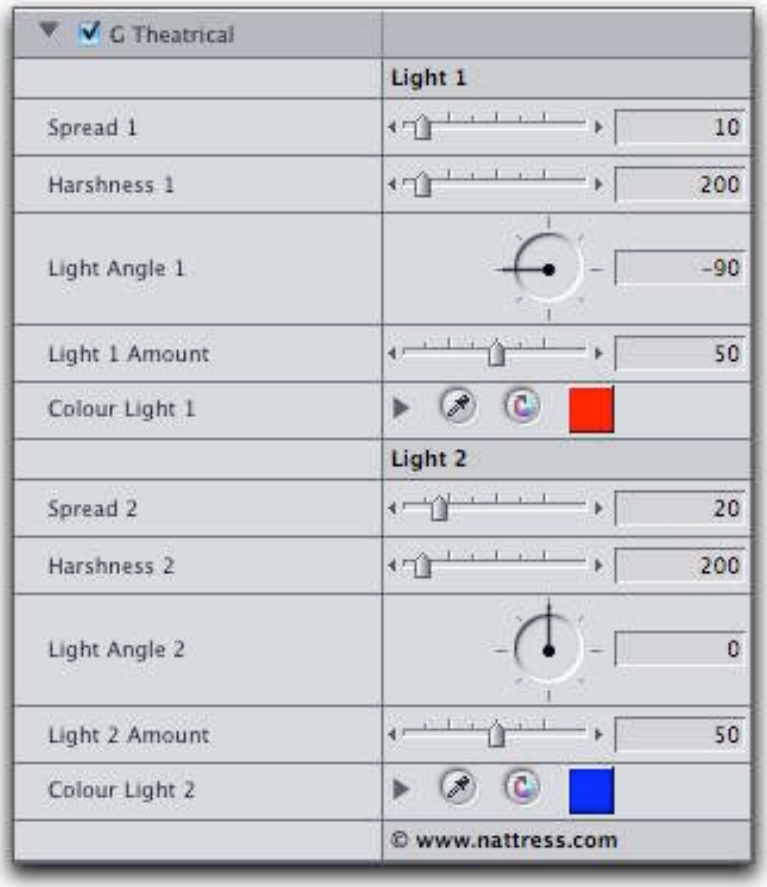
G Star adds stars to your highlights. This effect can be made as subtle or as over the top as you like. If you have time to experiment, try dropping the *Star Threshold* and the *Star Brightness* to create a impressionist painting effect from your video.



Control	Settings	Notes
Star Threshold	0 to 255	This sets the level of highlights that will receive the star treatment. The lower the number, the more of your image becomes starry.
Star Length	0 to 400	This sets the length of the arms of each star. Keyframe this to make your stars throb/pulse.
Star Angle	-360 to 360	This sets the angle, in degrees, for the direction of the star. Keyframe this to create a real 'twinkle'.
Star Brightness	0 to 500	Larger numbers make for brighter stars.
Star Saturation	-1 to 1	This controls how much colour, taken from the video, appears in each star. Negative numbers desaturate.
Star Sharpness	0 to 254	This controls how soft or sharp the stars are. At higher numbers, the sharpness will eliminate the star points that are off axis of the *Star Angle.*
Star Post Blur	0 to 100	This adds a blur to the star effect. A medium high blur creates a heavenly glow out of the star effect. Generally, keep this number low to preserve star integrity.
Star Points	2 to 10	Sets the number of points or arms for the stars.
Star Blend	0 to 100	Controls the blending of the original image with the modified image. Zero is no modification and 100% is the full starry effect.
Invert Stars	on off	Turn this on make white into black. If saturation is turned up, colours will be inverted.
Mode	Normal Mulitply Screen Overlay Lighten Darken Add	Selects how the effect is combined with the original footage. Normal: a simple percentage mix using the amount set in *Star Blend.* Multiply: combination results in the final image being darker. Screen: the opposite of multiply, brighter image. Overlay: makes brights brighter and darks darker. Lighten: makes brights brighter. Darken: Makes darks darker. Add: another way of brighting the brights.

G Theatrical

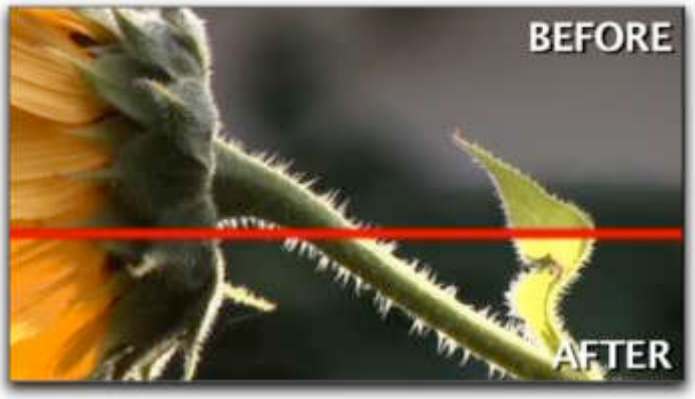
When you want to make your footage look like a rock concert, or add in the warm glow of a sunset, this filter is the one to use to create fake dramatic lighting. The strong colours of the default are good for creating a theatrical or concert lighting effect. Use warm tones of orange and red to put a sunset glow on your video.

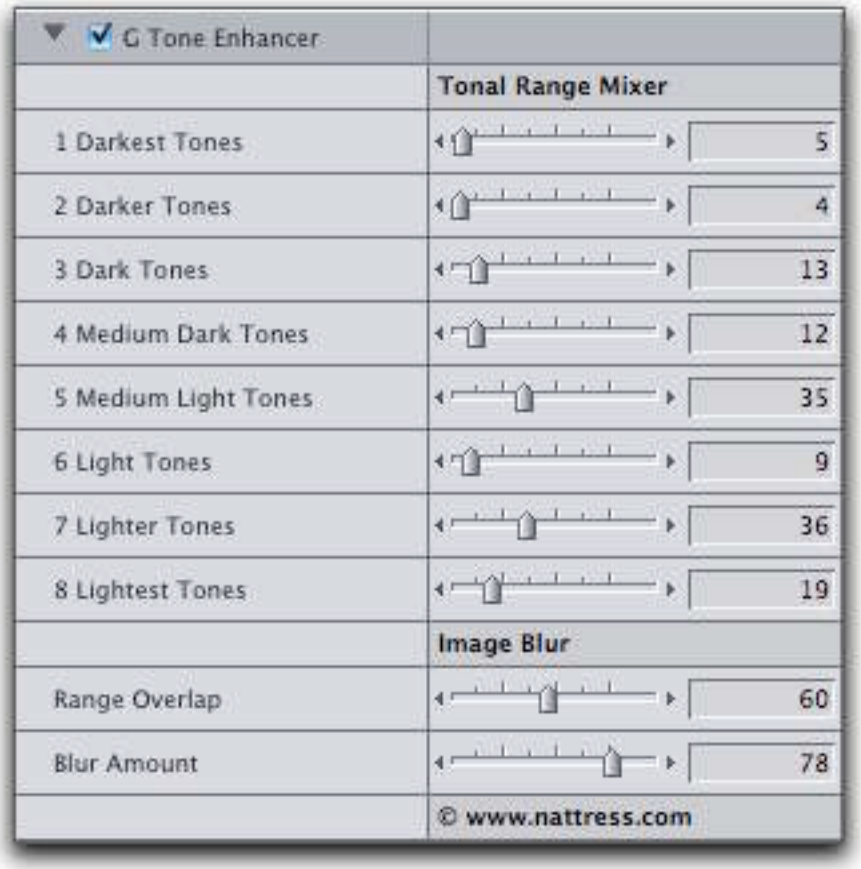


Control	Settings	Notes
Spread	`0 to 100`	This controls how much of the coloured light spreads into your footage.
Harshness	`0 to 2000`	This controls how starkly the light strikes your image.
Light Angle	`-360 to 360`	This sets the angle, in degrees, for the direction of the light.
Light Amount	`0 to 100`	This is your light 'wattage' or strength of light.
Colour Light	`Colour Picker`	Selects the colour of the light.

G Tone Enhancer

G Tone Enhancer gives your footage a little lift by enhancing the luma values. The luma range is divided into eight ranges, each of which can be individually adjusted to receive more or less 'enhancement'. Range Overlap softens the transition between each range of luma bands, reducing the slight posterisation that can occur.

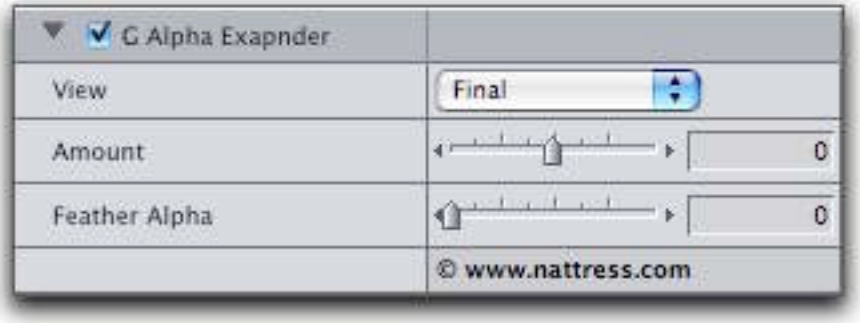




Control	Settings	Notes
1 Darkest Tones **2 Darker Tones** **3 Dark Tones** **4 Medium Dark Tones** **5 Medium Light Tones** **6 Light Tones** **7 Lighter Tones** **8 Lightest Tones**	`0 to 100`	Each of these eight ranges can be adjusted to have more or less 'enhancement'. Think of it like video 'equilization'.
Range Overlap	`1 to 128`	Softens the transition between each range. Use this to reduce any unwanted posterisation.
Blur Amount	`0 to 100`	Use this to add a beautiful 'diffuse glow' to your footage.

FixIT:
G Alpha Expander

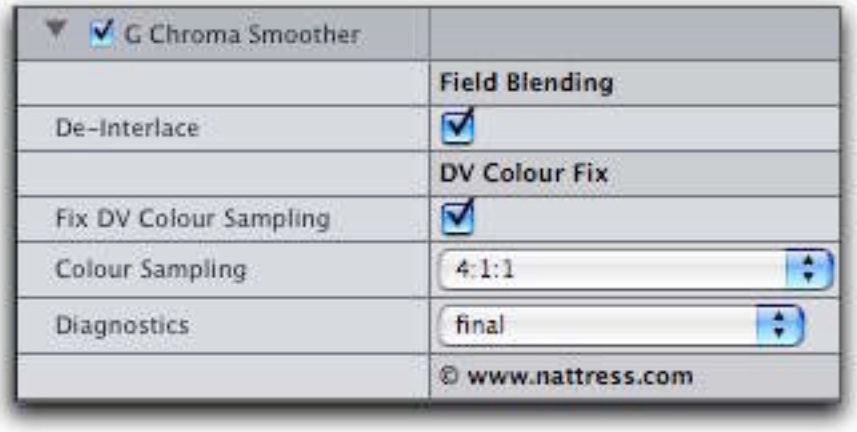
Expands or contracts an image's alpha channel. Useful for cleaning up mattes. Apply this filter after the chromakey or bluescreen or green-screen filters built into FCP to vastly improve the quality of your key.



Control	Settings	Notes
View	`Matte` `Final`	View the Matte or the Final image.
Amount	`-10 to 10`	Positive numbers expand, negative numbers contract.
Feather Alpha	`0 to 100`	Applies a feather to soften the edges of the matte.

G Chroma Smoother

This filter combines a speedy and high quality field blending de-interlace with a 4:1:1 or 4:2:0 (progressive or interlace) DV colour sampling custom interpolator that increase the colour sampling to 4:4:4. Use the DV Colour Fix before chroma keying for improved keying or when boosting DV to DigiBeta.



DV digital video is a great format that has many advantages, not least size and cost, but this comes at the price of compression. Most digital video, whether it be DV, DVCAM, DVCPro (50), Digital-S, Digital Betacam, Betacam SX, HDCAM etc. is compressed in some way. One way in which these formats differ is in how they compress the colour information in your video signal. Colour information is routinely compressed by reducing it's resolution compared to that of the luma part of the video signal. Digital video records the video picture as one luma component (Y') and two chroma components (Cb & Cr). The resolution of the Cb & Cr chroma components is often recorded at half the horizontal resolution of the luma component. There are a set of short-hand descriptions of the

various ways that the colour can be recorded as a fraction of the resolution of the luma signal:

Y':Cb:Cr	Notes
4:4:4	no reduction in chroma resolution. The resolution of the chroma is identical to that of the luma.
4:2:2	standard for broadcast video - the resolution of the chroma is 1/2 that of the luma; used by Digital Betacam, DVCPro 50, Digital-S etc.
4:1:1	the resolution of the chroma is 1/4 of that of the luma; used by NTSC DV and DVCAM, and PAL and NTSC DVCPro
4:2:0	the resolution of the chroma is 1/2 of that of the luma in both horizontal and vertical directions; used by DVD, PAL DV and DVCAM

For more information on Chroma sampling, please view the article "Chroma Sampling: An Investigation" at www.lafcpug.org/Tutorials/basic_chroma_sample.html.

Control	Settings	Notes
De-Interlace	on off	Turns on field blending de-interlace.
Fix DV Colour Sampling	on off	Turns on the custom interpolator.
Colour Sampling	4:2:0 Interlaced 4:2:0 Progressive 4:1:1 4:2:2	Selects a special algorithm for NTSC 4:1:1, PAL 4:2:0 (for interlaced images) or PAL 4:2:0 (for Progressive images) or 4:2:2 footage.
Diagnostics	final Cb Smooth Cr Smooth Cb Original Cr Original	Enables you to view the final output, the modified Cb or Cr chroma channels, or the original Cb or Cr chroma channels. But flipping between modes, you can see how the interpolator adds in chroma detail.

G Copy Channel

G Copy Channel is an utility filter that was designed to help with the production of 3D (red / green) video. The filter has been further modified to allow the you to copy from any RGB or Y'CbCr channel to any other RGB or Y'CbCr channel. Apply the G Copy Channel filter to the

destination video (where you want to copy your channel *to*). Then, the channel you wish to copy, gets dropped, as a source video, into an “image well” within the filter parameters.

Control	Settings	Notes
Copy Source	Image well	The video that contains the channel to be copied gets dragged and dropped here.
Copy Channel From	Y’ Cb Cr R G B Alpha	Selects the channel that is to be copied from the copy source.
Copy Channel To	Y’ Cb Cr R G B Alpha	Selects the channel for the destination, in the video clip on the timeline.
Invert Channel	on off	Inverts the channel that gets copied.
Diagnostics	Effect Copy Source Destination Source Channel	Allows you to see the video from the copy source or just the channel being copied.

G Deflash

Removes the effects of photographic flashes from footage by removing the "damaged" frame and replacing it with a blend of the previous and next frames. This filter is set to detect flashes that occur for one field only.

While setting the values, make sure you set the display of the image at 100% with *Show as Square Pixels* turned off. Once values are set, the filter will render correctly no matter what setting the viewer is on.

Control	Settings	Notes
Flash Tolerance	`0 to 255`	While viewing diagnostics, adjust this control to make the areas of the image effected by the flash appear white. Don't worry if other small areas of the image are also turned white - especially on frames without a flash. Frames without a flash should appear mostly black.
Flash Detect	`0 to 100`	Sets the percentage of the image that must appear white in the diagnostic mode to count as a flash.
View Diagnostics	`on` `off`	Shows the flashed frames as mostly white, super imposing a red number for low percentage chance of being a flash frame or a green number for indicating a high probability of a flash frame - as set by the *Flash Detect* value.

G Deflicker

This filter removes interlace twitter from imported graphics. Just add *G Deflicker* and save yourself all that time of having to open photoshop and resave the graphic with De-Interlacing applied. There are no control parameters needed with this filter.

G Field

This tool fixes field order problems.

Control	Settings	Notes
Mode	`Shift in Frame Up`	Moves the image down by one field.
	`Shift in Frame Down`	Moves the image up by one field.
	`Swap in frame`	Swaps the upper and lower fields of the image.
	`Swap lower with previous`	Replaces the lower field with the upper field of the previous frame.
	`Swap lower with next`	Replaces the lower field with the upper field of the next frame.
	`Swap upper with previous`	Replaces the upper field with the lower field of the previous frame.
	`Swap upper with next`	Replaces the upper field with the lower field of the next frame.

G Reinterlacer

This filter adds interlacing back into progressive video.

Control	Settings	Notes
Field Order	Lower Upper	Selects which field order to create.

Image F/X:

G Diffuse

G Diffuse is a filter that takes pixels in the image and spreads them randomly in a circle around the pixel position. *Diffuse Radius* controls the size of that circle, and governs the amount of that effect. G Diffuse improves on the in-built FCP effect by allowing a number of *iterations* which improves the quality of the diffuse effect at the expense of render time, also allowing the iterations to be blurred before being added together to further soften the effect. To make the averaging work with the iterations, each application of the diffuse effect for a single frame must be random. If *Random?* is selected, the diffuse effect will also be random for each frame/field, not just within a frame.

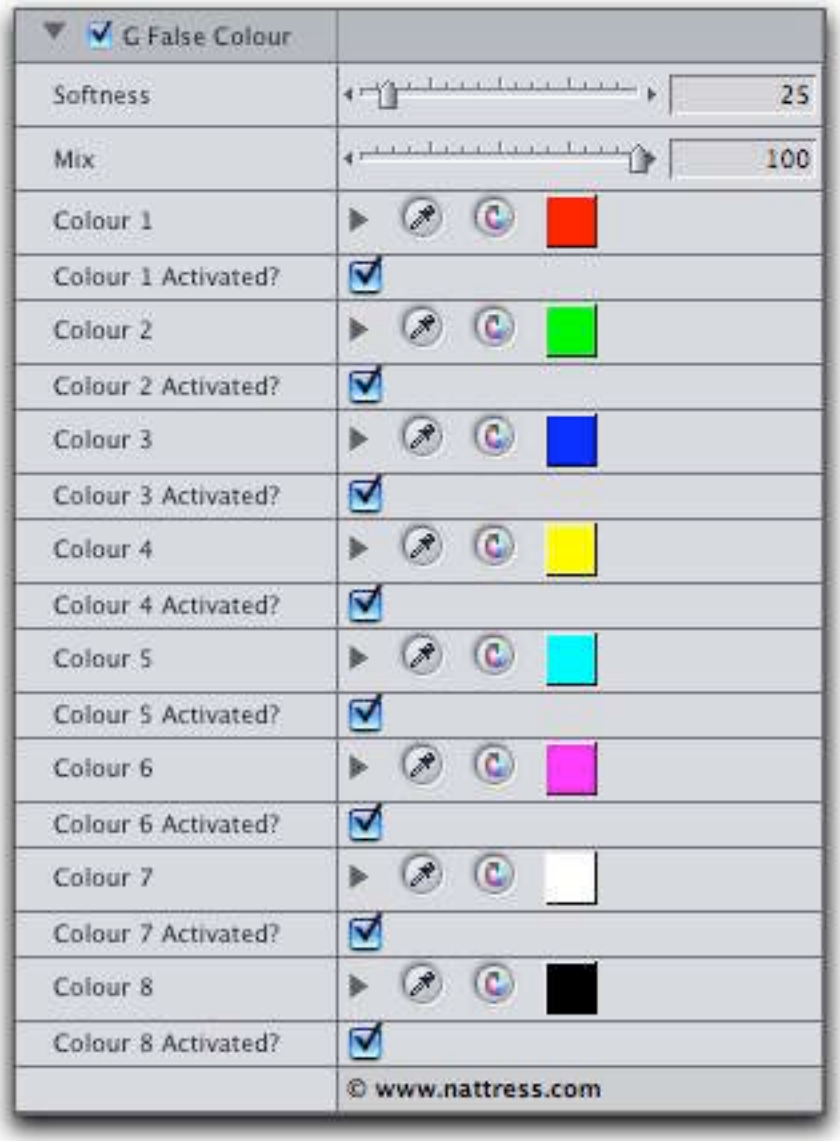
This filter does not render correctly in 10-bit High Resolution mode, so stick to 8-bit and all will be fine.

Control	Settings	Notes
Iterations	1 to 20	The number of random diffusions that get added together to create the effect. Increasing Iterations increases both render time and the smoothness of the effect.

Control	Settings	Notes
Diffuse Radius	`0 to 100`	The size of the diffuse effect.
Blur Radius	`0 to 100`	Size of the softening blur that gets added to the diffusions.
Repeat Edges	`on` `off`	Sets wether the edges of the video get repeated by the diffuse effect or not. Turning this on keeps the video going right to the edge of the screen, instead of diffusing inwards.
Random?	`on` `off`	Sets wether the frames use random diffusion or not - diffusion is always random for the iterations within a frame.

G False Colour

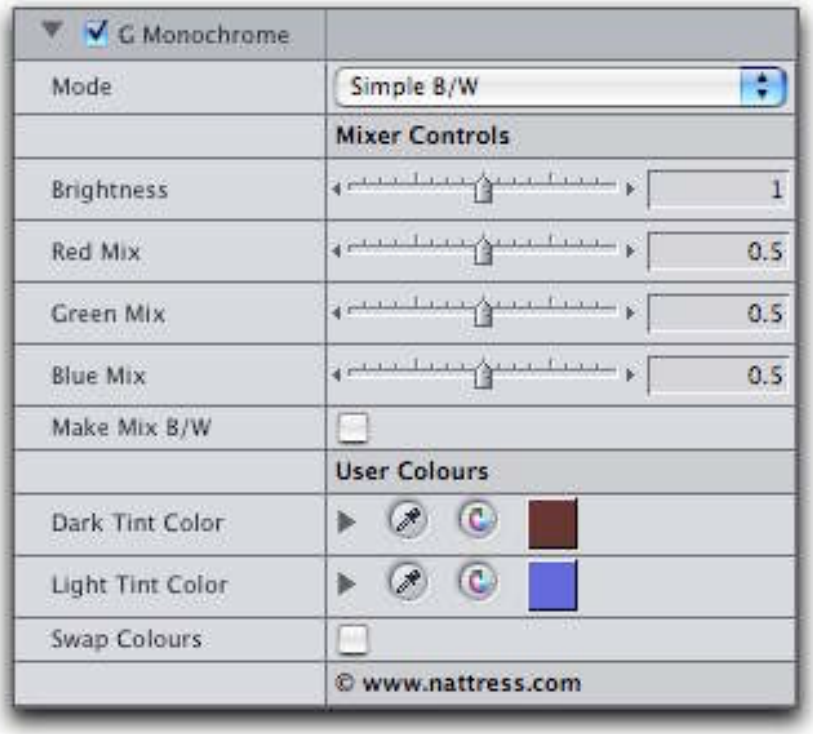
G False Colour allows you to colour the various tones of the video image with any set of up to eight colours. The tonal ranges can be controlled with the *Softness* control to allow them to be discretely coloured. Colour 1 is applied to the darker tones and higher numbers are applied to lighter tones.



Control	Settings	Notes
Softness	`0 to 255`	Blends the coloured regions into each other.
Mix	`0 to 100`	Controls the blending of the original image with the colourized image. Zero is no colourization and 100% is the full effect.
Colour ?	`Colour picker`	Sets the colour for the tonal band.
Colour ? Activated	`on` `off`	Sets wether that colour is to be used or not.

