



**DFT User Guide**

## ABOUT THIS GUIDE

This User Guide is a reference for DFT. You can read from start to finish or jump around as you please. This guide is available in Acrobat PDF format.

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January 16, 2018

### About Us

Digital Film Tools brings together the unbeatable combination of superior software designers, motion picture visual effects veterans, video editors and photographers. Add three Emmy Awards and experience in creating visual effects for hundreds of feature films, commercials and television shows and you have a recipe for success. The understanding of photography, film and video editing, and in particular visual effects, allows us to design productive and highly specialized software. Software that is useful as well as easy to use. Our products stand up to the rigors of production and are the culmination of many years of experience.

Our philosophy is to bring our visual effects tools and techniques to the masses. What was once found only in expensive high-end packages or existed as proprietary in-house tools, is now available to photographers, artists, designers, and video/film editors. Did I mention affordable? Our software doesn't cost an arm and a leg and won't break the bank.

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## INTRODUCTION

### DFT

DFT (aka Digital Film Tools) is the definitive digital toolbox meant to simulate optical camera filters, specialized lenses, film stocks and grain, lens flares, optical lab processes, color correction, keying, compositing as well as natural light and photographic effects.

Available as plug-ins for all popular video and film post production programs as well as a standalone application, DFT provides you with everything you will need to enhance your images using a staggering amount of filter presets. Using the DFT Standalone or photo plug-in versions, any filter can be limited to a portion of the screen using sophisticated but simple to use masking controls. A layering system to apply multiple filters as well as the Standalone's batch processing system rounds out DFT's set of tools.

DFT is comprised of the following filters: Ambient Light, Black and White, Bleach Bypass, Blur, Borders, Cartoon, Camera Shake, Center Spot, Chroma Bands, Chromatic Aberration, Color Correct, Color Gradient, Color Infrared, Color Paste, Colorize Gradient, Color Shadow, Color Spot, Color Suppress, Composite, Cross Processing, Day for Night, DeBand, DeBlock, DeFlicker, DeFog, DeFringe, DeNoise, Depth of Field, Detail, Develop, Diffusion, Dot, Double Fog, Drop Shadow, Dual Gradient, Edge Composite, Enhancing, Eye Light, Fan Rays, Film Stocks, Flag, Flashing, Fluorescent, Fog, F-Stop, Frost, Gels, Glow, Glow Darks, Glow Edges, Grain, Grunge, Harris Shutter, Haze, High Contrast, Holdout Composite, Hot Spot, Ice Halos, Infrared, Kelvin, Key Light, Lens Distortion, Lens Flare, Light, Light Wrap, Looks, Low Contrast, Match, Math Composite, Matte Repair, Mist, Multi-Star, ND Gradient, Net, Night Vision, Non-Additive Mix, Optical Dissolve, Overexpose, Ozone, Pastel, Pencil, Photographic, Polarizer, Premultiply, Printer Points, Rack Focus, Radial Exposure, Radial Streaks, Radial Tint, Rainbow, Random Spikes, Rays, Reflector, ReLight, Selective Color Correct, Screen Smoother, Selective Saturation, Sepia, Shadows/Highlights, Skin Tone, Silk, Sky, Soft Light, Spikes, Spiral Rays, Split Field, Split Tone, Star, Streaks, Sunset, Telecine,

Temperature, Texture, Three Strip, Time Blur, Tint, Tone Adjust, Transform, Turb Distort, Two Strip, Unpremultiply, Vignette, Water Droplets, Wide Angle Lens, X-Ray and zMatte.

# DFT Features

## General

- Simulation of optical glass camera filters, specialized lenses, film stocks, lens flares, optical lab processes, grain, exacting color correction as well as natural light and photographic effects
- 126 individual filters
- Thousands of customizable presets

## Film Stocks & Looks

- 329 different color and black and white still photographic film stocks, motion picture films stocks and historical photographic processes
- 89 color grading presets from Academy Award nominated movies including 2001 A Space Odyssey, Apocalypse Now, Blade Runner, Back to the Future, Frankenstein, Gone with the Wind, King Kong, Saving Private Ryan and Titanic
- 68 stylized color and black and white looks

## Lighting

- 331 optical lens flare presets organized into Anamorphic, Circular, Polygons, Star, Starburst and Stylized categories
- 193 different lighting gels to colorize your images
- Gobo library for lighting effects includes 751 gobos categorized into Abstract, Doors, Elements, Foliage, Snowflakes, Textures and Windows groups

## Compositing

- Compositing tricks and techniques
- Effectively composite fire, explosions and smoke
- Edge tools to color correct or blur the composite's edge
- Proprietary matte generation
- Matte manipulation using shrink, grow, blur and wrap functions

## Keying

- Create mattes from blue, green, any color screen using the zMatte keyer
- Multiple matte creation
- Matte shrink, blur and wrap functions
- DV and HD deartifacting

- **Sophisticated color correction and suppression**
- **Light wrapping**
- **Edge tools to color correct or blur only the edge**
- **Integrated transform controls**
- **Screen smoothing for unevenly lit blue and green screens**

## Architecture

- **Mac Retina Display Support**
- **8, 16, 32 bit image processing**
- **Multi-processor acceleration**
- **GPU acceleration**

# Filter Categories

The Filters are categorized by filter function: Color, Composite, Diffusion, Film Lab, Grads/Tints, Key, Image, Lens, Light, and Special Effects.

## Color

- 1 Black and White**
- 2 Color Correct**
- 3 Develop**
- 4 Enhancing**
- 5 F-Stop**
- 6 Fluorescent**
- 7 Haze**
- 8 High Contrast**
- 9 Kelvin**
- 10 Low Contrast**
- 11 Match**
- 12 Ozone**
- 13 Polarizer**
- 14 Printer Points**
- 15 Selective Color Correct**
- 16 Selective Saturation**
- 17 Shadows/Highlights**
- 18 Sky**
- 19 Telecine**
- 20 Temperature**
- 21 Tone Adjust**

## Composite

- 1 Color Paste**
- 2 Composite**
- 3 Drop Shadow**

- 4** Edge Composite
- 5** Holdout Composite
- 6** Light Wrap
- 7** Math Composite
- 8** Non-Additive Mix
- 9** Optical Dissolve
- 10** Premultiply
- 11** Unpremultiply

## Diffusion

- 1** Center Spot
- 2** Diffusion
- 3** Double Fog
- 4** Fog
- 5** Frost
- 6** Mist
- 7** Net
- 8** Silk

## Film Lab

- 1** Bleach Bypass
- 2** Cross Processing
- 3** Film Stocks
- 4** Flashing
- 5** Grain
- 6** Grunge
- 7** Overexpose
- 8** Three Strip
- 9** Two Strip

## Grads/Tints

- 1** Color Spot

- 2** Color Gradient
- 3** Colorize Gradient
- 4** Dual Gradient
- 5** Gels
- 6** ND Gradient
- 7** Photographic
- 8** Radial Tint
- 9** Sepia
- 10** Skin Tone
- 11** Split Tone
- 12** Sunset
- 13** Tint

## Image

- 1** DeBand
- 2** DeBlock
- 3** DeFlicker
- 4** DeFog
- 5** DeNoise
- 6** Detail
- 7** Transform

## Key

- 1** Color Suppress
- 2** Matte Repair
- 3** Screen Smoother
- 4** zMatte

## Lens

- 1** Blur
- 2** Camera Shake
- 3** Chromatic Aberration

- 4** DeFringe
- 5** Depth of Field
- 6** Lens Distortion
- 7** Rack Focus
- 8** Radial Exposure
- 9** Split Field
- 10** Vignette
- 11** Wide Angle Lens

## Light

- 1** Ambient Light
- 2** Chroma Bands
- 3** Dot
- 4** Edge Glow
- 5** Eye Light
- 6** Fan Rays
- 7** Flag
- 8** Glow
- 9** Glow Darks
- 10** Halo
- 11** Hot Spot
- 12** Ice Halos
- 13** Key Light
- 14** Lens Flare
- 15** Light
- 16** Multi-Star
- 17** Radial Streaks
- 18** Rainbow
- 19** Random Spikes
- 20** Rays

**21 Reflector**

**22 ReLight**

**23 Soft Light**

**24 Spikes**

**25 Spiral Rays**

**26 Star**

**27 Streaks**

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## Special Effects

**1 Borders**

**2 Cartoon**

**3 Color Infrared**

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# INSTALLATION

## Video/Film Plug-ins

- 1** Download DFT at [www.digitalfilmtools.com](http://www.digitalfilmtools.com)
- 2** Double-click on the file that was downloaded and run through the installation process.
- 3** When prompted, select the destination programs to install to. You can choose from After Effects, Avid Editing Systems, Final Cut Pro, Motion and Premiere Pro.
- 4** Start your program and apply DFT:
  - **After Effects:** Apply a DFT filter to a clip in the timeline from one of the Effects > DFT v1 menus.
  - **Premiere Pro:** Apply a DFT filter to a clip in the timeline from one of the Effects > Video Effects > DFT v1 groups.
  - **Final Cut Pro X:** Select a clip in the timeline and apply a DFT filter from one of the Effects > DFT v1 groups.
  - **Motion:** Drag a DFT filter from one of the Library > Filters > DFT v1 groups to the image in the Canvas.
  - **Avid Editing Systems:** Apply a DFT filter to a clip in the timeline from one of the Effect Palette > DFT v1 groups.

After applying a DFT plug-in, the activation window pops up. If the activation window does not automatically open, click License... at the bottom of the plug-in's parameters.

- 5** If you purchased the software, select **Activate DFT** and follow the instructions.  
or
- 6** Select **Request Trial Activation (Internet Required)** and click **Next** to receive a fully functioning version of DFT for the specified trial period. At the end of the trial period, DFT reverts to a limited demo mode.  
or
- 7** Select **Run in Demo Mode** and click **Finish**.

**Note:** In Demo Mode, a watermark is superimposed over the image.

## OFX Plug-ins

- 1 Download DFT at [www.digitalfilmtools.com](http://www.digitalfilmtools.com)
- 2 Double-click on the file that was downloaded and run through the installation process.
- 3 When prompted, select the OFX installation option.
- 4 Start your program and apply a DFT v1 filter to a clip.

After applying a DFT filter, the activation window pops up. If the activation window does not automatically open, click License... at the bottom of the plug-in's parameters.

**Note:** In some OFX hosts, the License... button is located in the Options group.

- 5 If you purchased the software, select **Activate DFT** and follow the instructions.  
or
- 6 Select **Request Trial Activation (Internet Required)** and click **Next** to receive a fully functioning version of DFT for the specified trial period. At the end of the trial period, DFT reverts to a limited demo mode.  
or
- 7 Select **Run in Demo Mode** and click **Finish**.

**Note:** In Demo Mode, a watermark is superimposed over the image.

# UNINSTALLING

## Windows

From the Windows Start Menu, select Programs > Digital Film Tools > DFT v1 > Uninstall DFT.

## Macintosh

Go to Applications/Digital Film Tools/DFT v1 and double-click on Uninstall DFT.

# ACTIVATING, DEACTIVATING AND TRANSFERRING LICENSES

## Activation Options

### Internet Activate

Activates DFT over the Internet.

### Request License from Self-Service Website

If you do not have an Internet Connection on the computer where you want to run DFT, use this option. The self-service website will generate a license file which you can then transfer to the desired computer.

### Install a License File

Loads a license file obtained from the self-service website or received by email.

**Note:** If you experience an error when using Internet Activate, it is because you or your company uses a proxy server to access the Internet and/or your firewall is blocking our program's access to the Internet. For proxy server users, select Advanced Options and enter the appropriate proxy server settings. For firewall users, open your firewall software and allow our software to access the Internet.

## Deactivation Options

Once DFT has been activated, you can access the Deactivation options by selecting the License menu.

### Internet Deactivate

Deactivates DFT over the Internet and is only available if you initially activated over the Internet. Use this method to return your Product Code back to the activation server. You will then be able to use your Product Code to activate DFT on another computer.

#### **To deactivate a license:**

- 1 Open the License menu.**
  - **After Effects / Premiere Pro: Apply a DFT v1 filter and click on License... at the bottom of the Effect Controls window.**

- **Final Cut Pro X / Motion:** Apply a DFT v1 filter and click on License... at the bottom of the Inspector.
- **Avid Editing Systems:** Apply a DFT v1 filter and click on License... at the bottom of the Effect Editor.
- **OFX Hosts:** Apply a DFT v1 filter and click on License... at the bottom of the DFT effect controls.

**Note:** In some OFX hosts, the License... button is located in the Options group.

## 2 Choose Internet Deactivate and click Next.

DFT is now deactivated.

# License Transfer

Your Product Code allows you to run DFT on one computer at a time. However, you may transfer the license by deactivating on one computer and activating on another.

Internet Deactivate / Internet Activate is the preferred method of license transfer between computers, but is only available if you initially activated over the Internet and currently have Internet access. If you do not have Internet access, you will need to contact customer support to assist you in transferring the license.

### **To transfer a license:**

## 1 Open the License menu.

- **After Effects / Premiere Pro:** Apply a DFT v1 filter and click on License... at the bottom of the Effect Controls window.
- **Final Cut Pro X / Motion:** Apply a DFT v1 filter and click on License... at the bottom of the Inspector.
- **Avid Editing Systems:** Apply a DFT v1 filter and click on License... at the bottom of the Effect Editor.
- **OFX Hosts:** Apply a DFT v1 filter and click on License... at the bottom of the DFT effect controls.

**Note:** In some OFX hosts, the License... button is located in the Options group.

## 2 Choose Internet Deactivate and click Next.

DFT is now deactivated.

- 3** On the target computer, select **Activate DFT** and follow the instructions.  
DFT will then activate on the new computer.

# COMPOSITING ISSUES

With DFT filters that take over compositing in After Effects, Premiere Pro and Final Cut Pro, there are certain situations to be aware of.

## After Effects

**1 Filters that have optional inputs like Background, Depth or Matte crop or pad the optional input to the foreground resolution. The work around is:**

- Solution: Precompose the layer that will be used as the foreground into a composition whose image size matches that of the layer to be used as the optional input or vice-versa.

**2 Placing a Holdout Composite, Math Composite or Non-Additive Mix plug-in at the top of a composition will cover up anything going on below it. The work arounds are:**

- Solution #1: Position the Holdout Composite, Math Composite or Non-Additive Mix plug-in and its associated layers at the bottom of the layer stack.
- Solution #2: Precompose the layers being covered up into their own composition and use this new composition as the Background input to the Holdout Composite, Math Composite or Non-Additive Mix plug-in.

**3 If you have other filters applied to a layer that you want to use in one of the input selectors, they will not be recognized. The work around is:**

- Solution: Precompose the layer and its associated filters into its own composition. The precomposed layer can then be used in one of the DFT filter input selectors.

**4 After Effects Masking is disabled when using the Matte input of the Composite plug-in. The work arounds are:**

- Solution #1: Place a copy of the background clip above the Composite plug-in and its associated layers. Mask out the unwanted portion on this copied layer and it will get rid of any unwanted foreground areas.
- Solution #2: Crop the foreground clip from within the Composite plug-in.

# GENERAL TUTORIALS

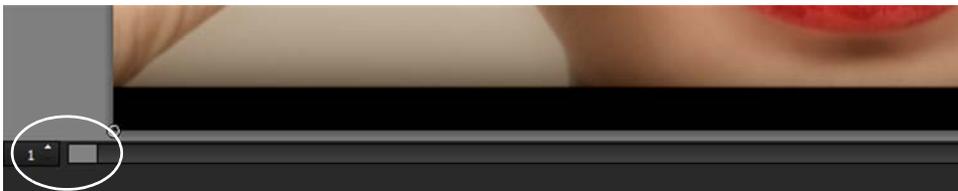
## DFT User Interface

- 1 Apply a DFT filter that contains presets. For instance, Special Effects > Looks.
- 2 Click the DFT Interface button.



The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

- 3 Try out the various filter presets.
- 4 Adjust the filter parameters to your liking.
- 5 To preview a different frame in the Viewer, drag the Time Bar slider at the bottom of the Viewer.



**Note:** The Time Bar is only available in host applications that support this feature.

- 6 Click the Done button to return to the host application.



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

## Tagging and Sorting Favorite Presets

Presets can be tagged as a Favorite allowing them to be sorted separately in the Presets window.

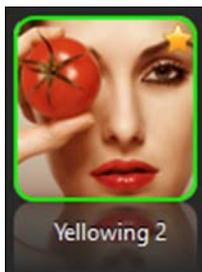
- 1 Apply a DFT filter with presets.
- 2 Click the DFT Interface button.

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

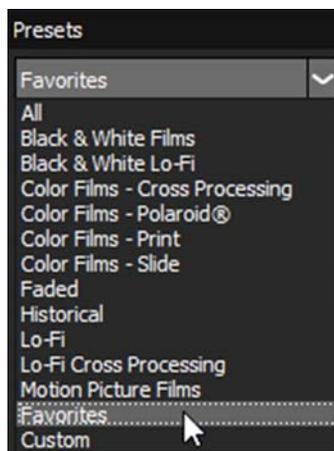
- 3 Tag a preset as a Favorite by selecting the preset and pressing the Toggle Favorite icon located at the top right of the Presets window.



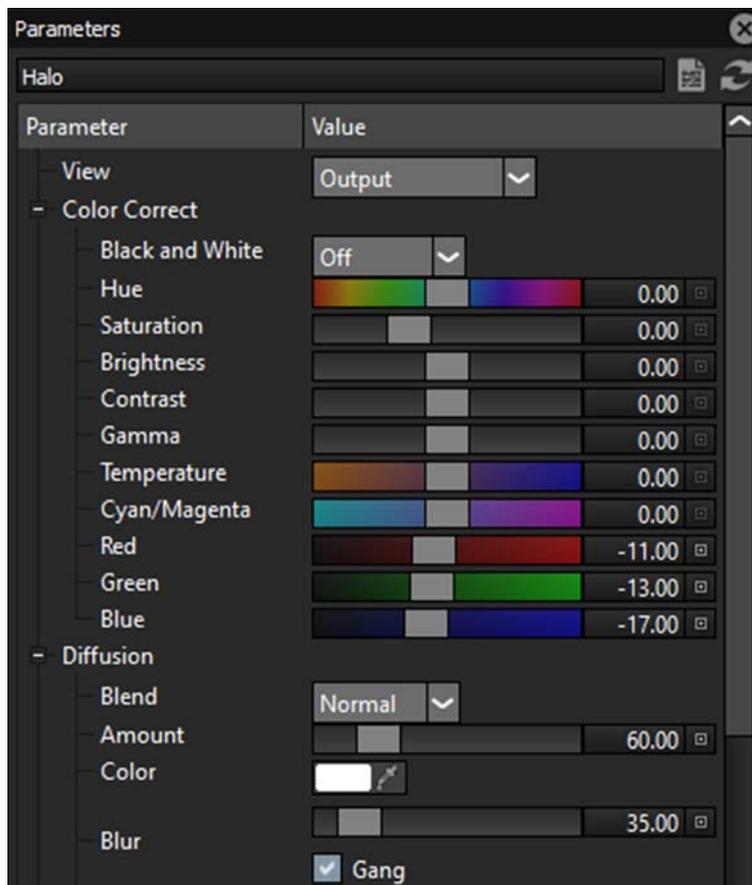
Presets tagged as a favorite display a yellow star at the top right of the preset.



- 4 To sort the Presets window by Favorites, select Favorites in the Presets pop-up menu.



## Comparing Images



DFT can compare images using Side-by-Side, Vertical Split, Horizontal Split or A/B comparison modes. By default, the current filter and original image are selected for comparison.



- 1** Apply a DFT filter and make sure it is affecting the image in some way.
- 2** Click the DFT Interface button.

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

- 3 Click on the Side-by-Side Comparison icon.



Horizontal images are stacked vertically and vertical images are placed side by side.



- 4 Click the Vertical Split Comparison mode icon.



You can now compare the images using a vertical split.



- 5** Move your cursor into the image area over the split line and when the cursor changes to a double-arrow, click and drag to move the split.

Depending on the filter used, the split line may not be obvious, so triangular sashes on the outside of the image help you find it. If you drag the sash all the way around, it will swap directions.

- 6** Enable the A/B Comparison icon and then click the Show Other View icon that appears to cycle the current filter with the original image.



- 7** When done, press the A/B Comparison icon to turn it off.

## Creating Variations

Variations based on either one or two parameters can be created and are displayed as thumbnails in a window below the Presets window.



- 1 Apply a DFT filter.**
- 2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

- 3 Click on a parameter name in the Parameters window.



Variable parameters are Ranges, Toggles, and Colors.

When you select a parameter, the Variations appear and you'll see the variations being generated on that parameter.

- 4 Click on a second parameter and it will generate variations between the two.



The first parameter you click on will be the dominant parameter - it'll go across the top of the Variations tab. So, you can get different results depending on the order you select the parameters.

- 5 Click on a selected parameter to toggle it back off again.

**Note:** You can only have one or two parameters selected at a time. If you click on a third parameter, the last parameter you clicked on will deselect itself. If you deselect both of the parameters, the Variations window will disappear because the variations are no longer being generated.

Variations are generated based on the current effect parameters. So, you can pick some parameters for your variation, then go back to the Presets window and pick a different Preset, and the variations will regenerate.

See [Variations](#) for more information.

## Setups

A Setup takes a snapshot of the parameter settings applied to your image. Setups can be saved and loaded and are independent of the image they were originally applied to.

- 1 Apply a DFT filter.
- 2 Click the DFT Interface button.

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

- 3 Choose a preset and make some parameter adjustments.**
- 4 Select File > Save Setup.**
- 5 When the file browser opens, enter a name and click Save.**

You can now apply this setup to a different image using File > Open Setup.

## FILTER TUTORIALS

### Ambient Light

Ambient creates light without a defined source and contributes to the overall brightness of a scene without casting shadows.

**1 Apply Ambient Light from the Light category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Brightness to set the intensity of the ambient light.**

**5 To apply a custom light color to the image, click on the Color box and select a color.**

**6 To apply a colored gel to the light, select one from the Gels pop-up menu.**

**7 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Ambient Light](#) filter for more information.

## Black and White

Black and White converts color images to black and white simulating the look of Black and White photographic filters.

**1 Apply Black and White from the Color category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 From the Filter pop-up, select the type of black and white filter to be applied to your color image.**

Your choice of filter can dramatically change the black and white result.

**5 Use the Brightness, Contrast and Gamma controls to further adjust the image.**

**6 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Black and White](#) filter for more information.

## Bleach Bypass

Bleach Bypass is a film laboratory technique where, by skipping the bleach stage in the color processing sequence, silver is retained in the image along with the color dyes. The result is effectively a black and white image superimposed on a color image. Bleach Bypass images have increased contrast, reduced saturation, often giving a pastel effect.

**1 Apply Bleach Bypass from the Film Lab category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

At the top left of the Presets window, the presets are categorized into various groups located inside a pop-up menu.

**4 In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**

**5 Use the Amount slider to control the strength of the Bleach Bypass filter.**

**6 Saturation, Contrast and Temperature sliders are provided for additional enhancement.**

**7 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Bleach Bypass](#) filter for more information.

# Blur

Blurs the image with individual horizontal and vertical controls. It's fast, high quality and blurs outside the frame which removes the dark inward bleeding edges of most blurs.

**1 Apply Blur from the Lens category.**

**2 Adjust the Blur-Horizontal slider.**

Since Gang is activated by default, the Blur-Vertical amount will match the Horizontal value.

**3 Un-click the Gang and now the Horizontal and Vertical sliders can be moved independently.**

**4 Set the Position of the blur if you'd like.**

By default, the Position is set to Centered, where the image is equally blurred inward and outward. You can also set the Position to Inner or Outer. Inner and Outer are good for shrinking or growing mattes.

See the [Blur](#) filter for more information.

## Borders

Select from a variety of different pre-made borders or create your own.

**1 Apply Borders from the Special Effects category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

At the top left of the Presets window, the presets are categorized into various groups located inside a pop-up menu.

**4 In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**

**5 If you selected one of the pre-made Border 1-11 presets, you can adjust the Orientation, Invert state, Softness, Roughness and Randomization of the edge.**

Variable colored, softened borders can also be created using Border > Type > Custom.

**6 Select Border > Type > Custom. You can then adjust the Size, Color, Softness, Roughness and Randomization of the edge.**

**7 Using the Transform controls, you can transform image within the border.**

**8 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Borders](#) filter for more information.

## Camera Shake

Simulates camera shake using random changes in amplitude, speed, scale, rotation, and motion blur.

- 1 Apply Camera Shake from the Lens category.**
- 2 Adjust the Amplitude, Speed, Scale, Rotate and Randomize sliders until you achieve the desired amount of shake.**
- 3 Enable Motion Blur if you want to add realistic camera blur to the image.**

See the [Camera Shake](#) filter for more information.

# Cartoon

Converts the image into a cartoon.

**1 Apply Cartoon from the Special Effects category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Amount to the desired level.**

**5 Set the Detail. Increasing the value shows more detail while decreasing the value shows less detail.**

**6 Adjust the Line control to set the amount of outlining.**

**7 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Cartoon](#) filter for more information.

## Center Spot

Center Spot diffuses and blurs distracting backgrounds while keeping a center spot in focus. The center spot can be moved, sized and the amount of blur can be controlled. Warm Center Spot combines the benefits of Center Spot with a warming filter making it ideal for portraits and skintones.