G Monochrome

Need a monochrome image? Choose between simple Black & White, a custom channel colour mix, a black and white custom channel mix or a duotone with user selected colours. Producing Black & White in post production gives you the most control over the final image by using the colour information to add more detail to the end result. By adjusting the Red, Green and Blue mix, you can make a Black & White image that favours one colour over another, giving you the freedom to achieve the look you want.

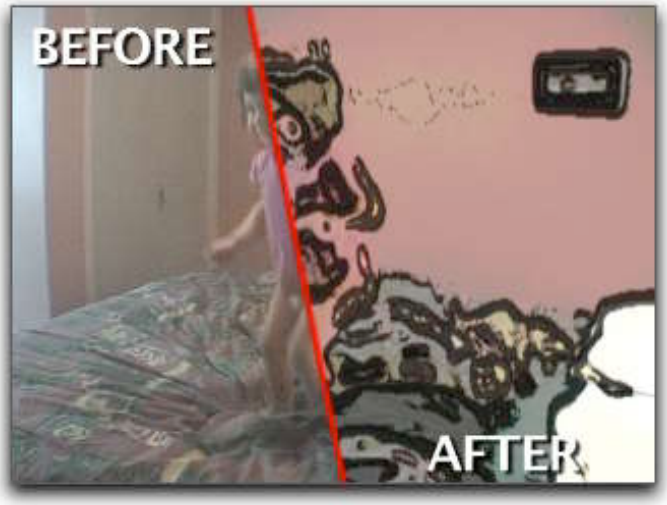


Control	Settings	Notes

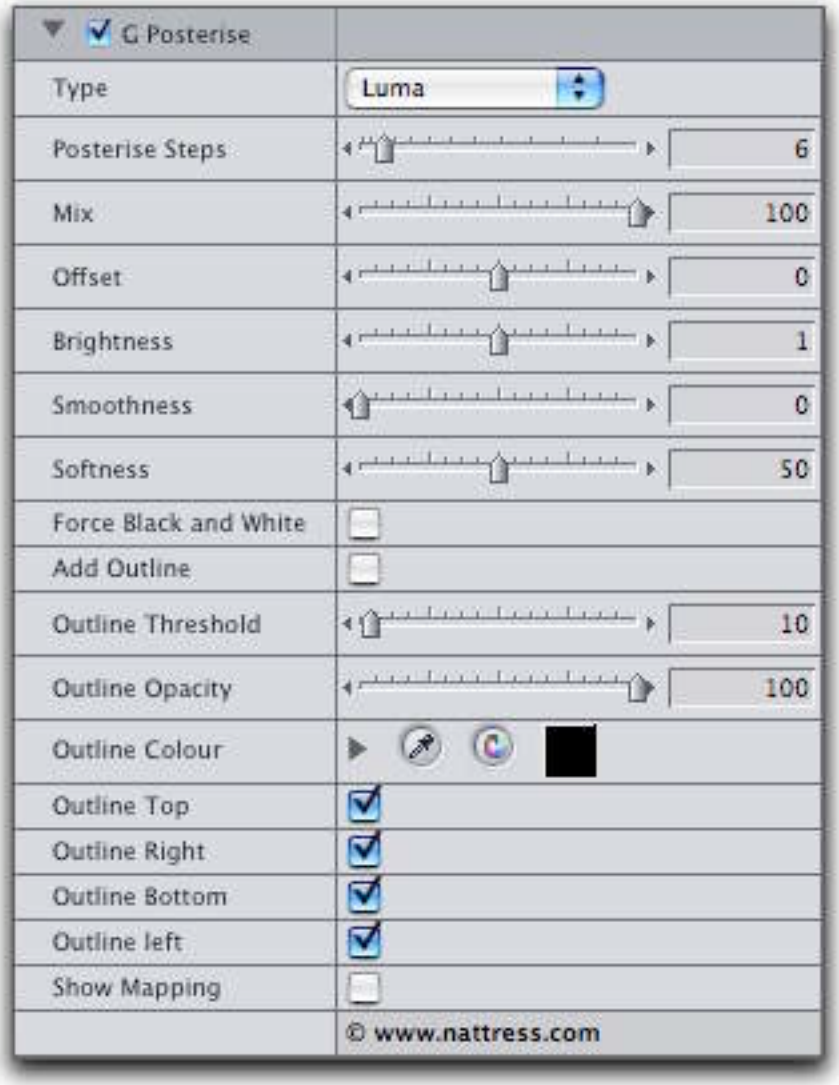
Mode	`Simple B/W`
	`Mixer Monochrome`
	`User Colours`
		Selects between Simple B/W, Mixer Monochrome and User Colours.
		Simple B/W: quick black and white. The settings on the controls below are not applied when in *Simple B/W*.
		Mixer Monochrome: creates a monochromatic image using the *Mixer Controls.*
		User Colours: applies the user selected colours to the image. Settings in the *Mixer Controls* are applied to the image before the colours are applied.

Brightness	`0 to 2`	Adjusts the overall brightness of the channel mix.
Red Mix **Green Mix** **Blue Mix**	`0 to 1`	Controls how much of each colour channel is used to calculate the final image.
Make Mix B/W	`on` `off`	Forces the channel mix to be black and white, when in *Mixer Monochrome* mode.
Dark Tint Colour	`Colour Picker`	Selects the dark colour for the duotone, when working in *User Colours* mode.
Light Tint Colour	`Colour Picker`	Selects the light colour for the duotone, when working in *User Colours* mode.
Swap Colours	`on` `off`	This enables you to quickly swap the colours assigned to the Dark and Light tints, when working in *User Colours* mode.

G Posterise



G Posterise is an improvement on the standard posterise type effects, which shift the video tones into discreet steps or bands, because it has the control *Softness*, which enables you to blend the transition between bands of colours. *G Posterise* also has the fantastic feature of adding an outline, if desired, on the transitions between the steps of the posterise effect. This can be used to make the video look like a cartoon. Due to the advanced nature of G Posterise, a *Show Mapping* option draws a graph on screen to show the brightness steps and the softness adjustment for diagnostic purposes.

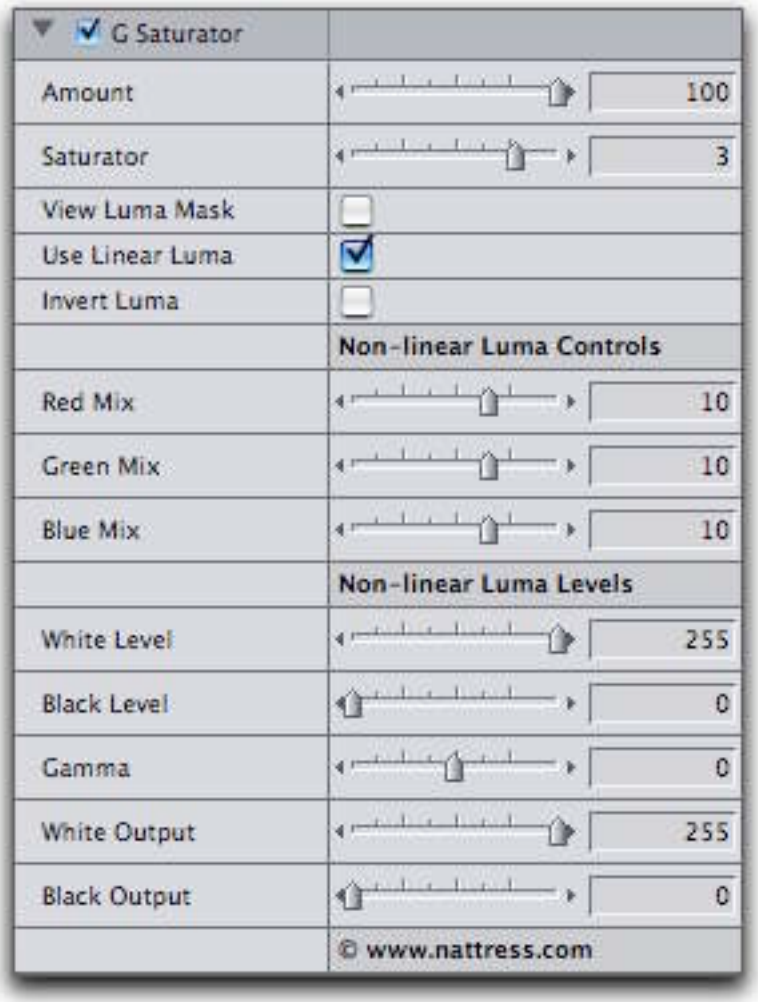


Control	Settings	Notes
Type	Luma RGB	Selects whether the posterisation is applied to the luma of the video, or to the RGB channels.
Posterise Steps	1 to 255	The number of individual steps that make up the posterisation effect.
Mix	0 to 100	Controls the blending of the original image with the posterised image. Zero is no posterised and 100% is the full effect.
Offset	-1 to 1	Moves the steps to the left or right in the mapping graph - changes the positioning of the tonal bands.
Brightness	0 to 2	Moves the steps higher or lower, increasing or decreasing the brightness of the effect.
Smoothness	0 to 200	Sets the amount of pre-blur on the effect which make the results smoother - useful for when producing a cartoon effect to reduce the detail.
Softness	0 to 100	Softens the edges of the posterisation steps.
Force Black and White	on off	Makes the effect black and white.
Add Outline	on off	Turns on the cartoon outline.
Outline Threshold	0 to 255	Sets the threshold for the edge detection algorithms that draw the outline.
Outline Opacity	0 to 100	Sets the percentage opacity of the outline.
Outline Colour	Colour Picker	Sets the colour of the outline.
Outline Top	on off	Sets the outline to be drawn on the top edges of the detected regions, relative to the darker region.
Outline Right	on off	Sets the outline to be drawn on the right edges of the detected regions, relative to the darker region.
Outline Bottom	on off	Sets the outline to be drawn on the bottom edges of the detected regions, relative to the darker region.
Outline Left	on off	Sets the outline to be drawn on the left edges of the detected regions, relative to the darker region.
Show Mapping	on off	Displays a graph that helps tweak the effect, especially the steps, offset, brightness and softness settings.

G Saturator

G Saturator gives you variable saturation or desaturation and the option to use a custom luma mask (Non-linear Luma Controls) to control which areas of the image are effected.

By selecting *Invert Luma*, the bright colours will lose their colour, and dark colours become more saturated. The levels controls allow you to tweak the effect by defining how dark or bright the tones of the mask are and hence how much they affect the saturation.

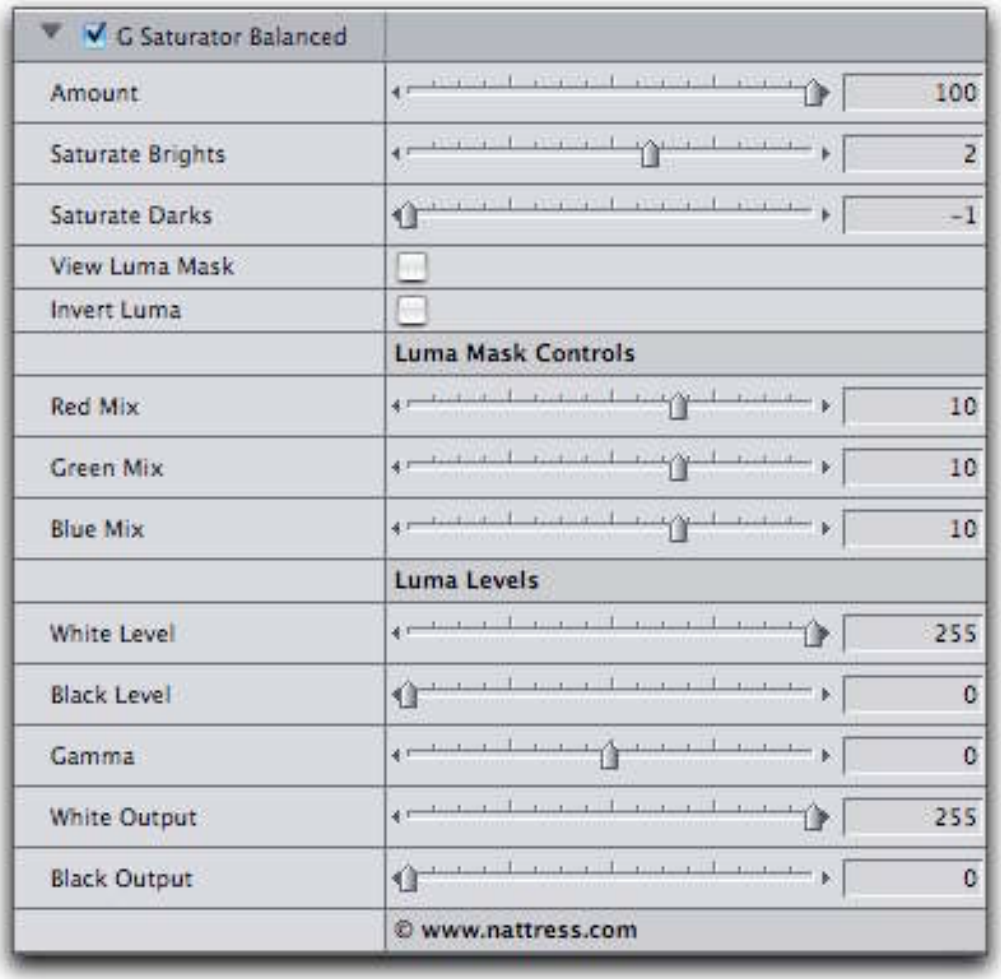


Control	Settings	Notes
Amount	`0 to 100`	Controls the overall amount of the saturation / desaturation effect by blending the saturated image with the original image.
Saturator	`-1 to 4`	Saturates or desaturates the image by the amount set.
View Luma Map	`on` `off`	Turning this on shows a diagnostic luma map to help you fine tune the luma mask when using the Non-linear Luma Controls.
Use Linear Luma	`on` `off`	Select this when you don't want to modify the luma mask. Select 'Off' to use the Non-linear Luma Controls to create a custom luma mask.
Invert Luma	`on` `off`	Swaps the effect on the bright and dark regions.
Red Mix **Green Mix** **Blue Mix**	`0 to 15`	Each colour channel can be individually mixed to adjust the *Luma.* Sometimes selecting *Invert Luma* and reversing the colour mix can more desirable results than directly mixing the colours.
White Level	`0 to 255`	Lowering White Level will brighten the luma mask, increasing the region included in the luma mask.

Control	Settings	Notes
Black Level	`0 to 255`	Raising Black Level will darken the luma mask, decreasing the region included in the luma mask.
Gamma	`-1 to 1`	Adjusts the brightness or darkness of the luma mask mid tones, leaving bright and dark tones alone.
White Output	`0 to 255`	Lowering White Output will make the luma mask dimmer by limiting the maximum brightness and thus decreasing the region included in the luma mask.
Black Output	`0 to 255`	Raising Black Output will make the dark areas of the luma brighter, increasing the region included in the luma mask.

G Saturator Balanced

G Saturator Balanced modifies bright and dark regions separately. The luma mask controls which areas of the image are treated as *Brights* and which are considered *Darks*. Saturating bright regions while desaturating the dark regions can create a very striking visual look. Use the *Luma Mask Controls* to mix the colour balance used to create the luma mask. The *Luma Levels* give you the ability to finely tweak the luma mask.



Control	Settings	Notes
Amount	`0 to 100`	Controls the amount of the effect by blending the the new image with the original.
Saturate Brights	`-1 to 4`	Saturates(positive numbers) or desaturates (negative numbers) the bright regions (as determined by the luma mask).
Saturate Darks	`-1 to 4`	Saturates(positive numbers) or desaturates (negative numbers) the dark regions (as determined by the luma mask).
View Luma Map	`on` `off`	Turning this on shows a diagnostic luma map to help you fine tune the luma mask.
Invert Luma	`on` `off`	Swaps the bright and dark regions, reversing the effect.
Red Mix **Green Mix** **Blue Mix Red Mix** **Green Mix** **Blue Mix**	`0 to 15`	Each colour channel can be individually mixed to adjust the *Luma.* Sometimes selecting *Invert Luma* and reversing the colour mix can more desirable results than directly mixing the colours.

Control	Settings	Notes
White Level	0 to 255	Lowering White Level will brighten the luma mask, increasing the region included in the luma mask.
Black Level	0 to 255	Raising Black Level will darken the luma mask, decreasing the region included in the luma mask.
Gamma	-1 to 1	Adjusts the brightness or darkness of the luma mask mid tones, leaving bright and dark tones alone.
White Output	0 to 255	Lowering White Output will make the luma mask dimmer by limiting the maximum brightness and thus decreasing the region included in the luma mask.
Black Output	0 to 255	Raising Black Output will make the dark areas of the luma brighter, increasing the region included in the luma mask.

G Sharpen

This filter produces a very strong effect which can be used stylistically or to clean up enlarged images (for example when working with low resolution videos taken on a digital stills camera).

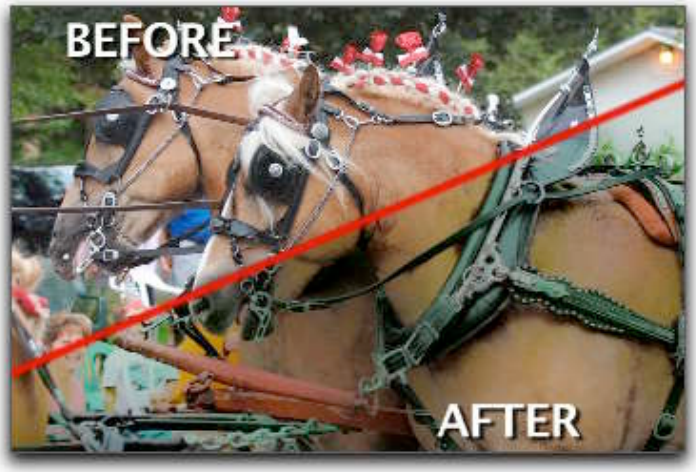
Control	Settings	Notes
Super Sharpen On?	`on` `off`	This control gives you turbo power sharpening. Brutal, but sometimes necessary.
Sharpen Amount	`0 to 200`	This sets how much sharpening is applied.
Anti-Alias Amount	`0 to 100`	Increase this value to soften any jaggies that get created from sharpening.

Sharpen?	`Luma and Chroma`
	`Luma Only`
	`Chroma Only`
		Controls whether sharpen is applied to both Luma and Chroma or just one or the other.

Traditional Sharpen On?	`on` `off`	When using *Super Sharpen On*, this mode gives you the option of combining a classic sharpen algorithm with the unique Nattress *Super Sharpen,* or using the *Super Sharpen* in isolation. If both *Super Sharpen* and *Traditional Sharpen* are turned off, your image will not be sharpened.
Sharpen Radius	`0 to 100`	When *Traditional Sharpen* is set to on: increasing the radius increases the sharpen effect by drawing on a larger region of the picture for sharpness evaluation.
Sharpen Threshold	`0 to 100`	When *Traditional Sharpen* is set to on: controls the level at which sharpening gets applied. The lower the threshold, the more of the image gets sharpened.
Sharpen Amount	`0 to 1000`	When *Traditional Sharpen* is set to on: controls how much sharpening is applied.

G Surreal

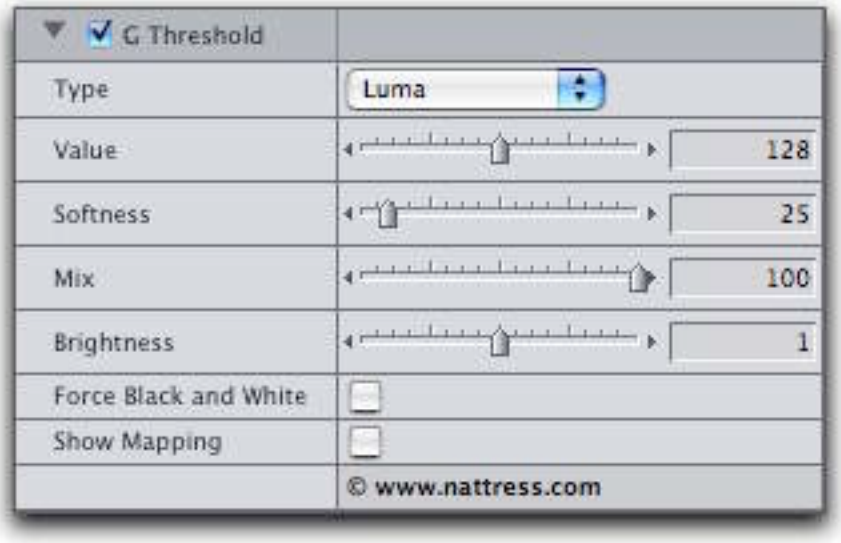
This filter creates a surreal, cartoon-ish, old-film, dream-like look. Use this filter to create dream sequences or tell flash backs to the good old days.



Control	Settings	Notes
Keep Original Chroma?	on off	Setting this to on, keeps the original chroma. Turning it off, uses the desaturated, modified chroma.
Amount	0 to 100	Controls how much of the effect is applied.

G Threshold

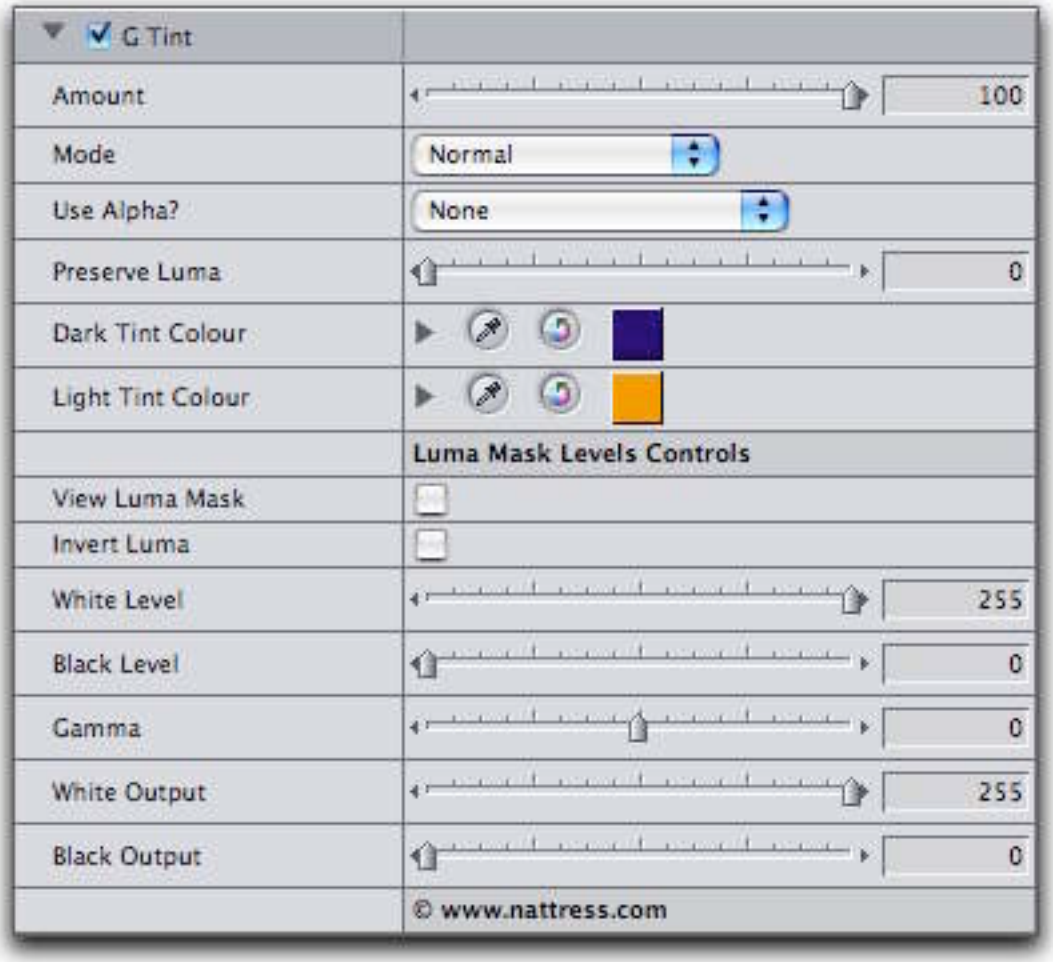
Sometimes you need to set limits for your footage...*G Threshold* does this, but with the luxury of softening the step to prevent abrupt discontinuities, if desired.



Control	Settings	Notes
Type	Luma RGB	Selects whether the threshold is applied to the luma or to the RGB Channels.
Value	0 to 255	Sets the threshold, above which all goes to white (or full saturation if in RGB mode), and below which all goes to black (or desaturation).
Softness	0 to 255	Softens the edges of the threshold step, resulting in a wider range of values before dropping off to white or black.
Mix	0 to 100	Controls the blending of the original image with the modified image. Zero is no modification and 100% is the full effect.
Brightness	0 to 2	Increases or decreases the brightness.
Force Black and White	on off	Makes the effect black and white.
Show Mapping	on off	Displays a graph that helps tweak the effect, especially the value, brightness and softness.

G Tint

Tint your image using a custom duotone effect based upon luma levels in the image. Bright areas of the image are tinted by the *Light Tint Colour*, and dark ares of the image are tinted by the *Dark Tint Colour.* Mid tones are tinted by a blend of the two colours. By choosing a warm and a cool colour for the tinting, nice effects can be achieved. The standard levels controls can be employed to define the luma mask and control which areas are tinted which colour. If a uniform colour tint is desired, then both the dark and the light tint colour can be set to the same colour. To swap around the dark and light tint colours, select *Invert Luma*. Create *day for night* by tinting with dark and pale blue.



Control	Settings	Notes
Amount	`0 to 100`	Sets the amount of the tint effect to blend with the original.

Mode	`Normal`
	`Multiply`
	`Screen`
	`Overlay`
	`Lighten`
	`Darken`
	`Add`
		Controls the blending mode to use for compositing the tint.

Use Alpha?	`Luma Alpha` `None`	Select *Luma Alpha* to blend the tint using the luma map, which causes more colour to be applied to lighter regions. Choose *None* to add the tint uniformly to the whole image.
Preserve Luma	`0 to 100`	Forces the filter to preserve the luma from the original image at the percentage set. This keeps the image from getting brighter or darker with the added tint.
Dark Tint Colour	`colour picker`	Selects the colour with which to tint the dark areas of the image.
Light Tint Colour	`colour picker`	Selects the colour with which to tint the light areas of the image.
View Luma Mask	`on` `off`	Displays the luma mask.
Invert Luma	`on` `off`	Inverts the luma map, so what was tinted as dark before is now tinted as light and vice versa.
White Level	`0 to 255`	Lowering White Level will brighten the luma mask, increasing the region of *Light Tint Colour*.
Black Level	`0 to 255`	Raising Black Level will darken the luma mask, increasing the region of *Dark Tint Colour*.
Gamma	`-1 to 1`	Adjusts the brightness or darkness of the luma mask mid tones, without affecting the extremes.
White Output	`0 to 255`	Lowering White Output will make the luma mask dimmer by limiting the maximum brightness and thus increase the region of *Dark Tint Colour*.
Black Output	`0 to 255`	Raising Black Output will make the dark areas of the luma brighter, increasing the region of *Light Tint Colour*.

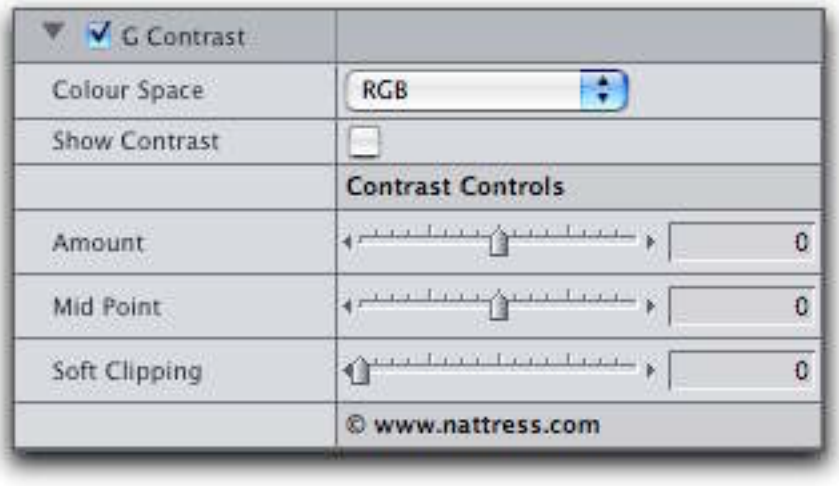
Levels and Curves:

Overview / Comparison Table

This group of filters all affect the video levels. To help you figure out which filter is the best one for your needs, below is a table that summarizes each filter and the level of control it offers.

Filter	Level of Control
G Simple Levels	Controls white and black levels and outputs, plus clipping. This plug-in is simple and fast. Applies to the RGB channels as a whole or to the Luma of Y'CrCb, depending on the chosen colour space.
G Simple Curves	Takes the ease and speed of the controls in *G Simple Levels* and adds curves control to smoothly alter the image tones.
G Levels	Adds a gamma curve and dithering (to reduce banding artifacts) to the controls of *G Simple Curves.*
G Super Levels	Takes all of the controls of *G Levels* and applies them to each colour space channel individually (R, G, & B or Y', Cr, & Cb).
G Detail Levels	Divides the image into two components (high and low detail) and enables you to control white and black levels and outputs of each component separately.
G Simple Contrast	Fast and simple: controls contrast amount, mid-point and on-screen display.
G Contrast	Includes the basic controls of G Simple Contrast, and adds a soft-clipping control to push the contrast in the extreme bright and dark.
G Detail Contrast	Divides the image into two components (high and low detail) and enables you to control contrast levels of each component separately.
G Hyper Contrast	This filter gives you edge dependent contrast masking. This preserves the integrity of edges, while still enabling a high degree of contrast control over remaining regions.

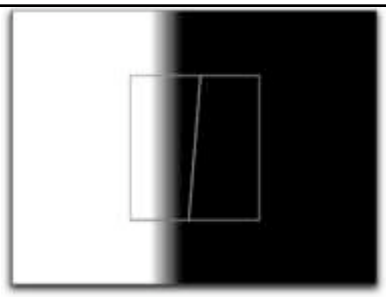
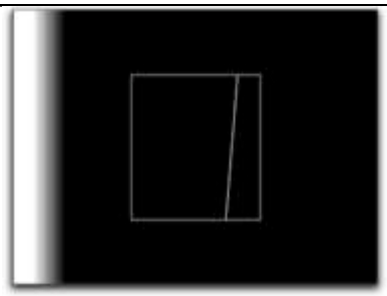
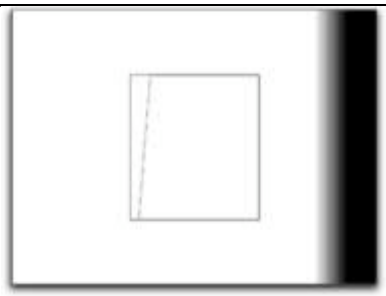
G Contrast



G Contrast gives you basic control over the contrast of your video. It allows you creative control by choice of colour space, RGB or Y'CbCr and through the controls for *Amount* of contrast and the *Mid-point*, which affects the overall brightness. This plugin is great for quick adjustments to video, or at more extreme settings for quite stunning looks when compositing.

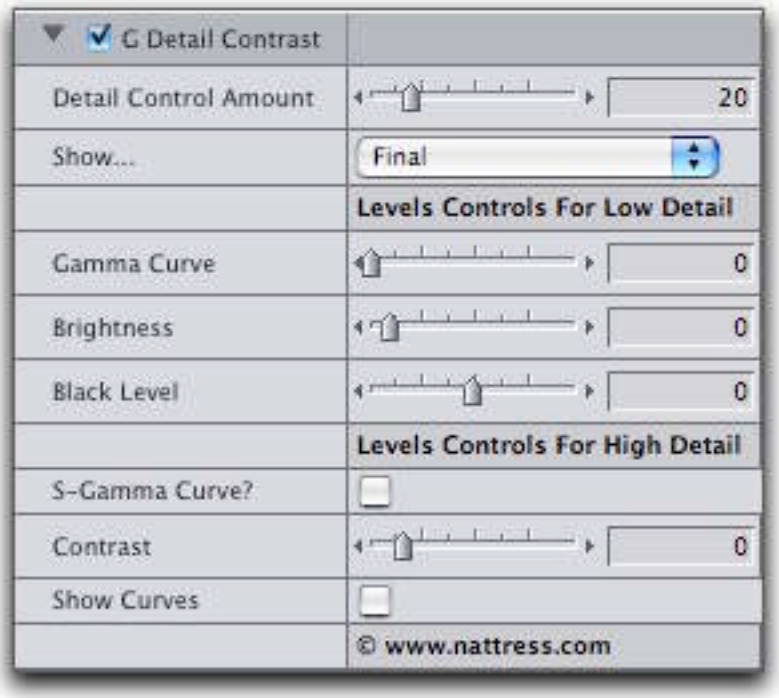
Control	Settings	Notes
Colour Space	RGB Y'CbCr	Most video is natively in the Y'CbCr space (commonly and incorrectly known as "YUV"). By allowing the selection of Y'CbCr or RGB, you can create a different visual effect. When working in Y'CbCr, only Y' contrast is affected, preserving colour saturation. In RGB, R, G and B are affected, creating changes in both the lightness / darkness of the image and it's saturation.
Show Contrast	on off	By turning this control on, a graph will appear showing you how the G Contrast plugin is affecting your image. This graph does not render onto your video.
Amount	-100% to 100%	Adjusts the contrast, from -100% which is no contrast at all, through 0%, being no change to 100% which is very contrasty indeed.
Mid Point	-100% to 100%	Adjusts the mid point of the contrast curve, which in effect will brighten or darken your image.
Soft Clipping	0 to 100	Increasing this amount adds a curve to the top and bottom of the contrast curve, resulting in a increase in contrast in the brightest and darkest parts of the screen.

The following table gives you a quick overview of how different contrast settings affect a basic grayscale image, with the *Show Contrast* diagnostic graph displayed.

 **Default Settings**	 **Amount = 100% for high contrast**	 **Amount = -50% for low contrast**
 **Amount = 100% for high contrast, Mid Point = -40% for dark image**	 **Amount = 100% for high contrast, Mid Point = +40% for bright image**	

G Detail Contrast

This filter is a combined sharpen and noise reduction tool. It works by splitting the image into two components: one containing all the high frequency details; and one containing all the low frequency or broad details.



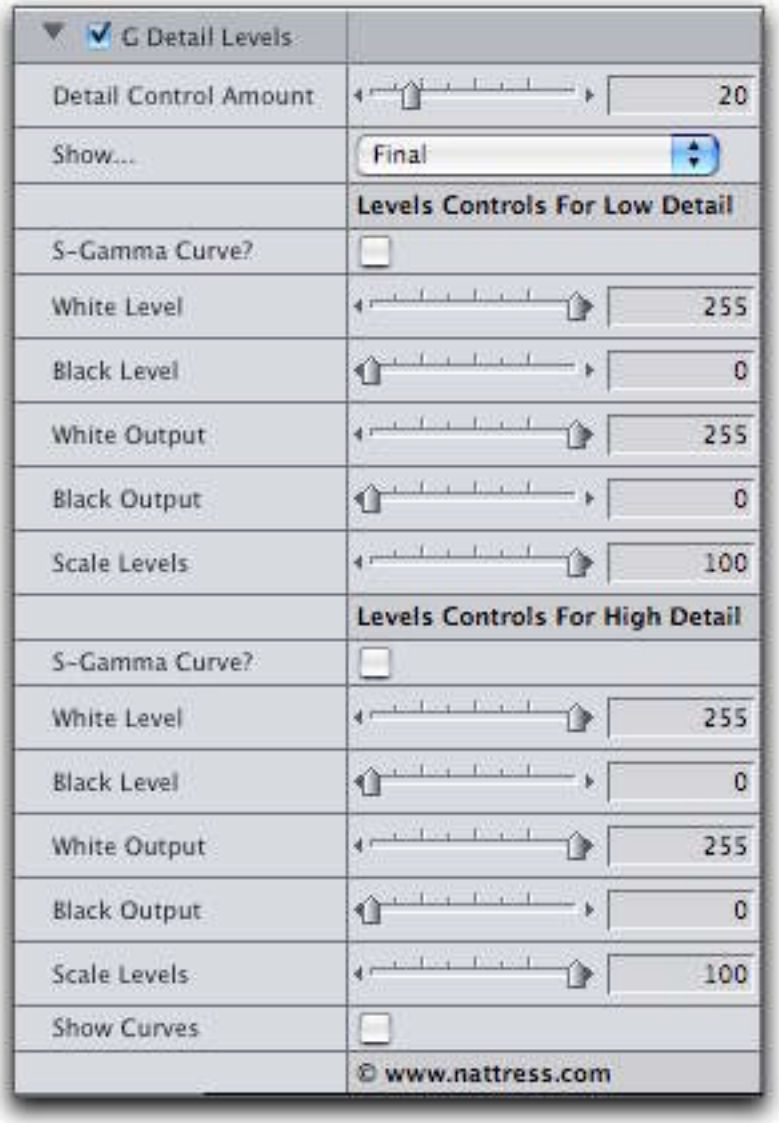
Control	Settings	Notes
Detail Control Amount	`0 to 100`	This sets the level at which the detail in your image is considered high frequency. A higher setting puts more of the image in the high frequency component of the image split.

Show...	`Final`
	`Low Detail`
	`HIgh Detail`
		This sets the display to show the final effect, or only the parts of the image designated as Low Detail, or only the High Detail. Be sure to set this to *Final* before rendering.

Gamma Curve	`0 to 100`	Increasing this control gives a boost to the Low Detail parts of the image.
Brightness	`-100 to 1000`	This allows you to control the brightness of the Low Detail parts of the image.
Black Level	`-100 to 100`	Controls black level for the Low Detail parts of the image.
S-Gamma Curve?	`on` `off`	Allows you to apply a gamma curve to boost the High Level detail.
Contrast	`-100 to 500`	Controls the level of contrast in the High Detail regions.
Show Curves	`on` `off`	Displays a graph showing the levels for HIgh Detail with a green line and Low Detail with a red line.

G Detail Levels

Like *G Detail Contrast*, **G Detail Levels** splits the image into two components: one of high frequency details; and one of low frequency or broad details. This enables you to adjust the levels of the High and Low frequency regions independently.



Control	Settings	Notes
Detail Control Amount	`0 to 100`	This sets the level at which the detail in your image is considered high frequency. A higher setting puts more of the image in the high frequency component of the image split.

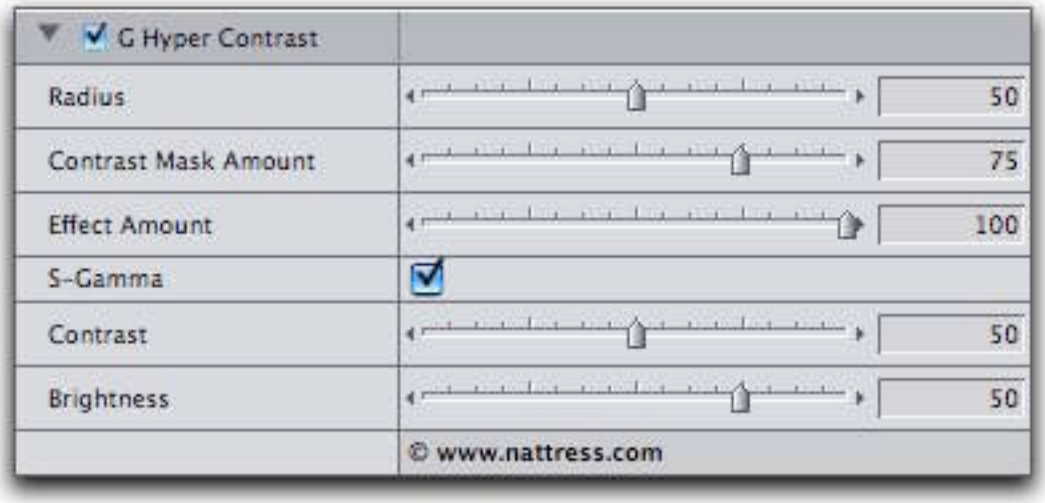
Show...	`Final`
	`Low Detail`
	`HIgh Detail`
		This sets the display to show the final effect, or only the parts of the image designated as Low Detail, or only the High Detail. Be sure to set this to *Final* before rendering.

S-Gamma Curve? (Low and High Detail)	`on` `off`	Allows you to apply a gamma curve to boost the levels.
White Level (Low and High Detail)	`0 to 255`	Lowering White Level will brighten image.
Black Level (Low and High Detail)	`0 to 255`	Raising Black Level will darken image.

Control	Settings	Notes
White Output (Low and High Detail)	`0 to 255`	Lowering White Output will make the whole image dimmer by limiting the maximum brightness of the image.
Black Output (Low and High Detail)	`0 to 255`	Raising Black Output will make the dark areas of the image brighter, making the image look foggy.
Scale Levels (Low and High Detail)	`0 to 100`	This gives you fine control over the level curve you have created by enabling you to gently blend the curve back towards the default curve (0 on the *Scale Level)*.
Show Curves	`on` `off`	Displays a graph showing the levels for High Detail with a green line and Low Detail with a red line.

G Hyper Contrast

This filter gives you edge dependent contrast masking. This preserves the integrity of edges, while still enabling a high degree of contrast control over remaining regions. In effect, by preserving the edges, you can push the contrast to a higher, or 'hyper', level, without destroying your image.

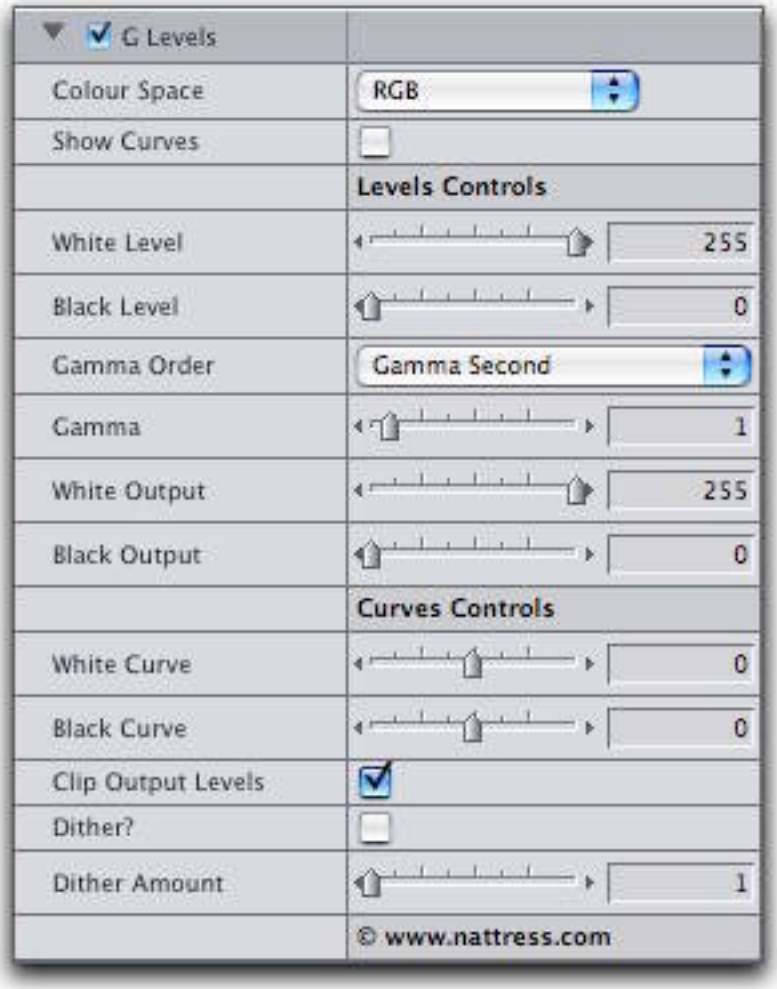


Control	Settings	Notes
Radius	`0 to 100`	Controls the edge masking. Smaller numbers include more 'edges'.
Contrast Mask Amount	`0 to 100`	Controls the spread or strength of the contrast mask. Use *Radius* and *Contrast Mask Amount* to fine tune which areas receive the contrast effect.
Effect Amount	`0 to 100`	Controls how much of the effect is applied, by blending the contrasted image with the original image.
S-Gamma	`on` `off`	Allows you to apply a gamma curve to boost the mid-tones.

Control	Settings	Notes
Contrast	`0 to 100`	Sets the level of contrast that is applied to the masked regions.
Brightness	`-100 to 100`	Controls the brightness of the final image.

G Levels

This filter is the essentials levels control: choice of RGB or Y'CrCb colour space; on-screen curves display; white and black levels and outputs; gamma control; black and white curves controls; output clipping; and curve dithering control (to reduce banding artifacts).

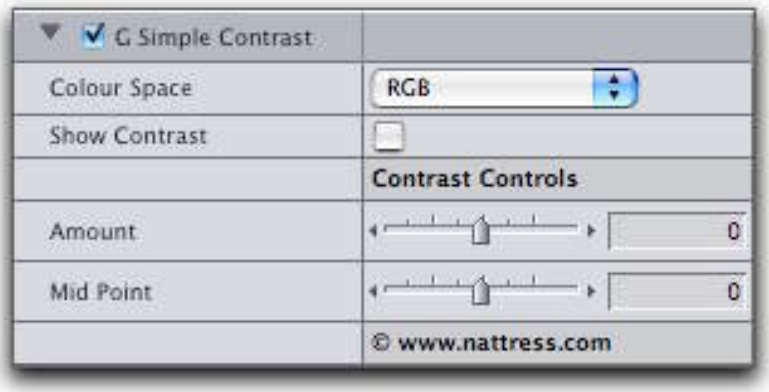


Control	Settings	Notes
Colour Space	`RGB` `Y'CbCr`	Most video is natively in the Y'CbCr space (commonly and incorrectly known as "YUV"). By allowing the selection of Y'CbCr or RGB, you can create a different visual effect. When working in Y'CbCr, only Y' level is affected, preserving colour saturation. In RGB, R, G and B are affected, creating changes in both the lightness / darkness of the image and it's saturation.
Show Curves	`on` `off`	By turning this control on, a graph will appear showing you how the G Levels plugin is affecting your image. This graph does not render onto your video.
White Level	`0 to 255`	Lowering White Level will brighten image.