**1 Apply Center Spot from the Diffusion category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

At the top left of the Presets window, the presets are categorized into various groups located inside a pop-up menu.

**4 In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**

**5 Adjust the Spot > Position by clicking and dragging the center image point to the desired location.**

**6 Set the Radius, Falloff Radius and Falloff.**

The area covered by the spot will be in focus with all other areas blurred.

**7 If you are curious, you can see what the Spot looks like by changing your View to Spot. Change your View to Output when done.**

**8 Adjust the Horizontal and Vertical Blur to your liking.**

**9 If you applied a Warm Center Spot preset, adjust the Temperature > Color and Opacity sliders to your liking.**

**10 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Center Spot / Warm Center Spot](#) filters for more information.

# Chroma Bands

Creates rainbow diffraction patterns.

**1 Apply Chroma Bands from the Light category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Click and drag the point control to move the Chroma Bands and use Scale to change the size.**

**5 Change Spread to control the distribution of the bands and Taper to fade the edges.**

**6 Adjust Cycles to set the amount of bands and Density to control the amount of rays.**

**7 Set the Brightness and Chroma as desired.**

**8 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Chroma Bands](#) filter for more information.



## Chromatic Aberration

Chromatic aberration is caused by a lens having a different refractive index for different wavelengths of light and is seen as fringes of color around the edges of the image. This fringing is removed by un-distorting the individual color channels.

- 1 Apply Chromatic Aberration from the Lens category.**
- 2 Look at the edges of the image and determine if the chromatic aberration is red/cyan, green/magenta, or blue/yellow.**
- 3 Start by adjusting the Distortion parameter for the particular color fringing that you are trying to remove. For instance, if you see red/cyan fringing, adjust the Distortion slider in the Red/Cyan group.**

If you are using anamorphic motion picture lenses or are experiencing non-radial, asymmetric fringing, you may need to adjust the Anamorphic Squeeze and Curvature X/Y parameters.

See the [Chromatic Aberration](#) filter for more information.





## Color Correctors

DFT includes a number of different color correctors that are handy for adjusting an image's color. They include: Color Correct, F-Stop, Printer Points, Telecine and Temperature. The Color Correct filter will be used in the following tutorial since it is similar to the other color correctors.

**1 Apply Color Correct from the Color category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust any of the sliders in the Master group.**

The master settings affect the entire image. However, you can also use mattes in the shadow, midtone and highlight regions to adjust the color selectively in those areas.

**5 Change your View to Shadows, Midtones or Highlights to see the matte values.**

The areas that are white in the matte are the areas that will be adjusted by the color controls. The areas defined as shadows, midtones or highlights can be adjusted by modifying the Position and Range parameters.

**6 Use the Shadows, Midtones or Highlights Position parameters if you want to select different values for the adjustment.**

**7 Increase the Shadows, Midtones or Highlights Range controls to add more values to the adjustment. Decrease for less values.**

**8 Change your View to Output to see the image.**

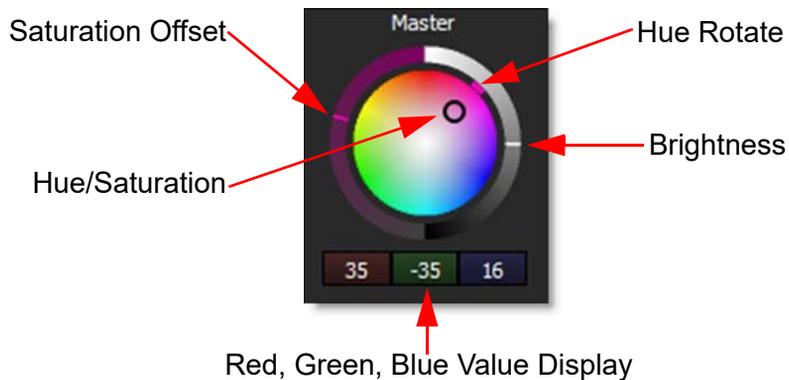
**9 Adjust the sliders in the Shadows, Midtones or Highlights groups to see how it affects your image.**



An alternative to adjusting the sliders is to use the Color Wheels.



The color wheels have the following controls:



- 10 Move the center point on one of the Color Wheels to adjust the Hue and Saturation.



As the center point is moved, the Hue and Saturation adjustments are achieved by simultaneously changing the Red, Green and Blue parameters in the respective group: Master, Shadows, Midtones, or Highlights. The current Red, Green and Blue values are displayed below the Color Wheel.

- 11 Drag the colored dash on the outside of the Color Wheel to rotate the hue.



- 12 To increase or decrease the selected color's saturation, adjust the Saturation Offset by sliding the dash on the left circular slider.



- 13 Change the Brightness by dragging the dash on the right circular slider.



To reset a color wheel, you can right-click on any color wheel and select Reset > All, Shadows, Midtones, or Highlights.

- 14 Click the Done icon to return to the host application.



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See [Color Correctors](#) for more information.

## Color Gradient

Color Gradient colors and or darkens only a portion of the image giving you the ability to simulate any Color Gradient filter. Presets for your favorite color gradient filters are provided as well as the ability to create custom colors. There is a graduated transition for a smooth color blend between the colored/darkened portion and the original image.

**1 Apply Color Gradient from the Grads/Tints category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Grad > Type, Corner Points, Size and Angle.**

To adjust the Corner Points, just click and drag them to the desired location.

**Note:** On some host programs, you must highlight the effect title in the Effect Controls window to see the on-screen controls.

Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

**5 If you are curious, you can see what the gradient looks like by changing your View to Grad. Change your View to Output when done.**

The white area of the gradient will be tinted.

**6 If you want less coloring of the image, turn down the Filters > Opacity.**

**7 Image highlights can be retained by adjusting the Filters > Preserve Highlights control to a value of 100.**

**8 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the **Color Gradient** filter for more information.

## Color Infrared

Color Infrared simulates infrared filters used in conjunction with infrared sensitive film or sensors to produce very interesting false-color images with a dreamlike or sometimes lurid appearance.

**1 Apply Color Infrared from the Special Effects category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Magenta and Blue sliders to your liking.**

**5 Changing the Hue will only adjust hue in non-blue areas.**

Color Infrared images usually have high contrast.

**6 Lower the Contrast setting if it is too high for your image.**

**7 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Color Infrared](#) filter for more information.



# Color Paste

Color Paste takes the luminance values of the foreground image and pastes it as a color over the background.

## 1 Apply Color Paste from the Composite category:

### After Effects / Final Cut Pro / Motion / Premiere Pro

- Stack your foreground clip (what you want to color paste) above a background layer/track.
- Apply Color Paste to the foreground layer/track.

### OFX

- For node based hosts, apply Color Paste to a RGB clip and then use a Composite or Merge node to composite the result.
- For layer based hosts, stack your foreground clip (what you want to color paste) above a background layer/track. Then, apply Color Paste to the top foreground layer/track.

## 2 Adjust the Opacity and Color to achieve the desired effect.

**Note:** Color Paste requires a minimum of Premiere Pro CC. In addition, the Sequence Settings > Composite in Linear Color preference needs to be disabled for Color Paste to composite correctly.

Go to the [Color Paste](#) filter for more information.





## Color Shadow

Creates a high contrast image overlaid with a gradient.

**1 Apply Color Shadow from the Special Effects category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Threshold to obtain the desired amount of image detail.**

The color gradient can be adjusted to your specific image.

**5 Adjust the Grad > Direction, Corner Points and Size to position and adjust the grad.**

To adjust the Corner Points, just click and drag them to the desired location.

Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

**6 To change the background or gradient colors, click on the Background Color, Color 1 or Color 2 > Color boxes and select a color.**

Color 1 sets the top of the gradient and Color 2 sets the bottom of the gradient.

**7 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the **Color Shadow** filter for more information.





## Color Spot

Tints the image using presets for common photographic filters except for a center spot which retains normal color. The center spot can be moved, sized and the amount of blur can be controlled.

**1 Apply Color Spot from the Grads/Tints category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Spot > Position by clicking and dragging the center image point to the desired location.**

**5 Set the Spot > Radius, Falloff Radius and Falloff.**

**6 If you are curious, you can see what the Spot looks like by changing your View to Spot. Change your View to Output when done.**

The white area of the spot will be tinted.

**7 If you want less coloring of the image, turn down the Color > Opacity.**

**8 Image highlights can be retained by adjusting the Color > Preserve Highlights control to a value of 100.**

**9 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Color Spot](#) filter for more information.





## Color Suppress

Removes either blue or green from an image. This is usually used to remove the blue or green light that commonly spills onto objects filmed in front of blue or green screens.

- 1 Apply Color Suppress from the Key category.**
- 2 Choose either Blue or Green from the Suppress pop-up menu.**
- 3 Adjust the Amount to set the proper level of color suppression.**

If color you want to suppress is still evident, increase the Range slider.

- 4 Set the Range control to your liking.**
- 5 For edges that contain a lot of transparency like hair or reflections, you can suppress the color spill of the foreground edge to the color gray using the Edge parameter.**

**Note:** The Edge parameter requires an Alpha channel.

Go to the [Color Suppress](#) filter for more information.



# Composite

Composite layers a foreground over a background using a matte with the ability to add drop shadows.

## 1 Apply Composite from the Composite category:

### After Effects / Premiere Pro

- To use Composite, you can work with either two or three layers. When working with three layers, the layers should be stacked in the following order from bottom to top: matte, background and foreground. When working with two layers, the top layer must be a RGB+Alpha clip.
- For a three layer effect, apply Composite to the foreground layer. For a two layer effect, apply Composite to the layer that contains the RGB+Alpha clip.
- When using three layers, select the layer containing the matte using the Matte > Input selector. You should be aware that the Matte > Input expects an Alpha channel by default. If you want to use a channel other than the Alpha to create your composite, go to Matte > Use and select a different channel.

### Avid

- To use Composite, you can work with either two or three video tracks. When working with three tracks, the video tracks should be stacked in the following order from bottom to top: background, foreground and matte. When working with two tracks, the top track must contain a Matte Key (RGB+Alpha clip).
- For a two track effect, apply Composite to the track that contains the Matte Key. For a three track effect, apply Composite to the track that has the matte.
- Depending on what is black and white in your matte, you may need to set the Alpha pop-up menu to a non-inverted selection. By default, Composite inverts the matte to be compatible with the way Avid treats matte values in a Matte Key.

### Final Cut Pro

- To use Composite, you work with two video tracks. The tracks should be stacked in the following order from bottom to top: background and then foreground.
- Apply Composite to the top foreground track.
- The Alpha channel used to create the composite can be from either the foreground's Alpha channel or from a separate clip. If you don't want to use the foreground's Alpha channel or if it does not have one, click the drop zone to the right of the Matte > Input parameter, choose a clip, and press Apply Clip below the Viewer.

## Motion

- To use Composite, you work with two video tracks. The tracks should be stacked in the following order from bottom to top: background and then foreground.
- Apply Composite to the top foreground track.
- The Alpha channel used to create the composite can be from either the foreground's Alpha channel or from a separate clip. If you don't want to use the foreground's Alpha channel or if it does not have one, drag the clip to be used as the matte and place it onto the drop zone to the right of the Matte > Input parameter.

## OFX

- For node based hosts, apply Composite to a RGB+Alpha clip and then hook up a background clip.
- For layer based hosts, the layers/tracks should be stacked in the following order from bottom to top: background and then a foreground that is a RGB+Alpha clip. Then, apply Composite to the top foreground layer/track.

**2** If you want, Color Correct, Blur or Grain the Foreground clip.

**3** The Foreground can be transformed using the Transform parameters.

There are two sets of on-screen Transform controls in Composite. The point controls that are offset to the right and down are for the drop shadow, while the point controls located on the corners and center of the image are for the foreground.

**Note:** On some host programs, you must highlight the effect title in the Effect Controls window to see the on-screen controls.

**4** Use Transform > Crop to get rid of unwanted areas of the Foreground.

**5** In the Matte group, apply Shrink/Grow, Blur and Clip controls to the matte if needed.

**6** Add a Drop Shadow to the Foreground using the Color, Opacity, Blur and Transform controls in the Drop Shadow Group.

**7** Use the Edge parameters to clean up ratty edges, if any, in the composite.

Go to the **Composite** filter for more information.



## Colorize Gradient

**1 Apply Colorize Gradient from the Grads/Tints category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4**

**5 Choose your color by clicking on the Shadows, Midtones or Highlights > Color boxes and selecting a color.**

**6 Adjusting the Shadows, Midtones or Highlights > Position slider will set where the colors are applied to the image.**

**7 If you want less coloring of the image, turn down Opacity.**

You can also use a gradient to control where the colorization is applied.

**8 To use a gradient, click on Grad > Enable.**

**9 Adjust the Grad > Type, Corner Points, Size and Angle.**

To adjust the Corner Points, just click and drag them to the desired location.

**Note:** On some host programs, you must highlight the effect title in the Effect Controls window to see the on-screen controls.

Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

**10 If you are curious, you can see what the Grad looks like by changing your View to Grad. Change your View to Output when done.**

Go to the **Colorize Gradient** filter for more information.



## Cross Processing

Cross-processing is a photographic technique where print film (C41) is processed in the set of chemicals usually used to process slide film (E6) or vice versa. The final result yields images with oddly skewed colors and increased contrast and saturation. Different film stocks produce different results, so we have created what we feel is a representative look.

**1 Apply Cross Processing from the Film Lab category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

At the top left of the Presets window, the presets are categorized into various groups located inside a pop-up menu.

**4 In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**

**5 Use the Amount slider to control the strength of the Cross Processing filter.**

**6 Switch the Mode to Slide to Print.**

Both Print to Slide and Slide to Print modes are available.

**7 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Cross Processing](#) filter for more information.

## Day for Night

Day for Night simulates a technique used for shooting exteriors in daylight made to look like they were photographed at night.

**1 Apply Day for Night from the Special Effects category.**

Day for Night uses a type of diffusion that grows darks areas into bright areas.

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Diffusion > Blur and Opacity parameters to your liking.**

The Day for Night effect relies on a blue tint to simulate moonlight. You can modify the color of the tint as well as its intensity using the Moonlight controls.

**5 Use the Moonlight controls to adjust the tint applied to the image.**

Photographically the image is underexposed by two stops or so. We duplicate the underexposure by using a combination of color correction controls. Modify the color correct presets brighter or darker depending on your image.

**6 Change the Color Correct settings if necessary.**

**7 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Day for Night](#) filter for more information.



# DeFlicker

Removes luminance flickering.

**1 Apply DeFlicker from the Image category.**

The first step is to determine the reference frame that all other frames will be matched to so the flickering can be removed.

**2 Navigate to a frame with the appropriate brightness level for the scene and press Set Reference Image.**

**3 Use Amount to set the level of deflickering.**

See the [DeFlicker](#) filter for more information.



# Defog

Using advanced deweathering algorithms, Defog restores clear day contrasts and colors of a scene taken in bad weather such as fog and mist. It is also successful in removing the effects of optical Fog and Diffusion filters.

**1 Apply Defog from the Special Effects category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Click on the Defog > Color picker and click on an area of fog.**

This sets the color of the fog to be removed.

**5 Adjust the Defog > Defog parameter to remove more fog or mist.**

The fog is removed in a radial pattern emanating from the vanishing point. For instance, if your fog moves in the direction of top right to bottom left, set your vanishing point towards the top right corner and the fog removal will be more intense at the upper right and fall off at the bottom left. However, in most cases, the vanishing point can be left in the center of the screen and you will obtain acceptable results.

**6 If needed, move the Vanishing Point to a new location by clicking and dragging the on-screen control in the center of the screen.**

If the defogging operation causes the shadow areas to become too contrasty, adjust the Min Depth slider to a lower value. This will bring back some shadow detail.

**7 Lower the Min Depth value if you have lost too much detail in the shadow portions of the image.**

**8 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Defog](#) filter for more information.

# DeFringe

Purple or blue fringing around overexposed areas is a result of sensor overloading in video as well as digital still cameras. DeFringe isolates and removes the various types of color fringing.

**1 Apply DeFringe from the Lens category.**

Determine the color of the fringing that you would like to remove. Let's say that you have purple fringing in the highlight areas of your image.

**2 Go to the Magenta parameter group.**

**3 Move the Magenta slider to the right until the purple fringing is gone.**

**4 If the purple fringing is not being removed when the Magenta slider is adjusted, you may need to adjust the Position slider.**

**5 Change your View to Magenta to see the matte values.**

The areas that are white in the matte are the areas that will be defringed.

**6 Change your View back to Output.**

**7 Move the Position slider to the right or left until you see the fringing go away.**

This may be necessary if your purple fringing is not the same hue of what we consider to be magenta.

**8 If there is still some magenta left, you may want to increase the value of the Range slider to include more values considered as magenta.**

See the [DeFringe](#) filter for more information.



## Depth of Field

Depth of Field can be added to a scene by isolating and blurring only a portion of the image. The amount of blurring is directly proportionate to the luminance of the depth source.

**1 Apply Depth of Field from the Lens category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Blur sliders to your liking.**

In some of the filters, a matte is generated to create the desired effect--in this case, depth of field.

**5 Change your View to Depth to see the matte values.**

The areas that are white in the matte are the areas where blur will be introduced. The location of the blur within the scene can be adjusted by modifying the Matte > Position and Range parameters.

**6 Change the Matte > Position parameter if you want to select different values to be used for the matte.**

**7 Increase the Matte > Range control to add more values to the matte. Decrease for less values.**

**8 Increase the Matte > Blur parameter to soften the transition areas of the matte.**

**9 Change your View to Output to see the filtered image.**

The Depth of Field filter can also use a grad or an image as the depth source instead of the matte.

**10 Set the Depth to Grad.**

**11 Adjust the Grad > Type, Corner Points, Size and Angle.**

To adjust the Corner Points, just click and drag them to the desired location.

**Note:** On some host programs, you must highlight the effect title in the Effect Controls window to see the on-screen controls.



Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

- 12 Click the Done icon to return to the host application.



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

- 13 To use an image as the depth source:

#### **After Effects / Premiere Pro**

- Change Depth > Depth to Input.
- Select the layer/track you want to use from the Depth > Input selector.

#### **Final Cut Pro X**

- Change Depth > Depth to Input.
- Click the drop zone to the right of the Depth Input parameter, choose a clip, and press Apply Clip below the Viewer.

#### **Motion**

- Change Depth > Depth to Input.
- Drag the image to be used as the depth input and place it onto the drop zone to the right of the Depth > Input parameter.

#### **Avid Editing Systems**

- Place images on two adjacent video tracks.
- Apply the Depth of Field filter to the upper track of the two adjacent tracks.
- Change Depth > Depth to Input.
- The track below the one that you added Depth of Field to is used as the depth source.

#### **OFX Hosts**

- Assign the image to be used as the depth source.

**Note:** Using an image as the depth source is only available in OFX hosts that support auxiliary inputs. Consult the host documentation for instructions on how to assign a source input as this will vary by host.

- Change Depth > Depth to Input.

- The assigned input will now be used as the depth source.

See the [Depth of Field](#) filter for more information.

## Detail

Detail presents a new technique for performing selective sharpening, detail enhancement and edge aware smoothing.

**1 Apply Detail from the Image category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

At the top left of the Presets window, the presets are categorized into various groups located inside a pop-up menu.

**4 In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**

**5 To sharpen or enhance detail, increase the values of the Detail > Coarse, Medium and Fine controls. Increasing the values sharpens/enhances detail while decreasing the values smooths/decreases detail.**

**6 Enable Detail > Gang to move all sliders at once.**

If there are unwanted areas of the image that are being affected, you can optionally use a matte to isolate the effect.

**7 Activate Matte > Enable.**

**8 Change your View to Matte to see the matte values.**

The idea here is to generate a matte that isolates the areas of the image that will be affected. The white areas of the matte are the areas that will be modified by the Detail controls. The matte has been preset to a highlight luminance matte, but this can be easily changed.

**9 Select the appropriate Matte > Extract On option for your image.**

**10 If needed, change the Matte > Position parameter so that the image areas you are trying to smooth are as white as possible in the matte.**

**11 Adjust the Matte > Range value so that the white values of the matte are limited as much as possible to the image areas that you are trying to isolate.**

**12 Increase the Matte > Blur parameter if you want to soften the transition areas of the matte.**

**13** Change your View to Output to see the filtered image.

**14** Click the Done icon to return to the host application.



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Detail](#) filter for more information.

# Diffusion

Diffusion creates atmosphere by reducing contrast while creating a glow around highlights or shadows using an extensive texture library.

**1 Apply Diffusion from the Diffusion category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

Each preset uses a different texture to create the diffusion effect.

**4 Adjust the Diffusion > Brightness parameter to control the amount of diffusion added to the image.**

You can either use the texture by itself or combine it with a matte using one of the Texture > Blend modes. The areas that are white in the matte are the areas where diffusion will be introduced.

**5 Combine the texture with a matte by changing Texture > Blend from Texture Only to Multiply.**

I like the Multiply blend mode because it only adds the texture in the areas of the matte.

**6 Change your View to Matte to see the matte values.**

The areas that are white in the matte are the areas where diffusion will be introduced. The location of the diffusion within the scene can be adjusted by modifying the Matte > Position and Range parameters.

**7 Change the Matte > Position parameter if you want to add diffusion to different areas of the image.**

**8 Adjust the Matte > Range slider to increase or decrease the image areas affected by the diffusion.**

**9 Change your View to Output to see the filtered image.**

**10 Adjust the position of the texture by clicking and dragging the center image point to the desired location.**

**11 You can also use the Texture > Transform controls to transform the texture.**

**12 Adjust the Diffusion > Brightness, Blur and Color of the diffusion to your liking.**

**13** Click the Done icon to return to the host application.



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Diffusion](#) filter for more information.

## Double Fog

The Double Fog filter creates a soft, misty atmosphere over the image by first applying fog using a vanishing point along the direction of increasing distance in the image. Then, a second pass blooms image highlights.

**1 Apply Double Fog from the Diffusion category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Click on the Fog > Color parameter to set the color of the fog.**

This sets the color of the fog to be added.

**5 Adjust the Fog > Fog parameter to control how much overall fog is added to the image.**

The fog is added in a radial pattern emanating from the vanishing point. For instance, if you want your fog to move in the direction of top right to bottom left, set your vanishing point towards the top right corner and the fog will be more intense at the upper right and fall off at the bottom left. However, in most cases, the vanishing point can be left in the center of the screen and you will obtain acceptable results.

**6 If needed, move the Vanishing Point to a new location by clicking and dragging the on-screen control in the center of the screen.**

You can limit where the fog is added to your image by using the Min/Max Depth sliders. Min Depth controls how much fog is added in the darker areas of the image, while Max Depth controls how much fog is added in the brighter areas of the image.

**7 Change the Min/Max Depth values if you want to control how fog is added in the shadow and highlight areas of the image.**

Secondary fogging effects can be achieved using the Glow parameters. A portion of the screen is isolated with a matte, and based on this matte, additional fog and glow can be added.

**8 Adjust the Glow > Brightness, Blur and Color settings to your liking.**

In some of the filters, a matte is generated to create the desired effect--in this case, highlight glow.

**9 Change your View to Matte to see the matte values.**

The areas that are white in the matte are the areas where glow will be introduced. For instance, If you want to put glow around bright lights, make sure that the light sources appear as white in the matte. The location and amount of the additional glow within the scene can be adjusted by modifying the Matte > Position and Range parameters.

**10 Change the Matte > Position parameter if you want to select different luminance values to be used for the matte.**

**11 Increase the Matte > Range value to add more glow into the scene. Decrease for less glow.**

**12 Increase the Matte > Blur parameter to soften the transition areas of the matte.**

**13 Change your View to Output to see the filtered image.**

**14 To create Glow effects around highlights such as bright lights, change your Glow > Blend parameter to Add and make sure that your matte includes only the light sources.**

**15 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Double Fog](#) filter for more information.

# Drop Shadow

Drop shadows can be added to an image that has an Alpha channel.

## 1 Apply Drop Shadow from the Composite category:

### After Effects / Final Cut Pro / Motion / Premiere Pro

- To use Drop Shadow, the layers should be stacked in the following order from bottom to top: background and then a foreground that is a RGB+Alpha clip.
- Apply Drop Shadow to the top foreground layer.

### Avid

- To use Drop Shadow, you can work with either two or three video tracks. When working with three tracks, the video tracks should be stacked in the following order from bottom to top: background, foreground and matte. When working with two tracks, the top track must contain a Matte Key (RGB+Alpha clip).
- For a two track effect, apply Drop Shadow to the track that contains the Matte Key. For a three track effect, apply Drop Shadow to the track that has the matte.
- Depending on what is black and white in your matte, you may need to set the Alpha pop-up menu to a non-inverted selection. By default, Drop Shadow inverts the matte to be compatible with the way Avid treats matte values in a Matte Key.

### OFX

- For node based hosts, apply Drop Shadow to a RGB+Alpha clip and then use a Composite or Merge node to composite the result.
- For layer based hosts, the layers/tracks should be stacked in the following order from bottom to top: background and then a foreground that is a RGB+Alpha clip. Then, apply Drop Shadow to the top foreground layer/track.

## 2 Use the Transform controls to Position, Scale, Rotate or Corner-Pin the drop shadow.

## 3 Set the Color, Opacity and Blur.

**Note:** On some host programs, you must highlight the effect title in the Effect Controls window to see the on-screen controls.

Go to the [Drop Shadow](#) filter for more information.

## Dual Gradient

Dual Gradient applies two photographic filters to the image which are blended together with a gradient.

**1 Apply Dual Gradient from the Grads/Tints category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

The color gradient can be adjusted to your specific image.

**4 Adjust the Grad > Direction, Corner Points and Size to position and adjust the grad.**

To adjust the Corner Points, just click and drag them to the desired location.

Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

**5 To set the Dual Gradient colors, click on the Color 1 or Color 2 > Color boxes and select a color.**

**6 If you want less coloring of the image, turn down the Color 1 or Color 2 > Opacity.**

**7 Image highlights can be retained by adjusting the Preserve Highlights control to a value of 100.**

**8 Change your View to Grad to see the color gradient being applied to the image.**

**9 Change your View back to Output to see the filtered image.**

**10 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the **Dual Gradient** filter for more information.

# Edge Composite

Edge Composite automatically generates an edge matte from an existing Alpha channel and allows you to color correct or blur only the edge of the foreground.

## 1 Apply Edge Composite from the Composite category:

### After Effects / Final Cut Pro / Motion / Premiere Pro

- To use Edge Composite, the layers/tracks should be stacked in the following order from bottom to top: background and then a foreground that is a RGB+Alpha clip.
- Apply Edge Composite to the top foreground layer/track.

### Avid

- To use Edge Composite in Avid Editing Systems, you can work with either two or three video tracks. When working with three tracks, the video tracks should be stacked in the following order from bottom to top: background, foreground and matte. When working with two tracks, the top track must contain a Matte Key (RGB+Alpha clip).
- For a two track effect, apply Edge Composite to the track that contains the Matte Key. For a three track effect, apply Edge Composite to the track that has the matte.
- Depending on what is black and white in your matte, you may need to set the Alpha pop-up menu to a non-inverted selection. By default, Edge Composite inverts the matte to be compatible with the way Avid treats matte values in a Matte Key.

### OFX

- For node based hosts, apply Edge Composite to a RGB+Alpha clip and then use a Composite or Merge node to composite the result.
- For layer based hosts, the layers/tracks should be stacked in the following order from bottom to top: background and then a foreground that is a RGB+Alpha clip. Then, apply Edge Composite to the top foreground layer/track.

## 2 Change the View to Edge Matte.

## 3 Using the Size control, set the thickness of the Edge Matte.

## 4 Switch the View back to Output.

## 5 Adjust the Color Correction, Blur and Opacity of the edge.

Go to the [Edge Composite](#) filter for more information.

## Enhancing

Selectively enhance any color to make it pop with little to no effect on other colors.

**1 Apply the Enhancing filter from the Color category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

At the top left of the Presets window, the presets are categorized into various groups located inside a pop-up menu.

**4 In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**

**5 Adjust the Enhancing slider to make the red, orange and brown values pop.**

In some of the filters, a matte is generated to create the desired effect--in this case, the enhancement effect. By default, the Matte > Hue is preset to red values.

**6 Change your View to Matte to see the matte values.**

The areas that are white in the matte are the red, orange and brown areas of the image that will be enhanced. The enhancement effect within the scene can be adjusted by modifying the Matte > Hue and Range parameters.

**7 Choose another Matte > Preset or change the Matte > Hue parameter if you want to add enhancement to different areas of the image.**

**8 Adjust the Matte > Range slider to increase or decrease the areas affected by the enhancement.**

**9 Change your View to Output to see the image.**

**10 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Enhancing](#) filter for more information.

# Eye Light

Creates a targeted light to be placed around a person's eyes.

- 1 Apply Eye Light from the Light category.**
- 2 Using the Transform controls, you can transform the eye light.**
- 3 Select either the Light > Blend > Add or Screen Blend mode.**

Add will burn out highlights while the Screen Mode will retain them.

- 4 Adjust the Light > Brightness to set the intensity of the light.**

**Note:** You can darken the entire image except for the eye light shape by adjusting the Shadow > Brightness.

- 5 Use the Light > Blur sliders to control the softness of the light.**
- 6 To apply a custom light color to the image, click on the Color box and select a color.**
- 7 To apply a colored gel to the light, select one from the Gels pop-up menu.**

See the [Eye Light](#) filter for more information.

# Fan Rays

Generates asymmetric fanned rays.

**1 Apply Fan Rays from the Light category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Click and drag the point control to move the Fan Rays and use Scale to change the size.**

**5 Adjust the Brightness and Color.**

**6 Use Element Count to set the amount of rays.**

**7 Change Randomize and Jitter to vary the look of the rays.**

**8 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Fan Rays](#) filter for more information.

# Film Stocks

Film Stocks is a unique filter that simulates a 113 different color and black and white photographic film stocks.

**1 Apply Film Stocks from the Film Lab category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

At the top left of the Presets window, the film stocks are categorized into various groups located inside a pop-up menu.

**4 In the Presets window, choose a new preset group from the pop-up menu to see a different set of film stock presets.**

Each preset sets a combination of the various parameters to achieve the desired effect, but only the parameters that are necessary. You can modify the existing settings including adjusting those controls that were not previously set.

**5 Use the Amount slider to set the amount of the selected preset. The Amount mixes between the full effect of the preset and the original image.**

To mimic the characteristics of a particular film stock, a combination of settings for the RGB channels have been set to form a film response curve.

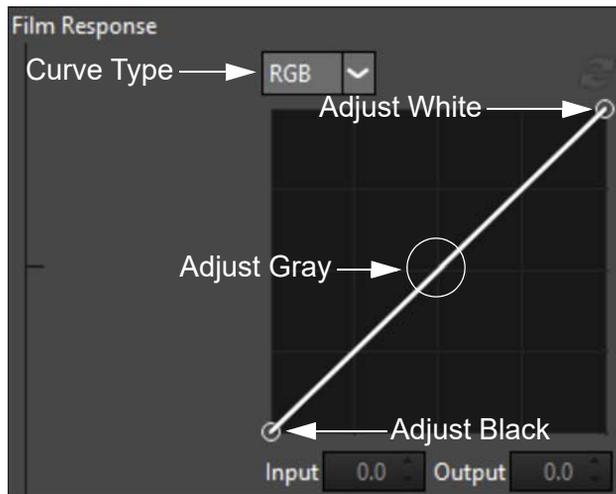
**6 Change the Film Response > RGB, R, G and B sliders. They will minimize or accentuate the pre-configured film response curve.**

**Note:** If you are using a black and white preset, the grayscale film response curve is adjusted using RGB.

**7 Adjust any of the Black and White, Color Correct, Filter, Sharpen, Diffusion, Vignette or Grain settings to your liking.**

**Note:** You may not see an accurate representation of the grain in the viewer unless your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio.

In the DFT interface, you can use Film Response > Curves to adjust the entire tonal range of an image by changing the shape of the curve. The Curves adjustment lets you adjust points throughout the tonal range of an image (from shadows to highlights).



- 8** Select RGB, Red, Green or Blue from the Curve Type pop-up menu. You can also click directly on an existing curve in the graph to select it.



Adding and deleting points from the curve is quick and easy.

- 9** Click directly on the curve to add a new point. Up to five points can be added.
- 10** Delete points by clicking and dragging them to the edge of the graph.
- 11** Move points by clicking and dragging them.
- Adjust curve points to achieve a specific result.
- 12** Move a point in the top portion of the curve to adjust the shadows.
- 13** Move a point in the center of the curve to adjust the midtones.
- 14** Move a point in the top portion of the curve to adjust the highlights.

- 15** Move the curve upward or downward to lighten or darken the image. The steeper sections of the curve represent areas of higher contrast; flatter sections represent areas of lower contrast.
- 16** To darken highlights, move a point near the top of the curve downward. Moving a point either down or to the right maps the input value to a lower output value, and the image darkens.
- 17** To lighten the shadows, move a point near the bottom of the curve upward. Moving a point either up or to the left maps a lower input value to a higher output value, and the image lightens.
- 18** Click the Done icon to return to the host application.



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Film Stocks](#) filter for more information.

# Flashing

Flashing allows you to use photographic filters to lower the contrast of your shadows or highlights. The motion picture lab can expose a small amount of light to the film at various stages of the developing and printing process. For example, Negative plus Dupe Negative flashing lifts blacks, while Print plus Master Positive flashing softens whites.

**1 Apply Flashing from the Film Lab category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

At the top left of the Presets window, the presets are categorized into various groups located inside a pop-up menu.

**4 In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**

**5 Adjust the Shadows > Brightness slider to brighten shadow areas.**

**6 Adjust the Highlights > Brightness slider to darken highlight areas.**

**7 To flash the Shadows or Highlights with a custom color, click on the Shadows or Highlights > Color box and select a color.**

**8 To choose one of the preset filters, select a filter from the Shadows or Highlights > Presets list.**

**9 Once colors have been chosen, adjust the Shadows or Highlights > Brightness sliders to set the amount of color added to either the Shadows or Highlights.**

**10 Change your View to Shadows or Highlights to see the matte values.**

In some of the filters, a matte is generated to create the desired effect--in this case, flashing. The areas that are white in the matte are the areas that will be adjusted by either the Shadows or Highlights sliders. The areas defined as Shadows or Highlights can be adjusted by modifying the Position and Range parameters.

**11 Use the Shadows or Highlights Position parameters if you want to select different values to be used for the matte.**

- 12 Increase the Shadows or Highlights Range controls to add more values to the matte. Decrease for less values.
- 13 Change your View to Output to see the image.
- 14 Click the Done icon to return to the host application.



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Flashing](#) filter for more information.

## Flag / Dot

Flags and Dots are rectangular and circular lighting control devices used to create shadow areas on a motion picture or photographic set. This concept has been extended to digital so that areas of the image can be selectively darkened.

- 1 Apply Flag or Dot from the Light category.**
- 2 Using the Transform controls, you can transform the flag or dot.**
- 3 Adjust the Flag or Dot > Brightness to set the intensity.**
- 4 Use the Flag or Dot > Blur sliders to control the softness.**

See the [Flag and Dot](#) filters for more information.

# Fluorescent

Removes the green cast caused by fluorescent bulbs.

**1 Apply Fluorescent from the Color category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Temperature slider as needed.**

**5 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Fluorescent](#) filter for more information.

# Fog

The Fog filter creates a soft, misty atmosphere over the image and glows highlights.

**1 Apply Fog from the Diffusion category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Fog > Brightness, Blur and Color settings to your liking.**

In some of the filters, a matte is generated to create the desired effect--in this case, fog.

**5 Change your View to Matte to see the matte values.**

The areas that are white in the matte are the areas where fog will be introduced. The location of the fog within the scene can be adjusted by modifying the Matte > Position and Range parameters.

**6 Change the Matte > Position parameter if you want to select different luminance values to be used for the matte.**

**7 Increase the Matte > Range value to add more fog into the scene. Decrease for less fog.**

**8 Change your View to Output to see the filtered image.**

**9 Increase the Matte > Blur parameter to soften the transition areas of the matte.**

**10 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Fog](#) filter for more information.

# Frost

Frost glows highlights and reduces contrast while softening facial blemishes and wrinkles.

Black Frost offers all the benefits of the Frost filter in a more subtle form. This filter subtly controls highlights, reduces contrast and provides a harder look than the Frost filter, while suppressing facial blemishes and wrinkles.

**1 Apply Frost from the Diffusion category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

At the top left of the Presets window, the presets are categorized into various groups located inside a pop-up menu.

**4 In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**

**5 Adjust Detail > Smoothing to smooth out fine detail.**

Smoothing uses an edge aware smoothing algorithm to minimize fine image detail so that areas with courser detail are unaffected.

**6 Adjust the Mist > Brightness, Blur and Color settings to your liking.**

In some of the filters, a matte is generated to create the desired effect--in this case, mist.

**7 Change your View to Matte to see the matte values.**

The areas that are white in the matte are the areas where mist will be introduced. The location of the mist within the scene can be adjusted by modifying the Matte > Position and Range parameters.

**8 Change the Matte > Position parameter if you want to select different values to be used for the matte.**

**9 Increase the Matte > Range control to add more values to the matte. Decrease for less values.**

**10 Increase the Matte > Blur parameter to soften the transition areas of the matte.**

- 11 Change your View to Output to see the filtered image.
- 12 Click the Done button to return to the host application.



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Frost](#) filters for more information.



## Gels

Photographers, cinematographers and lighting designers use colored filters or gels in front of lights. We have created digital equivalents of the lighting gels and these same exact colors can be applied to the entire image or inside a gradient. In cooperation with Gamproducts and Rosco, we have created digital versions of their popular gels.

**1 Apply Gels from the Grads/Tints category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

At the top left of the Presets window, the gels are categorized into various groups located inside a pop-up menu.

**4 In the Presets window, choose a new presets group from the pop-up menu to see a different set of gel presets.**

**5 Adjust the Color > Opacity, Preserve Highlights and Exposure Compensation sliders to your liking.**

The selected gel can be applied through a gradient creating a graduated transition between the colored portion and the original image.

**6 Click on the Grad > Enable checkbox to activate the Grad.**

**7 Adjust the Grad > Type, Corner Points, Size and Angle.**

To adjust the Corner Points, just click and drag them to the desired location.

Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

**8 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the **Gels** filter for more information.



# Glow

Glow creates glows around selected areas of the image based on a generated matte.

**1 Apply Glow from the Light category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Select either the Glow > Blend > Add or Screen blend mode.**

Add will burn out highlights while the Screen Mode will retain them.

**5 Adjust the Glow > Brightness, Blur and Color settings to your liking.**

In some of the filters, a matte is generated to create the desired effect--in this case, glow.

**6 Change your View to Matte to see the matte values.**

The areas that are white in the matte are the areas where glow will be introduced. The location of the glow within the scene can be adjusted by modifying the Matte > Position and Range parameters.

**7 Change the Matte > Position parameter if you want to select different values to be used for the matte.**

**8 Increase the Matte > Range control to add more values to the matte. Decrease for less values.**

**9 Increase the Matte > Blur parameter to soften the transition areas of the matte.**

**10 Change your View to Output to see the filtered image.**

**11 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Glow](#) filter for more information.

# Glow Darks

Glows and grows the darks areas of the image

**1 Apply Glow Darks from the Light category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Glow > Amount and Blur settings to your liking.**

In some of the filters, a matte is generated to create the desired effect--in this case, glowing darks.

**5 Change your View to Matte to see the matte values.**

The areas that are white in the matte are the areas where glow will be introduced. The location of the glow within the scene can be adjusted by modifying the Matte > Position and Range parameters.

**6 Change the Matte > Position parameter if you want to select different values to be used for the matte.**

**7 Increase the Matte > Range control to add more values to the matte. Decrease for less values.**

**8 Increase the Matte > Blur parameter to soften the transition areas of the matte.**

**9 Change your View to Output to see the filtered image.**

**10 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Glow Darks](#) filter for more information.

# Glow Edges

Glow Edges isolates lines and edges in an image and then adds glow only to these areas resulting in a stylized look.

**1 Apply the Glow Edges filter from the Light category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Select either the Add or Screen Blend mode. Add will burn out highlights while the Screen mode will retain them.**

**5 Adjust the Glow > Brightness, Blur and Color settings to your liking.**

In Glow Edges, an edge matte is generated to create the desired effect.

**6 Change your View to Edge to see the matte values.**

The areas that are white in the edge matte are the areas where glow will be introduced.

**7 Adjust the Edge > Brightness to make sure that you have sufficient white areas in the edge matte.**

**8 Set the Edge > Blur to smooth out the edge matte.**

**9 Change your View to Output to see the filtered image.**

**10 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Glow Edges](#) filter for more information.

# Grain

Grain simulates film grain with control of size, intensity and softness.

**1 Apply Grain from the Film Lab category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Size parameter.**

The larger the Size setting, the larger the grain will be.

**Note:** You may not see an accurate representation of the grain in the viewer unless your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio.

**5 Manipulate the Red, Green and Blue Amount parameters.**

The Amount parameters set the red, green and blue intensities of the grain. Film stocks generally have varying amounts of red, green and blue intensities with the blue intensity generally higher than the rest. If you turn the red, green and blue amount sliders to a value of 0, the grain will disappear.

**6 Change the Softness parameter.**

The Softness parameter sets the softness of the grain. Normally, only minor softness adjustments are necessary, usually between a value of 0-1.

**7 Adjust the Response Position and Response Range to control where you will see grain in the image.**

In most cases, film grain is apparent over the entire image except the brightest whites with the black areas being the most affected. A low Response Position value places grain in the darkest image values, while a high Response Position value places grain in the brightest areas. Response Range will increase or decrease the area where grain is added to the image based on the value of the slider.

**8 If you want, use Response Minimum to set the minimum level of grain that is always added to the image.**

- 9 Click the Done icon to return to the host application.



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Grain](#) filter for more information.

# Grunge

Adds film dirt, hair, scratches, stains, splotches, gate weave, flicker, vignetting and grain--all to make your pristine image look like damaged film.

**1 Apply Grunge from the Film Lab category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Use any combination of dirt, hair, scratches, stains, splotches, gate weave, flicker, vignetting and grain by adjusting the respective element's Opacity slider.**

**5 Change the Randomize slider and you will have a new pattern of whatever element you are adding.**

Each grunge element can either be black or white depending on whether Positive or Negative is selected in the Type pop-up menu. Positive films have black grunge elements and negative films have white elements.

**6 Choose either Positive or Negative in the Type pop-up menu for each grunge element.**

**7 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Grunge](#) filter for more information.

# Harris Shutter

The Harris Shutter filter uses separate images for the red, green and blue channels or offsets the individual channels of a sequence in time.

- 1 Apply Harris Shutter from the Special Effects category.**
- 2 If using the same sequence but offset in time for the various channels, set the Red, Green and Blue > Offset.**
- 3 Select the source for the Red, Green and Blue channels.**
  - **After Effects:** Select the layer from the Red, Green, and Blue > Source selector.
  - **Premiere Pro:** Select the track from the Red, Green, and Blue > Source selector.
  - **Final Cut Pro X:** Click the drop zone to the right of the Red, Green, or Blue > Source parameter, choose a clip, and press Apply Clip below the Viewer.
  - **Avid Editing Systems:** Place the source clips on a track below the clip you applied Harris Shutter to. Source 1, Source 2, and Source 3 are numbered from top to bottom where Source 1 is the first track below the one Harris Shutter is applied to.
  - **OFX Hosts:** Assign the images to be used as the Red, Green, or Blue > Sources.

**Note:** The Red, Green and Blue source inputs are only available in OFX hosts that support auxiliary inputs. If auxiliary inputs are not supported, they will not be visible. Consult the host documentation for instructions on how to assign a source input as this will vary by host.

If an image is not assigned using the Source parameters, the original image's color channel will be used.

- 4 Adjust the Red, Green and Blue > Amounts to the desired level.**  
See the [Harris Shutter](#) filter for more information.

# Haze / Sky

## Haze

Reduces excessive blue by absorbing UV light and eliminates haze which tends to wash out color and image clarity.

## Sky

Reduces UV light, haze and is pink tinted for added warmth and better colors. It is especially useful for images shot in outdoor open shade and on overcast days.

**1 Apply Haze or Sky from the Color category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Set the amount of haze to be removed from the scene using the Haze control.**

**5 Adjust the Temperature and Cyan/Magenta parameters to your liking.**

**Note:** Cyan/Magenta is only included in the Sky filter.

**6 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Haze and Sky](#) filters for more information.

# High Contrast

Creates an extreme high contrast image.

**1 Apply High Contrast from the Color category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Contrast and Amount sliders until you achieve the desired amount of contrast.**

**5 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [High Contrast](#) filter for more information.

# Holdout Composite

The Holdout Composite is a two-layer/track effect that effectively composites images such as fire, explosions and smoke.

## 1 Apply Holdout Composite from the Composite category:

### After Effects / Premiere Pro

- To use Holdout Composite, the layers/tracks should be stacked in the following order from bottom to top: background and then foreground.
- Apply Holdout Composite to the top foreground layer/track.
- Using the Background pop-up menu, choose the layer/track to be used as the background.

### Avid

- To use Holdout Composite, the video tracks should be stacked in the following order from bottom to top: background and then foreground.
- Apply Holdout Composite to the top foreground track.

### Final Cut Pro

- Apply Holdout Composite to a clip.
- Click the drop zone to the right of the Background parameter, choose a clip, and press Apply Clip below the Viewer.

### Motion

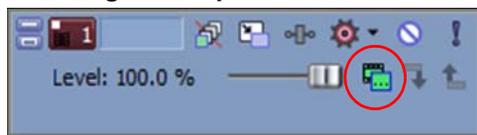
- Apply Holdout Composite to a clip.
- Drag the clip to be used as the background and place it onto the drop zone to the right of the Background parameter.

### OFX

- For node based hosts, apply Holdout Composite to a foreground clip and then hook up a background clip.
- For layer based hosts, the layers/tracks should be stacked in the following order from bottom to top: background and then a foreground clip. Then, apply Holdout Composite to the top foreground layer/track.

**Note:** In Vegas, Holdout Composite is accessed through the Composite Mode icon in the track controls and then navigating to the Custom > DFT v1 > Composite category.

#### Vegas Composite Mode Icon



Holdout Composite creates a luminance matte of the foreground and pastes it as black (or optionally as another color) over the background. You can adjust Black and White Clip of this luminance matte using the Matte controls.

- 2 Change the View to Matte.**
- 3 If needed, adjust the Matte > Black Clip to make blacks in the matte blacker.**
- 4 If needed, adjust the Matte > White Clip to make whites in the matte whiter.**
- 5 Change the View back to Output.**
- 6 Choose either the Add, Screen or Lighten Blend mode. Add or Screen usually work best.**
- 7 Set the Level control to your liking.**

If the blacks in your composite look milky, it is usually because the foreground blacks are not entirely black. These impure black areas will be added to the background image as part of the Holdout Composite causing the final result to have milky blacks. You can improve milky blacks using Black Clip.

- 8 Use Black Clip if the composite's blacks look milky.**

Go to the [Holdout Composite](#) filter for more information.

## Hot Spot

Utilized in most lens flares, glow ball simulates the circular glow created when a light source interacts with a lens.

**1 Apply Hot Spot from the Light category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Click and drag the point control to move the Hot Spot and use Total Scale to change the size.**

**5 Adjust the Brightness, Inner Color and Outer Color.**

**6 Change the Ring controls to vary the look of the ring.**

**7 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Hot Spot](#) filter for more information.



# Ice Halos

Ice halos are created when small ice crystals in the atmosphere generate halos by reflecting and refracting light. Most notably, circles form around the sun or moon as well as rare occurrences when the entire sky is painted with a web of arcing halos.

**1 Apply Ice Halos from the Light category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 You can also choose different ice halos by adjusting the Halo > Sun Altitude slider.**

**5 Choose Light > Blend > Add or Screen blend mode.**

Add will burn out highlights while Screen will retain them.

**6 In the Light menu, adjust the Brightness as well as the Displacement and Blur of the ice halo if you'd like.**

**7 Adjust the position of the ice halo by clicking and dragging the center image point to the desired location.**

**8 You can also use the Halo > Scale control to transform the ice halo.**

**9 Combine the ice halo with a matte by changing Halo > Blend from Halo Only to Matte.**

Matte only adds the ice halo in the areas of the matte. If you are not seeing enough of the ice halo, your matte should be adjusted.

**10 Change your View selector to Matte to see the matte values.**

The default matte settings are preset to a highlight matte. The areas that are white in the matte are the areas where the ice halo will be added into the image. The location of the ice halo within the scene can be adjusted by changing the Matte > Position and Range parameters.

**11 Change the View selector from Matte to Output.**

**12 Change the Matte > Position parameter if you want to change where you see the ice halo.**



- 13 Increase the **Matte > Range** value to add more of the ice halo to the scene. Decrease to see less of the ice halo.
- 14 Increase the **Matte > Blur** parameter to soften the matte.
- 15 Click the **Done** icon to return to the host application.



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Ice Halos](#) filter for more information.

# Infrared

Infrared simulates infrared filters used in conjunction with infrared sensitive film or sensors to produce very interesting black and white images with glow in highlight areas.

**1 Apply Infrared from the Special Effects category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Choose the type of black and white filter to be applied to your color image from the Black and White pop-up menu.**

The type of Black and White filter that you choose can dramatically change the look of your image.

**5 Set the Mist > Brightness and Blur to your liking.**

**6 If you want, you can use the Color Correct controls to modify the Brightness, Contrast and Gamma of the image.**

In some of the filters, a matte is generated to create the desired effect--in this case, diffusion.

**7 Change your View to Matte to see the matte values.**

The areas that are white in the matte are the areas where diffusion will be introduced. The location of the diffusion within the scene can be adjusted by modifying the Matte > Position and Range parameters.

**8 Change the Matte > Position parameter if you want to select different values to be used for the matte.**

**9 Increase the Matte > Range control to add more values to the matte. Decrease for less values.**

**10 Increase the Matte > Blur parameter to soften the transition areas of the matte.**

**11 Change your View to Output to see the filtered image.**

**12 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Infrared](#) filter for more information.

# Kelvin

Degrees Kelvin is the standard unit of measure for color temperature which is a way to characterize the spectral properties of a light source. Low color temperature implies warmer (redder) light, while high color temperature implies a colder (bluer) light.