Control	Settings	Notes
Black Level	0 to 255	Raising Black Level will darken image.
Gamma Order	Gamma First Gamma Second	This sets whether the gamma adjustment is calculated before or after the levels are adjusted.
Gamma	0.1 to 10	Controls the amount of gamma curve adjustment.
White Output	0 to 255	Lowering White Output will make the whole image dimmer by limiting the maximum brightness of the image.
Black Output	0 to 255	Raising Black Output will make the dark areas of the image brighter, making the image look foggy.
White Curve	-100% to 100%	Positive values bend the bright part of the curve upwards, brightening highlights and negative values bend it downwards dimming highlights.
Black Curve	-100% to 100%	Positive values bend the dark part of the curve upwards, brightening shadows and negative values bend it downwards darkening shadows.
Clip Output Levels	on off	By turning Clip Output Levels OFF, values beyond the end of the curve will be set to the extremes, and when Clip Output Levels is ON, values will remain constant.
Dither?	on off	Setting *Dither?* on adds a small amount of noise to reduce any banding artifacts.
Dither Amount	1 to 10	Controls the amount of noise that gets added if *Dither?* is set to on.

G Simple Contrast

This filter is the same as *G Contrast*, minus the *soft Clipping* feature, so you get a slightly faster render.

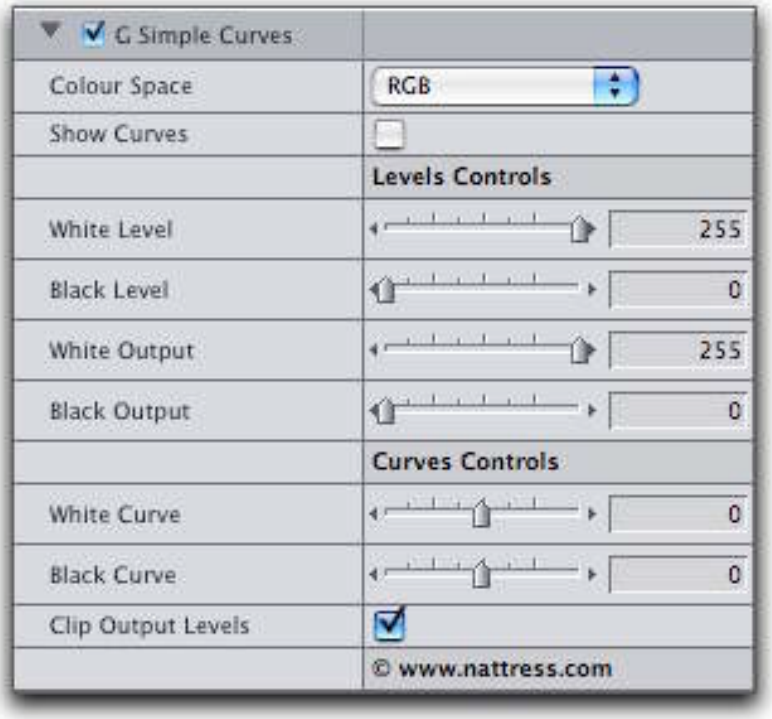


Control	Settings	Notes
Colour Space	RGB Y'CbCr	Most video is natively in the Y'CbCr space (commonly and incorrectly known as "YUV"). By allowing the selection of Y'CbCr or RGB, you can create a different visual effect. When working in Y'CbCr, only Y' contrast is affected, preserving colour saturation. In RGB, R, G and B are affected, creating changes in both the lightness / darkness of the image and it's saturation.
Show Contrast	on off	By turning this control on, a graph will appear showing you how the plugin is affecting your image. This graph does not render onto your video.

Control	Settings	Notes
Amount	-100% to 100%	Adjusts the contrast, from -100% which is no contrast at all, through 0%, being no change to 100% which is very contrasty indeed.
Mid Point	-100% to 100%	Adjusts the mid point of the contrast curve, which in effect will brighten or darken your image.

G Simple Curves

G Simple Curves has all the features of *G Simple Levels*, but adds the ability to smoothly alter the tones of the image using curves. These curves have been specially designed for video use, and although simple in operation, they can produce beautiful results. The curves can also be used to simulate film-like gamma characteristics, giving your video a warmth and richness that adds depth and drama.

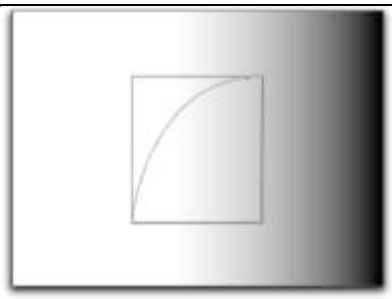


Control	Settings	Notes
Colour Space	RGB Y'CbCr	Most video is natively in the Y'CbCr space (commonly and incorrectly known as "YUV"). By allowing the selection of Y'CbCr or RGB, you can create a different visual effect. When working in Y'CbCr, only Y' level is affected, preserving colour saturation. In RGB, R, G and B are affected, creating changes in both the lightness / darkness and saturation.
Show Curves	on off	Displays a graph representing level changes.. This graph does not render onto your video.
White Level	0 to 255	Lowering White Level will brighten image.
Black Level	0 to 255	Raising Black Level will darken image.
White Output	0 to 255	Lowering White Output will make the whole image dimmer by limiting the maximum brightness of the image.
Black Output	0 to 255	Raising Black Output will make the dark areas of the image brighter, making the image look foggy.

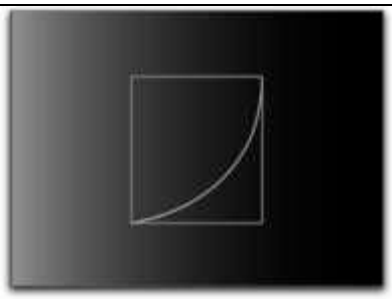
Control	Settings	Notes
White Curve	`-100% to 100%`	Positive values bend the bright part of the curve upwards, brightening highlights and negative values bend it downwards dimming highlights.
Black Curve	`-100% to 100%`	Positive values bend the dark part of the curve upwards, brightening shadows and negative values bend it downwards darkening shadows.
Clip Output Levels	`on` `off`	By turning Clip Output Levels OFF, values beyond the end of the curve will be set to the extremes, and when Clip Output Levels is ON, values will remain constant.

The following shows some examples of different curve settings applied to a basic gray-scale image. Note the *Show Levels* control is set to display a diagnostic graph.

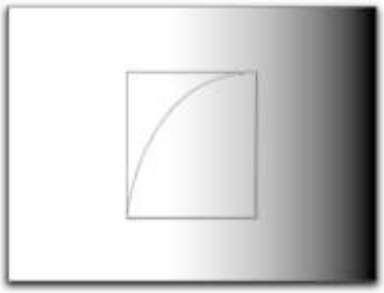
Default Settings



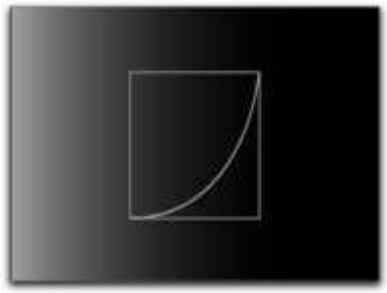
White Curve 100%



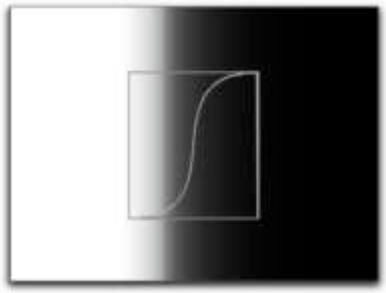
White Curve -100%



Black Curve 100%



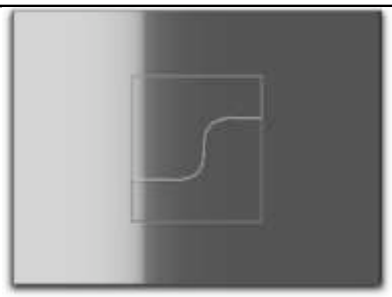
Black Curve -100%



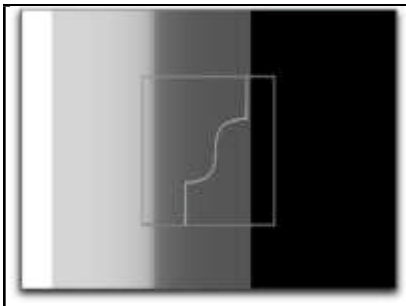
White Curve 100% and Black Curve -100%

White Curve -100% and Black Curve 100%

White Curve 50% and Black Curve -50% for a nice S-shaped Gamma curve

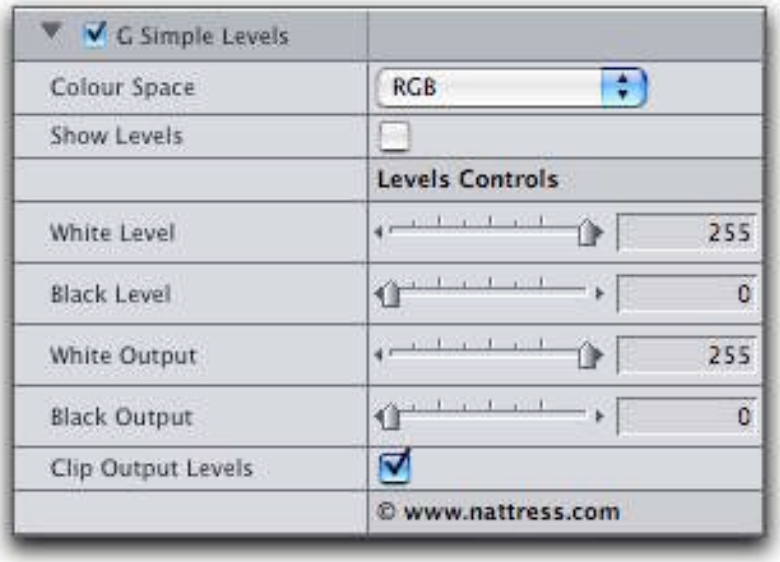


Clipping On



Clipping Off

G Simple Levels



G Simple Levels is an incredibly useful plugin that gives you creative control over the levels in your video. By allowing you to turn off the clipping of the video levels, it can also function as a contrast control with an even greater range of adjustment than *G Contrast*. The *Show Levels* option displays a graph over your video showing you exactly what the plugin is doing so that you can precisely adjust your video.

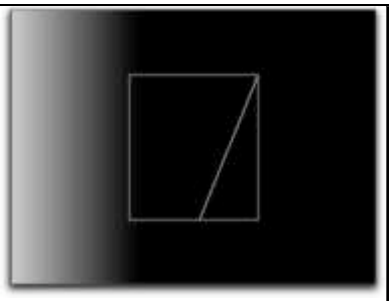
Control	Settings	Notes
Colour Space	RGB Y'CbCr	Most video is natively in the Y'CbCr space (commonly and incorrectly known as "YUV"). By allowing the selection of Y'CbCr or RGB, you can create a different visual effect. When working in Y'CbCr, only Y' level is affected, preserving colour saturation. In RGB, R, G and B are affected, creating changes in both the lightness / darkness of the image and it's saturation.
Show Levels	on off	Displays a graph showing how the G Levels plugin is affecting your image. This graph does not render onto your video.
White Level	0 to 255	Lowering White Level will brighten image
Black Level	0 to 255	Raising Black Level will darken image
White Output	0 to 255	Lowering White Output will make the whole image dimmer by limiting the maximum brightness of the image
Black Output	0 to 255	Raising Black Output will make the dark areas of the image brighter, making the image look foggy

Control	Settings	Notes
Clip Output Levels	on off	By turning Clip Output Levels OFF, The levels control will function more like G Contrast, but with greater control over the contrast of the image.

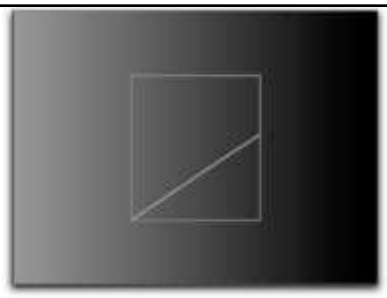
The following table gives you a visual overview of the different Level settings applied to a basic grayscale image, with the *Show Levels* diagnostic graph displayed.

Default Settings

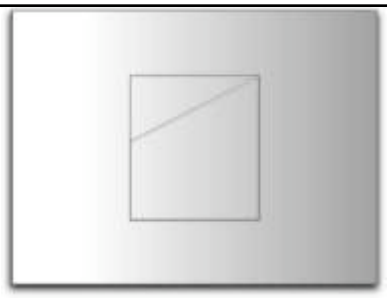
Lowered White Level



Raised Black Level

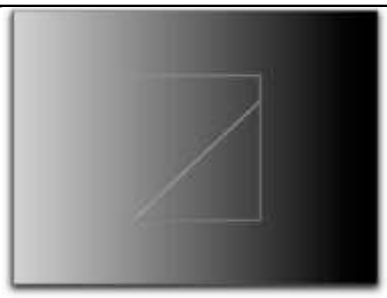


Lowered White Output



Raised Black Output

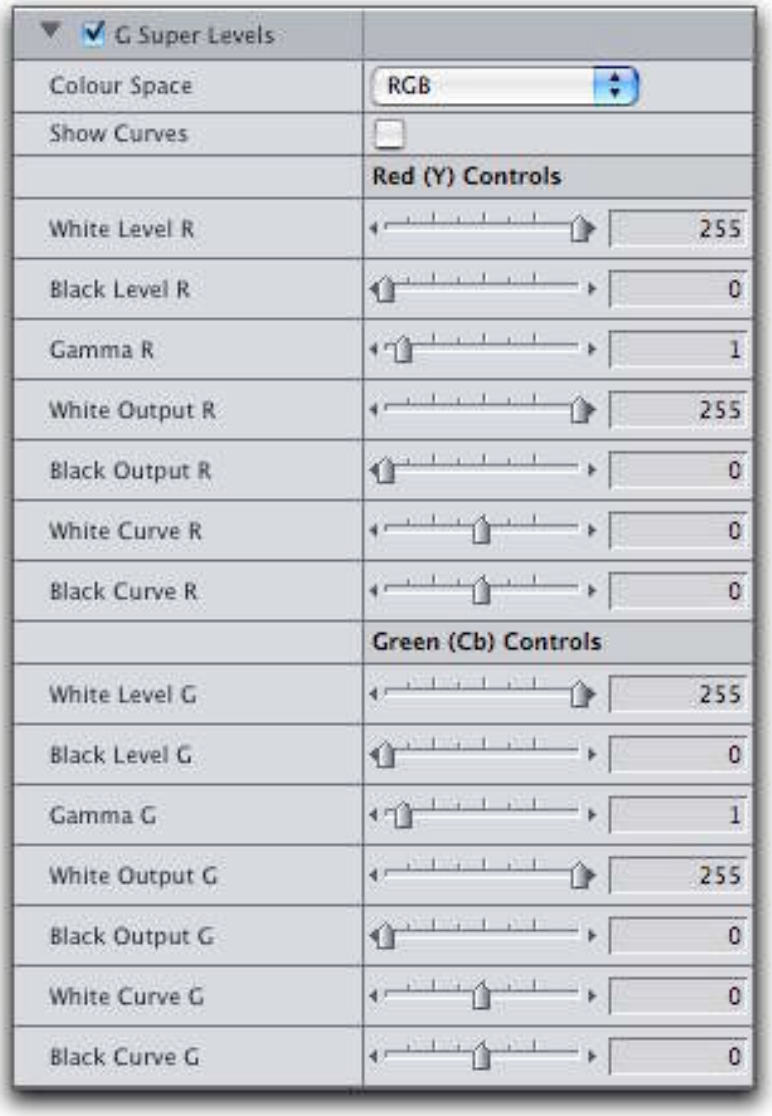
Clipping On



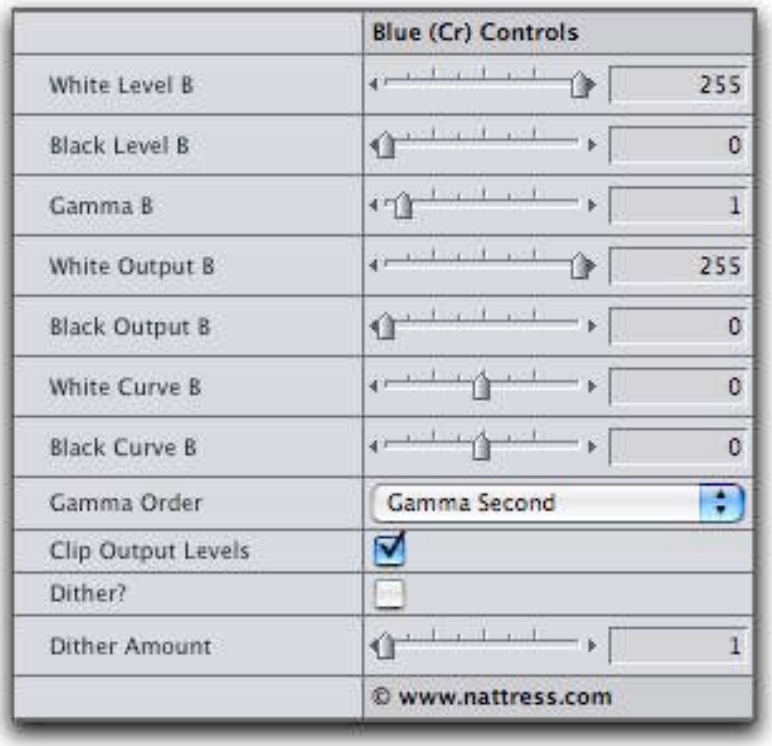
Clipping Off

G Super Levels

G Super Levels takes all the wonderful levels control of *G Levels* and makes it available for each channel, R, G, and B or Y, Cr, and Cb.



(cont')

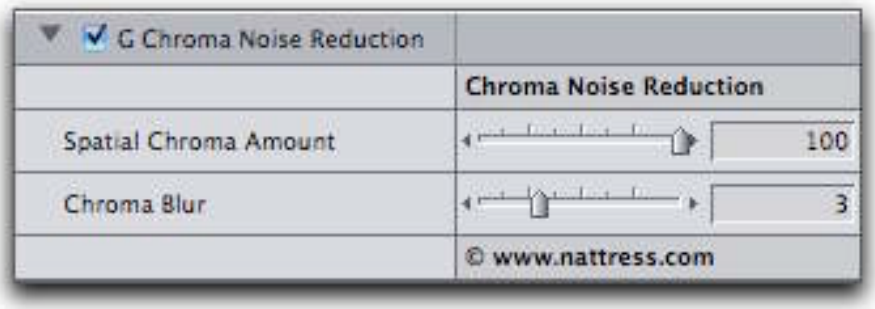


Control	Settings	Notes
Colour Space	RGB Y'CbCr	Most video is natively in the Y'CbCr space (commonly and incorrectly known as "YUV"). By allowing the selection of Y'CbCr or RGB, you can create a different visual effect.
Show Levels	on off	By turning this control on, a graph will appear showing you how the G Levels plugin is affecting your image. The red line shows the Red or Y levels. The green Line shows Green or Cb levels. And the blue line shows Blue or Cr Levels. This graph does not render onto your video.
White Level (Red / Y Controls Green / Cb Controls Blue / Cr Controls)	0 to 255	Lowering White Level will brighten the channel.
Black Level (Red / Y Controls Green / Cb Controls Blue / Cr Controls)	0 to 255	Raising Black Level will darken the channel.
Gamma (Red / Y Controls Green / Cb Controls Blue / Cr Controls)	0.1 to 10	Controls the amount of gamma curve adjustment.
White Output (Red / Y Controls Green / Cb Controls Blue / Cr Controls)	0 to 255	Lowering White Output will make the channel dimmer by limiting the maximum brightness.

Control	Settings	Notes
Black Output (Red / Y Controls Green / Cb Controls Blue / Cr Controls)	0 to 255	Raising Black Output will make the dark areas of the channel brighter.
White Curve (Red / Y Controls Green / Cb Controls Blue / Cr Controls)	-100% to 100%	Positive values bend the bright part of the curve upwards, brightening highlights and negative values bend it downwards dimming highlights.
Black Curve (Red / Y Controls Green / Cb Controls Blue / Cr Controls)	-100% to 100%	Positive values bend the dark part of the curve upwards, brightening shadows and negative values bend it downwards darkening shadows.
Gamma Order	Gamma First Gamma Second	Sets whether the gamma adjustment is calculated before or after the levels.
Clip Output Levels	on off	By turning Clip Output Levels OFF, The levels control will function more like G Contrast, but with greater control over the contrast of the image.
Dither?	on off	Setting *Dither?* on adds a small amount of noise to reduce any banding artifacts.
Dither Amount	1 to 10	Controls the amount of noise that gets added if *Dither?* is set to on.

Noise Reduction:

G Chroma Noise Reduction

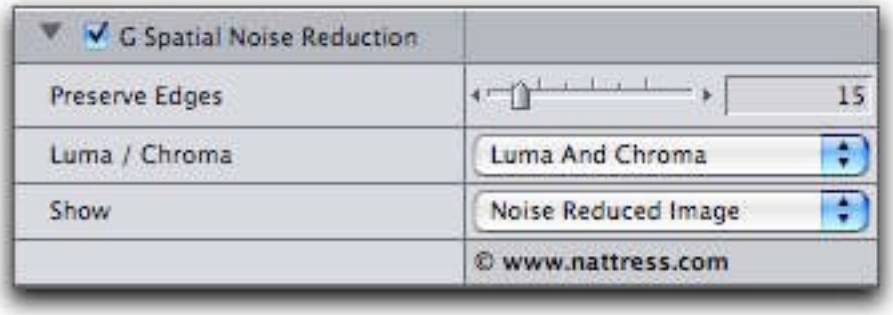


This filter was originally designed to improve the picture of a HDV camera that produced a rather noisy chroma signal. Fortunately chroma noise is easy to fix without much loss of picture resolution. Start by increasing the *Chroma Blur* until the noise disappears. Then try backing off the *Spatial Chroma Amount* until just before the noise reappears.

Control	Settings	Notes
Spatial Chroma Amount	0 to 100	This controls how much of the Chroma Noise Reduction is mixed with the original image.

Control	Settings	Notes
Chroma Blur	`0 to 10`	Sets how much the Chroma is blurred.

G Spatial Noise Reduction



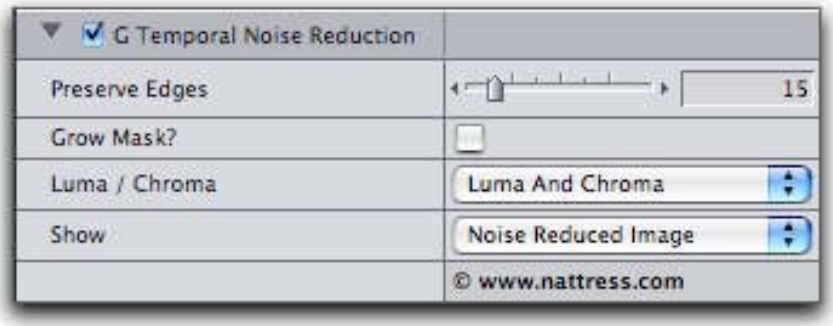
G Spatial Noise Reduction enables you to remove noise from your image while maintaining the sharpness of edges. Noise is reduced by averaging values within the image (as opposed to over time). This filter gives you the option of reducing the noise of both the Luma and Chroma channels together or just one or the other.

Control	Settings	Notes
Preserve Edges	`0 to 100`	This controls the edge tolerance. The higher the setting, the more restrictive the mask will be.

Luma / Chroma	`Luma Only`
	`Chroma Only`
	`Luma and Chroma`
		Selects which channels will be noise reduced.

Show	`Noise Reduced Image`
	`Edge Mask`
	`Spatial Average`
		Noise Reduced Image shows noise reduction with edges preserved. *Edge Mask* shows, in black, the areas that are protected from noise reduction. *Spatial Average* shows the entire image with noise reduction (no edge protection applied). Be aware this setting renders as seen (so you can choose between *Noise Reduced Image* and *Spatial Average* if desired).