**1 Apply Kelvin from the Color category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

The Color Temperature of the image is determined by the difference of the Destination and Source Kelvin parameters.

**4 Adjust the Destination Kelvin slider.**

Presets for a number of different light sources and conditions are provided in degrees Kelvin, the standard unit of measure for color temperature.

**5 If you want less coloring of the image, turn down the Color Temperature > Opacity.**

**6 Image highlights can be retained by adjusting the Color Temperature > Preserve Highlights control to a value of 100.**

The temperature adjustment can be applied through a gradient creating a graduated transition between the colored portion and the original image.

**7 Click on the Grad > Enable checkbox to activate the Grad.**

**8 Adjust the Grad > Type, Corner Points, Size and Angle.**

To adjust the Corner Points, just click and drag them to the desired location.

Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

**9 If you are curious, you can see what the Grad looks like by changing your View to Grad. Change your View to Output when done.**

**10** Click the Done icon to return to the host application.



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Kelvin](#) filter for more information.

# Key Light

Using Key Light, an image can be relit by with either a directional or point light.

**1 Apply Key Light from the Light category.**

Parallel is the default light source type and creates a directional light source.

**2 Adjust the Angle to change the direction of the light source.**

**3 Set the Strength slider for the desired light intensity.**

**4 Switch the Type to Point.**

A point light is used where the light either emanates from or fades into a vanishing point depending on the state of the Invert control.

**5 Move the point control in the center of the screen to change the Point light location.**

**Note:** For Final Cut Pro, you must activate the cross hair icon next to the Position parameter to move the Point light location.

**6 Activate Invert and the light source will fade into a vanishing point.**

**7 Set the Strength slider.**

See the [Key Light](#) filter for more information.



# Lens Distortion

Lens Distortion corrects for pin-cushioning and barrel distortion of camera lenses. It is also useful for creating the look of a wide angle lens.

- 1 Apply Lens Distortion from the Lens category.**
- 2 Start by adjusting the Distortion control to straighten out any curved lines that should be straight.**

**Note:** Positive Distortion parameters correct Pin-cushioning while negative values correct Barrel distortion.

Depending on the lens that was used, you may need to also adjust the Anamorphic Squeeze and Curvature X and Y parameters.

See the [Lens Distortion](#) filter for more information.



# Lens Flare

Lens flares are produced by the scattering or flaring of light within a lens when pointed into a bright light. Although an image aberration, lens flares can be added for dramatic effect.

**1 Apply Lens Flare from the Light category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

At the top left of the Presets window, the lens flares are categorized into various groups located inside a pop-up menu.

**4 In the Presets window, choose a new preset group from the pop-up menu to see a different set of lens flare presets.**

**5 Click and drag the hot spot point control to move the origin of the lens flare. This is the Position control.**

**6 Click and drag the center point control to change the end position of the lens flare. This is the Pivot control.**

**7 Adjust the Color, Brightness, Scale and Angle as desired.**

If the lens flare is positioned towards the edge of the frame, you can use the Edge Flare controls to simulate the flaring of the light source as the flare enters or exists the frame.

**8 Change the Edge Flare > Amount and Size and then move the lens flare towards the edge of the screen to see the effect.**

**9 Noise can be added to all elements by enabling Noise > All Elements and then setting the noise controls.**

**Note:** To selectively add noise to a single element, you would enable the Lens Noise parameter within the Flare Editor for the desired element. See the next tutorial.

To edit lens flare elements, open the Flare Editor.

## Editing A Lens Flare

**1 Click the Edit Flare button.**

The Flare Editor interface opens consisting of a Viewer, Parameters, Global, Flare (currently used flare elements) and Elements (all available elements).

**Note:** The controls shown in the Global tab affect all elements. These are the same as those shown in the DFT interface prior to opening the Flare Editor.

**2 Click on an element in the Flare window to select it.**

The controls for the selected element are displayed in the Parameters tab.

**3 Adjust the parameters to taste.**

When multiple elements are selected, the controls for all selected elements are displayed and grouped in the Parameters window.

**4 Add additional elements by either...**

- Double-click an element in the Elements window and it is added to the end of the stack in the Flare window. If an element is selected in the Flare window prior to the double-click, the new element is added after the selection.

or

- Drag and drop from the Elements window to the Flare window or Viewer. Multiple selected elements can be dragged and dropped simultaneously.

**5 To move an element to a new position in the stack, drag the element's icon to a new position. Multiple elements can be moved at once.**

**6 To rename an element, click in the element's text box and type to rename it.**

**7 To delete an element, select it and press the Delete key.**

**8 To delete all elements and start from scratch, press the Reset icon at the top left of the Viewer.**



**9 Click the Done icon to exit the Flare Editor.**



**10 Click the Done icon again to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

To finish off the lens flare and to help integrate it into your footage, you can use Occlusion and Flicker. Occlusion blocks the lens flare using one of the source layer's RGBA channels so it will appear to come from behind an object, while Flicker will simulate a flickering light source.

**11 To use Occlusion, first specify the Occlusion > Source.**

- **After Effects:** Select the layer from the Occlusion > Source selector.
- **Premiere Pro:** Select the track from the Occlusion > Source selector.
- **Final Cut Pro X:** Click the drop zone to the right of the Occlusion > Source parameter, choose a clip, and press Apply Clip below the Viewer.
- **Avid Editing Systems:** Place the source clip on a track below the clip you applied Lens Flare to.
- **OFX Hosts:** Assign the image to be used as the Occlusion > Source.

If a source is not specified, the Occlusion > Threshold is based on the clip that Lens Flare is applied to.

**Note:** The Source input is only available in OFX hosts that support auxiliary inputs. If auxiliary inputs are not supported, they will not be visible. Consult the host documentation for instructions on how to assign a source input as this will vary by host.

**12 Set the Occlusion > Channel to determine which channel to use for the occlusion source.**

**13 Adjust the Occlusion > Threshold to control how much the occlusion source affects the flare.**

**14 Enable Occlusion > Invert to reverse the visibility of the lens flare as determined by the source.**

The visibility of the lens flare will now automatically animate based on the source input channel.

**15 If the light source is flickering, you can also flicker the lens flare by adjusting the Flicker > Amount and Speed.**

See the [Lens Flare](#) filter for more information.

# Light

Light can be added to a scene where none existed before just as if you were adding light at the time of shooting. Realistic lighting and shadow is introduced using digital versions of lighting gobos.

**1 Apply Light from the Light category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

At the top left of the Presets window, the gobos are categorized into various groups located inside a pop-up menu.

**4 In the Presets window, choose a new gobo group from the pop-up menu to see a different set of gobo presets.**

**5 Choose Light > Blend > Add, Screen or Subtract for the blend mode.**

Add will burn out highlights while Screen will retain them. Subtract, on the other hand, will add shadow in place of light in the area of the gobo.

**6 In the Light menu, adjust the Brightness, Displacement, and Blur of the light.**

Adding blur to the light makes the light glow.

**7 Adjust the position of the gobo by clicking and dragging the center image point to the desired location.**

**8 You can also use the Gobo > Transform controls to transform the gobo.**

**9 To apply a custom light color to the image, click on the Light > Color box and select a color.**

**10 To apply a colored gel to the light, select one from the Light > Gels pop-up menus.**

**11 Combine the gobo with a matte by changing Gobo > Blend from Gobo Only to Multiply.**

I like the Multiply blend mode because it only adds the gobo in the areas of the matte.

**12 Change your View selector to Matte to see the matte values.**

The default matte settings are preset to a highlight matte to create the light effect. If you are not seeing sufficient light, your matte should be adjusted. The areas that are white in the matte are the areas where light will be added into the image. The location of the light within the scene can be adjusted by changing the Matte > Position and Range parameters.

- 13** Change the Matte > Position parameter if you want to select different values to be used for the light.
- 14** Increase the Matte > Range value to add more light into the scene. Decrease for less light.
- 15** Increase the Matte > Blur parameter to soften the transition areas of the light.
- 16** Change the View selector from Matte to Output.
- 17** The softness of the light can also be adjusted using the Light > Blur setting.
- 18** Click the Done icon to return to the host application.



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

- 19** To use your own image or sequence as the light source:

#### **After Effects:**

- Select Input from the Gobo > Type menu.
- Select a layer from the Gobo > Input menu.

#### **Premiere Pro:**

- Select Input from the Gobo > Type menu.
- Select a track from pop-up menu located below the Gobo > Type menu.

#### **Final Cut Pro X:**

- Select Input from the Gobo > Type menu.
- Click the drop zone to the right of the Gobo Input parameter, choose a clip, and press Apply Clip below the Viewer.

#### **Motion:**

- Select Input from the Gobo > Type menu.

- Drag the image to be used as the light source and place it onto the drop zone to the right of the Gobo > Input parameter.

### **Avid Editing Systems**

- Select Input from the top most pop-up in the Gobo group.
- Place the light source clip on a track below the clip you applied Light to.

**Note:** If the camera is moving and you want to add a gobo, the gobo won't automatically follow the camera. You will either need to manually move the gobo to follow the camera or better, use Motion Tracking software to Match Move the gobo to the camera move. Track the motion of your source image, set your View to Gobo, apply the tracker motion to your gobo and render it. To use the newly tracked and rendered gobo as a light source, follow the previous instructions listed for using your own image or sequence as the light source.

### **OFX Hosts**

- Assign the image to be used as the light source.

**Note:** Using an image as the light source is only available in OFX hosts that support auxiliary inputs. Consult the host documentation for instructions on how to assign a source input as this will vary by host.

- Select Input from the top most pop-up in the Gobo group.
- The assigned input will now be used as the light source.

See the [Light](#) filter for more information.

# Light Wrap

Light Wrap helps blend the foreground into the background by making the color of the background wrap into the foreground edges without softening the edge.

## 1 Apply Light Wrap from the Composite category:

### After Effects / Premiere Pro

- To use Light Wrap, the layers/tracks should be stacked in the following order from bottom to top: background and then a foreground that is a RGB+Alpha clip.
- Apply Light Wrap to the top foreground layer/track.
- Using the Background pop-up menu, choose the layer/track to use for the Light Wrap source.

### Avid

- To use Light Wrap, you can work with either two or three video tracks. When working with three tracks, the video tracks should be stacked in the following order from bottom to top: background, foreground and matte. When working with two tracks, the top track must contain a Matte Key (RGB+Alpha clip).
- For a two track effect, apply Light Wrap to the track that contains the Matte Key. For a three track effect, apply Light Wrap to the track that has the matte.
- Depending on what is black and white in your matte, you may need to set the Alpha pop-up menu to a non-inverted selection. By default, Light Wrap inverts the matte to be compatible with the way Avid treats matte values in a Matte Key.

### Final Cut Pro

- Apply Light Wrap to a RGB+Alpha clip.
- Click the drop zone to the right of the Background parameter, choose a clip, and press Apply Clip below the Viewer.

### Motion

- Apply Light Wrap to a RGB+Alpha clip.
- Drag the clip to be used as the Light Wrap source and place it onto the drop zone to the right of the Background parameter.

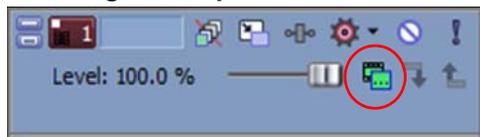
### OFX

- For node based hosts, apply Light Wrap to a RGB+Alpha clip, hook up a background and then use a Composite or Merge node to composite the result.

- For layer based hosts, the layers/tracks should be stacked in the following order from bottom to top: background and then a foreground that is a RGB+Alpha clip. Then, apply Light Wrap to the top foreground layer/track.

**Note:** In Vegas, Light Wrap is accessed through the Composite Mode icon in the track controls and then navigating to the Custom > DFT v1 > Composite category.

#### Vegas Composite Mode Icon



- 2 Change the View to Light Wrap.
- 3 Using the Wrap control, set the thickness of the Light Wrap.
- 4 Switch the View back to Output.
- 5 Adjust the Brightness setting to the appropriate brightness.

Go to the [Light Wrap](#) filter for more information.

## Low Contrast

Low Contrast spreads highlights into darker areas, lowers contrast and keeps bright areas bright.

**1 Apply Low Contrast from the Color category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Contrast > Light Brightness and Contrast > Light Spread to control the brightness and distance of the light being spread into the shadow areas.**

In some of the filters, a matte is generated to create the desired effect--in this case, low contrast.

**5 Change your View to Matte to see the matte values.**

The areas that are white in the matte will be the image areas used to spread light into the shadow areas. The location of the low contrast within the scene can be adjusted by modifying the Matte > Position and Range parameters.

**6 Change the Matte > Position parameter if you want to select different values to be used for the matte.**

**7 Increase the Matte > Range control to add more values to the matte. Decrease for less values.**

**8 Change your View to Spread to see the special matte used to create the low contrast effect.**

The Spread matte will change as the Contrast > Light Spread slider is adjusted.

**9 Move the Contrast > Light Spread slider to see how it affects the Spread matte. Leave it at a value of 200 when you are done.**

**10 Change your View to Output to see the filtered image.**

**11 Adjust the Contrast > Shadow Brightness if your shadows are still too dark.**

**12 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Low Contrast](#) filter for more information.



# Match

Matches the brightness and color from one image and applies it to another.

- 1** Apply the Match filter from the Color category to a target clip.
- 2** Select the source image to be matched using the Source selector.
  - **After Effects:** Select the layer from the Source selector.
  - **Premiere Pro:** Select the track from the Source selector.
  - **Final Cut Pro X:** Click the drop zone to the right of the Source parameter, choose a clip, and press Apply Clip below the Viewer.
  - **Avid Editing Systems:** Place the source clip on a track below the clip you applied the Match filter to.

Using the Mode parameter, the match can occur on the first frame, every frame or using a reference image from a particular frame.

- 3** To use a reference image from a particular frame, change the View from Output to Source.
- 4** Find the frame in the sequence that you would like to match.
- 5** Set the Mode to Reference Image and then press the Set Reference Image button.

The color and brightness of the source image are analyzed and applied to your target image.

- 6** Switch the View from Source to Output to see the result.
- 7** Adjust the Color and Brightness parameters to your liking.

See the [Match](#) filter for more information.



# Math Composite

Math Composite combines two clips using one of the Blend modes. You can choose from Add, Subtract, Multiply, Screen, Difference, Darken and Lighten.

## 1 Apply Math Composite from the Composite category:

### After Effects

- To use Math Composite, the layers should be stacked in the following order from bottom to top: background and then foreground.
- Apply Math Composite to the top foreground layer.
- Using the Background pop-up menu, choose the layer to use as the background.

### Avid

- To use Math Composite, the video tracks should be stacked in the following order from bottom to top: background and then foreground.
- Apply Math Composite to the top foreground track.

### Final Cut Pro

- Apply Math Composite to a track.
- Click the drop zone to the right of the Background parameter, choose a clip, and press Apply Clip below the Viewer.

### Motion

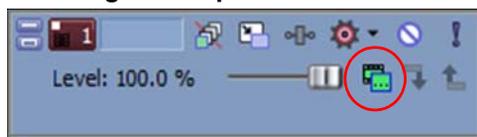
- Apply Math Composite to a track.
- Drag the clip to be used as the background and place it onto the drop zone to the right of the Background parameter.

### OFX

- For node based hosts, apply Math Composite to a foreground clip and then hook up a background clip.
- For layer based hosts, the layers/tracks should be stacked in the following order from bottom to top: background and then foreground. Then, apply Math Composite to the top foreground layer/track.

**Note:** In Vegas, Math Composite is accessed through the Composite Mode icon in the track controls and then navigating to the Custom > DFT v1 > Composite category.

#### Vegas Composite Mode Icon



## 2 Choose the appropriate mode from the Blend pop-up menu.

If the blacks in your composite look milky, it is usually because the foreground blacks are not entirely black. Depending on the Blend mode that you choose, the impure black areas may be added to the background image causing the final result to have milky blacks. You can improve milky blacks using Black Clip.

- 3 Use Black Clip if the composite's blacks look milky.**
- 4 Set the Level control to your liking.**

Go to the [Math Composite](#) filter for more information.

# Matte Repair

Matte Repair grows, shrinks or blurs a matte. It also is handy for cleaning up impurities in the black or white areas.

## 1 Apply Matte Repair from the Key category:

### After Effects / Final Cut Pro / Motion / Premiere Pro

- To use Matte Repair, the layers/tracks should be stacked in the following order from bottom to top: background and then a foreground that is a RGB+Alpha clip.
- Apply Matte Repair to the top foreground layer/track.

### Avid

- To use Matte Repair, you can work with either two or three video tracks. When working with three tracks, the video tracks should be stacked in the following order from bottom to top: background, foreground and matte. When working with two tracks, the top track must contain a Matte Key (RGB+Alpha clip).
- For a two track effect, apply Matte Repair to the track that contains the Matte Key. For a three track effect, apply Matte Repair to the track that has the matte.
- Depending on what is black and white in your matte, you may need to set the Alpha pop-up menu to a non-inverted selection. By default, Matte Repair inverts the matte to be compatible with the way Avid treats matte values in a Matte Key.

### OFX

- For node based hosts, apply Matte Repair to a RGB+Alpha clip and then use a Composite or Merge node to composite the result.
- For layer based hosts, the layers/tracks should be stacked in the following order from bottom to top: background and then a foreground that is a RGB+Alpha clip. Then, apply Matte Repair to the top foreground layer/track.

## 2 Change your View to Matte to see the matte values.

## 3 Set the Use pop-up menu for the image channel you want to repair.

**Note:** The Use parameter is not available in Avid Editing Systems. When applied to a Matte Key, the Alpha Channel is used, otherwise it uses the luminance of the RGB channels.

## 4 Adjust Black Clip if you want to make the blacks blacker.

## 5 Adjust White Clip if you want to make the whites whiter.

## 6 If the edges of your matte need smoothing, use the Shrink/Grow, Blur or Wrap parameters to take care of them.

If you applied Matte Repair to a RGB+Alpha clip and there is a background layer/track below it, you can make adjustments and see the effect it has on your composite when the View is set to Output.

**7 Change the View back to Output.**

Go to the [Matte Repair](#) filter for more information.

# Mist

Mist creates atmosphere by reducing contrast while creating a glow around highlights. A more subtle version of Mist, the Black Mist preset creates atmosphere by reducing contrast, but with minimal glow around highlights. The Warm Mist's add a warming filter while Cool Mist adds a cooling filter.

**1 Apply Mist from the Diffusion category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

At the top left of the Presets window, the presets are categorized into various groups located inside a pop-up menu.

**4 In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**

**5 Adjust the Mist > Brightness, Blur and Color settings to your liking.**

In some of the filters, a matte is generated to create the desired effect--in this case, mist.

**6 Change your View to Matte to see the matte values.**

The areas that are white in the matte are the areas where glow will be introduced. The location of the glow within the scene can be adjusted by modifying the Matte > Position and Range parameters.

**7 Change the Matte > Position parameter if you want to select different values to be used for the matte.**

**8 Increase the Matte > Range control to add more values to the matte. Decrease for less values.**

**9 Increase the Matte > Blur parameter to soften the transition areas of the matte.**

**10 Change your View to Output to see the filtered image.**

**11 If you applied one of the Warm or Cool Mist presets, adjust the Color Correct > Temperature slider to your liking.**

**12** Click the Done icon to return to the host application.



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Mist](#) filter for more information.

## Multi-Star

User definable multi-point star patterns are generated on highlights in the image.

**1 Apply Multi-Star from the Light category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Star > Brightness, Spokes, Size and Color settings to your liking.**

In some of the filters, a matte is generated to create the desired effect--in this case, a star filter.

**5 Change your View to Matte to see the matte values.**

The matte has been preset to a highlight matte to generate the stars. Different luminance values can be selected with the Matte > Position parameter and the range of matte values can be adjusted using Matte > Range.

**6 Change the Matte > Position parameter if you want to select different luminance values to be used for the matte.**

Stars will be generated wherever there are white values in the matte.

**7 Change your View to Stars to see the generated stars.**

**8 Increase the Matte > Range value to add more stars into the scene. Decrease for less stars.**

**9 Change your View to Output to see the filtered image.**

**10 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Multi-Star](#) filter for more information.

## ND Gradient

ND (Neutral Density) Gradient darkens only a portion of the image using a graduated transition between the darkened portion and the original image. It selectively adjusts brightness without affecting color balance. The most likely use for ND Gradient would be to balance the difference between the sky and ground in a landscape.

**1 Apply ND Gradient from the Grads/Tints category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Exposure slider to vary the amount of neutral density being applied to the image.**

**5 Adjust the Grad > Type, Corner Points, Size and Angle.**

To adjust the Corner Points, just click and drag them to the desired location.

Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

**6 If you are curious, you can see what the Grad looks like by changing your View to Grad. Change your View to Output when done.**

**7 If you want less darkening of the image in the area of the Grad, adjust F-Stop > Exposure.**

**8 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the **ND Gradient** filter for more information.

# Net

Softens and minimizes facial imperfections while retaining image clarity. Warm Net adds a warming filter.

**1 Apply Net from the Diffusion category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

At the top left of the Presets window, the presets are categorized into various groups located inside a pop-up menu.

**4 In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**

**5 Adjust the Blur and Opacity parameters to your liking.**

**6 If using a Warm Net preset, adjust the Color Correct > Temperature control to your liking.**

**7 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Net](#) filter for more information.

# Night Vision

Night Vision creates the effect of a Night Vision lens by tinting the image green, blooming highlights and adding grain.

**1 Apply Night Vision from the Special Effects category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

At the top left of the Presets window, the presets are categorized into various groups located inside a pop-up menu.

**4 In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**

**5 Choose the type of black and white filter to be applied to your color image from the Black and White pop-up menu.**

The type of Black and White filter that you choose can dramatically change the look of your image.

**6 Adjust the Glow > Brightness and Blur as well as the Grain > Size and Amount settings to your liking.**

**Note:** You may not see an accurate representation of the grain in the viewer unless your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio.

**7 If you want, you can use the Color Correct controls to modify the color of the image.**

In some of the filters, a matte is generated to create the desired effect--in this case, glow.

**8 Change your View to Matte to see the matte values.**

The areas that are white in the matte are the areas where glow will be introduced. The location of the glow within the scene can be adjusted by modifying the Matte > Position and Range parameters.

**9 Change the Matte > Position parameter if you want to select different values to be used for the matte.**

- 10 Increase the **Matte > Range** control to add more values to the matte. Decrease for less values.
- 11 Increase the **Matte > Blur** parameter to soften the transition areas of the matte.
- 12 Change your **View** to **Output** to see the filtered image.
- 13 Click the **Done** icon to return to the host application.



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Night Vision](#) filter for more information.

# Non-Additive Mix

Known as a NAM, non-additive mix combines two images by controlling their luminance level relative to each other as well as a set mix percentage.

## 1 Apply Non-Additive Mix from the Composite category:

### After Effects

- To use Non-Additive Mix, the layers should be stacked in the following order from bottom to top: background and then foreground.
- Apply Non-Additive Mix to the top foreground layer.
- Using the Background pop-up menu, choose the layer to use as the background.

### Avid

- To use Non-Additive Mix, the video tracks should be stacked in the following order from bottom to top: background and then foreground.
- Apply Non-additive Mix to the top foreground track.

### Final Cut Pro

- Apply Non-Additive Mix to a track.
- Click the drop zone to the right of the Background parameter, choose a clip, and press Apply Clip below the Viewer.

### Motion

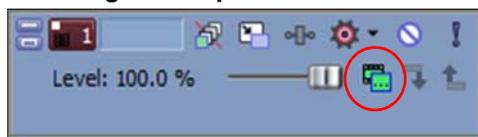
- Apply Non-Additive Mix to a track.
- Drag the clip to be used as the background and place it onto the drop zone to the right of the Background parameter.

### OFX

- For node based hosts, apply Non-Additive Mix to a foreground clip and then hook up a background clip.
- For layer based hosts, the layers/tracks should be stacked in the following order from bottom to top: background and then foreground. Then, apply Non-Additive Mix to the top foreground layer/track.

**Note:** In Vegas, Non-Additive Mix is accessed through the Composite Mode icon in the track controls and then navigating to the Custom > DFT v1 > Composite category.

#### Vegas Composite Mode Icon



## 2 Set the Mix value so that the foreground clip is blended with the background.

If the blacks in your composite look milky, it is usually because the foreground blacks are not entirely black. These impure black areas will be added to the background clip as part of the Non-Additive Mix causing the final result to have milky blacks. You can improve milky blacks using Black Clip.

**3 Use Black Clip if the composite's blacks look milky.**

Go to the [Non-Additive Mix](#) filter for more information.



# Optical Dissolve

Optical Dissolve uses a power function to simulate an optical film dissolve.

## 1 Apply Optical Dissolve from the Composite category:

After Effects / Final Cut Pro / Motion / Premiere Pro

- The layers/tracks should be stacked in the following order from bottom to top: background and then foreground.
- Apply Optical Dissolve to the top foreground layer/track.

## OFX

- For node based hosts, apply Optical Dissolve to a foreground clip and then hook up a background clip.
- For layer based hosts, the layers/tracks should be stacked in the following order from bottom to top: background and then foreground. Then, apply Optical Dissolve to the top foreground layer/track.

## 2 Set the Opacity value so that the foreground clip is blended with the background.

Go to the [Optical Dissolve](#) filter for more information.



# Overexpose

Overexpose simulates the overexposure that occurs when a film camera is stopped.

**1 Apply Overexpose from the Film Lab category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Amount, Intensity and Blur controls to achieve the desired effect.**

**5 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Overexpose](#) filter for more information.

# Ozone

The Ozone filter allows you to manipulate the color of an image with incredible flexibility and accuracy. The spectrum of image values is divided into 11 discrete zones using proprietary image slicing algorithms. When using Luminance as the method for slicing up the image, the Position and Range sliders are preset so that each zone is twice as bright as the previous zone, proceeding from black towards white. The color values of each zone can then be independently adjusted until you've painted a new picture. Your adjustments occur on a zone by zone basis, but you view the result of all color corrections simultaneously.

**1 Apply Ozone from the Color category.**

**2 Use the View menu to look at Zones 0-10.**

The selected zone is represented as a black and white image. The values shown as white in the selected zone are the portions of the image that will be modified when using the color adjustments. As the values drop-off to black, so does the strength of whatever adjustments you'll make. Although the zone's Position and Range parameters are preset according to the Digital Zone system, they can be changed if you want.

**3 If you'd like, change the Position and Range parameters for the selected zone.**

The Position value pinpoints the color values to be used in the selected zone. For instance, if the zones are created using Luminance, a high Position value shows the brightest image values as white values in the zone. A low Position value shows the darkest image values as white values in the zone. The Range value increases or decreases the range of values in the selected zone.

**4 Make sure that the View is set to Output.**

The Viewer now shows the full color image.

**5 To modify your image, adjust any combination of the Hue, Saturation, Brightness, Contrast, Gamma, Red, Green, Blue, Temperature, and Cyan/Magenta sliders for each zone.**

Your adjustments occur on a zone by zone basis, but you view the result of all color corrections simultaneously.

See the [Ozone](#) filter for more information.

# Pastel

Converts the image into pastel artwork.

**1 Apply Pastel from the Special Effects category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Amount to the desired level.**

**5 Set the Detail. Increasing the value shows more detail while decreasing the value shows less detail.**

**6 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Pastel](#) filter for more information.

# Pencil

Pencil converts your image to a pencil sketch.

- 1 Apply Pencil from the Special Effects category.**
- 2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

- 3 Try out some of the presets.**
- 4 Vary your result by adjusting both the Amount and Color controls.**
- 5 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Pencil](#) filter for more information.

# Photographic

The most complete line of Kodak® filters for photographic uses is available in the form of gelatin films and are known as Wratten® Gelatin Filters. Our Photographic filter is a digital equivalent of the Wratten set and were created using the spectral transmission curves for each optical filter. The Color Conversion, Light Balancing and Color Compensating preset groups are subsets of the Photographic filters.

**1 Apply Photographic from the Grads/Tints category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

At the top left of the Presets window, the presets are categorized into various groups located inside a pop-up menu.

**4 In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**

**5 If you want less coloring of the image, turn down the Color > Opacity.**

**6 Image highlights can be retained by adjusting the Filters > Preserve Highlights control to a value of 100.**

The selected filter can be applied through a gradient creating a graduated transition between the colored portion and the original image.

**7 Click on the Grad > Enable checkbox to activate the Grad.**

**8 Adjust the Grad > Type, Corner Points, Size and Angle.**

To adjust the Corner Points, just click and drag them to the desired location.

Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

**9 If you are curious, you can see what the Grad looks like by changing your View to Grad. Change your View to Output when done.**

**10** Click the Done icon to return to the host application.



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Photographic](#) filter for more information.

# Polarizer

The Polarizer creates a darkened, deep blue sky. Through the use of a matte and a gradient, the color of the sky can be adjusted. Warm Polarizer adds a warming filter.

**1 Apply Polarizer or Warm Polarizer from the Color category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

At the top left of the Presets window, the presets are categorized into various groups located inside a pop-up menu.

**4 In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**

**5 Change your View to Matte to see the matte values.**

In some of the filters, a matte is generated to create the desired effect--in this case, polarization.

**6 Change the Matte > Hue parameter if you want to select different blue values to be used for the sky matte.**

A matte is generated based on the blue values in the sky. Skies vary in their color of blue, so you can adjust the matte to accommodate your sky. The blue that is used to create the matte can be modified by using Matte > Hue to select the exact blue value and Matte > Range to select the amount of blue values to be used for the matte.

**7 Increase the Matte > Range control to add more values to the sky matte. Decrease for less values.**

**8 Increase the Matte > Blur parameter to soften the transition areas of the matte.**

Remember, the areas that are white in the matte are the areas that will be polarized.

**9 Change your View to Output to see the filtered image.**

**10 Adjust the Sky color settings to make the sky look polarized--usually Brightness and Saturation.**

- 11 If the polarization is affecting areas other than the sky, enable the Grad and adjust it to limit the areas of polarization.**

To adjust the Corner Points, just click and drag them to the desired location.

Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

- 12 If you applied Warm Polarizer, adjust the Warming > Color and Opacity sliders to your liking.**
- 13 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the **Polarizer** filter for more information.

## Rack Focus

Rack Focus replicates a true camera defocus by introducing lens Bokeh effects. Bokeh is the Japanese term that describes the quality of out-of-focus points of light. In defocused areas, each point of light becomes a shape--either a circle or a polygon. The shape grows in size as the amount of defocusing is increased.

**1 Apply Rack Focus from the Lens category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Blur to your liking.**

**5 Set the Aperture > Brightness and Color settings.**

**6 Change the Aperture > Facets to control the polygon's shape and use Angle to rotate the Bokeh.**

**7 Set the Aperture > Curvature to 100 if you prefer the Bokeh to be circular in shape.**

In some of the filters, a matte is generated to create the desired effect--in this case, Bokeh effects.

**8 Set your View to Matte to see the matte values.**

The matte has been preset to a highlight matte to generate the Bokeh effect. The areas that are white in the matte are the areas where Bokeh will be introduced. The location of the Bokeh within the scene can be adjusted by modifying the Matte > Position and Range controls.

**9 Change the Matte > Position parameter if you want to select different luminance values to be used for the matte.**

Bokeh will be generated wherever there are white values in the matte.

**10 Change your View to Aperture to see the Bokeh.**

**11 Increase the Matte > Range value to add more Bokeh into the scene. Decrease for less Bokeh.**

**12 Change your View to Output to see the filtered image.**

**13** Click the Done icon to return to the host application.



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Rack Focus](#) filter for more information.



# Radial Exposure

Lightens and/or darkens the center or edges of an image to correct lens vignetting.

- 1 Apply Radial Exposure from the Lens category.**
- 2 Adjust the Exposure > Edges or Center parameters.**

The radial gradient used to lighten or darken the edges or center of the image can be adjusted to suit your image.

- 3 Adjust the Spot > Position, Radius, Falloff Radius and Falloff.**
- 4 If you are curious, you can see what the Spot looks like by changing your View to Spot. Change your View to Output when done.**

See the [Radial Exposure](#) filter for more information.



## Radial Streaks

Short radial streaks emanating from the center point.

**1 Apply Radial Streaks from the Light category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Click and drag the point control to move the Radial Streaks and use Scale to change the size.**

**5 Adjust the Brightness and Color.**

**6 Use Element Count to set the amount of rays.**

**7 Change Randomize to vary the look of the rays.**

**8 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Radial Streaks](#) filter for more information.

# Radial Tint

Tints the image using multi-color, radially graduated filters.

**1 Apply Radial Tint from the Grads/Tints category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Radial Grad > Position, Size, Rotation and Aspect.**

**5 To set your own radial gradient colors, click on the Color 1, 2, 3 or 4 > Color boxes and select colors.**

Color 1 is the top left quadrant of the image, Color 2 is the top right quadrant, Color 3 is the bottom right quadrant and Color 4 is the bottom left quadrant.

**6 If you want less coloring of the image, turn down Color 1, Color 2, Color 3 or Color 4 > Opacity.**

**7 Image highlights can be retained by adjusting the Preserve Highlights control to a value of 100.**

**8 Change your View to Gradient to see the color gradient being applied to the image.**

**9 Change your View back to Output to see the filtered image.**

You can also mask out a portion of the Radial Tint effect using a Spot mask.

**10 To use a Spot mask with the Radial Tint, click on Spot > Enable.**

**11 Set the Spot > Radius, Falloff Radius and Falloff.**

**12 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Radial Tint](#) filter for more information.

# Rainbow

Recreates arced rainbows of spectral colors, usually identified as red, orange, yellow, green, blue, indigo, and violet, that appear in the sky as a result of the refractive dispersion of sunlight in drops of rain or mist.

**1 Apply Rainbow from the Light category.**

**2 Choose Light > Blend > Add, Screen or Normal blend mode.**

Add will burn out highlights while Screen will retain them. Normal uses a normal composite function to add the rainbow.

**3 In the Light menu, adjust the Brightness, and if you'd like, set the Displacement and Blur of the rainbow.**

**4 Set the base of the rainbow using Crop > Offset, Angle and Softness.**

**5 Use the Rainbow > Position control to move the rainbow.**

**6 Set the Rainbow > Radius, Aspect, and Thickness as desired.**

**7 Combine the rainbow with a matte by changing Rainbow > Blend from Rainbow Only to Matte.**

Matte only adds the rainbow in the areas of the matte. If you are not seeing enough of the rainbow, your matte should be adjusted.

**8 Change your View selector to Matte to see the matte values.**

The default matte settings are preset to a highlight matte. The areas that are white in the matte are the areas where the rainbow will be added into the image. The location of the rainbow within the scene can be adjusted by changing the Matte > Position and Range parameters.

**9 Change the View selector from Matte to Output.**

**10 Change the Matte > Position parameter if you want to change where you see the rainbow.**

**11 Increase the Matte > Range value to add more of the rainbow to the scene. Decrease to see less of the rainbow.**

**12 Increase the Matte > Blur parameter to soften the matte.**

See the [Rainbow](#) filter for more information.

# Random Spikes

Generates asymmetric radial rays.

**1 Apply Random Spikes from the Light category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Click and drag the point control to move the Random Spikes and use Scale to change the size.**

**5 Adjust the Brightness and Color.**

**6 Use Element Count to set the amount of rays.**

**7 Change Randomize to vary the look of the rays.**

**8 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Random Spikes](#) filter for more information.



# Rays

Create stunning and realistic light ray effects quickly and easily.

- 1 Apply Rays from the Light category.**
- 2 Move the point control in the center of the screen to change the source point from which the rays will emanate.**

**Note:** For Final Cut Pro, you must activate the cross hair icon next to the Position parameter to move the Rays source location.

- 3 Adjust the Rays > Length, Brightness, Color and Blur as desired.**
- 4 To limit the amount of rays, increase the Rays > Threshold parameter.**

Threshold controls the amount of rays based on a brightness threshold. Fewer rays with more definition are generated at higher threshold values.

- 5 Use the Shimmer > Amount and Phase to randomize the rays.**

If you are working with an image that lacks prominent highlight areas, you can use the Light Source parameters to generate rays.

- 6 Adjust Light Source > Brightness and Size to add an additional light source to create rays.**
- 7 Set the Texture controls to breakup the rays with a noise pattern.**  
See the [Rays](#) filter for more information.



# Reflector

Silver and gold reflectors allow you to add white or gold light into shadow areas.

**1 Apply Reflector from the Light category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

At the top left of the Presets window, the presets are categorized into various groups located inside a pop-up menu.

**4 In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**

**5 Adjust the Brightness and Color settings to your liking.**

In some of the filters, a matte is generated to create the desired effect--in this case, light reflecting into the shadow areas.

**6 Change your View to Matte to see the matte values.**

The areas that are white in the matte are the areas where light will be introduced. The location of the light within the scene can be adjusted by modifying the Position and Range parameters.

**7 Change the Position parameter if you want to select different values to be used for the matte.**

**8 Increase the Range controls to add more values to the matte. Decrease for less values.**

**9 Change your View to Output to see the filtered image.**

**10 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Reflector](#) filter for more information.



# ReLight

Light can be added to a scene where none existed before. A complete set of light source controls allow you to adjust the light just as you would at the time of shooting.

- 1 Apply the ReLight filter located in the Light category.**
- 2 Using the Light Source > Transform controls, you can transform the shape.**
- 3 In the Light menu, adjust the Brightness, Displacement, and Blur of the light.**

Adding blur to the light makes the light glow.

- 4 To apply a custom light color to the image, click on the Light > Color box and select a color.**
- 5 To choose one of the Gels, select one from the Light > Gels pop-up menu.**
- 6 Combine the light source with a matte by changing Light Source > Blend from Shape Only to Multiply.**

I like the Multiply blend mode because it only adds the light source in the areas of the matte.

- 7 Change your View selector to Matte to see the matte values.**

The default Matte settings are preset to a highlight matte to create the light effect. If you are not seeing sufficient light, your matte should be adjusted. The areas that are white in the matte are the areas where light will be added into the image. The location of the light within the scene can be adjusted by changing the Matte > Position and Range parameters.

- 8 Change the Matte > Position parameter if you want to select different values to be used for the light.**
- 9 Increase the Matte > Range value to add more light into the scene. Decrease for less light.**
- 10 Change the View selector from Matte to Output.**
- 11 Increase the Matte > Blur parameter to soften the transition areas of the matte.**

See the [ReLight](#) filter for more information.



## Selective Color Correct

Colors can be selectively isolated through the use of a matte and adjusted using hue, saturation, brightness, gamma, contrast, temperature, cyan/magenta, red, green, and blue controls.

**1 Apply Selective Color Correct from the Color category.**

**2 Change your View to Matte to see the matte values.**

In some of the filters, a matte is generated to create the desired effect--in this case, selective color correction.

**3 Adjust the matte controls so that the areas that you want to color correct are white in the matte.**

Go to the **Matte** parameters to see how they work.

**4 Change your View to Output to see the image.**

**5 Adjust the color correct parameters to your liking.**

See the **Selective Color Correct** filter for more information.

# Screen Smoother

Smooths out unevenly lit blue and green screens.

- 1 Apply Screen Smoother from the Key category to a blue or green screen.**
- 2 Choose either Blue Screen or Green Screen from the Matte > Extract On pop-up menu.**

By default, darker screen areas are brightened.

- 3 Adjust the Color Correct > Brightness to smooth out the screen.**
- 4 Set the other Color Correct parameters as needed.**
- 5 If you would like to adjust different areas of the screen, move the Matte > Position and Range sliders.**

The Position value pinpoints the exact blue or green screen values to be used in the matte, while the Range increases or decreases the range of values.

- 6 If you see noise developing as a result of the color correction, raise the Matte > Blur sliders.**

Go to the [Screen Smoother](#) filter for more information.

## Selective Saturation

The saturation of the image can be adjusted independently in the shadows, midtones and highlights.

**1 Apply Selective Saturation from the Color category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Saturation in the Shadows, Midtones or Highlights.**

In some of the filters, a matte is generated to create the desired effect--in this case, selective saturation. Shadow, midtone and highlight mattes have been preset for you to adjust the saturation selectively in those areas.

**5 Change your View to Shadows, Midtones or Highlights to see the matte values.**

The areas that are white in the matte are the areas that will be adjusted by the Saturation sliders. The areas defined as shadows, midtones or highlights can be adjusted by modifying the Position and Range parameters.

**6 Use the Shadows, Midtones or Highlights Position parameters if you want to select different values to be used for the matte.**

**7 Increase the Shadows, Midtones or Highlights Range controls to add more values to the matte. Decrease for less values.**

**8 Change your View to Output to see the image.**

**9 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Selective Saturation](#) filter for more information.

# Sepia

Sepia creates a warm brown tone for a nostalgic feeling.

**1 Apply Sepia from the Grads/Tints category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Color > Amount, Opacity, Preserve Highlights and Exposure Compensation sliders to your liking.**

Sepia can be applied through a gradient creating a graduated transition between the colored portion and the original image.

**5 Click on the Grad > Enable checkbox to activate the Grad.**

**6 Adjust the Grad > Type, Corner Points, Size and Angle.**

To adjust the Corner Points, just click and drag them to the desired location.

Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

**7 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the **Sepia** filters for more information.

## Shadows/Highlights

Shadows/Highlights lowers contrast evenly throughout the image by brightening shadow areas and darkening highlights. It is useful for correcting dark foreground subjects due to strong backlighting as well as highlights that are slightly washed out.

**1 Apply Shadows/Highlights from the Color category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Shadows > Shadows slider to brighten shadow areas.**

**5 Adjust the Highlights > Highlights slider to darken highlight areas.**

In some of the filters, a matte is generated to create the desired effect--in this case, lowering contrast.

**6 Change your View to Shadows or Highlights to see the matte values.**

The areas that are white in the matte are the areas that will be adjusted by either the Shadows or Highlights sliders. The areas defined as Shadows or Highlights can be adjusted by modifying the Position and Range parameters.

**7 Use the Shadows or Highlights > Position parameters if you want to select different values to be used for the matte.**

**8 Increase the Shadows or Highlights > Range controls to add more values to the matte. Decrease for less values.**

**9 Change your View to Output to see the image.**

**10 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Shadows/Highlights](#) filter for more information.

# Silk

Black Silk softens wrinkles, blemishes and fine detail to produce smooth skin textures while retaining detail in coarse features such as the eyes, nose and mouth. Warm Silk offers all the benefits of the Black Silk filter while adding a diffuse warm tint to the shadows.

**1 Apply Silk from the Diffusion category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

At the top left of the Presets window, the presets are categorized into various groups located inside a pop-up menu.

**4 In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**

**5 Adjust Detail > Smoothing to smooth out fine detail.**

Smoothing uses an edge aware smoothing algorithm to minimize fine image detail so that areas with courser detail are unaffected. However, if there are unwanted areas of the image that are being affected, you can optionally use a matte to isolate the effect.

**6 Activate Matte > Enable.**

**7 Change your View to Matte to see the matte values.**

The idea here is to generate a matte that isolates the areas of the image that need to be smoothed. For instance, you might be trying to isolate and smooth the skin on a person's face. The white areas of the matte are the areas that will be smoothed. The matte has been preset to a highlight luminance matte, but this can be easily changed.

**8 Select the appropriate Matte > Extract On option for your image.**

**9 If needed, change the Matte > Position parameter so that the image areas you are trying to smooth are as white as possible in the matte.**

**10 Adjust the Matte > Range value so that the white values of the matte are limited as much as possible to the image areas that you are trying to isolate.**

- 11 Increase the **Matte > Blur** parameter if you want to soften the transition areas of the matte.
- 12 Change your **View** to **Output** to see the filtered image.
- 13 If using a **Warm Silk** preset, adjust the **Color Correct > Temperature** control to your liking.
- 14 Click the **Done** icon to return to the host application.



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Silk](#) filter for more information.

# Skin Tone

A set of colorization filters to enhance skin tones.

**1 Apply Skin Tone from the Grads/Tints category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Color > Opacity, Preserve Highlights and Exposure Compensation sliders to your liking.**

The selected color can be applied through a gradient creating a graduated transition between the colored portion and the original image.

**5 Click on the Grad > Enable checkbox to activate the Grad.**

**6 Adjust the Grad > Type, Corner Points, Size and Angle.**

To adjust the Corner Points, just click and drag them to the desired location.

Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

**7 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the **Skin Tone** filter for more information.

## Soft Light

Provides soft, digitally diffused and virtually shadowless light.

**1 Apply Soft Light from the Light category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Select either the Blend > Add or Screen Blend mode.**

Add will burn out highlights while the Screen Mode will retain them.

**5 Adjust the Brightness to set the intensity of the light.**

**6 Use the Blur sliders to control the softness of the light.**

**7 To apply a custom light color to the image, click on the Color box and select a color.**

**8 To apply a colored gel to the light, select one from the Gels pop-up menu.**

**9 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Soft Light](#) filter for more information.

# Spikes

Long radial rays emanating from the center point.

**1 Apply Spikes from the Light category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Click and drag the point control to move the Spikes and use Scale to change the size.**

**5 Adjust the Brightness and Color.**

**6 Use Element Count to set the amount of rays.**

**7 Change Randomize to vary the look of the rays.**

**8 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Spikes](#) filter for more information.

# Spiral Rays

Creates spiral rays.

**1 Apply Spiral Rays from the Light category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Click and drag the point control to move the Spiral Rays and use Scale to change the size.**

**5 Adjust the Brightness and Color.**

**6 Use Element Count to set the amount of rays.**

**7 Change Randomize to vary the look of the rays.**

**8 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Spiral Rays](#) filter for more information.

## Split Field

Split Field splits the image with a line that can be positioned, rotated and blurred. On one side of the line, the image is blurred and on the other, it is in focus.

**1 Apply Split Field from the Lens category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Blur controls.**

**5 Position, Rotate and Blur the split line using the Split controls.**

**6 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Split Field](#) filter for more information.

# Split Tone

Shadows, midtones and highlights can be individually tinted with the Split tone filter.

- 1 Apply Split Tone from the Grads/Tints category.**
- 2 Turn up the Opacity slider in the Shadows, Midtones or Highlights.**
- 3 Change the Split Tone colors by clicking on the Color boxes.**

In some of the filters, a matte is generated to create the desired effect--in this case, split toning.

- 4 Change your View to Shadows, Midtones or Highlights to see the matte values.**

The areas that are white in the matte are the areas that will be tinted by the selected tint color. The areas defined as Shadows, Midtones or Highlights can be adjusted by modifying the Position and Range parameters.

- 5 Adjust the Shadows, Midtones or Highlights > Position and Range controls to change what is considered to be Shadows, Midtones or Highlights.**
- 6 Change your View to Output to see the image.**

See the [Split Tone](#) filter for more information.

# Star

A star pattern similar to those created by lens flares.

**1 Apply Star from the Light category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Click and drag the point control to move the Star and use Scale to change the size.**

**5 Adjust the Brightness and Color.**

**6 Use Element Count to set the amount of spikes.**

**7 Create a more organic random star with Noise and Noise Density.**

**8 Change Randomize to vary the brightness within the star.**

**9 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Star](#) filter for more information.

# Streaks

The Streaks filter creates horizontal or vertical streaks around highlights in the image.

**1 Apply Streaks from the Light category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

At the top left of the Presets window, the presets are categorized into various groups located inside a pop-up menu.

**4 In the Presets window, choose a new preset group from the pop-up menu to see a different set of filter presets.**

**5 Adjust either the Vertical or Horizontal Streaks controls.**

**Note:** If you adjust both the Vertical and Horizontal Streak controls at the same time, the Streak effect will be lost.

**6 Select either the Add or Screen Blend mode. Add will burn out highlights while the Screen mode will retain them.**

**7 Adjust the Streak > Brightness and Color settings to your liking.**

In some of the filters, a matte is generated to create the desired effect--in this case, streaks.

**8 Change your View to Matte to see the matte values.**

The areas that are white in the matte are the areas where streaks will be introduced. The location of the streaks within the scene can be adjusted by modifying the Matte > Position and Range parameters.

**9 Change the Matte > Position parameter if you want to select different values to be used for the matte.**

**10 Increase the Matte > Range control to add more values to the matte. Decrease for less values.**

**11 Change your View to Output to see the filtered image.**

**12** Click the Done icon to return to the host application.



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Streaks](#) filter for more information.

# Sunset

Sunset applies three photographic filters to the image which are blended together with a gradient.

**1 Apply Sunset from the Grads/Tints category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Grad > Type, Corner Points, Size and Angle.**

To adjust the Corner Points, just click and drag them to the desired location.

Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

**5 To change the Sunset colors, click on the Color 1, 2 or 3 > Color box and select a color.**

**6 If you want less coloring of the image, turn down Color 1, Color 2 or Color 3 > Opacity.**

**7 Image highlights can be retained by adjusting the Preserve Highlights control to a value of 100.**

**8 Change your View to Grad to see the color gradient being applied to the image.**

**9 Change your View back to Output to see the filtered image.**

**10 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the **Sunset** filter for more information.

# Texture

Applies textures to an image for a stylized look.

**1 Apply Texture from the Special Effects category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Amount slider to control how much texture is applied to the image.**

**5 Increase the Complexity to generate a more detailed, repetitive texture.**

**6 Use Randomize to change the look of the texture.**

**7 Adjust the position of the texture by clicking and dragging the center image point to the desired location.**

**8 You can also use the Transform controls to transform the texture.**

**9 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Texture](#) filter for more information.

# Three Strip / Two Strip

## Three Strip

Known and celebrated for its ultra-realistic, saturated levels of color, the Technicolor® Three Strip process was commonly used for musicals, costume pictures and animated films. It was created by photographing three black and white strips of film each passing through red, green and blue filters on the camera lens and then recombining them in the printing process. Our Three Strip filter was created under the direction of Academy Award Winning Visual Effects Supervisor Rob Legato.

## Two Strip

The Technicolor® Two Strip process was the first stab at producing color motion pictures and consisted of simultaneously photographing two black and white images using red and green filters. This look creates an odd but pleasing hand-painted look where faces appear normal and green takes on a blue-green quality, while the sky and all things blue appear cyan. Our Two Strip filter was created under the direction of Academy Award Winning Visual Effects Supervisor Rob Legato.