G Temporal Noise Reduction



This filter gives you Noise Reduction by averaging values over time. It works much the same as *G Spatial Noise Reduction* with one additional control to grow the edge mask. *Grow Mask?* helps preserve detailed areas from noise reduction when there is slight movement within the image.

Control	Settings	Notes
Preserve Edges	`0 to 100`	This controls the edge tolerance. The higher the setting, the more restrictive the mask will be.
Grow Mask?	`on` `off`	Expands the edge mask to compensate for subtle movements.

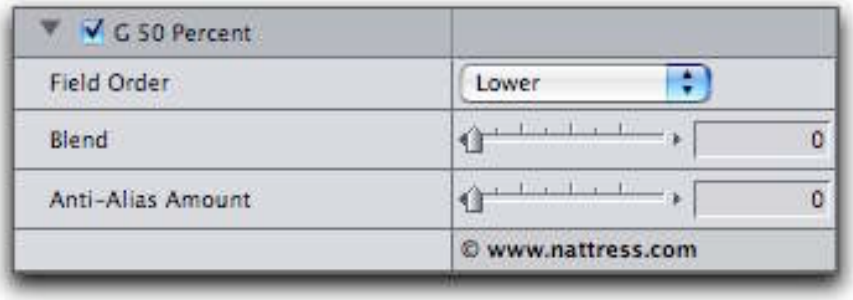
Luma / Chroma	`Luma Only`
	`Chroma Only`
	`Luma and Chroma`
		Selects which channels will be noise reduced.

Show	`Noise Reduced Image`
	`Edge Mask`
	`Spatial Average`
		Noise Reduced Image shows noise reduction with edges preserved. *Edge Mask* shows, in black, the areas that are protected from noise reduction. *Spatial Average* shows the entire image with noise reduction (no edge protection applied). Be aware this setting renders as seen (so you can choose between *Noise Reduced Image* and *Spatial Average* if desired).

Time Tools:

G 50 Percent

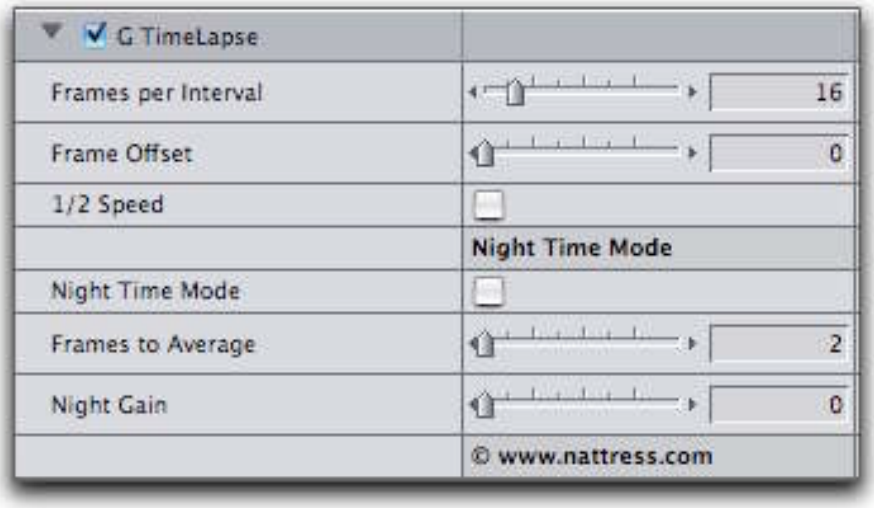
This filter creates a smooth 50% slow motion by splitting fields into full frames. Controls to blend between fields and to add anti-aliasing ensure a smooth slow motion.



Control	Settings	Notes
Field Order	`Lower` `Upper`	Selects which field appears first. If set incorrectly, your footage will stutter.
Blend	`0 to 100`	Blends between the two fields
Anti-Alias Amount	`0 to 100`	Expanding one field up to a full frame can sometimes create jaggies. Increase *Anti-Alias Amount* until the image appears smoother.

G TimeLapse

Many camcorders have a time lapse function that works by taking a set number of frames at a set interval, for example 16 frames every one minute. This creates a rather choppy time lapse effect. This filter pulls out a frame from each interval to create a smoother, and faster, time lapse.



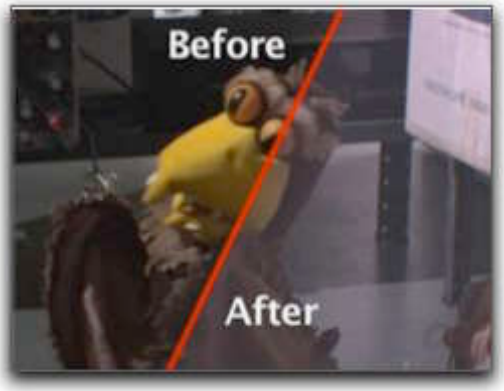
Control	Settings	Notes
Frames per Interval	`2 to 90`	This is the number of frames the camcorder recorder at each interval.
Frame Offset	`0 to 90`	Use this to select which of the frames in the sequence to use. A setting of 0, uses the first frame. 1 uses the next frame, etc.
1/2 Speed	`on` `off`	Turn this on to slow down the footage.
Night Time Mode	`on` `off`	Turn this on if you were shooting at night and want to pull more detail out of your footage.
Frames to Average	`2 to 16`	Sets how many frames to combine to pull added detail from night footage.
Night Gain	`0 to 1`	Boosts brightness.

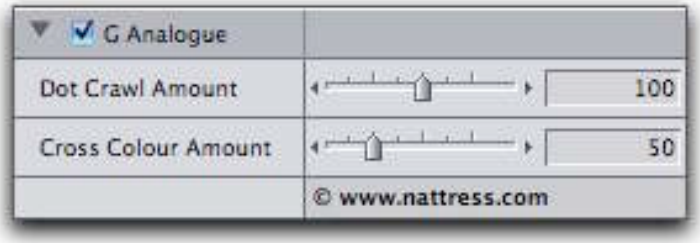
TV Effects:

Sometimes you need to make your footage look like bad television. Whether you are trying to fake the look of archived video stocks, the POV of a consumer camcorder, or simply the nasties of broadcast television, the following filters give you all the tools to give your video the *TV look.*

G Analogue

This filter recreates the noise of an analogue composite TV signal.

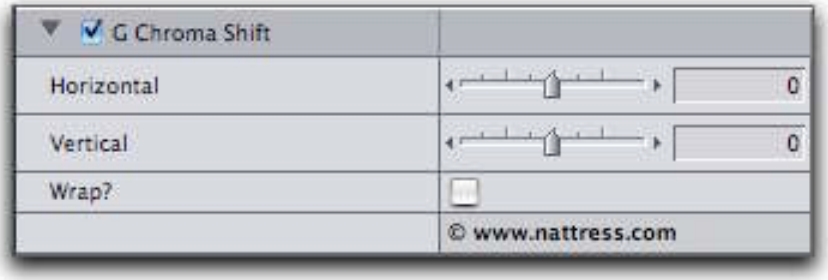




Control	Settings	Notes
Dot Crawl Amount	`0 to 200`	This creates a deterioration around edges and a crumbly look. The higher the setting, the more extreme the effect.
Cross Colour Amount	`0 to 200`	This creates the effect of the colours signals bleeding into each other. The higher the setting, the more extreme the effect.

G Chroma Shift

This filter creates the colour drift that happens when the chroma loses alignment with the luma.



Control	Settings	Notes
Horizontal	`-100 to 100`	Negative numbers move the chroma left and positive numbers shift to the right.
Vertical	`-100 to 100`	Negative numbers move the chroma up and positive numbers shift down.

Control	Settings	Notes
Wrap	on off	If wrapping is on, then as the shifted chroma drops off the edge of the screen, it appears on the opposite side.

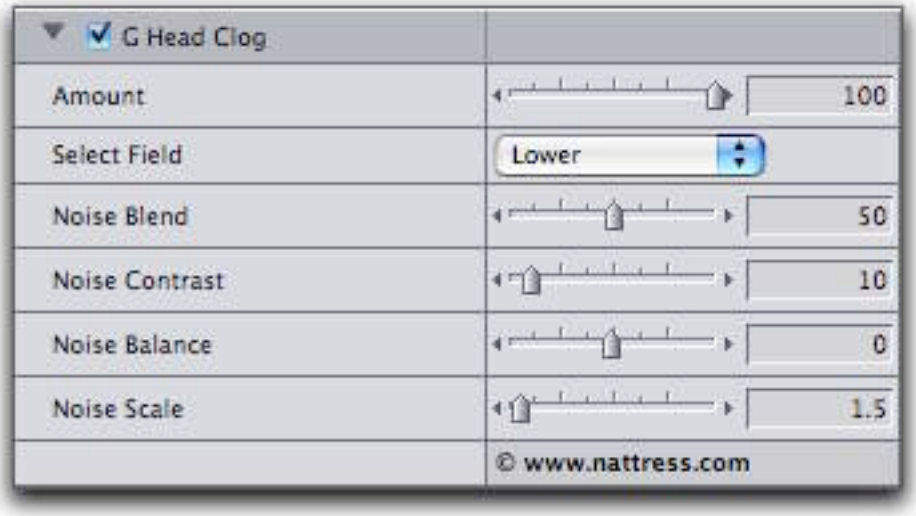
G Digital

Use **G Digital** to add in digital compression artifacts to your video.

Control	Settings	Notes
Compression	0 to 200	Controls the amount of digital compression artifacts added.

G Head Clog

Recreate the joys of analogue video tape! VHS deck head clogs produce a distinctive noisy field effect that can last for a few moments or indefinitely, depending on the state of the deck. This filter can also be used to add a low level grain to your video to create a film-like grain.



Control	Settings	Notes
Amount	`0 to 100`	Controls the level of noise added to the field. Note that a low setting (5 or less) creates a nice film grain effect.
Select Field	`Upper` `Lower`	Selects which field to affect.
Noise Blend	`0 to 100`	Blends the white part of the noise with the original video.
Noise Contrast	`0 to 100`	Increasing the contrast of the noise makes the noise appear sharper.
Noise Balance	`-100 to 100`	Controls the midpoint of the noise. Negative setting shifts the noise brighter. Positive setting darkens the noise.
Noise Scale	`1 to 10`	Increasing this, enlarges the grains of the noise.

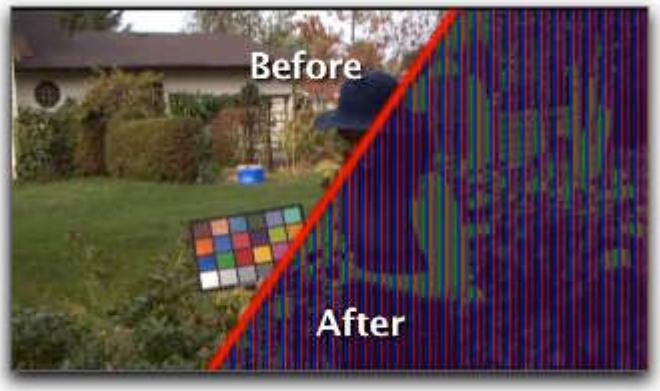
G Resolution

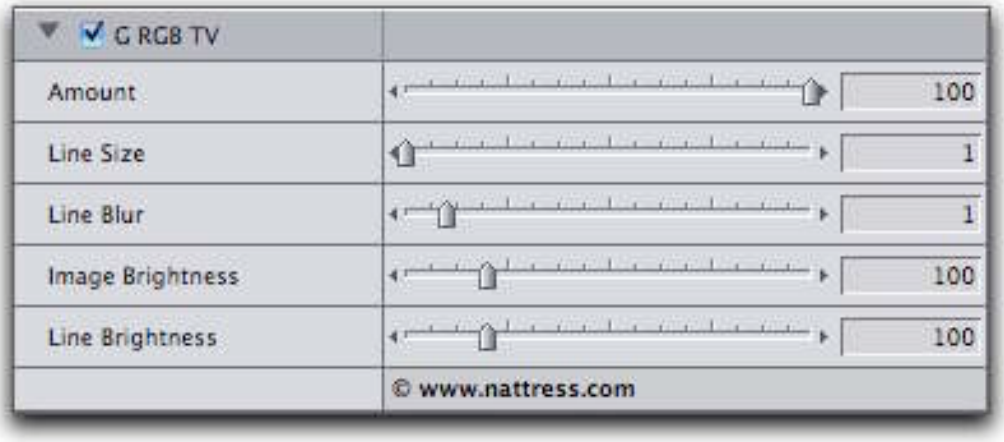
Use **G Resolution** to reduce the resolution of the Luma and/or Chroma to recreate the soft, analogue degeneration, of old video.

Control	Settings	Notes
Luma Resolution	`0 to 100`	Percentage setting of luma resolution.
Chroma Resolution	`0 to 100`	Percentage setting of Chroma resolution.

G RGB TV

Ever look at a plasma or CRT screen up close? Close enough to see the individual colour lines that run up and down the screen? This filter creates that colour breakdown, without having to put your nose six inches from the screen.





Control	Settings	Notes
Amount	`0 to 100`	Controls the amount of the effect that gets mixed with the original video.
Line Size	`1 to 10`	Sets the scale of the colour lines.
Line Blur	`0 to 10`	Adds a blur to the lines. A small blur goes a long way when the *Lines Size* is small.

Control	Settings	Notes
Image Brightness	`0 to 500`	Controls the level of overall brightness/darkness.
Line Brightness	`0 to 500`	Controls the level of brightness/darkness for the lines only.

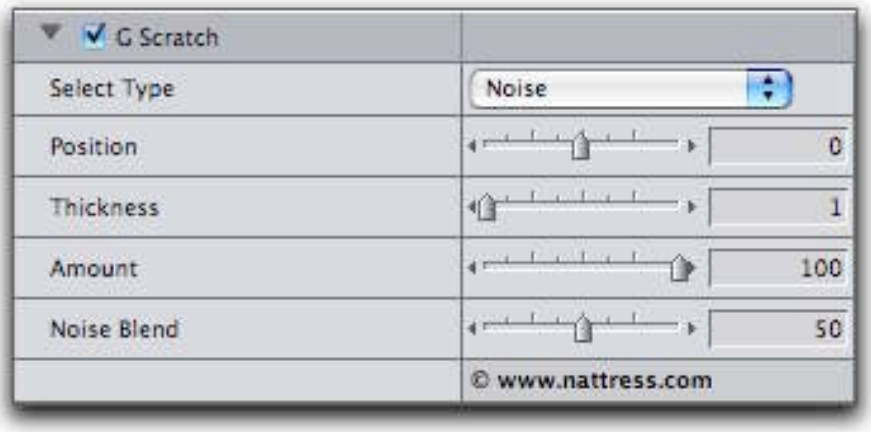
G Roll

If you've ever tried to play an old analogue tape that has stretched with time, you'll be familiar with the roll and vertical distortions that this filter creates.

Control	Settings	Notes
Vertical Roll	`0 to 1000`	Shifts the video down in a simulation of bad tracking. Use keyframes to create an animated roll, if desired.
Vertical Frequency	`1 to 2000`	Percentage based measure of how much of the vertical height of the image fits on the screen. A setting of 50, stretches the video so only half is on screen. A setting of 200 compresses the image so that 2 images fit on screen at once.

G Scratch

A scratch on video tape runs horizontally across the screen. Its appearance depends on the intensity of the scratch and the dropout compensation capability of the machine that is playing the tape.



Control	Settings	Notes

Select Type	`Black`
	`Noise`
	`Corrected`
		Controls the appearance of the scratch. *Corrected* repeats the lines above and below the scratch to recreate the missing data.

Position	`-100 to 100`	Negative numbers move the scratch up from centre, while positive numbers are down from centre.
Thickness	`0 to 100`	Sets the thickness of the scratch.
Amount	`0 to 100`	Sets the amount of the scratch effect to blend with the original, unscratched video.
Noise Blend	`0 to 100`	When type of scratch is set to *Noise*, this control enables you to blend through the bright regions of noise back to your original image, while preserving the dark noise.

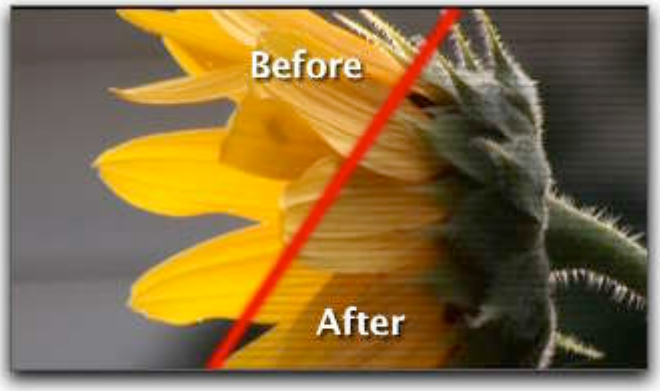
G Shift

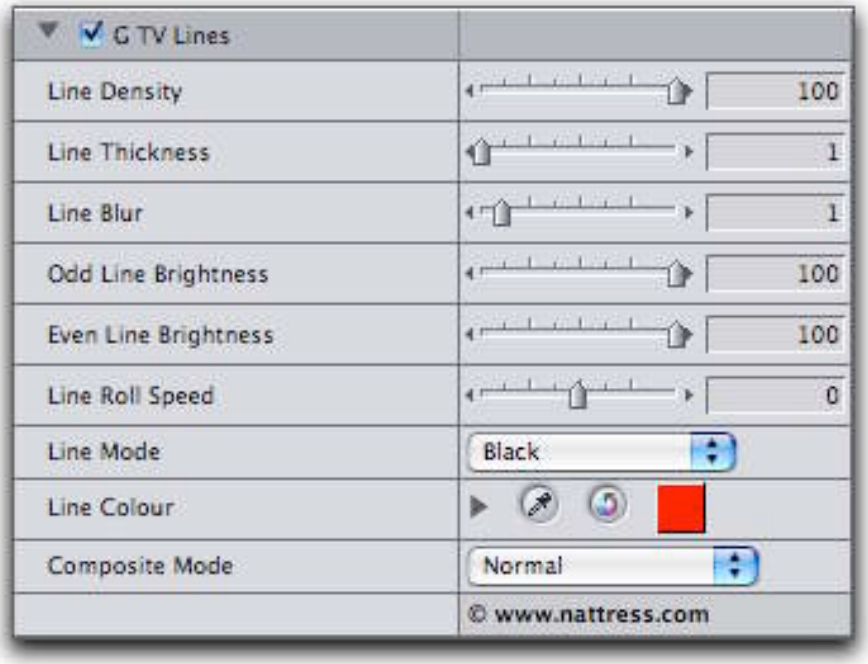
This filter moves your video around the screen, incorporating wrap-around, so what falls off one side of the screen reappears on the opposite side. Designed to make video look old and broken, it could conceivably be used to fix video that has been captured with a vertical and/or horizontal shift.

Control	Settings	Notes
Horizontal Position	`-100 to 100`	Percentage shift from centre. Negative numbers are to the left. Positive numbers tot he right.
Vertical Position	`-100 to 100`	Percentage shift from centre. Negative moves the image up. Positive shifts down.

G TV Lines

This creates the look of really, really, old television sets where horizontal lines darken/lighten or colourize alternating lines or fields. A little goes a long way with this filter.





Control	Settings	Notes
Line Density	`0 to 100`	Sets the vibrancy and strength of the lines.
Line Thickness	`1 to 10`	Controls how thick the lines are. The thinner the lines, the more lines appear on screen.
Line Blur	`0 to 100`	Controls the soft or hardness of the line edges.
Odd Line Brightness	`0 to 100`	Controls the brightness of the *Odd Line*, or part of the image that appears between lines in *Black, White* or *Colour* modes.
Even Line Brightness	`0 to 100`	Controls the brightness of the *Even Line* or the black/white/colour lines that the filter adds to the image.
Line Roll Speed	`-10 to 10`	Negative settings cause the lines to roll up the screen and positive numbers make the roll go down. Note that high *Line Roll Speeds* can appear to go in reverse due to a frequency mismatch with the video framerate.

Control	Settings	Notes

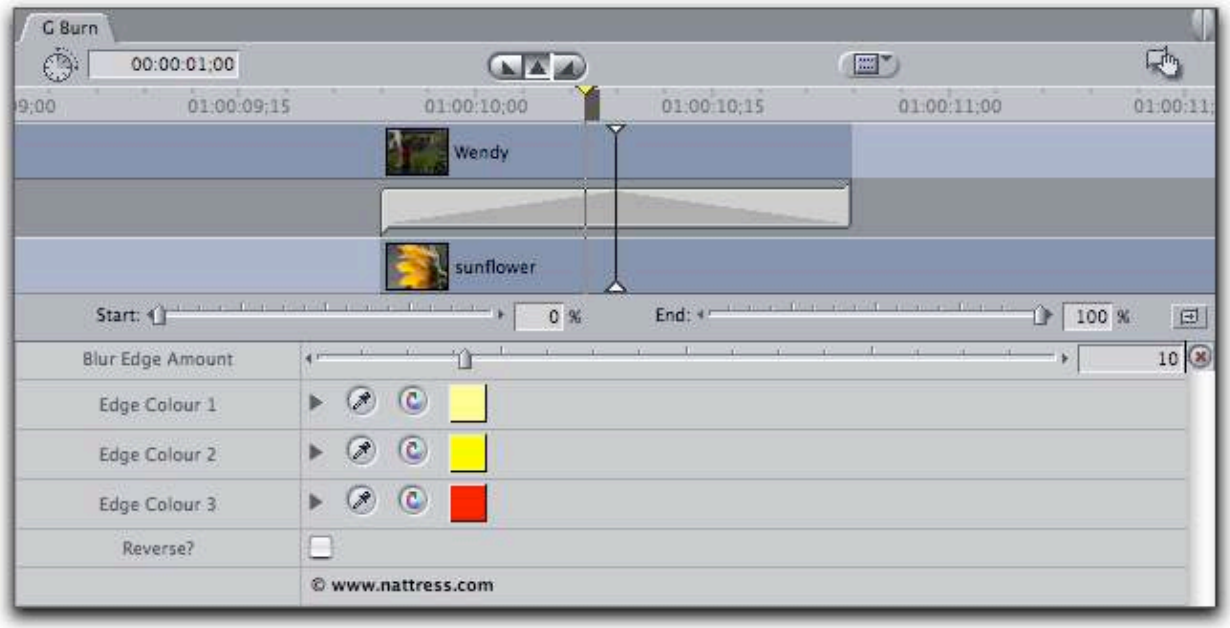
Line Mode	`Black`
	`White`
	`Colour`
	`Image`
		Selects whether the added lines are black, white, a selected colour, or composed from the image itself. Using the *Image* mode and changing the *Odd* and *Even Line Brightness* can produce pleasing results.

Line Colour	`Colour Picker`	Selects the colour of the line, when in *Colour* mode.

Composite Mode	`Normal`
	`Multiply`
	`Screen`
	`Overlay`
	`Lighten`
	`Darken`
	`Add`
		Selects the compositing mode for the lines.

Transitions:
G Burn

This transition burns through the outgoing video with a smoldering ‘flame’ in the colours you select. Yellow and red or orange make a nice burnt film look, while blues and greens conjure up thoughts of alien blasters doing damage.