**1 Apply Three Strip or Two Strip from the Film Lab category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Change your View to Red, Green or Blue to see the matte values.**

In some of the filters, a matte is generated to create the desired effect--in this case, modifying the intensity of the red, green and blue values.

Normally, the areas that are white in the matte are the areas that will be adjusted by a particular filter or control. The Red, Green and Blue Intensities, on the other hand, make adjustments where you see black in the matte.

**5 Adjust the Intensity of whatever color channel you are viewing and you will see that certain values become darker. These are the values that will be intensified in the color image.**

- 6 Change your View to Output to see the color image.
- 7 Adjust the Red, Green and Blue Intensities until you have the desired levels of red, green and blue in the image.

**Note:** When using the Two Strip filter, adjusting the Blue Intensity will darken image areas that were blue in the source image.

- 8 You may need to use the Red, Green and Blue Smooth controls to smooth out any noise that may have appeared if the intensities were turned up to high values.

The Smooth controls are set to a low value by default.

- 9 Set the Opacity to a lower level if the strength of the effect looks too strong.

Color Correct controls are also provided for additional control.

- 10 Click the Done icon to return to the host application.



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Three Strip / Two Strip](#) filters for more information.

# Time Blur

Time Blur mixes frames together to create interesting motion effects.

- 1 Apply Time Blur from the Special Effects category.**
- 2 Set the Frames parameter to the amount of frames that you want to blend.**
- 3 Set the Frame Window to either Past, Centered or Future to determine the positioning of the frame averaging window.**

Go to the [Time Blur](#) filter for more information.

# Tint

Tints the entire image with a selected color using a variety of colorization modes.

**1 Apply Tint from the Grads/Tints category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

At the top left of the Presets window, the tints are categorized into various groups located inside a pop-up menu.

**4 In the Presets window, choose a new preset group from the pop-up menu to see a different set of tint presets.**

**5 To apply a different color to the image, click on the Tint > Color box and select a new color.**

**6 Try out the different colorization methods in the Color > Color Mode pop-up menu.**

**7 If you want less tinting of the image, turn down the Tint > Opacity.**

If you want, the image can be converted to black and white before the tint is applied.

**8 From the Black and White > Filter pop-up menu, select the type of black and white filter to be applied to your color image.**

Your choice of filter can dramatically change the black and white result.

**Use the Brightness, Contrast and Gamma controls to further adjust the image.**

You can also use a gradient in combination with the Tint.

**9 To use a gradient with the Tint, click on Grad > Enable.**

**10 Adjust the Grad > Type, Corner Points, Size and Angle.**

To adjust the Corner Points, just click and drag them to the desired location.

Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

- 11 If you are curious, you can see what the Grad looks like by changing your View to Grad. Change your View to Output when done.
- 12 Click the Done icon to return to the host application.



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Tint](#) filter for more information.

## Tone Adjust

Tone Adjust approximates the appearance of high dynamic range images by adjusting the tonal values. Specifically, detail is recovered from the darker portions of the images and can optionally be denoised.

**1 Apply Tone Adjust from the Color category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Amount slider to brighten shadow areas.**

**5 If image noise becomes more prominent as a result of the Amount adjustment, use the DeNoise slider to minimize the noise in those areas.**

In some of the filters, a matte is generated to create the desired effect--in this case, brightening shadow areas.

**6 Change your View to Matte to see the matte values.**

The areas that are white in the matte are the areas that will be adjusted. The shadow areas to be brightened can be adjusted by modifying the Position and Range parameters.

**7 Use the Position parameter if you want to select different values to be used for the matte.**

**8 Increase the Range control to add more values to the matte. Decrease for less values.**

**9 Change your View to Output to see the image.**

**10 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Tone Adjust](#) filter for more information.

# Transform

Transform an image using Position, Scale, Rotate, Corner-Pin, Shear and Crop controls.

- 1 Apply Transform from the Image category.**
- 2 Use the on-screen controls for Position and Corner-Pin.**

**Note:** On some host programs, you must highlight the effect title in the Effect Controls window to see the on-screen controls.

- 3 Additionally, Crop, Scale, Rotate, and Shear controls can be used to affect the image.**

Go to the [Transform](#) filter for more information.

# Turb Distort

Distorts the image by pulling it in a random manner.

- 1 Apply Turb Distort from the Special Effects category.**
- 2 Adjust the Scale, Stretch, Angle and Amount sliders until you achieve the desired amount of distortion.**

**Note:** The Viewer should be at 100% to accurately determine the final result.

- 3 Use Speed to automatically animate the distortion. If you set speed to 100, it uses the frame number as the time value directly. A speed of 200 makes it animate twice as fast, etc.**
- 4 Adjust the Time parameter to shift the distortion animation by shifting it in time.**

See the [Turb Distort](#) filter for more information.

# Vignette

A vignette, or soft fade, is a popular photographic effect where the photo gradually fades into the background, usually in a circular or rectangular shape. The vignette can be any color as well as thrown out of focus.

**1 Apply Vignette from the Lens category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Adjust the Shape > Roundness to make the vignette either circular or rectangular and use Shape > Softness to control the softness of the vignette's edge.**

**5 To give the vignette's edge a random shape, use the Distortion, Distortion Size and Randomize controls.**

**6 Set the Vignette > Color and Opacity.**

The vignette can be either colored or defocused or a combination of the two.

**7 Turn down the Vignette > Opacity if you would like to see only a blurred vignette.**

**8 Turn up the Vignette > Horizontal and Vertical Blur to your liking.**

**9 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Vignette](#) filter for more information.

## Water Droplets

Simulates the circular, rainbow colored optical effects produced by tiny water droplets in clouds, mist and fog.

**1 Apply Water Droplets from the Light category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 Choose Light > Blend > Add or Screen blend mode.**

Add will burn out highlights while Screen will retain them.

**5 In the Light menu, adjust the Brightness as well as the Displacement and Blur of the rainbow if you'd like.**

**6 Adjust the position of the rainbow by clicking and dragging the center image point to the desired location.**

**7 You can also use the Rainbow > Scale control to transform the rainbow.**

**8 Combine the rainbow with a matte by changing Rainbow > Blend from Rainbow Only to Matte.**

Matte only adds the rainbow in the areas of the matte. If you are not seeing enough of the rainbow, your matte should be adjusted.

**9 Change your View selector to Matte to see the matte values.**

The default matte settings are preset to a highlight matte. The areas that are white in the matte are the areas where the rainbow will be added into the image. The location of the rainbow within the scene can be adjusted by changing the Matte > Position and Range parameters.

**10 Change the View selector from Matte to Output.**

**11 Change the Matte > Position parameter if you want to change where you see the rainbow.**

**12 Increase the Matte > Range value to add more of the rainbow to the scene. Decrease to see less of the rainbow.**

**13 Increase the Matte > Blur parameter to soften the matte.**

**14** Click the Done icon to return to the host application.



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [Water Droplets](#) filter for more information.

## Wide Angle Lens

Simulates the effect of a wide angle lens.

- 1 Apply Wide Angle Lens from the Lens category.**
- 2 Start by adjusting the Distortion control to add the desired wide angle look.**

You may need to also adjust the X and Y Correction parameters which compensate for the deformation introduced with the Distortion parameter.

See the [Wide Angle Lens](#) filter for more information.

# X-Ray

Simulates the look of X-Ray images.

**1 Apply X-Ray from the Special Effects category.**

**2 Click the DFT Interface button.**

The DFT user interface opens and consists of Presets, Parameters and Viewer windows.

**3 Try out some of the presets.**

**4 From the Black and White > Filter pop-up menu, select the type of black and white filter to be applied to your color image.**

Your choice of filter can dramatically change the black and white result.

**5 Use the Brightness, Contrast and Gamma controls to further adjust the image.**

**6 Adjust the Color if you would like to tint the image to something other than blue.**

**7 Click the Done icon to return to the host application.**



The values of the parameter adjustments in the DFT user interface are transferred to your host application.

See the [X-Ray](#) filter for more information.

## zMatte

Using proprietary matte extraction techniques, zMatte quickly and simply creates mattes with minimal parameters even if you are dealing with fine hair detail, smoke, or reflections.

### Applying zMatte

- 1 Apply zMatte from the **Key** category.

#### After Effects / Avid / Final Cut Pro / Motion / Premiere Pro

- To use zMatte in layer based hosts, the layers/tracks should be stacked in the following order from bottom to top: background and then foreground.
- Apply zMatte to the top foreground layer/track.

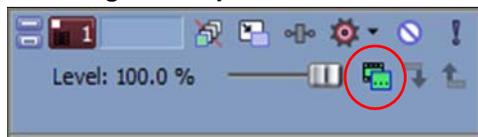
**Note:** The layer/track below the one that you applied zMatte to is automatically used as the background.

#### OFX

- For node based hosts, apply zMatte to a foreground clip and then hook up a background clip.
- For layer based hosts, the layers/tracks should be stacked in the following order from bottom to top: background and then foreground. Then, apply zMatte to the top foreground layer/track.

**Note:** In Vegas, zMatte is accessed through the Composite Mode icon in the track controls and then navigating to the Custom > DFT v1 > Key category.

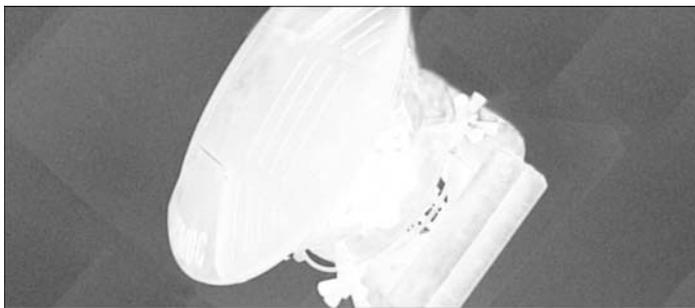
#### Vegas Composite Mode Icon



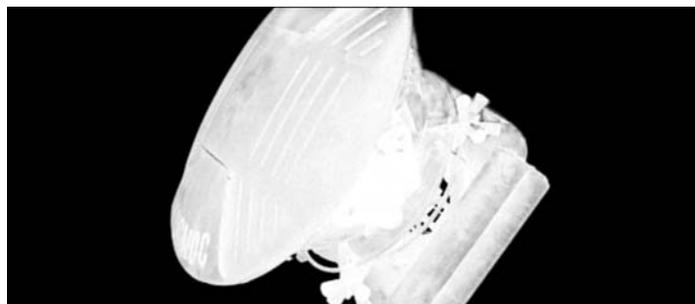
### Basic Blue and Green Screen Keying

- 1 Apply zMatte from the **Key** category.
- 2 Start by selecting Primary Matte from the View pop-up menu.

- 3 Set the Primary Matte > Extract On to Blue or Green Screen.



- 4 Adjust the Primary Matte > Background slider so that the background areas are completely black.



- 5 Set the Primary Matte > Foreground slider so that the foreground areas are completely white.



- 6 When using DV or HD footage, it is useful to enable DeArtifact located at the top of the zMatte controls and then adjust the Horizontal Blur control. DeArtifact is handy for cleaning up aliased or jaggy edge compression artifacts caused by DV and HD video footage.
- 7 If the edges of your matte need smoothing, use the Primary Matte > Shrink/Grow, Blur or Wrap parameters to take care of them.

## 8 Change the View menu to Output.

In Nuke, View > Output renders RGBA which by default is premultiplied. You can also use View > Composite to see the foreground composited over the background.

If you see any color spill from the blue or green screen, it can be eliminated using the Color Suppress controls.

Green Color Spill



## 9 In the Color Suppress group, adjust the Color Suppress > Amount, Range and Edge controls as needed.

Green Suppressed



## Using Light Wrap

Light Wrap helps blend the foreground into the background by making the color of the background wrap into the foreground edges without completely losing the edge.

### 1 Apply zMatte from the Key category and create a blue or green screen key by adjusting the Primary Matte > Extract On, Background and Foreground sliders.

### 2 Assign the source for the Light Wrap:

#### After Effects / Premiere Pro

- Using the Light Wrap > Background pop-up menu, choose the layer/track to be used for the Light Wrap source.

## Avid

- The track below the current track is automatically used as the source for the Light Wrap.

## Final Cut Pro

- Click the drop zone to the right of the Light Wrap Background parameter, choose a clip, and press Apply Clip below the Viewer.

## Motion

- Drag the clip to be used as the Light Wrap source and place it onto the drop zone to the right of the Background parameter.

## OFX

- For node based hosts, the background clip is automatically used as the source for the Light Wrap.
  - For layer based hosts, the layer/track below the current layer/track is automatically used as the source for the Light Wrap.
- 3** Adjust the Light Wrap > Brightness setting to the appropriate brightness.
  - 4** Change the View to Light Wrap.
  - 5** Using the Light Wrap > Wrap control, set the thickness of the Light Wrap.

Light Wrap Source



- 6** Switch the View back to Output.

No Light Wrap



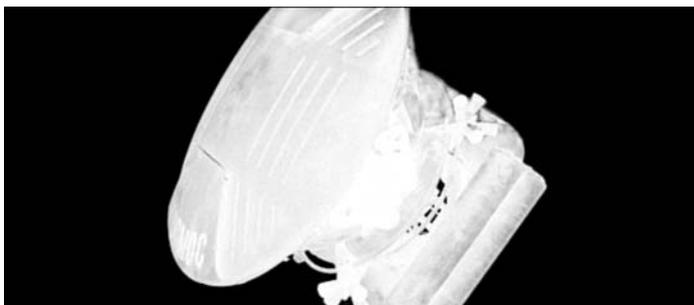
With Light Wrap



## Inner / Outer Keying Technique

We like to use an inner / outer keying method that involves creating a Primary Matte which has gray values in the foreground's edge. This will give a nice, smooth edge in the final composite. Next, the trick is to use the Secondary Matte to fill in any gray areas of the Primary Matte while retaining the gray values in the edge. You can do this by adjusting the Blur, Shrink/Grow and/or Wrap parameters of the Secondary Matte to retain the Primary Matte's edge values.

- 1 Apply zMatte from the Key category.**
- 2 Start by selecting Primary Matte from the View pop-up menu.**
- 3 Set the Primary Matte > Extract On to Blue or Green Screen.**
- 4 Adjust the Primary Matte > Background slider so that the background areas are completely black.**
- 5 Set the Primary Matte > Foreground slider so that the matte has gray values, especially in the edges.**



This Primary Matte will be used for the edges.

- 6 From the View menu, select Secondary Matte.**  
You can now see the Secondary Matte in the Viewer.
- 7 In the Secondary Matte group, click on the Enable checkbox.**
- 8 Set the Secondary Matte > Extract On to the same setting as the Primary Matte.**

- 9 Adjust the Secondary Matte so that the foreground is completely white and the background is completely black.



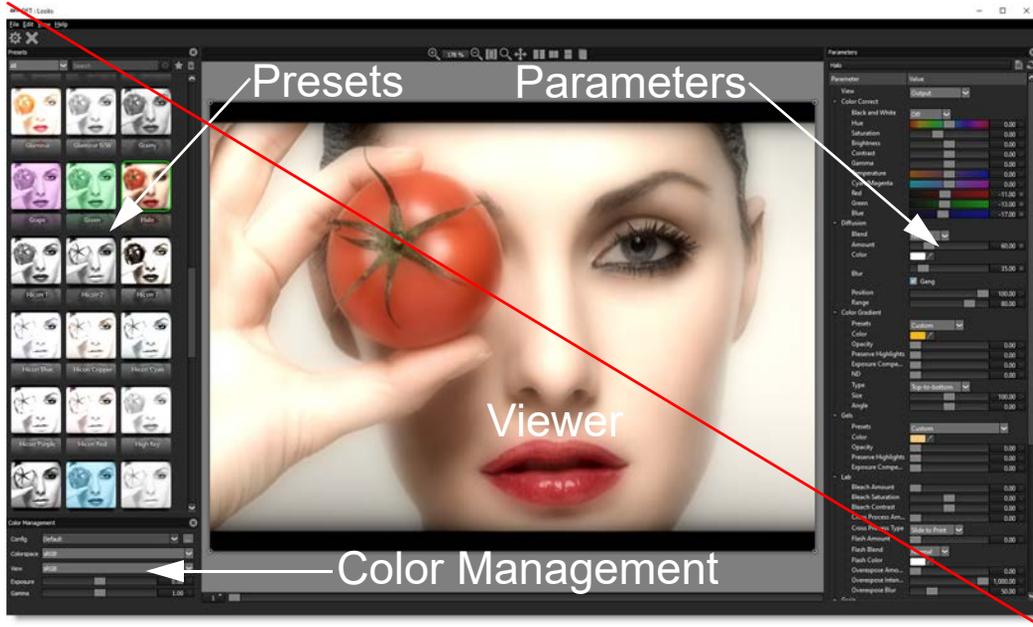
- 10 Switch the View menu to Combined Matte.  
The Combined Matte view shows the combination of the two mattes.
- 11 Adjust the Secondary Matte > Wrap parameter to pull back the hard edges of the Secondary Matte to reveal the gray edges of the Primary Matte.  
**Note:** You could also use Secondary Matte > Shrink/Grow and Blur instead of or in conjunction with Wrap to blend the two mattes together.
- 12 Change the View menu to Output.
- 13 Use the Color Suppress, Light Wrap and Edge controls as needed to finish off your key.



Go to the [zMatte](#) filter for more information.

## DFT USER INTERFACE

DFT is comprised of 4 main components: Viewer, Presets, Parameters and Color Management and can be opened by selecting the DFT Interface button.



## Viewer

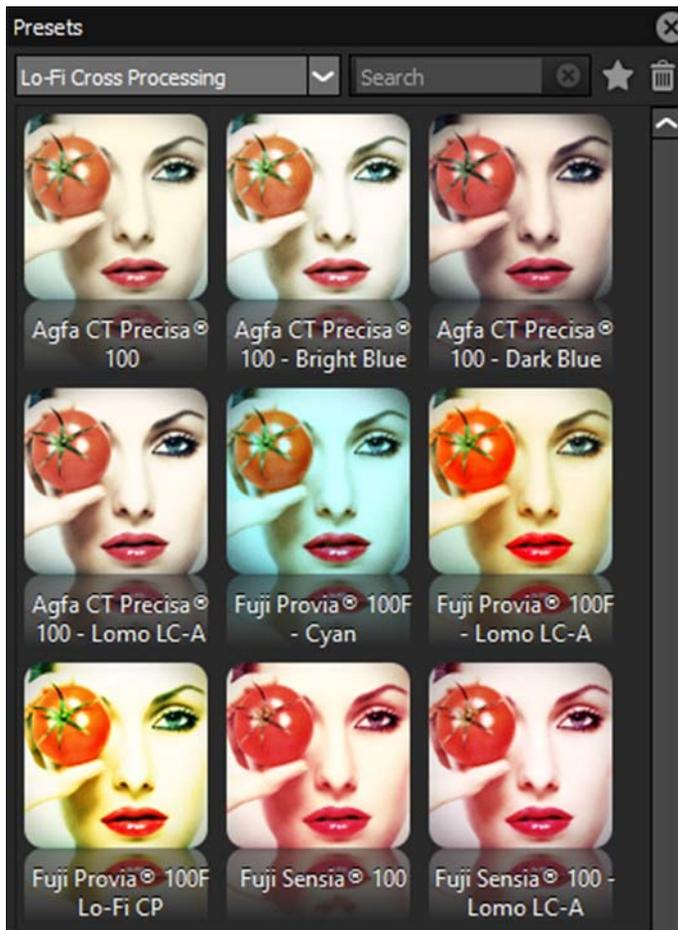
The Viewer is where images are viewed, edited and manipulated.



# Presets and Parameters

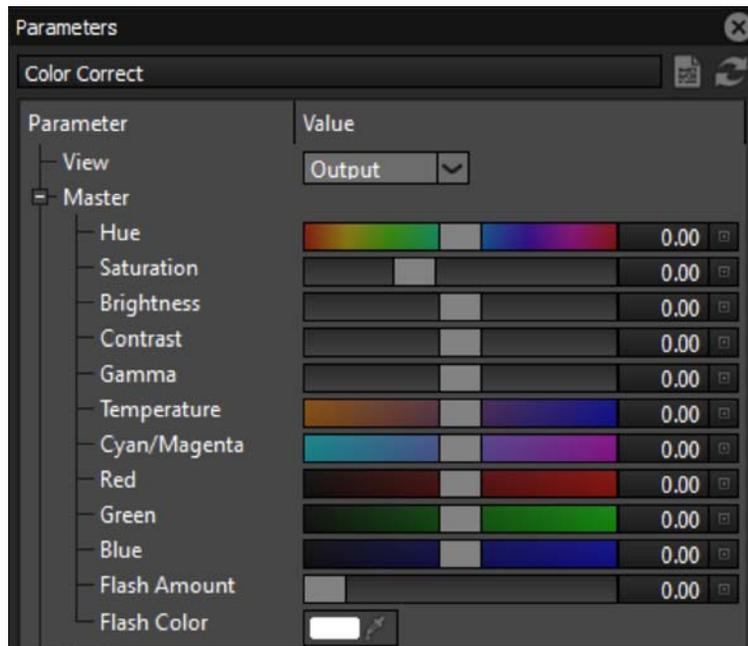
## Presets

The Presets window allows you to select from existing filter presets.



## Parameters

The Parameters window displays the current filter's parameters. Adjusting the parameters will update and change the image in the Viewer.



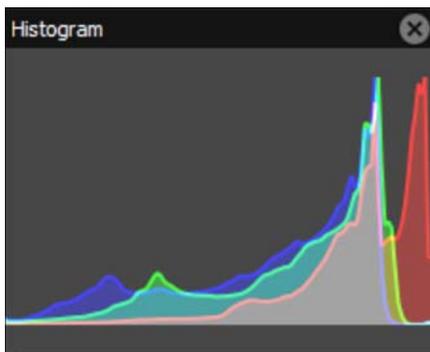
## Variations

The Variations window allows you to create your own filter variations and becomes visible when a parameter name is selected in the Parameters window.



## Histogram

A histogram is a specialized graph that plots the number of pixels at each color intensity level. It is very useful in seeing how an image's pixels are distributed.



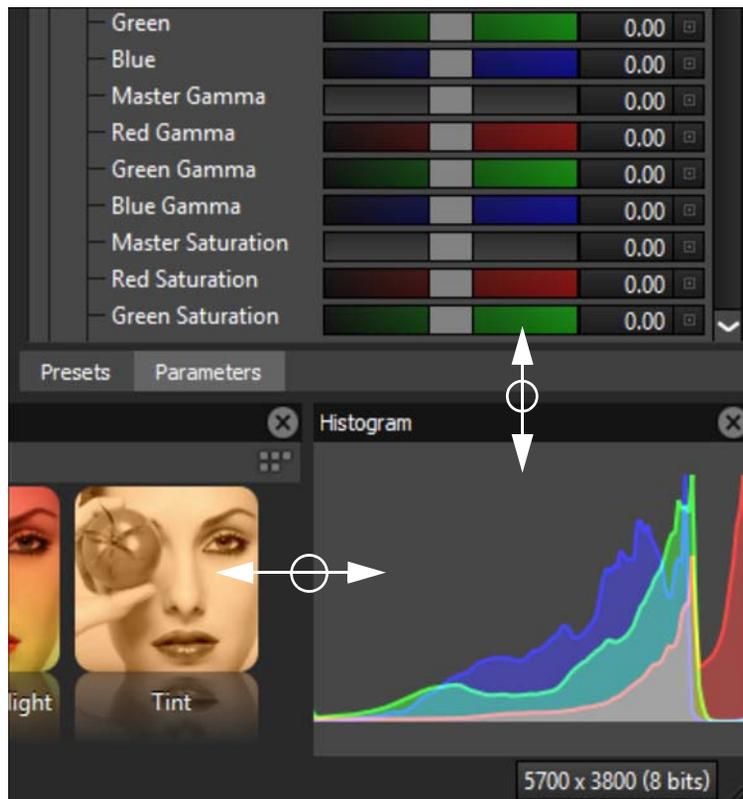
## Toolbar

The Toolbar contains Done and Cancel buttons.



## Sashes

By clicking and dragging the sashes, dividing lines between areas of the screen, you can customize the DFT interface.



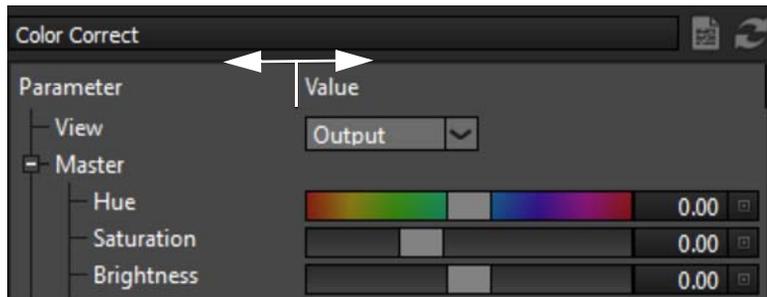
## Tool Tips

Hovering the cursor over an icon will pop up a tool tip that displays its function.



## Value Field Length

You can resize the Value field by clicking and dragging the dividing line between Parameter and Value at the top of the Parameters window. This is useful if the Parameter names are getting cut off.



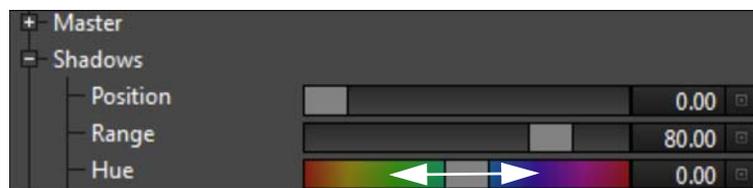
## Parameter Groups

Parameter groups in the Parameters window can be expanded and collapsed using the plus and minus icons located to the left of the group.



## Slider Precision

You can adjust any slider with finer precision by pressing **Ctrl(Win)/Cmd(Mac)** while dragging the slider.



## Setups

A Setup takes a snapshot of the filter's parameters. Setups can be saved and loaded and are independent of the image they were originally applied to. If you are loading a Setup containing multiple filters that was saved from the standalone or photo plug-in versions, only the filter that you are currently working with is modified by the settings contained in the Setup.

### Open Setup

Opens a previously saved Setup.

### Save Setup

Takes a snapshot of the filter's parameters and saves it as a Setup file. This Setup file can later be loaded to the same or a different image.

## Preferences

Preferences allow you to customize default settings.

### Thumbnail Size

You can select whether the DFT interface uses either a small or large thumbnail size. Medium thumbnails are the default.

#### Small

Small thumbnails are used in the DFT interface.

#### Medium

Medium thumbnails are used in the DFT interface.

#### Large

Large thumbnails are used in the DFT interface.

### Preview Size

DFT works at a maximum resolution as defined by the Preview Size--the default being 2048 by 2048 pixels. Never fear, when your image is saved, DFT always processes at the resolution of the original image.

#### 1024

DFT works at a maximum resolution of 1024 x 1024 pixels.

## 2048

DFT works at a maximum resolution of 2048 x 2048 pixels.

## 4096

DFT works at a maximum resolution of 4096 x 4096 pixels.

## Downsampling

At large preview sizes, interaction may slow down when adjusting filter parameters. To maintain fast processing during adjustments, you can enable Downsampling.

### Adaptive

Automatically downsamples the image if required.

### 2:1

Automatically downsamples the image by a factor of 2.

### 4:1

Automatically downsamples the image by a factor of 4.

### 8:1

Automatically downsamples the image by a factor of 8.

## Preview Scaling

### Point

Uses a lower quality scaling method when displaying the image in the Viewer. Point is more accurate when applying filters such as grain and sharpen, but when zooming in, the image will display “chunky” artifacts.

### Bicubic

Uses a smooth scaling method when displaying the image in the Viewer. Bicubic can mask the effect of grain and sharpen filters because of its inherent smoothing, but doesn't suffer from the Point methods chunkiness when zooming in.

## GPU Rendering

Enables or disables GPU rendering.

## Edit

### Undo/Redo

Undo or redo operations.

### Undo/Redo History

Undo/Redo has a history, so you can jump to any item in the history by picking it from the menu.

## View

### Window

The DFT user interface is broken up into individual windows which can be opened or closed by selecting or deselecting them from the View menu. The following windows can be opened or closed:

#### **Color Management**

Opens or close the Color Management window.

#### **Color Wheels**

Open or closes the Color Correct Wheels window.

#### **Console**

Displays diagnostic information.

#### **Copy to Clipboard**

Copies the contents of the Console to the Clipboard.

#### **Options**

#### **OpenGL**

Displays the OpenGL version information.

#### **Rendering Statistics**

Displays rendering times.

#### **Histogram**

Opens or closes the Histogram window. See [Histogram](#) for more information.

## Parameters

Opens or closes the Parameters window. See [Parameters](#) for more information.

## Presets

Opens or closes the Presets window. See [Presets](#) for more information.

## Variations

Opens or closes the Variations window. See [Variations](#) for more information.

## Reset

Resets the window layout the next time DFT is started. This is useful if you have tweaked your windows beyond recognition.

## Zoom In

Zooms the image in.

## Zoom Out

Zooms the image out.

## Fit Image to Window

Fits the image to the window.

## Layouts

There are 4 preset layouts that automatically arrange the interface windows into different configurations.

### Default Layout

The interface is configured with the default DFT layout where all windows are shown.

### Edit Layout

The Edit Layout shows the Viewer, Presets and Parameters windows.

### View Layout

The View Layout shows only the Viewer.

## Dual Monitor Layout

The Dual Monitor Layout shows the Viewer on the left monitor and all other windows on the right monitor.

### Layout Shortcuts

<u>Shortcut</u>	<u>Action</u>
F2	Selects the Default Layout
F3	Selects the Edit Layout
F4	Selects the View Layout
F5	Selects the Dual Monitor Layout

## Help

### User Guide

Opens the DFT User Guide.

### Help Shortcuts

<u>Shortcut</u>	<u>Action</u>
F1	Opens the DFT User Guide

### About

Shows the DFT version.

## VIEWER

The Viewer is where images are viewed, edited and manipulated.



## Zoom and Pan

### Zoom In

Zooms the image in.



### Zoom Level

Displays the zoom level as a percentage.



## Zoom Out

Zooms the image out.



## Zoom to Fit

Fits the entire image inside the Viewer.



## Zoom

Select the Zoom Region icon and drag select a square region in the Viewer to zoom in on that area.



## Pan

Pans the image left, right, up and down.



See the [Viewer Keyboard Shortcuts](#) for more zooming and panning options.

## Compare

Compares images using Side-by-Side, Vertical Split, Horizontal Split or A/B comparison modes. By default, the current filter and original image are selected for comparison. Choose one of the comparison modes using the icons above the Viewer.



# Side-by-Side Comparison

Compares images side by side in the Viewer.



## Vertical Split Comparison

Compares images using a vertical split. Move your cursor into the image area over the split line and when the cursor changes to a double-arrow, click and drag to move the split. Depending on the filter used, the split line may not be obvious, so triangular sashes on the outside of the image help you find it. If you drag the sash all the way around, it will swap directions.



## Horizontal Split Comparison

Compares images using a horizontal split. Move your cursor into the image area over the split line and when the cursor changes to a double-arrow, click and drag to move the split. Depending on the filter used, the split line may not be obvious, so triangular sashes on the outside of the image help you find it. If you drag the sash all the way around, it will swap directions.



## A/B Comparison

When the A/B Comparison button is selected,

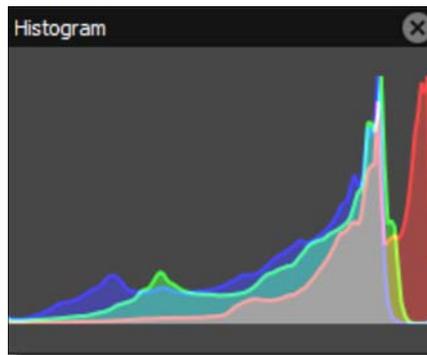


a Show Other View icon appears. Clicking it cycles through the images.



## Histogram

A histogram is a specialized graph that plots the number of pixels at each color intensity level. It is very useful in seeing how an image's pixels are distributed.



## Color Management

DFT uses the OpenColorIO standard originally developed by Sony Pictures Imageworks for its color management. OCIO is compatible with the Academy Color Encoding Specification (ACES) and is LUT-format agnostic, supporting many popular formats. In DFT, you can load custom color configuration files, apply color space conversions, as well as use other controls for fine tuning.

For a more detailed explanation of OpenColorIO, including generating LUT's and suggested workflows, please visit <http://opencolorio.org/>.

**Note:** The color management functionality provided is for display purposes only. The color profiles, LUTs, and colorspace conversions applied in the Viewer do not affect the rendered image.

Select View > Window > Color Management to open the Color Management window in the DFT user interface.

## Config

DFT includes a default OCIO configuration. To load a custom OCIO configuration, click the load icon to the right of the Config field.



For instance, you can download and use an Aces OCIO config file here:

<https://github.com/imageworks/OpenColorIO-Configs>

## Colorspace

Sets the input colorspace of the scene. The following colorspace are provided: Linear, sRGB, rec709, Cineon, Gamma 1.8, Gamma 2.2, Panalog, REDlog, ViperLog, AlexaV3LogC, PLogLin, SLog, Raw.

## View

Select a colorspace transform to apply to the scene. You can select from sRGB, rec709 or None.

## Exposure

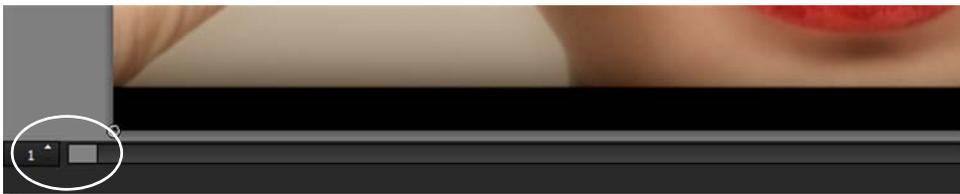
Adjusts the brightness of the image in F-stops. Exposure is applied before the display transform.

## Gamma

Adjusts the gamma of the image. Gamma is applied after the display transform.

## Time Bar

A Time Bar is located below the Viewer which controls which image in the sequence is loaded into the Viewer.



**Note:** The Time Bar is only available in host applications that support this feature.

### **To change the Time Bar frame:**

- 1 Drag the slider.**  
or
- 2 Enter a new number.**  
or
- 3 Click the up and down arrows next to the frame number.**

## Viewer Keyboard Shortcuts

<b>Shortcut</b>	<b>Action</b>
Middle-mouse drag	Pans the image
<b>Space Bar</b> +drag	Pans the image
<b>I</b> Key	Zooms the image in
<b>O</b> Key	Zooms the image out
Zoom icon+Drag a square	Zooms into the defined area
Scroll wheel over image	Zooms the image in and out
Middle-mouse double click	Fits the image to the window
<b>F</b>	Fits the image to the window
<b>H</b>	Opens the Histogram window

## PRESETS AND PARAMETERS

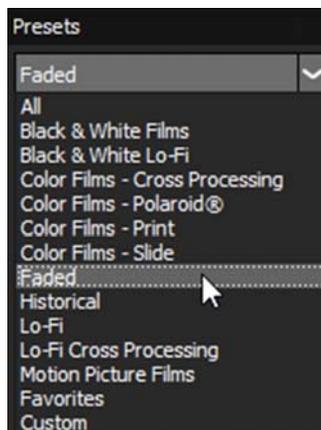
The DFT interface can be opened to select presets and adjust parameters by Clicking the DFT Interface button.

### Presets

The Presets window allows you to select from a set of pre-defined presets. Presets for most filters have been created so that you can easily click through the various choices.



Most filters contain multiple preset groups which are selectable at the top of the window.



Clicking once on a preset modifies the image in the Viewer. As you click on different presets, the image in the Viewer will update. This allows you to quickly try out several different presets.

## Preset Searching

Presets can be searched for by entering text in the search field located at the top of the Presets window. The pattern remains in effect when you switch filters, but it will clear automatically when you switch layers in the Effect window or apply a preset. Clear the search text to return the Presets window to its normal state.



### To search for a preset:

- 1 Select a filter, for instance Grads/Tints > Gels.

**2** In the Presets window search field, type *red*.

All presets with red in the name are shown.

**3** In the search field, type *sun/blue*.

Any preset with sun or blue in the name is shown.

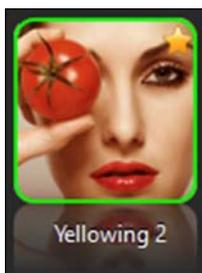
## Favorites

Presets can be tagged as a Favorite allowing them to be sorted separately in the Presets window.

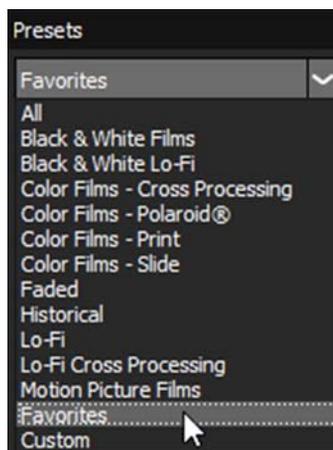
You can tag a preset as a Favorite by selecting the preset and pressing the Toggle Favorite icon located at the top right of the Presets window.



Presets tagged as a favorite display a yellow star at the top right of the preset.



To sort the Presets window by Favorites, select Favorites in the Presets pop-up menu.



## Presets Right-Click Menu

Right-click over a preset to open Preset options.

### **Rename**

Right-click on a preset, select Rename and type in the new name.

### **Delete**

Right-click on a preset and select Delete.

### **Make Default**

Right-click on a preset and select Make Default. The default preset is the one that is applied to the image when a filter is selected and the one shown in the Filter window. Changing the default will take effect the next time you start DFT.

### **Restore**

#### **Default Presets**

Restores the Default preset for each filter. The restore happens the next time you select the filter.

#### **Deleted Presets**

Restores deleted presets.

#### **Renamed Presets**

Restores renamed presets. The restore happens the next time you select the filter.

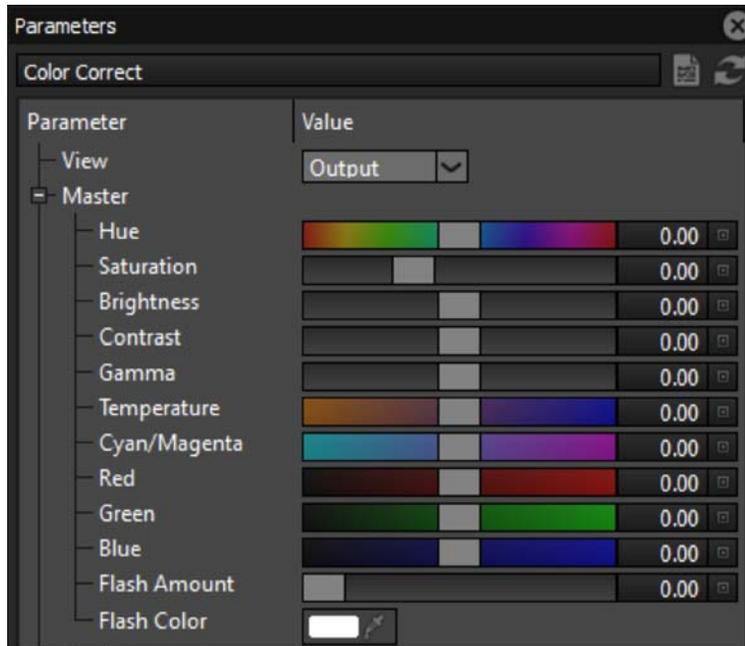
#### **To Factory Default**

Restores all presets to the default factory settings.

## Parameters

The Parameters window displays the current filter's parameters.

Adjusting the parameters will update and change the image in the Viewer.



Slider controls can be adjusted in the following ways:

- **Clicking and dragging the slider.**
- **You can adjust with finer precision by pressing Ctrl(Win)/Cmd(Mac) while dragging the slider.**
- **Clicking on the number to the right of the slider, typing in the desired value and hitting Enter.**
- **Hover the cursor over a slider and use the mouse scroll wheel to make the adjustment. Scrolling up raises the value while scrolling down lowers it.**

Pop-up menus can be adjusted in the following ways:

- **Click on the pop-up menu and make a selection.**
- **Hover the cursor over a pop-up menu and use the mouse scroll wheel to change the selection.**

## Create Custom Preset

Creates a custom preset in the Presets window based on the current parameter settings. You must name the preset prior to creating it by using the name field to the left of the Add Preset icon.



## Reset to Defaults

Resets all of the parameters for the currently selected preset to the built-in defaults.



## VARIATIONS

Variations based on either one or two parameters can be created and are displayed as thumbnails in a window below the Presets window.



To display the Variations window and create variations, pick a filter and click on a parameter name in the Parameters window.



Ranges, Toggles, and Color parameters are available for creating variations. When you select a parameter, the Variations window appears and you'll see the variations being generated on that parameter. Click on a second parameter and it will generate variations between the two.



The first parameter you click on will be the dominant parameter - it'll go across the top of the Variations tab. So, you can get different results depending on the order you select the parameters. Click on a selected parameter to toggle it back off again.

**Note:** You can only have one or two parameters selected at a time. If you click on a third parameter, the last parameter you clicked on will deselect itself. If you deselect both of the parameters or switch effects, the Variations window will disappear because the variations are no longer being generated.

Variations are generated based on the current effect parameters. So, you can pick some parameters for your variation, then go back to the Presets window and pick a different Preset, and the variations will regenerate.

## Variation Controls

### Maximum Number of Variations

Sets the number of variations.



### Parameter Value Spread

Determines the difference from one variation to another.



## Auto Generate

Variations are constantly being generated every time you select a parameter or click on a variation thumbnail.



## Generate

When Auto Generate is off, you must click the Generate icon to update the variations after new parameters are selected.



## TOOLBAR

The Toolbar contains Done and Cancel icons.



### Done

The values of the parameter adjustments in the DFT user interface are transferred to your host application.



### Cancel

Closes the DFT user interface without making any changes.



## COMMON FILTER CONTROLS

There are a number of common filter controls that appear in DFT. For simplicity they are listed here.

### Alpha (Avid Only)

Set the Alpha parameter to match Avid's File Pixel to Video Mapping import settings used when importing a file. By default, RGB (0-255) Inverted is selected to match Avid's default import settings.

**RGB (0-255)**

**RGB (0-255) Inverted**

**YUV (16-235)**

**YUV (16-235) Inverted**

### DFT Interface

Opens the DFT interface comprised of Viewer, Presets and Parameter windows. Here, you can select, view, adjust and save filter presets.

### Blur

#### **Horizontal**

The image is blurred by a quality blur along the X-axis.

#### **Vertical**

The image is blurred by a quality blur along the Y-axis.

#### **Gang**

The horizontal and vertical slider values can be ganged together. When ganged, moving the slider affects both values.

### Black and White

Selects the type of black and white filter to be applied to your color image.

## Normal

Converts the color image to a monochrome image.

## Red

Simulates a red filter in black and white photography.

## Green

Simulates a green filter in black and white photography.

## Blue

Simulates a blue filter in black and white photography.

## Yellow

Simulates a yellow filter in black and white photography.

## Orange

Simulates an orange filter in black and white photography.

# GPU Rendering

Controls the quality of DFT's GPU accelerated rendering on your graphics card.

## Default

The rendering quality is determined by the host application. For instance, if you are working in a 32 bit After Effects project, DFT will render on the GPU in 32 bit float.

## 16 bit float

Sets the rendering quality to 16 bit float. Requires half the memory of 32 bit float with no perceptible quality difference.

## 32 bit float

Sets the rendering quality to 32 bit float.

**Note:** In OFX hosts, a restart is required for GPU Rendering changes to take effect.

# Grad

Grad is the gradient transition area between the filtered image and the original. Its direction, corners, size and angle can be adjusted.

## Enable

Turns the grad on and off.

## ND Brightness

Darkens the colored portion of the grad.

## Type

Controls the direction of the grad.

### Top-to-bottom

The direction of the grad is from top to bottom.

### Bottom-to-top

The direction of the grad is from bottom to top.

### Left-to-right

The direction of the grad is from left to right.

### Right-to-left

The direction of the grad is from right to left.

### Horizontal Strip

Horizontal strip grad.

### Vertical Strip

Vertical strip grad.

## Size

The size of the grad.

## Angle

The angle of the grad.

**Note:** In some host programs, you must highlight the effect title in the Effect Controls window to see the on-screen controls.

# Matte

In some of the filters, a matte is generated to create the desired effect. The Matte controls consist of Position, Range and Blur parameters, and they work the same in all of the filters. The white areas of the matte are the areas that will be affected by the filter, while the black areas remain unaffected. The matte is extracted based on luminance, in most cases, and is created using the Position and Range parameters.

## Position

Selects the values to be included in the matte. A higher Position value shows more white values from the original image as white values in the matte. A lower Position value shows more black values from the original image as white values in the matte.

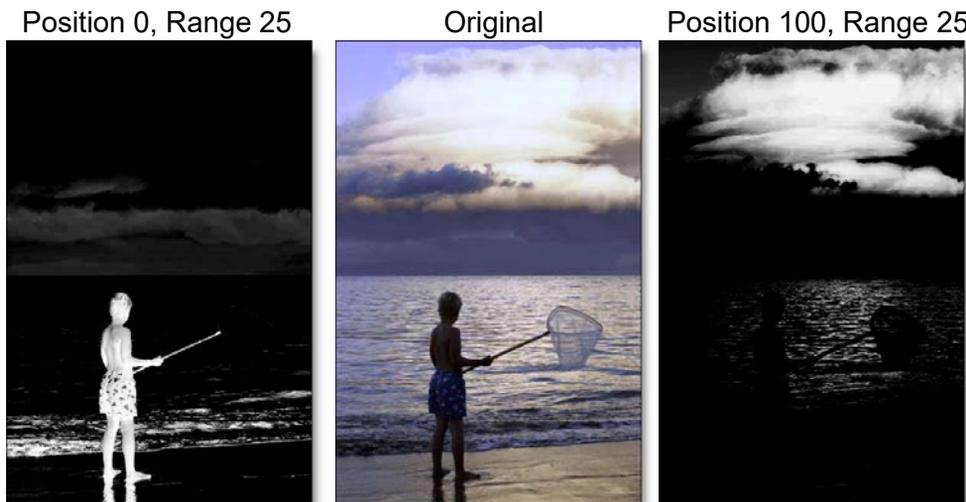


Photo © THINKSTOCK LLC--www.thinkstock.com

## Range

Controls the range of values to be used for the matte. Once you've selected the "Position", you can then add or subtract the "Range" of values to be included in the matte. A higher Range value includes more white values in the matte while a lower Range value includes less values in the matte.

Position 100, Range 25



Original



Position 100, Range 75



## Blur

The matte is blurred by a quality blur.

## Show Point Controls

Displays point controls in Nuke. This is to workaroud a Nuke bug where it shows point controls for any nodes that happen to be in the tree, even when the node isn't active.

## Spot

A spot in the form of a radial gradient is used to limit the effect of the filter.

## Position

There is an on-screen control in the center of the image. By clicking and dragging the on-screen control, the position of the spot can be adjusted.

## Position X

The horizontal position of the spot.

## Position Y

The vertical position of the spot.

**Note:** In some host programs, you must highlight the effect title in the Effect Controls window to see the on-screen controls.

## Aspect

The aspect ratio of the spot.

## Radius

The un-blurred radius of the spot.

## Falloff Radius

The blurred edge radius.

## Falloff

Moves the falloff towards the spot center point.

## Invert

Inverts the spot.

# Temperature

## Color

Sets the color through the use of a standard color picker.

## Opacity

Sets the opacity of the warming or cooling.

## Preserve Highlights

Preserves the white areas of the image.

## Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the warming or cooling.

# Transform

Transform your image using Position, Scale, Rotation, Corner-Pin, Shear and Crop controls.

## Crop

### Top

Crops the image from the top down.

### Bottom

Crops the image from the bottom up.

### Left

Crops the image from left to right.

### Right

Crops the image from right to left.

## Corner Pin

The image can be corner pinned by adjusting the Corner Pin sliders as well as dragging the four points on the corners of the screen.

**Note:** You may need to zoom the image out a bit to see the corner points. In addition, to see and adjust the corner points in After Effects, make sure that the effect title in the Effect Controls window is highlighted. For Final Cut Pro, you must activate the cross hair icon next to the corner position parameters to see and adjust the corner points on the screen.

### Upper-Left

Controls the X and Y position of the Upper Left Point.

### Upper-Right

Controls the X and Y position of the Upper Right Point.

### Lower-Right

Controls the X and Y position of the Lower Right Point.

### Lower-Left

Controls the X and Y position of the Lower Left Point.

## Position

Position can be adjusted by clicking and dragging an on-screen control in the center of the image.

### Position X

The horizontal position.

### Position Y

The vertical position.

**Note:** For Final Cut Pro, you must activate the cross hair icon next to the Position parameter.

## Scale

### Scale X

The horizontal scale.

### Scale Y

The vertical scale.

### Gang Scale

The Scale X and Scale Y slider values can be ganged together.

## Rotate

In addition to the standard position and scale controls, you can rotate. Positive values rotate clockwise and negative values rotate counter-clockwise.

## Shear

### Shear X

Skews left and right.

### Shear Y

Skews up and down.

## Anchor

### Anchor X

Defines the point on the X axis around which position, rotation, scaling or shearing takes place.

## Anchor Y

Defines the point on the Y axis around which position, rotation, scaling or shearing takes place.

## Filter

Chooses the filtering method when transforming the image. Mitchell is the default.

### Triangle

The Triangle filter is not the highest quality, but fine for scaled images.

### Quadratic

Quadratic is like triangle, but more blur with fewer artifacts. It offers a good compromise between speed and quality.

### Cubic

Cubic is the default filter in Photoshop. It produces better results with continuous tone images, but is slower than Quadratic. If the image contains fine details, the result may be blurrier than desired.

### Catmull-Rom

This produces good results with continuous tone images which are scaled down, producing sharp results with fine detailed images.

### Gaussian

Gaussian lacks in sharpness, but is good with ringing and aliasing.

### Mitchell

A good balance between sharpness and ringing, Mitchell is a good choice when scaling up.

### Sinc

Keeps small details when scaling down with good aliasing.

## View

Chooses what to view. The choices in this menu will change depending on the filter.

# AMBIENT LIGHT

## Description

Ambient creates light without a defined source and contributes to the overall brightness of a scene without casting shadows.