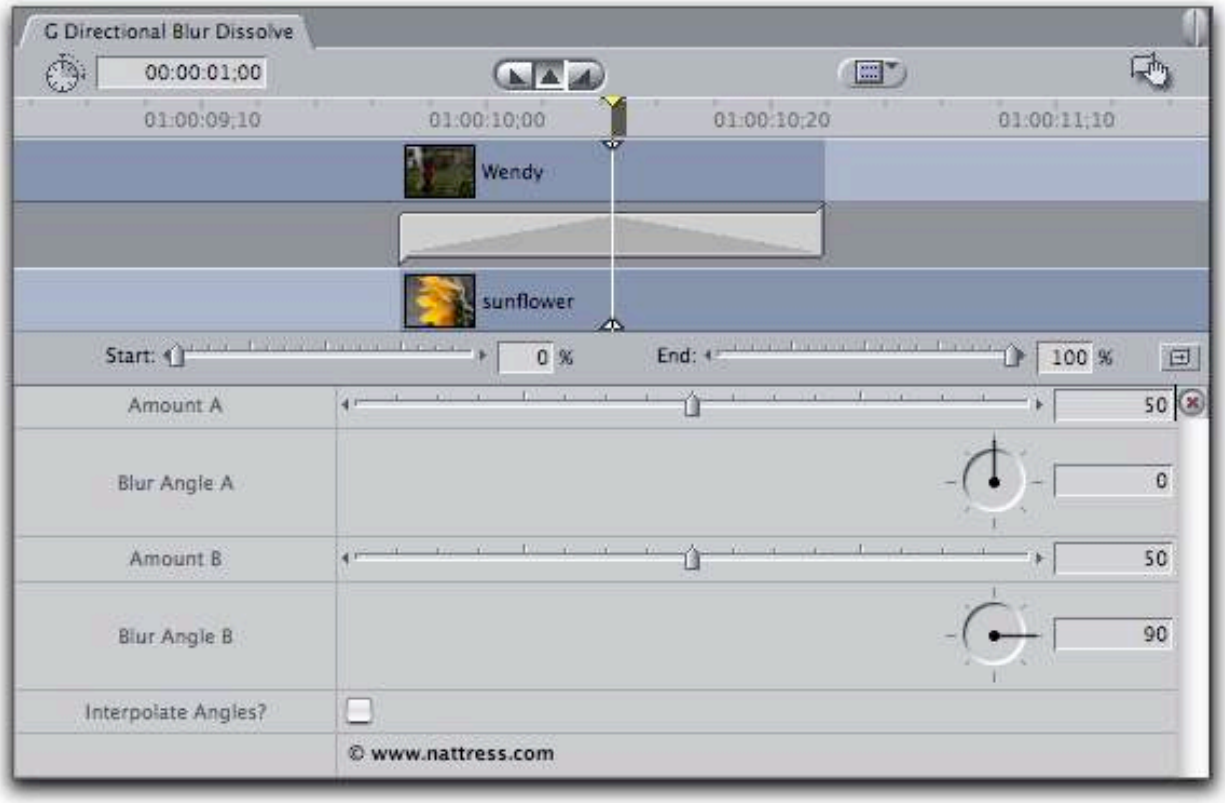


Control	Settings	Notes
Blur Edge Amount	`0 to 50`	Controls how blurry the coloured edge ‘burns’ appear.

Control	Settings	Notes
Edge Colour 1, 2 and 3	`Colour Picker`	Selects the colours for the burning edge.
Reverse?	on `off`	Runs the effect backwards.

G Directional Blur Dissolve

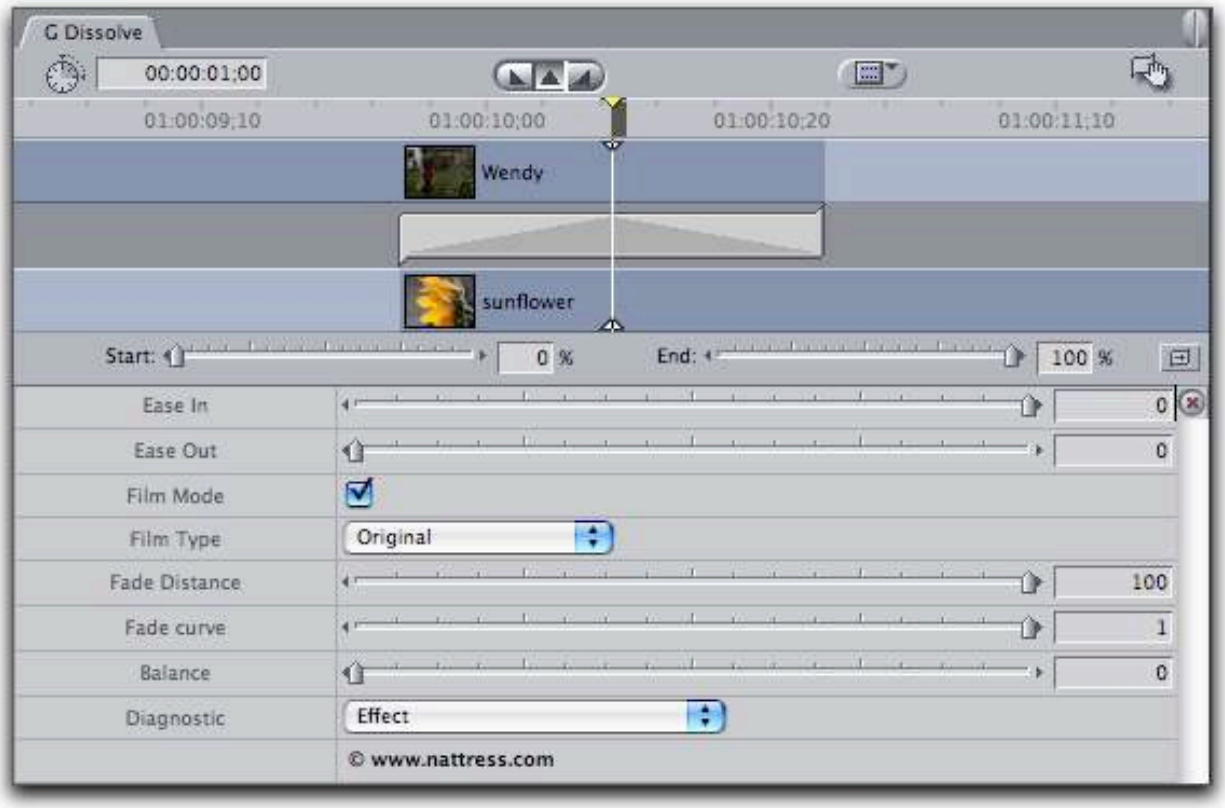
Blurs the outgoing video in the set direction before dissolving to the incoming video which has also been blurred in its set direction and finally unblurring the incoming video. Great transition for a sequence of photographs or when you want to add a dreamy, sentimental feel.



Control	Settings	Notes
Amount A	`0 to 100`	Sets the intensity of the blur on the outgoing video.
Blur Angle A	`-360 to 360 degrees`	Sets the angle of the blur on the outgoing video.
Amount B	`0 to 100`	Sets the intensity of the blur on the incoming video.
Blur Angle B	`-360 to 360 degrees`	Sets the angle of the blur on the incoming video.
Interpolate Angles?	on `off`	Animates between the setting of *Blur Angle A* and *Blur Angle B*.

G Dissolve

A dissolve transition with variable ease in and ease out to speed up or slow down the progression through the transition. *Film mode* turns the dissolve into a more "film like" dissolve and *Balance* controls the mix between the standard video dissolve and the "film like" dissolve. *Diagnostic* options allow you to see the effect, the *Time Graph* showing ease in and out, and the *Film Effect Graph* which shows how the fades blend and overlap.



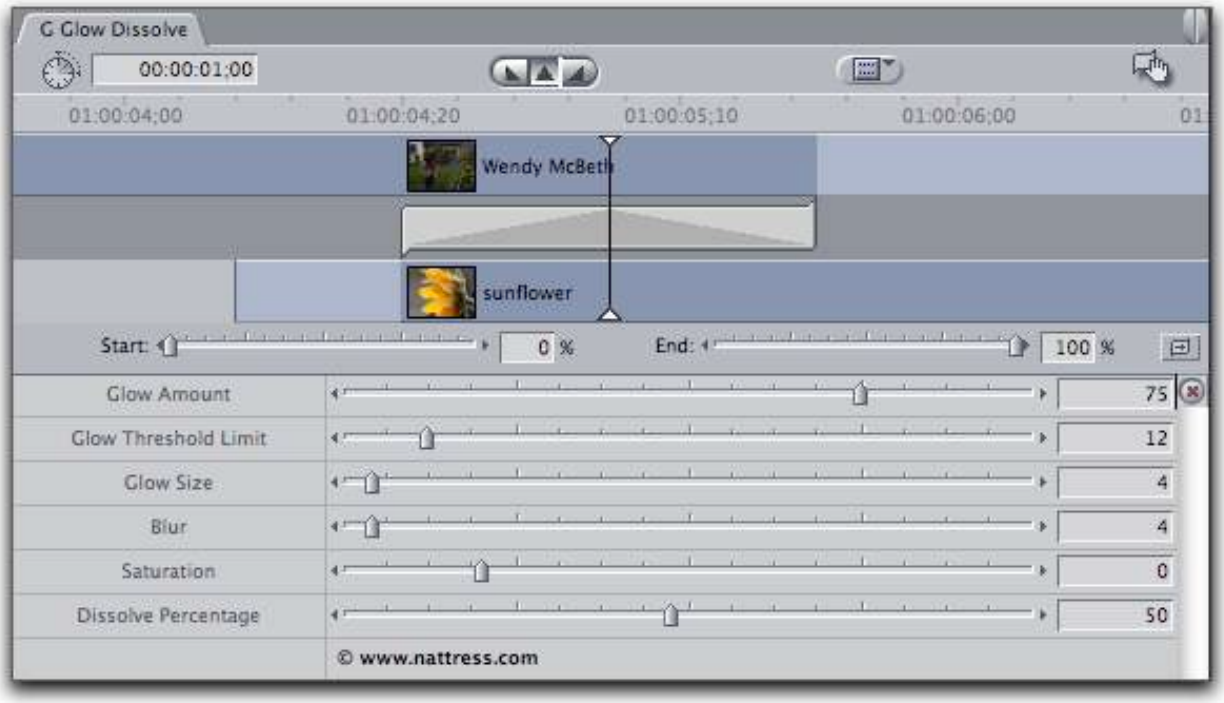
Control	Settings	Notes
Ease In	`-1 to 0`	Accelerates the start of the transition.
Ease Out	`0 to 1`	Decelerates the end of the transition.
Film Mode	`on` `off`	Makes the dissolve more film like.
Film Type	`Original` `Version 2`	Selects the type of film effect when *FIlm Mode* is activated.
Fade Distance	`1 to 100`	Controls how much the clips fade towards black as they dissolve. A shorter fade distance will make the dissolve appear brighter.
Fade Curve	`-1 to 1`	Makes the fader non-linear by using a gamma function. 1 is linear. Decreasing the Fade Curve will make the progression of the fade more gradual at first, then accelerating.

Control	Settings	Notes
Balance	`0 to 1`	Blends between normal and film like dissolve when *Film Mode* is on.

Diagnostic	`Effect`
	`Time Graph`
	`Film Effect Graph`
		Allows you to see the effect. *Time Graph* shows ease in and out. *Film Effect Graph* shows how the fades blend and overlap.

G Glow Dissolve

This transition adds a glow and blur to the clips before/while dissolving between them. The strength and range of the glow are user controlled. This transition creates a lovely, sentimental feel, useful for pictures, dream sequences, etc.



Control	Settings	Notes
Glow Amount	`0 to 100`	Sets the strength of the glow.
Glow Threshold Limit	`0 to 100`	This limits the glow to only the bright regions. The higher the Threshold Amount, the smaller the region that gets the “glow” effect.
Glow Size	`0 to 100`	Sets the spread of the glow.
Blur	`0 to 100`	Sets the amount of blur applied to the images.
Saturation	`-1 to 4`	Controls the saturation amount for the effect.
Dissolve Percentage	`0 to 100`	Controls the length of the dissolve between the video sources, as a percentage of the total transition length.

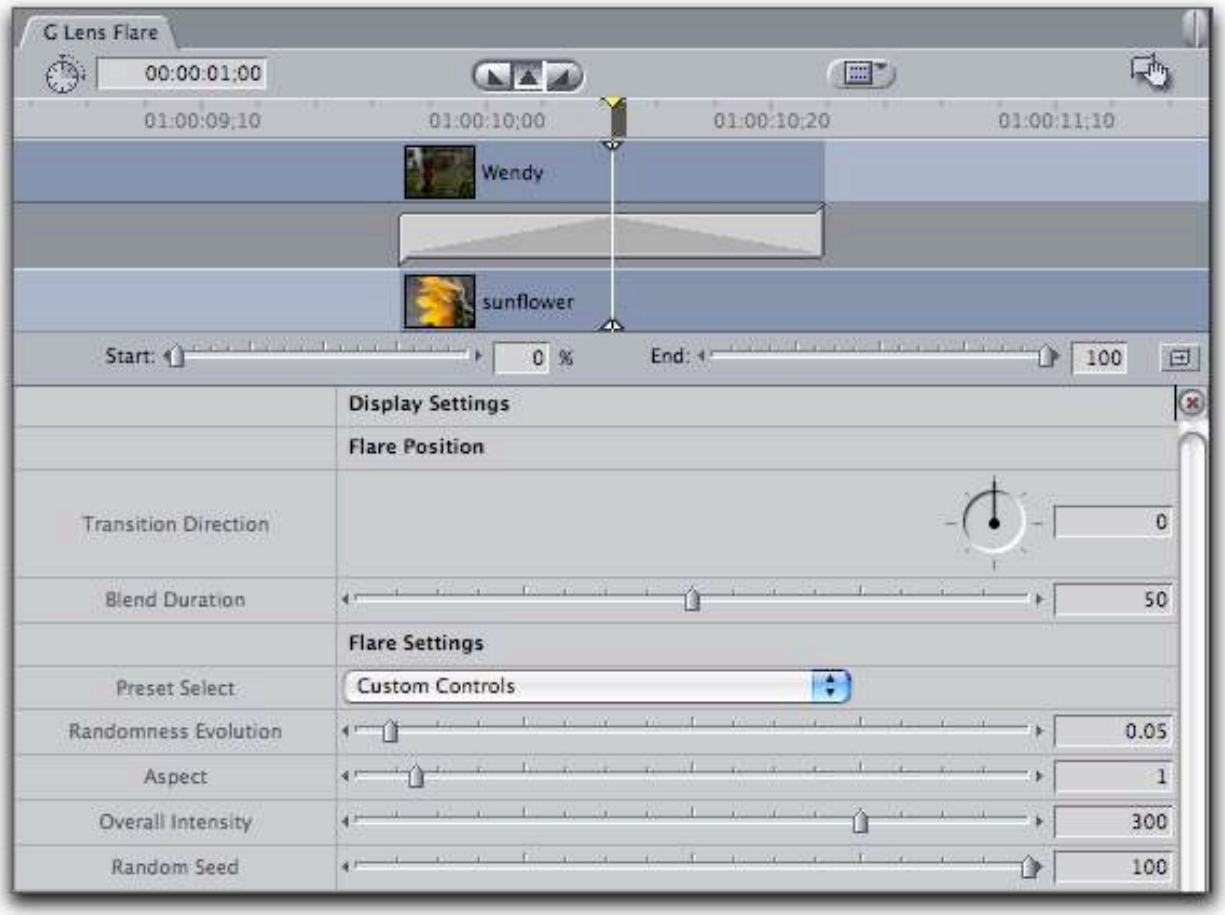
G Horizontal and Vertical Blur Dissolve

This transition is a somewhat similar to *G Directional Blur Dissolve,* in that it blurs the video before dissolving. However, *G Horizontal and Vertical Blur Dissolve (G H & V Blur Dissolve)* enables you to blur both the horizontal and vertical axis independently. As well, the blur algorithm used in *G H & V Blur Dissolve* creates a softer blur than the strong directional blur of *G Directional Blur Dissolve*. This transition is faster to render than *G Directional Blur Dissolve.*

Control	Settings	Notes
A Blur Horizontal	`0 to 100`	Sets the amount of horizontal blur on the outgoing video.
A Blur Vertical	`0 to 100`	Sets the amount of vertical blur on the outgoing video.
B Blur Horizontal	`0 to 100`	Sets the amount of horizontal blur on the incoming video.
B Blur Vertical	`0 to 100`	Sets the amount of vertical blur on the incoming video.

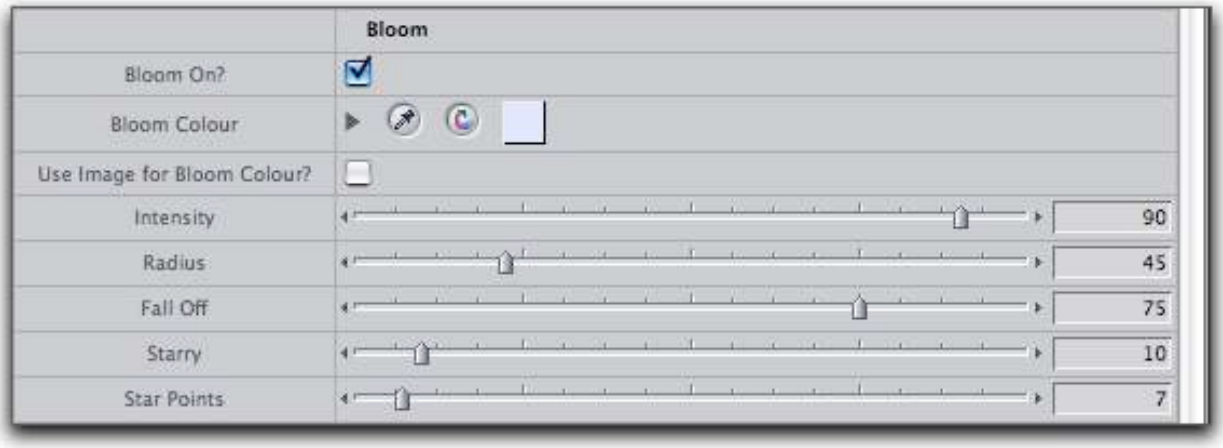
G Lens Flare Transition

This animated lens flare is applied over a dissolve for a dramatic transition effect.

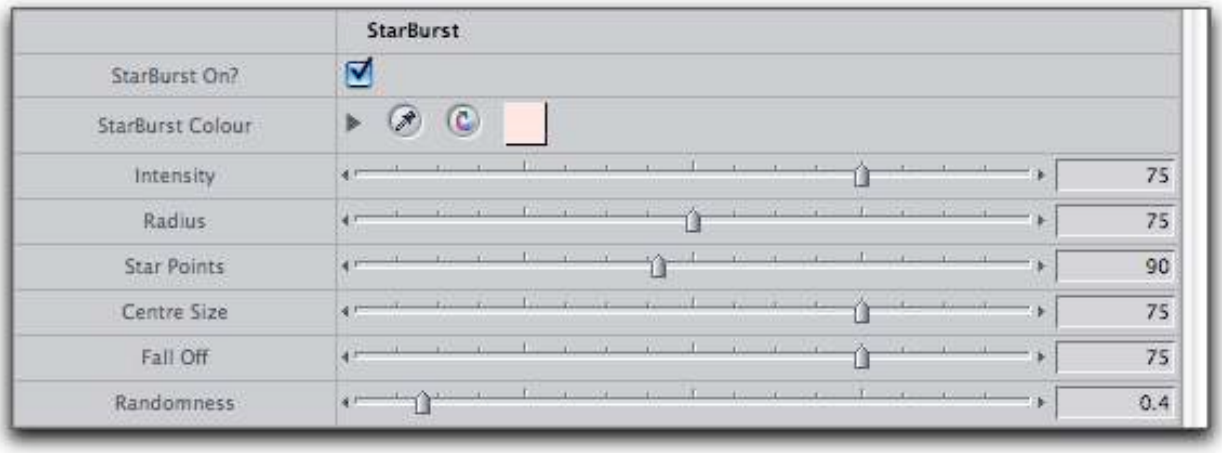


Control	Settings	Notes
Transition Direction	-360 to 360 degrees	Sets the direction that the flare travels.
Blend Duration	0 to 100	Controls the length of the dissolve between the video sources.
Preset Select	Custom Controls Other End of the Rainbow Photon Gaudy	Select either to use the custom controls to design your own lens flare or use a preset. Note when using a preset, the controls for *Bloom, Starburst,* and *Rainbow* will have no effect.
Randomness Evolution	0 to 1.00	Use a small number to change the randomness of the bloom and starburst slowly over time. A higher number will animate the changes rapidly. A setting of zero will make result in no change over time.
Aspect	0.1 to 10	Change the aspect ratio of the lens flares. Low numbers are long and thin. Higher numbers are stretched wide.
Overall Intensity	0 to 400	Master control of intensity of the whole effect. Individual intensity controls can be adjusted below.

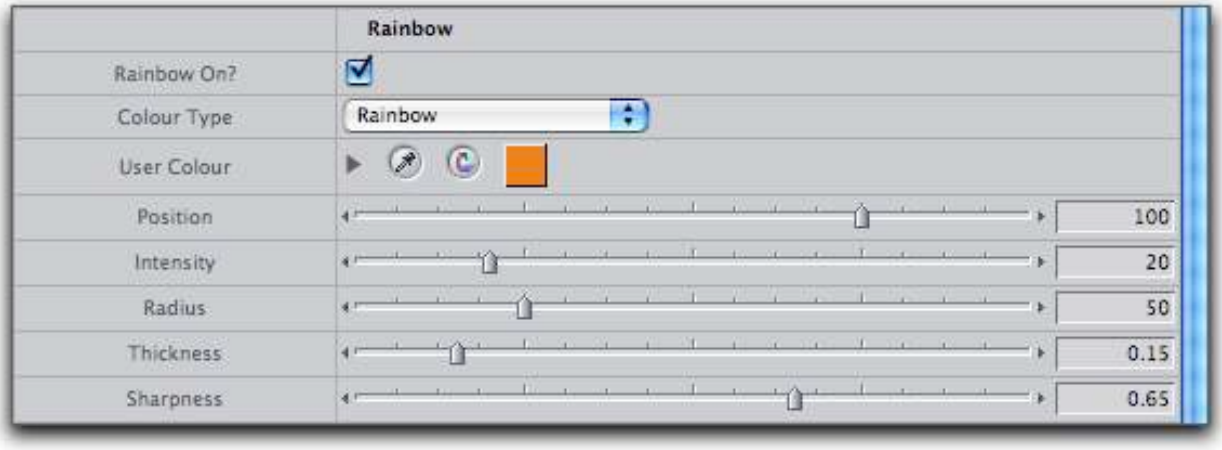
Control	Settings	Notes
Random Seed	`0 to 100`	This filter makes great use of random numbers - this control sets the "seed" for the random numbers. If you don't quite like the flare you've created, try adjusting the random seed to see if you can get a more pleasing pattern.



Control	Settings	Notes
Bloom On?	`on` `off`	Turns on the bloom effect.
Bloom Colour	`colour picker`	Picks the colour of the bloom.
Use Image for Bloom Colour?	`on` `off`	Tells the filter to look at the original image and use that for the colour of the bloom. Setting this to *on* overrides the user selected colour.
Intensity	`0 to 100`	Controls the brightness of the bloom.
Radius	`0 to 200`	The size of the bloom.
Fall Off	`0 to 100`	A lower number gives the bloomer a sharper edge, while a higher number gives it a softer edge.
Starry	`0 to 100`	Breaks up the edge of the bloom with a star effect. The higher the number, the more pronounced the star effect.
Star Points	`0 to 100`	The number of points on the star effect.

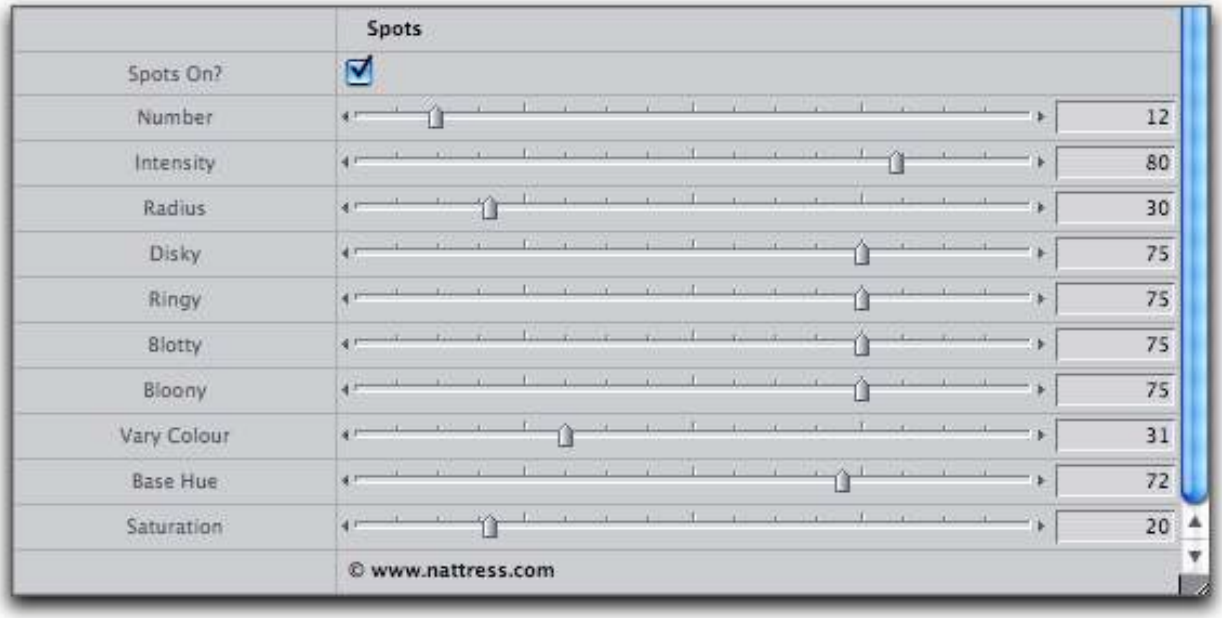


Control	Settings	Notes
StarBurst On?	on off	Turns on the StarBurst effect.
StarBurst Colour	colour picker	Selects the colour of the StarBurst effect.
Intensity	0 to 100	The brightness of the bloom.
Radius	0 to 150	The size of the StarBurst.
Star Points	0 to 200	The number of points on the StarBurst.
Centre Size	0 to 100	Wether the star meets at a small or large circle around the flare point.
Fall Off	0 to 100	Wether the StarBurst has a fade off towards the outer edge.
Randomness	0 to 4.00	Governs how random the placement of the star points is.



Control	Settings	Notes
Rainbow On?	on off	Turns on the Rainbow effect.

Control	Settings	Notes
Colour Type	`Rainbow` `User Colour`	Allows you to select from the Rainbow colours, or from a single user colour.
User Colour	`Colour Picker`	The user colour when not using the Rainbow colours.
Position	`-200 to 200`	Position along the line of the lens flare. Negative numbers come forward from the screen and positive numbers go deeper into the screen.
Intensity	`0 to 100`	The brightness of the rainbow.
Radius	`0 to 200`	Controls the radius of the rainbow.
Thickness	`0 to 1.00`	Sets the thickness of the rainbow band.
Sharpness	`0 to 1.00`	How the bands of the rainbow blend into each other. Zero is sharpest and 1.00 is smoothest.



Control	Settings	Notes
Spots On?	`on` `off`	Turns on the flare spots
Number	`0 to 100`	Sets the amount of spots.
Intensity	`0 to 100`	The overall brightness of the spots.
Radius	`0 to 150`	The radius of the spots.
Disky	`0 to 100`	Relative percentage of "Disk" type spots.
Ringy	`0 to 100`	Relative percentage of "Ring" type spots.

Control	Settings	Notes
Blotty	`0 to 100`	Relative percentage of "Blot" type spots.
Bloony	`0 to 100`	Relative percentage of "Bloon" type spots.
Vary Colour	`0 to 100`	How widely the colour of the spots varies from the base hue.
Base Hue	`0 to 100`	The base colour of the spots.
Saturation	`0 to 100`	The saturation of the colour of the spots.

G Long Dissolve

This transition is intended for long dissolves of several seconds or more. The built in FCP cross dissolve can appear to breathe or fluctuate in intensity over really long dissolves. *G Long Dissolve* gets around these artifacts by combining a dither blend with the dissolve.

Control	Settings	Notes
Dither Magnitude	`0 to 10`	Increasing the *Dither Magnitude* creates a smoother blend between the two video sources.

G Sharp Dissolve

G Sharp Dissolve blends the outgoing clip into the incoming clip by increasing the "sharpness" of the clips towards the middle of the transition. The sharpness effect is very similar to an "unsharp mask" with the tolerance set at zero to make sure that the whole of the video image has the sharpness effect applied.

Control	Settings	Notes
Ease In	`-1 to 0`	The default dissolve is linear. Setting the *Ease In* adds an acceleration curve of increasing speed.
Ease Out	`0 to 1`	Changes the linear dissolve into a deceleration curve, so more of the dissolving happens towards the end of the transition in time.
A Radius	`0 to 200`	Controls the size of the radius used by the sharpening algorithm on the outgoing video. A large radius increases the sharpness effect, but with a loss of detail.
B Radius	`0 to 200`	Controls the size of the radius used by the sharpening algorithm on the incoming video. A large radius increases the sharpness effect, but with a loss of detail.
Amount	`0 to 2000`	Controls how much of the sharpening effect is applied.

G Spring

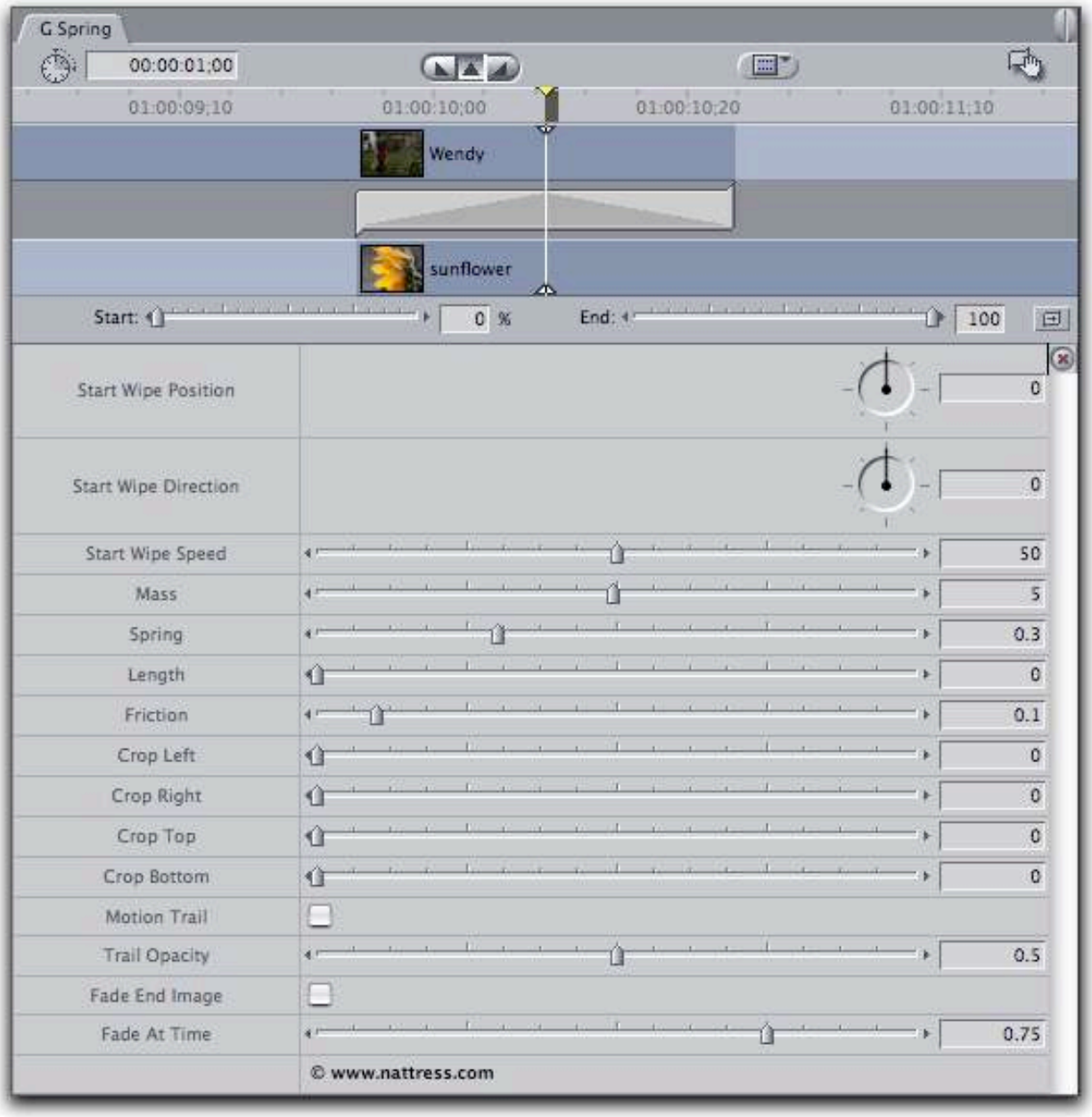
G Spring is a transition that "bounces" the incoming clip onto the video over the top of the outgoing clip as if it were attached to a spring. G Spring uses a physics based spring simulation. The majority of the controls for the transition govern the exact nature of the simulation. The transition works in an iterative manner. This means that each time FCP asks what a frame of the transition should look like, the transition calculates the new frame based upon the previously calculated frame. When rendering the transition, FCP asks for all the frames in order, and the transition will work. If you examine the frames of the transition before rendering, you will therefore not see exactly what you're going to get - this is a limitation of FCP and this physics based method of calculating a transition. Fortunately, it renders fast.

Due to the physics simulation, it cannot be pre-determined how long it will take for the bouncing video to settle at the centre of the screen. If the video doesn't settle before the transition ends, it may be necessary to lengthen the transition or speed up the motion of the bouncing video by altering the simulation parameters.

For the transition to work, the incoming image starts off the screen, and is allowed to bounce onto the screen. The *Start Wipe Position* points to the direction where the incoming image is waiting to begin the transition. To allow the image to bounce in a more interesting fashion, the "Start Wipe Direction" points in the direction the image is moving before the transition begins. The image has an initial velocity governed by "Start Wipe Speed".

Often video clips have borders or edges that don't look good when they're bouncing around the screen. The incoming clip has crop controls so that these edges can be cropped off. The crop controls work similarly to FCPs built in crop controls in the motion panel. If the incoming image is cropped then it may not look good, or it may "pop" when the transition ends. To avoid this situation, the *Fade End Image* can be used to fade up to the original version of the incoming video near the end of the transition. The *Fade At Time* controls the percentage through the transition that the original video will begin to fade in.

To enhance the effect, a motion trail can be added to the bouncing video.

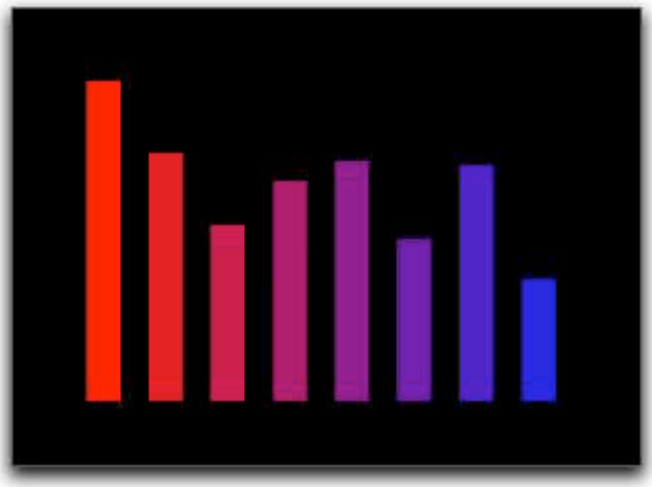


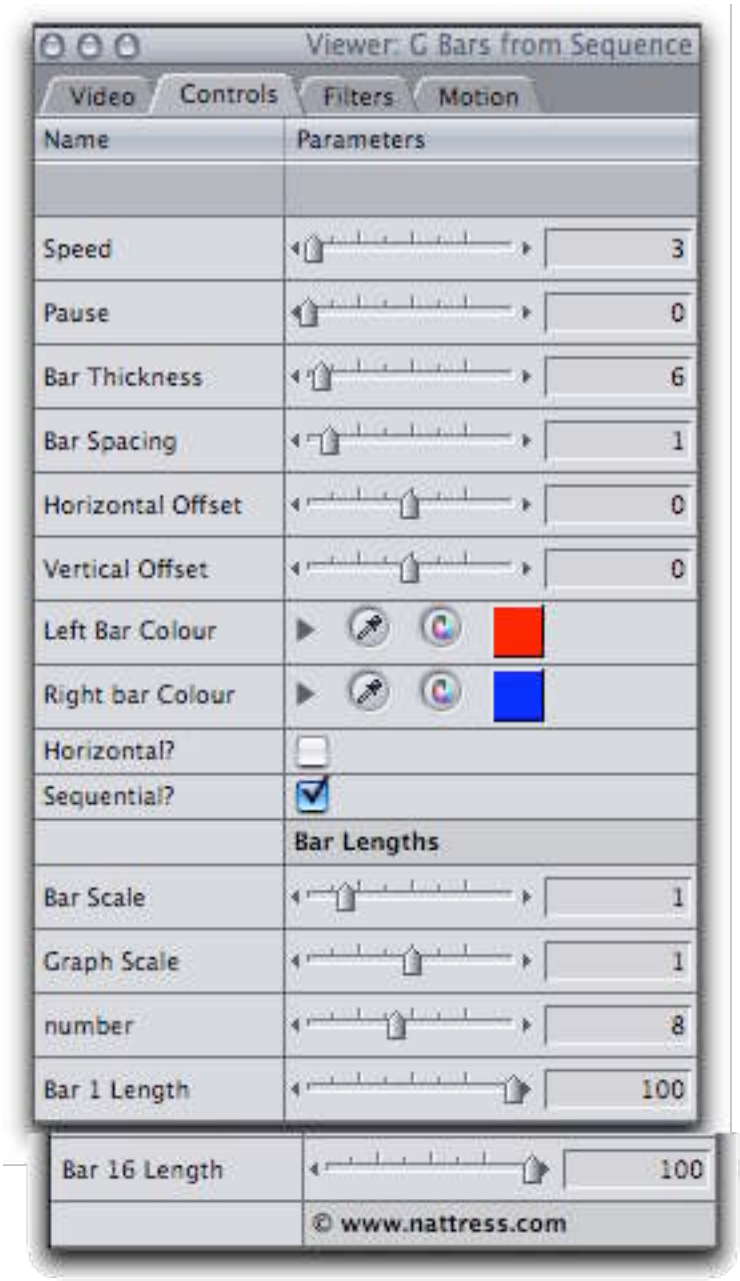
Control	Settings	Notes
Start Wipe Position	`-360 to 360 degrees`	The offscreen angular position at which the incoming video starts.
Start Wipe Direction	`-360 to 360 degrees`	The direction the incoming video is moving at the start of the transition.
Start Wipe Speed	`0 to 100`	The velocity at which the incoming video is moving at the start of the transition.
Mass	`0.1 to 10`	The mass of the screen - increasing mass will slow the movement of the screen, but also give it greater inertia.

Control	Settings	Notes
Spring	`0 to 1`	The spring constant of the simulation - increasing the spring constant will make the spring stronger and springier - decreasing it will make the spring looser and pull less on the screen.
Length	`0 to 10`	This is the "natural length" of the spring. This can be increased to allow the screen to move around further.
Friction	`0 to 1`	Friction acts like a viscous force that retards the motion of the screen. A friction of zero will send the screen in to chaos as there will be nothing stopping the spring stretching and the screen moving. Increasing the friction will dampen the movement.
Crop Left	`0 to 100 %`	Crops the incoming video from the left side.
Crop Right	`0 to 100 %`	Crops the incoming video from the right side.
Crop Top	`0 to 100 %`	Crops the incoming video from the top.
Crop Bottom	`0 to 100 %`	Crops the incoming video from the bottom.
Motion Trail	`on` `off`	Turns on the motion trail effect on the emotion of the bouncing clip. Note that *Motion Trails* are not affected by cropping.
Trail Opacity	`0 to 100 %`	Sets how solid the trail appears.
Fade End Image	`on` `off`	Fades from outgoing video to original (stationary) incoming video.
Fade at Time	`0 to 100 %`	Sets the percentage of the transition at which the original incoming clip should begin to fade in.

Generators:
G Bars

G Bars is a generator for drawing animated bar charts directly in FCP. Up to 16 bars can be drawn, and animated onto screen together or sequentially. The bars can be horizontal or vertical, and of any size. The colour of the bars can be set to change between the two colours specified. Setting the colours the same will make all bars the same colour.





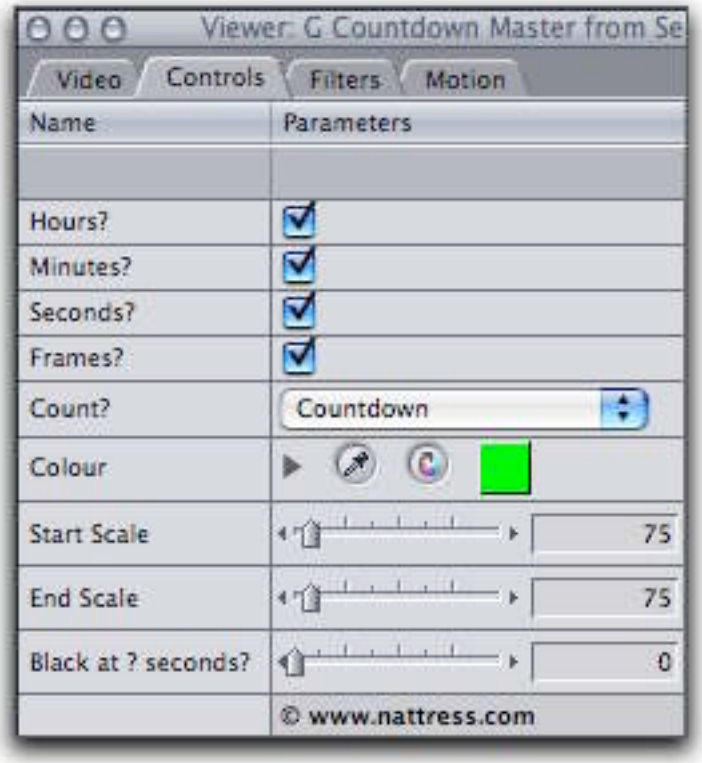
Control	Settings	Notes
Speed	`0 to 100`	Controls the speed of the bar animation.
Pause	`0 to 100`	Forces the bars to pause before animating on screen.
Bar Thickness	`0 to 100`	Sets the thickness of the bars.
Bar Spacing	`0 to 10`	Controls the spacing between the bars.

Control	Settings	Notes
Horizontal Offset	-100 to 100	Shifts the bar animation horizontal. Positive numbers move right and negative numbers move left.
Vertical Offset	-100 to 100	Shifts the bar animation vertically. Positive numbers move up and negative numbers move down.
Left Bar Colour	Colour Picker	Selects the colour of the left/bottom bar.
Right Bar Colour	Colour Picker	Selects the colour of the right/top bar.
Horizontal?	on off	Selects whether the bars are horizontal or vertical.
Sequential?	on off	Selects whether the bars animate in all together or sequentially.
Bar Scale	0.1 to 5	Controls the overall scale of the bars.
Graph Scale	0 to 2.00	Sets the scale of the overall animation.
Number	2 to 16	Sets the number of bars to use.
Bar 1 to 16 Length	0 to 100	Sets the length of the individual bar, in terms of a percentage.

G Countdown Master

This generator creates either a countdown or a counter that ticks off frames, seconds, minutes and hours at your choosing. Additional controls enable you to animate the scale of the countdown/counter and to set when the countdown goes to black. This was designed as a leader countdown, but could be used as a on onscreen frame counter by cropping and positioning the Countdown generator using the *Motion* tab.

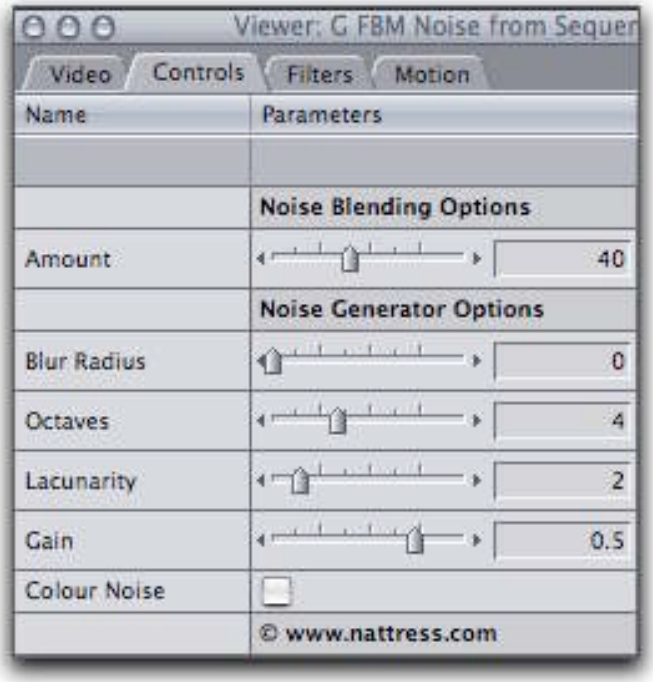
Note this generator does not render as expected in 10-bit mode, so stick with 8-bit for consistent results.



Control	Settings	Notes
Hours?	on off	Selects whether or not to display hours in the countdown/counter.
Minutes?	on off	Selects whether or not to display minutes in the countdown/counter.
Seconds?	on off	Selects whether or not to display seconds in the countdown/counter.
Frames?	on off	Selects whether or not to display frames in the countdown/counter.
Count?	Countdown Counter	Sets the generator to count down or up (counter).
Colour	colour picker	Picks the colour of the numbers.
Start Scale	0 to 1000	Sets the starting size of the countdown/counter.
End Scale	0 to 1000	Sets the end size of the countdown/counter.
Black at ? seconds?	0 to 100	When in *countdown* mode, sets the time in seconds at which the countdown goes to black. In *counter* mode, the display will stay black until the *Black at ? seconds* is reached.

G FBM Noise Generator

FBM stands for Fractional Brownian Motion, a type of noise that is often used in 2D and 3D computer graphics. FBM is a controllable type of noise that produces interesting results. FBM works by adding together a number of sets of noise of different scales. There is also an FBM Noise filter which you can use to add noise to an existing clip.



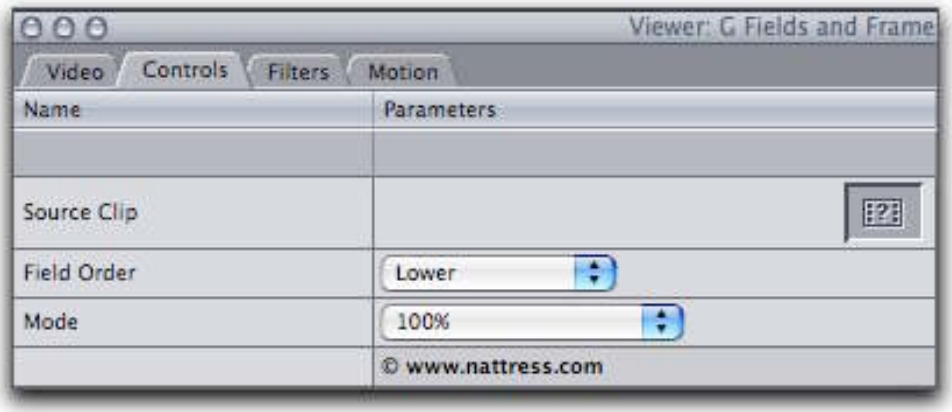
Control	Settings	Notes
Amount	`0 to 100`	The amount of noise.
Blur Radius	`0 to 10`	Controls the amount of blur that can be added to soften the noise.
Octaves	`1 to 10`	Sets the number of layers of noise that get added together. Larger numbers can produce more interesting effects, but also longer render times.
Lacunarity	`1 to 8`	Controls the scale difference between the layers of noise, in other words, the granularity of the noise.
Gain	`-1 to 1`	Controls the amplitude difference between the layers of noise. This can have some dramatic results when *Colour Noise* is on.
Colour Noise	`on` `off`	Turning this control on produces RGB colour FBM noise instead of mono-chrome FBM noise.

G Fields and Frames

This is a useful generator for turning interlaced video into a sequence of fields, or for taking a series of fields and interlacing them back together again. Alternatively, it can be used to speed up video 200% or slow it down 50% in a slightly different way than usual.

Additionally, the 100% mode just plays back the video at normal speed - but why is this useful? Say for instance you're working in a 24fps timeline and want to include some very nice slow footage. To get a good slow footage you shoot at 30p instead of 24p. If you were to put the 30p footage directly onto the FCP timeline, FCP would drop frames to make it run at 24p - not what you wanted. By dropping the clip into this generator and

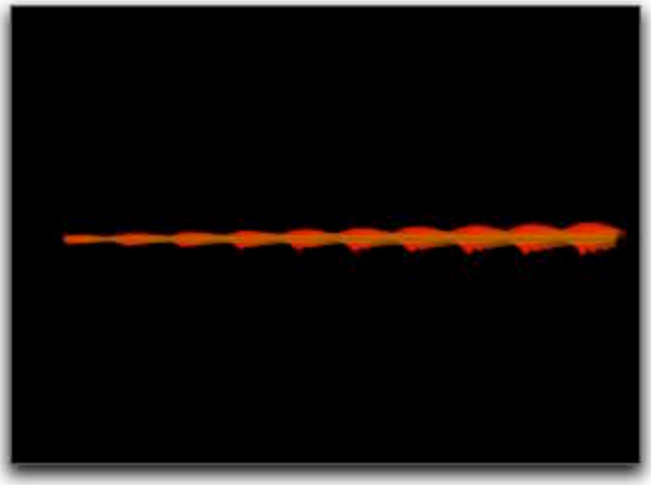
setting it to 100%, each frame of your 30p footage will be mapped to one frame of 24p, making it run longer, giving the desired effect.

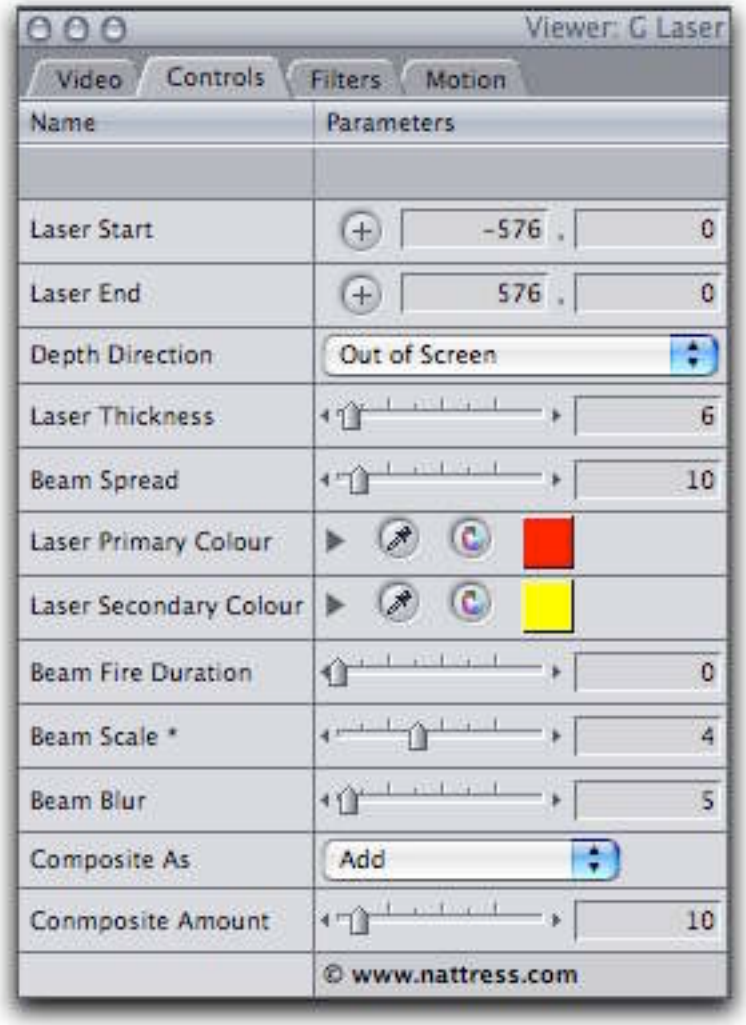


Control	Settings	Notes
Source Clip	`image well`	Drag the source video into this image well so that the generator can create frames or interlacing as selected below.
Field Order	`Upper` `Lower`	Selects the field dominance of the video.
Mode	`50%`	Slows the video down 50% by splitting out the fields from the video and putting them sequentially on the timeline.
	`50% Blend`	Slows down the video 50% by splitting out the fields and interlacing the field with a blended version of that frame. This creates a slightly smoother result than *50% mode*.
	`100%`	Plays each frame.
	`200%`	Speeds the video up 200% by taking alternating fields and interlacing them together into frames.

G Laser

This filter generates a two-toned laser beam that fires from a start point to an end point. The speed the beam travels is based on the length of the clip, factored with the length of the *Beam Fire Duration*: a short clip makes a faster beam. Because of the complexity of this filter, it can be a little slow to render, but you can create some really unique effects!





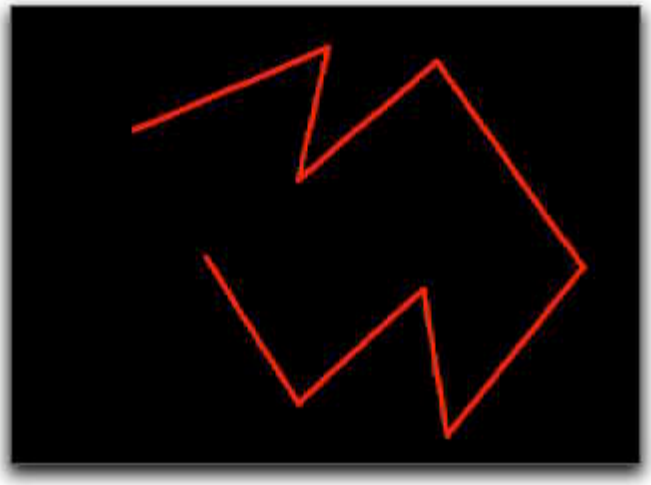
Control	Settings	Notes
Laser Start	`point picker`	Sets the start point for the laser effect.
Laser End	`point picker`	Sets the end point for the laser effect.
Depth Direction	`Out of Screen` `Into Screen`	Sets the perspective of the laser effect.
Laser Thickness	`0 to 100`	Controls the thickness of the laser beam.
Beam Spread	`0 to 100`	Sets how much the beam flares as it travels.
Laser Primary Colour	`Colour Picker`	Selects the main colour for the beam.
Laser Secondary Colour	`Colour Picker`	Selects the secondary colour for the beam.
Beam Fire Duration	`0 to 100`	This controls how long the laser beam fires before burning out.
Beam Scale	`0.1 to 10`	Scales the beam size up or down.

Control	Settings	Notes
Beam Blur	`0 to 100`	Blurs the laser beam.

Composite As	`Normal`
	`Lighten`
	`Add`
		Selects the compositing mode for the Laser effect.

Composite Amount	`0 to 100`	Percentage amount of the Laser effect that gets composited over the other layers of video.

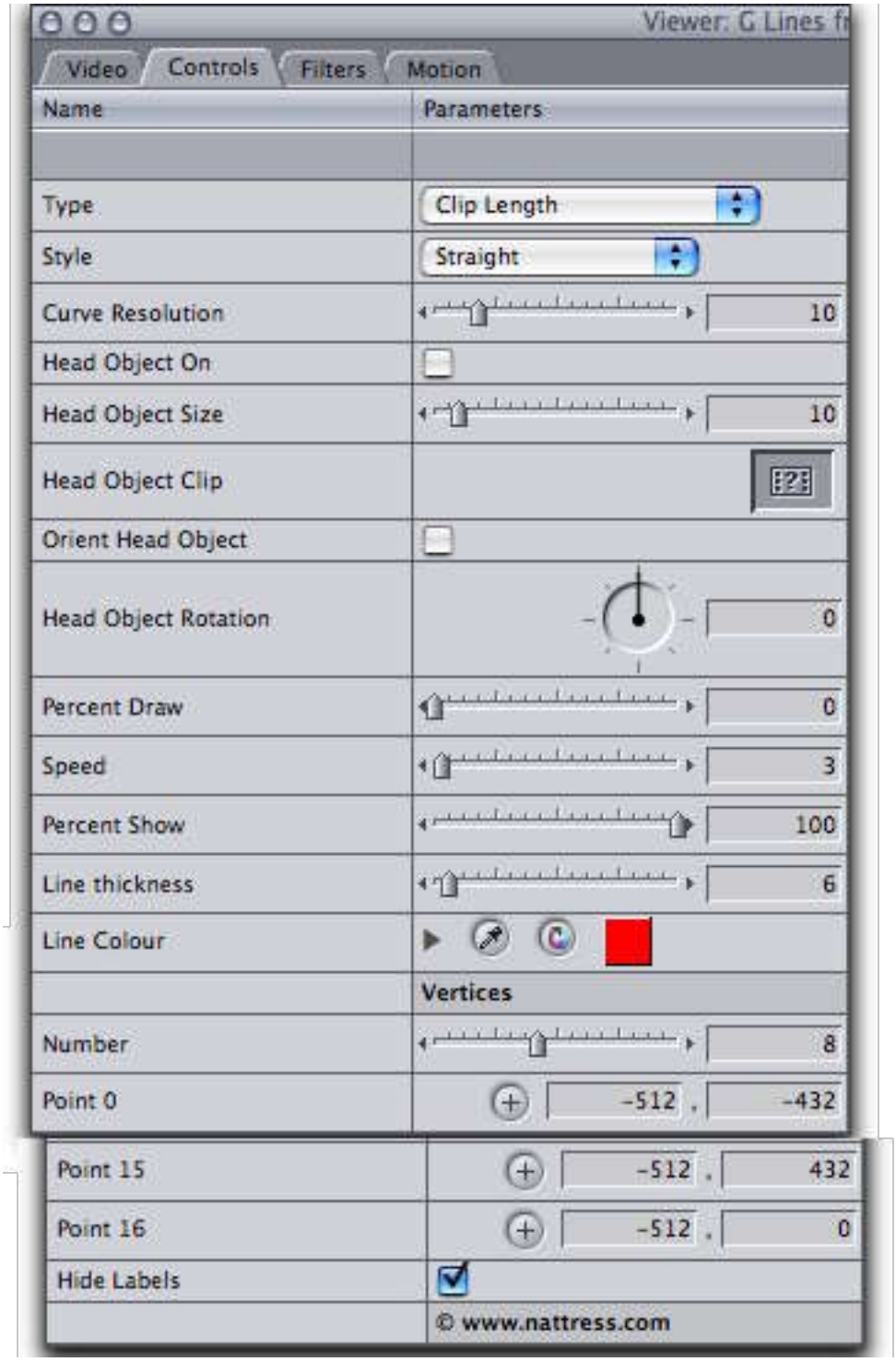
G Lines



Use this generator to draw lines that grow over time on top of an image - useful for highlighting diagrams of all kinds, or for other special effects, like animating the travel over a map.

There are three ways to animate with this generator: *Clip Length; Speed;* and *Percentage.* When set to *Clip Length*, the animation is spread evenly over the length of the clip. When set to *Speed*, the generator will draw the line at a constant speed. When set to *Percentage*, you control the growth of the line by keyframing the percentage control.

Note this filter doesn't render correctly in 10-bit mode, so use it in 8-bit mode.



Control	Settings	Notes

Type	`Clip Length`
	`Speed`
	`Percentage`
		Sets how the line will animate: to fit the clip length; by a set speed; or by keyframing the *Percent Draw* control.

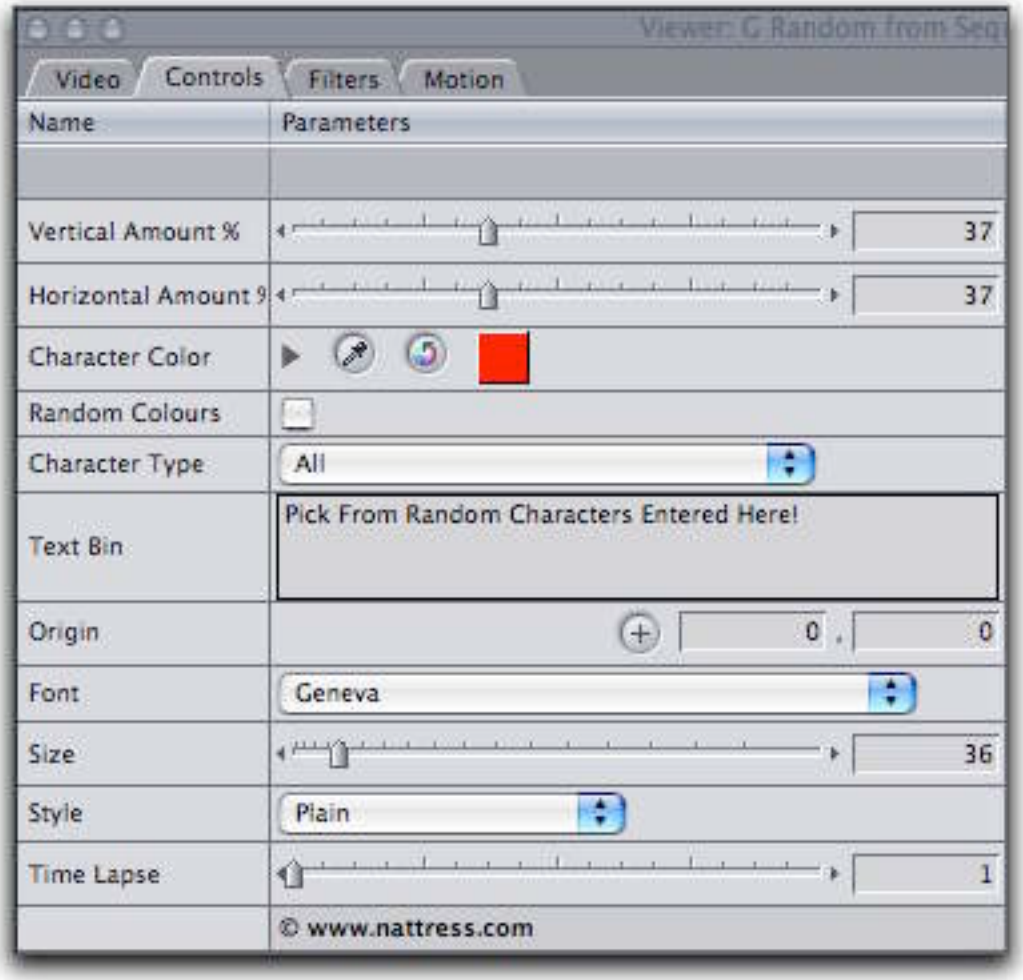
Control	Settings	Notes
Style	`Straight` `Curved`	Sets whether the line appears in straight sections or curved.
Curve Resolution	`1 to 50`	Controls the resolution of the curves. A higher resolution makes a finer curve.
Head Object On	`on` `off`	Turn this on when you want a clip or image to appear at the head of the animating line.
Head Object Size	`0 to 100`	Controls the size of the *Head Object Clip*.
Head Object Clip	`Image Well`	Drag the source clip from your clip bin into this *Image Well* when you want to use a clip or image at the head of the line.
Orient Head Object	`on` `off`	Turn this on if you want the *Head Object* to rotate as the line animates, for example if using a clip of an airplane over a map.
Head Object Rotation	`-360 to 360`	Keyframe animate this to rotate the *Head Object* as desired with the line animation.
Percent Draw	`0 to 100`	When in *Percentage* mode: keyframe this control to draw the line as desired.
Speed	`0 to 100`	When in *Speed* mode: set and/or keyframe this control to draw the line at the desired speed.
Percent Show	`0 to 100`	Sets how much of the drawn line is visible on screen. Lowering the percentage reduces the length of the tail of the line.
Line Thickness	`0 to 100`	Controls line thickness.
Line Colour	`Colour Picker`	Sets the colour of the line.
Number	`2 to 16`	Sets the number of points on the line.
Point 0	`Point Picker`	This is a special point used to control the curve on Point 1, when using Curved style.
Point 1 to 16	`Point Picker`	Sets the location of each point.
Hide Labels	`on` `off`	Hides or displays a label for each point.

G Long Lines

This generator is exactly the same as *G Lines*, except that it can handle up to 50 Points instead of only the 16 available in *G Lines*. Hey, you never know when you will be called upon to animate an oscilloscope display in post!

G Random

This nifty little generator creates random text or characters onscreen. You can pick the kind of characters the generator will use, or even specify the precise set of symbols to be randomly displayed. Choose from a user defined colour or random use of all colours! Then decide how fast you want to characters to change. This generator is great for filling in the screens and monitors of alien space vessels.

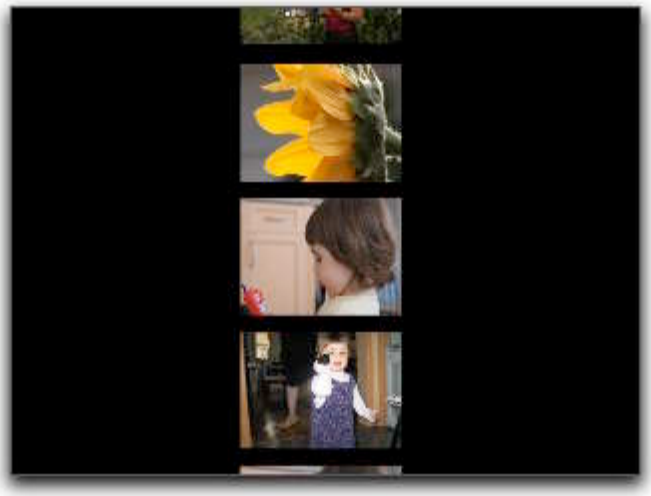


Control	Settings	Notes
Vertical Amount %	`0 to 100`	Sets how much of the screen vertically the random characters will fill.

Control	Settings	Notes
Horizontal Amount %	0 to 100	Sets how much of the screen horizontally the random characters will occupy.
Character Colour	Colour Picker	Select the colour of the characters.
Random Colour	on off	Turn this on to use random colours for the characters. If *off*, the colour is the *Character Colour* selected above.
Character Type	All Letters Letters - Capitals Letters - Lower Case Numbers Symbols Binary Random Bin	Selects the set of characters that will be used.
Text Bin	Text Box	Enter the characters that will be randomly displayed, when *Character Type* is set to *Random Bin.*
Origin	point picker	Sets the centre of the display region.
Font	Font list	Choose from available fonts.
Size	0 to 1000	Set the size of the characters.
Style	Plain Bold Italic Bold/Italic	Choose from available font styles.
Time Lapse	1 to 30	Low numbers create a highly animated character display. Higher numbers cause the display to change more slowly.

G Video Strip

G Video Strip is a very useful and time saving generator that takes up to ten video clips and puts them in an animating strip across, or up and down, the screen. If the clips used in the strip are shorter than the strip length they will repeat/loop play.




Viewer: G Video Strip
Video
Controls
Filters
Motion
Name
Parameters
Speed
0
Position
-0
Horizontal?
Size
10
Spacing
0
Crop Left
0
Crop Right
0
Crop Top
0
Crop Bottom
0
Source 1
Source 1 Activated?
Source 2
Source 2 Activated?
Source 3
Source 3 Activated?
Source 4
Source 4 Activated?
Source 5
Source 5 Activated?
Source 6
Source 6 Activated?
Source 7
Source 7 Activated?
Source 8
Source 8 Activated?
Source 9
Source 9 Activated?
Source 10
Source 10 Activated?
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Control	Settings	Notes
Speed	`-25 to 25`	A positive speed moves the video stip forward or up the screen, negative goes back or down. A speed of 0 will create a static video strip that does not move.
Position	`-100 to 100`	Controls the placement of the video strip horizontally or vertically on the screen.
Horizontal?	`on` `off`	*on*: the video strip appears horizontally *off*: the video strip appears vertically
Size	`1 to 100`	Sets the size of the videos in the strip, governing how many clips are visible at once.
Spacing	`-100 to 100`	Negative numbers move the videos closer together. Positive numbers put space between the clips.
Crop Left **Crop Right** **Crop Top** **Crop Bottom**	`0 to 1`	Crops the edges of the video clips.
Source 1 to 10	`Source Well`	Drag the source clip from your bin into this source well.
Source 1 to 10 Activated?	`on` `off`	Sets whether the video source is included in the video strip.

Other Great Filter Packages from Nattress:

Film Effects

is *the* 24p Film Effect for Final Cut Pro. Film Effects does everything you need to make your video look like film - whether NTSC or PAL

- Makes video look like film
- Preset Library contains many popular film effects - use as-is or tweak to create your own unique look
- Remove DV colour artifacts with chroma upsampler
- Native FCP plugin - no need to take your video to an external application
- New G Film Dissolve for five varieties of real film dissolve effects
- G Vignette for darkened edges and more creative effects
- G Smart De-Interlacer
- Dithered Levels controls
- Four new optimized de-interlacers
- Three new Gamma control plugins
- Two new chroma sharpeners that work with SD, DV, HDV and HD
- and more....

Standards Conversion

is the plugin to use if you need to convert between PAL, NTSC or 24p, add 3:2 pulldown, remove 3:2 pulldown, or convert advanced pulldown removal.

If you need to use 60i video in a 24p timeline, produce a PAL DVD from an NTSC video or practically any conversion using either PAL, NTSC or 24p video, whether it be High Definition or Standard Definition, then this plugin will be the most useful tool you'll ever buy. Every feature is available right inside FCP where you need it!

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