Photo by Ryan Lum on Unsplash

Go to the [Ambient Light Tutorial](#) to see how the filter works.

## Category

Light.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Brightness

Sets the intensity of the light.

### Gels

Photographers, cinematographers and lighting designers use colored filters or gels in front of lights. Whatever mood you wish to create, we have the colors needed to achieve the effect. Select one of the Gels presets from the pop-up menu.

## Color

Sets the color of the light through the use of a standard color picker.

# BLACK AND WHITE

## Description

Black and White converts color images to black and white simulating the look of Black and White photographic filters.



Photo by Anthony Delanoix on Unsplash

Go to the [Black and White Tutorial](#) to see how the filter works.

## Category

Color.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Filter

The Filter pop-up selects the type of black and white filter to be applied to your color image. Go to the [Black and White](#) section of Common Filter Controls to see how the Black and White controls work.

### Brightness

Adjusts the brightness of the image. Positive values brighten, negative values darken.

## Contrast

Adjusts the contrast of the image. Positive values increase contrast, negative values decrease contrast.

## Gamma

Adjusts the gamma of the image. The gamma adjustment leaves the white and black points the same and only modifies the values in-between. Positive values lighten the midtones, negative values darken the midtones.

# BLEACH BYPASS

## Description

Bleach Bypass is a film laboratory technique where, by skipping the bleach stage in the color processing sequence, silver is retained in the image along with the color dyes. The result is effectively a black and white image superimposed on a color image. Bleach Bypass images have increased contrast, reduced saturation, often giving a pastel effect.



Photo by Chris Barbalis on Unsplash

Go to the [Bleach Bypass Tutorial](#) to see how the filter works.

## Category

Film Lab.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Amount

Sets the intensity of the bleach effect.

## Saturation

Adjusts the saturation of the image. Positive values saturate, negative values desaturate.

## Contrast

Adjusts the contrast of the image. Positive values increase contrast, negative values decrease contrast.

## Temperature

Sets the color temperature of the image. Dragging the slider to the right makes the image cooler (bluer) and dragging the slider to the left makes the image warmer (redder).

# BLUR

## Description

Blurs the image with individual horizontal and vertical controls. It's fast, high quality and blurs outside the frame which removes the dark inward bleeding edges of most blurs.

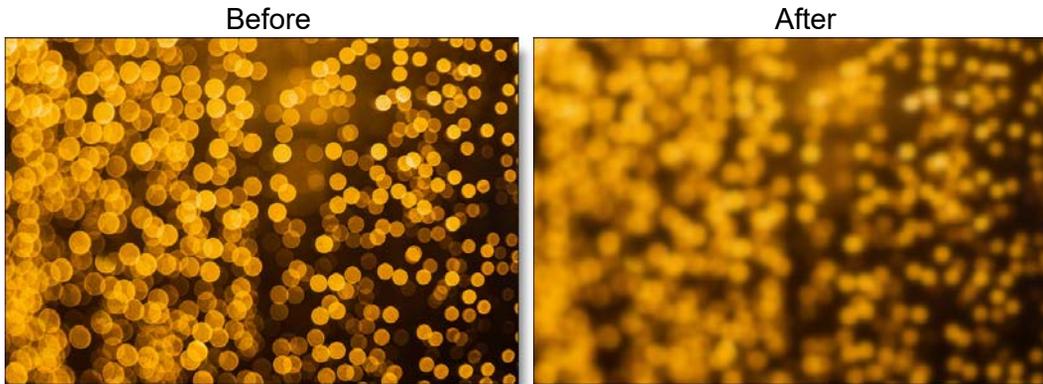


Photo by Michal Grosicki on Unsplash

Go to the [Blur Tutorial](#) to see how the filter works.

## Category

Lens.

## Controls

### Blur

#### Horizontal

The image is blurred by a fast, quality blur along the X-axis.

#### Vertical

The image is blurred by a fast, quality blur along the Y-axis.

#### Gang

The horizontal and vertical slider values can be ganged together. When ganged, moving the slider affects both values.

# BORDERS

## Description

Select from a variety of different pre-made borders or create your own.

Before



After



Photo by Tradd Harter on Unsplash

Go to the [Borders Tutorial](#) to see how the filter works.

## Category

Special Effects.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Border

#### Type

Choose from 11 different borders or Custom to create variable colored, softened borders.

#### Orientation

The orientation of border.

## **0 degrees**

The default orientation of the border.

## **90 degrees**

Rotates the border 90 degrees.

## **180 degrees**

Rotates the border 180 degrees.

## **270 degrees**

Rotates the border 270 degrees.

## **Invert**

Inverts the color of the border.

**Note:** Orientation and Invert are only used for the pre-made Border's 1-11.

## **Size**

The size of the border.

## **Color**

The border color.

## **Softness**

The softness of the border.

## **Roughness**

The roughness of the border.

## **Randomize**

Randomizes the roughness of the border.

## **Transform**

Transform the border using Scale and Rotate controls. Go to the **Transform** section of Common Filter Controls to see how the Transform Controls work.

# CAMERA SHAKE

## Description

Simulates camera shake using random changes in amplitude, speed, scale, rotation, and motion blur.



Photo by Bonnie Kittle on Unsplash

Go to the [Camera Shake Tutorial](#) to see how the filter works.

## Category

Lens.

## Controls

### Amplitude

Sets the size of the camera shake.

### Speed

The speed of the camera shake.

### Scale

Determines the camera shake fluctuation.

### Rotate

Sets the rotation of the camera shake.

## Randomize

Randomizes the camera shake.

## Motion Blur

### Enable

Turns Motion Blur on or off. The default is off.

### Shutter Angle

Determines how long the camera shutter stays open when a picture is taken--higher values create more motion blur. The range of the Shutter Angle is 0-720 and defaults to 180. Measured in degrees, it simulates the exposure of a rotating camera shutter. The shutter angle uses the footage frame rate to determine the simulated exposure. For example, a shutter angle of 180 degrees (50% of 360 degrees) for 24fps footage creates an effective exposure of 1/48 of a second. Typing 1 degree applies almost no motion blur, and typing 720 degrees applies a high degree of motion blur.

### Shutter Phase

Offsets the point in time, either forward or reverse, when the shutter opens. The range of the Shutter Phase is -360 to 360 and defaults to -90.

### Motion Samples

Renders intermediate frames equal to the Motion Samples value and accumulates them, one over the other, on a single frame. The higher the number, the smoother the motion. The Motion Samples range is from 1-256 and defaults to 16.

**Note:** Normally, motion blur is calculated going forward, so if there is no motion beyond the end of a sequence, there won't be motion blur on the last frame. To work around this, add an extra frame or two to the end of the work range in the Timebar and move the last transform keyframes to be outside of the session range.

# CARTOON

## Description

Converts the image into a cartoon.

Before



After



Photo by Ilya Yakover on Unsplash

Go to the [Cartoon Tutorial](#) to see how the filter works.

## Category

Special Effects.

## Controls

### Amount

Adjusts the amount of the cartoon effect.

### Detail

Adjusts the detail. If the slider is increased, you will see more detail while decreasing the slider will have an overall smoothing effect.

### Line

Adjusts the size of the cartoon's outline.

**Note:** If you are working in a host application that supports proxy resolutions, it is important to view the line strength at full size to determine what the final output will look like.

## CENTER SPOT

### Description

#### Center Spot

Diffuses and blurs distracting backgrounds while keeping a center spot in focus. The center spot can be moved, sized and the amount of blur can be controlled.

Before



After



Photo by Samuel Scrimshaw on Unsplash

#### Warm Center Spot

Combines the benefits of Center Spot with a warming filter making it ideal for portraits and skintones.

Before



After



Photo by Samuel Scrimshaw on Unsplash

Go to the [Center Spot Tutorial](#) to see how the filter works.

## Category

Diffusion.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

### Blur

Sets how much the image is blurred.

### Spot

A spot in the form of a radial gradient is used to control where blur is added to the image. Go to the **Spot** section of Common Filter Controls to see how the Spot controls work.

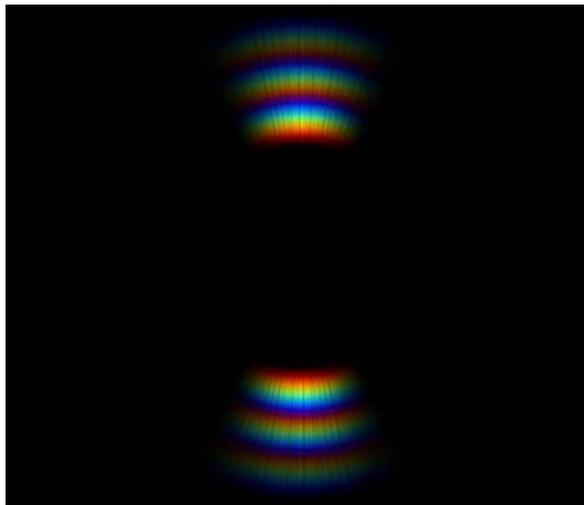
### Temperature

Applies a warming filter to the image. Go to the **Temperature** section of Common Filter Controls to see how the Temperature controls work.

# CHROMA BANDS

## Description

Creates rainbow diffraction patterns.



Go to the [Chroma Bands Tutorial](#) to see how the filter works.

## Category

Light.

## Controls

### Blend

Determines the blend mode used to create the rainbow effect.

### Add

The rainbow is added to your image.

### Screen

The rainbow is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

## Brightness

Adjusts the brightness.

## Color

Sets the color.

## Scale

Changes the size.

## Aspect

Sets the aspect ratio.

## Softness

Blurs the bands.

## Chroma

Controls the saturation.

## Angle

Changes the angle.

## Cycles

Sets the number of bands.

## Density

Determines the amount of rays.

## Taper

Tapers the band's edges.

## Spread

Changes the distribution of the bands.

## Offset

Determines the band's inner diameter.

## Noise

Controls the amount of noise in the bands.

# CHROMATIC ABERRATION

## Description

Chromatic aberration is caused by a lens having a different refractive index for different wavelengths of light and is seen as fringes of color around the edges of the image. This fringing is removed by un-distorting the individual color channels.

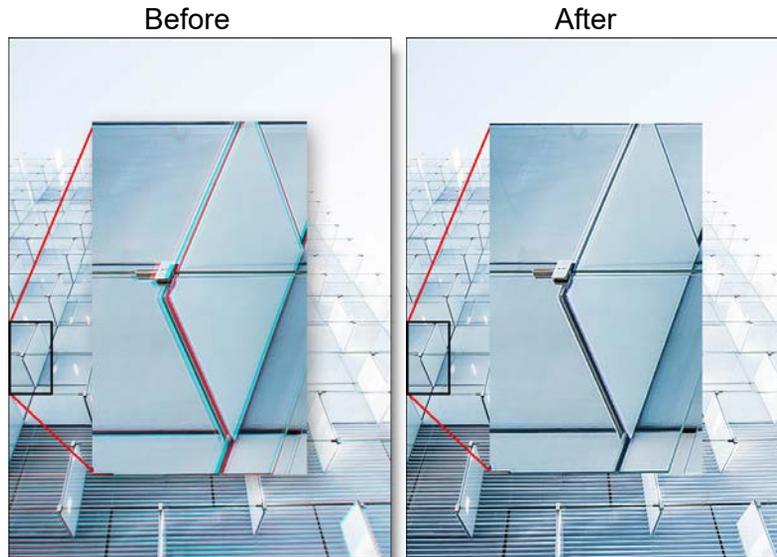


Photo by Joel Filipe on Unsplash

Go to the [Chromatic Aberration Tutorial](#) to see how the filter works.

There are some new types of color fringes that are not chromatic aberration. These effects might be visible as purple or blue fringes and are visible around overexposed areas in most cases. If the following conditions apply, your image most likely has true chromatic aberration as opposed to color fringing caused by sensor overloading:

- **Corners should show most color fringes whereas the center should show none.**
- **Color fringes should be not only at the edges of overexposed areas but at lower contrast edges, too.**
- **Color fringes should be of complementary color (red-cyan, green/magenta, and blue-yellow) on opposite sides of a dark or bright area.**

- Color fringes should be in all corners with the same direction and pointing out from the center.

## Category

Lens.

## Controls

### Red/Cyan, Green/Magenta, Blue/Yellow

Use the appropriate color group to remove the chromatic aberration. For instance, if you see red/cyan fringing, use the Red/Cyan group. Start by adjusting the Distortion parameter.

#### **Distortion**

Pulls the corners of the image in or out. Negative values pull the corners of the image inward while positive values pull the corners of the image outward.

#### **Anamorphic Squeeze**

Anamorphic Squeeze corrects for the squeeze found in anamorphic motion picture lenses.

#### **Curvature X and Y**

Curvature X and Y correct for non-radial, asymmetric distortions found in anamorphic motion picture lenses.

**Note:** Anamorphic Squeeze and Curvature X and Y only work once the Distortion parameter has been adjusted.

#### **Center X and Y**

Determines the center point for the distortion.

# COLOR CORRECTORS

## Description

DFT includes a number of different color correctors that are handy for adjusting an image's color. They include: Color Correct, F-Stop, Printer Points, Telecine and Temperature.

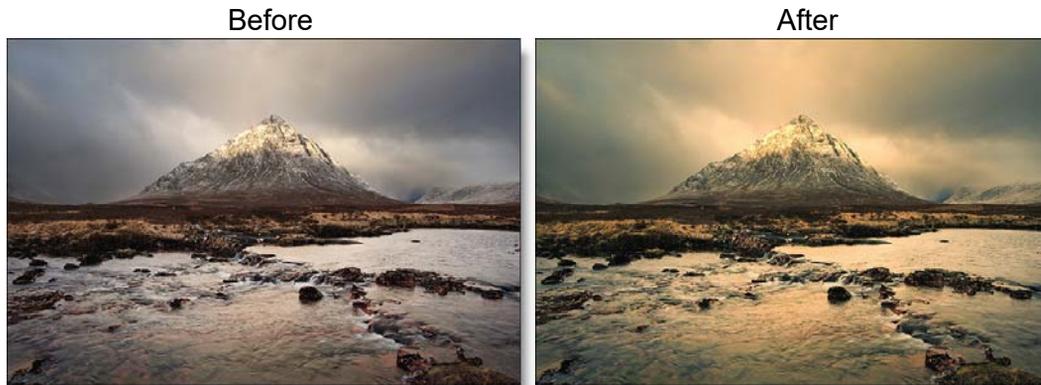


Photo by Sean Afnan on Unsplash

### Color Correct

Color Correct manipulates hue, saturation, brightness, contrast, gamma, temperature, cyan/magenta, red, green and blue values of the overall image and separately in user definable shadow, midtone and highlight areas. In addition to traditional slider controls, a visual Color Wheels interface can be used to make adjustments.

### F-Stop

F-Stop manipulates red, green and blue values of the overall image and separately in user definable shadow, midtone and highlight areas using F-Stops as the unit of measure. In camera terminology, F-Stops measure the size of the lens opening, otherwise known as aperture. Each F-Stop is twice as bright as the next.

## Printer Points

Printer Points manipulate the red, green and blue values of the overall image and separately in user definable shadow, midtone and highlight areas using motion picture laboratory printer points as the unit of measure. When creating color prints for motion pictures, a contact printer performs scene-to-scene color corrections. The most popular printing method is additive printing that uses three separate colored sources - red, green, and blue which are combined to form the light source that exposes the film. The red, green, and blue light valves in the printer are adjusted in values of 1, 2, 3... up to 60 for each primary color and are called printer points or printer lights.

## Telecine

Telecine emulates the method of color correction done in a telecine film to tape transfer suite. Hue, saturation, brightness, contrast, gamma and pedestal values of the overall image can be adjusted as well as separately in user definable shadow, midtone and highlight areas.

## Temperature

Temperature manipulates the temperature, cyan/magenta and brightness values of the overall image and separately in user definable shadow, midtone and highlight areas.

Go to the [Color Correctors Tutorial](#) to see how the filters work.

## Category

Color.

## Master, Shadows, Midtones, Highlights

All of the color correctors can adjust an image by using it's master, shadows, midtones and highlight groups. The Telecine filter uses the following terminology: Lift (shadows), Gamma (midtones) and Gain (highlights). The master settings affect the entire image while adjusting parameters within the shadows, midtones and highlights will only affect those specific areas.

If you are unsure about what values are included in the shadows, midtones and highlights, you can use the View pop-up menu. It will allow you to view the shadows, midtones and highlights as a black and white matte. The white areas are the areas that will be adjusted by that particular group. For instance, if you see white areas while viewing the midtones, then midtone color adjustments will affect only those white areas. If you want to change the default areas defined by the shadows, midtones and highlights, you would use the Position and Range sliders.



## Position

The Position slider pinpoints the values to be considered as shadows, midtones, or highlights. A low Position value uses the darkest image values, while a high Position value uses the brightest.

## Range

Increases or decreases the range of values considered as shadows, midtones or highlights. A low Range value indicates a narrow range of values, while a high Range value indicates a large range of values.

Go to the [Matte](#) section of Common Filter Controls to see how the Position and Range controls work.

## Color Correct

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

## Hue

Rotates the hue of the image.

## Saturation

Adjusts the saturation of the image. Positive values saturate, negative values desaturate.

## Brightness

Adjusts the brightness of the image. Positive values brighten, negative values darken.

## Contrast

Adjusts the contrast of the image. Positive values increase contrast, negative values decrease contrast.

## Gamma

Adjusts the gamma of the image. The gamma adjustment leaves the white and black points the same and only modifies the values in-between. Positive values lighten the midtones, negative values darken the midtones.

## Temperature

Sets the color of the image to be either warmer or cooler. Dragging the slider to the right makes the image cooler (bluer) and dragging the slider to the left makes the image warmer (redder).

## Cyan/Magenta

Adds either Cyan or Magenta to the image. Dragging the slider to the right makes the image more magenta and dragging the slider to the left makes the image more cyan.

## Red

Adds or subtracts red from the image.

## Green

Adds or subtracts green from the image.

## Blue

Adds or subtracts blue from the image.

## Flashing

The Flash parameters mix a color into the image through the use of a standard color picker. The default color is white. What in the world is this for? It is a great way to add atmosphere to an element. Flash comes from the film term “flashing”, which describes the optical process of lowering the contrast of an image by flashing it with light.

### Flash Amount

Sets the opacity of the Flash Color.

### Flash Color

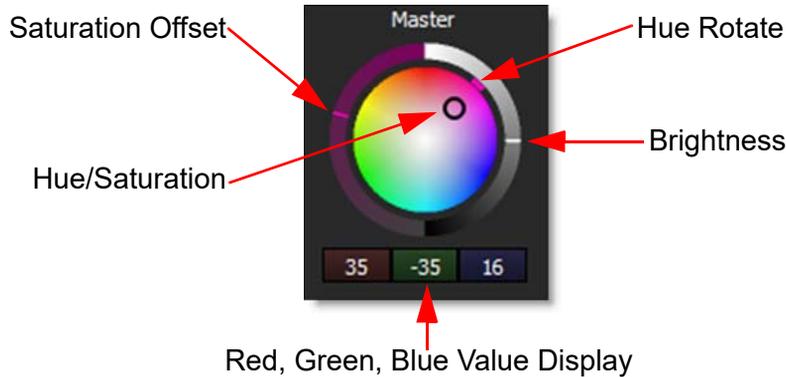
The Flash Color can be set through the use of a standard color picker.

## Color Wheels

The Color Wheel window allows you to adjust the color of the brightness, hue and saturation of the master, shadows, midtones and highlights.



The color wheels have the following controls:



## Hue/Saturation (Center Point)

As the center point is moved, both Hue and Saturation are adjusted.

## Hue Rotate

Dragging the colored dash on the outside of the wheel rotates the hue.

## Saturation

Increases or decreases the selected color's saturation.

## Brightness

Adjusts the brightness.

**Note:** The Hue and Saturation adjustments are achieved by simultaneously changing the Red, Green and Blue parameters in the respective group: Master, Shadows, Midtones, or Highlights. The current Red, Green and Blue values are displayed below the Color Wheel.

## Reset

Right-clicking on any color wheel will open a context menu that contains Reset > All, Shadows, Midtones, and Highlights options.

## F-Stop

### Input is Linear

Enable this if your image is in true linear color space. Gamma corrected images should have this parameter disabled.

## Red Exposure

Adds or subtracts red from the image.

## Green Exposure

Adds or subtracts green from the image.

## Blue Exposure

Adds or subtracts blue from the image.

## Gang

The Red, Blue and Green Exposure slider values can be ganged together. When ganged, drag any exposure slider to affect all three values.

## Printer Points

The Red, Green and Blue Exposure are set to a value of 25 which represent no adjustment. Printer “lights” or points set to 25, 25, 25 are considered to be the normal or standard printer setup at most motion picture labs.

## Input is Linear

Enable this if your image is in true linear color space. Gamma corrected images should have this parameter disabled by default.

## Red Exposure

Adds or subtracts red from the image. As in motion picture printing, higher values subtract and lower values add.

## Green Exposure

Adds or subtracts green from the image. As in motion picture printing, higher values subtract and lower values add.

## Blue Exposure

Adds or subtracts blue from the image. As in motion picture printing, higher values subtract and lower values add.

## Gang

The Red, Blue and Green Exposure slider values can be ganged together. When ganged, drag any Exposure slider to affect all three values.

## Telecine

### Hue

Rotates the hue of the image.

### Saturation

Adjusts the saturation of the image. Positive values saturate, negative values desaturate.

### Brightness

Adjusts the brightness of the image. Positive values brighten, negative values darken.

### Contrast

Adjusts the contrast of the image. Positive values increase contrast, negative values decrease contrast.

### Gamma

Adjusts the gamma of the image. The gamma adjustment leaves the white and black points the same and only modifies the values in-between. Positive values lighten the midtones, negative values darken the midtones.

### Pedestal

Adjusts the black level of the image.

## Temperature

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Temperature

Sets the color of the image to be either warmer or cooler. Dragging the slider to the right makes the image cooler (bluer) and dragging the slider to the left makes the image warmer (redder).

## Cyan/Magenta

Adds either Cyan or Magenta to the image. Dragging the slider to the right makes the image more magenta and dragging the slider to the left makes the image more cyan.

## Brightness

Adjusts the brightness of the image.

# COLOR GRADIENT

## Description

Color Gradient colors and or darkens only a portion of the image giving you the ability to simulate any Color Gradient filter. Presets for your favorite color gradient filters are provided as well as the ability to create custom colors. There is a graduated transition for a smooth color blend between the colored/darkened portion and the original image. Color Gradient is especially useful for changing and enhancing the color of the sky.



Photo by Joshua Earle on Unsplash

Go to the [Color Gradient Tutorial](#) to see how the filter works.

## Category

Grads/Tints.

## Filters

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Color

The Color parameter sets the color of the grad through the use of a standard color picker.

## Opacity

Sets the opacity of the color filter.

## Preserve Highlights

Preserves the white areas of the image.

## Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the filter application.

## Grad

Grad is the transition area that goes from the tinted image to the original image. Its direction, corners and size can be adjusted. Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

# COLOR INFRARED

## Description

Color Infrared simulates infrared filters used in conjunction with infrared sensitive film or sensors to produce very interesting false-color images with a dreamlike or sometimes lurid appearance.



Photo by Karsten Wurth on Unsplash

Go to the [Color Infrared Tutorial](#) to see how the filter works.

## Category

Special Effects.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Magenta

Adjusts the amount of magenta.

### Blue

Adjusts the amount of blue.

### Hue

Adjusts the hue in any non-blue areas.

## Contrast

Adjusts the contrast of the image.

# COLOR PASTE

## Description

Color Paste takes the luminance values of the foreground image and pastes it as a color over the background.

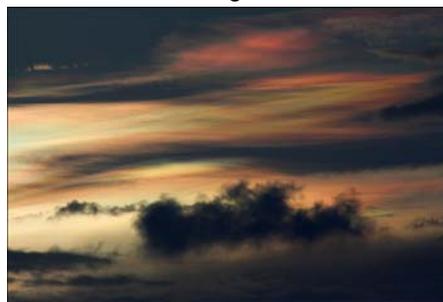
After



Background



Foreground



Background: Photo by Linda Xu on Unsplash  
Foreground: Photo by Bhavyesh Acharya on Unsplash

Go to the [Color Paste Tutorial](#) to see how the filter works.

**Note:** Color Paste requires a minimum of Premiere Pro CC. In addition, the Sequence Settings > Composite in Linear Color preference needs to be disabled for Color Paste to composite correctly.

## Category

Composite.

## Input Is Premultiplied

In Nuke, the Color Paste filter needs to know if the input image is premultiplied. Enable if premultiplied.

## Premultiply Result

In Nuke, Color Paste premultiplies the output by default.

## Opacity

Sets the opacity of the foreground element.

## Color

The Color parameter sets the color of the foreground image through the use of a standard eyedropper or color picker. The default color is white.

## COLOR SHADOW

### Description

Creates a high contrast image overlaid with a gradient.



Photo by Emre Karatas on Unsplash

Go to the [Color Shadow Tutorial](#) to see how the filter works.

### Category

Special Effects

### Controls

#### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

#### Threshold

Sets the amount of image detail.

#### Invert

Changes whether the gradient is in the background or foreground.

## Background Color

Sets the color of the background. Select the desired color using the color picker.

## Color 1

Sets the color for the top half of the image. Select the desired color using the color picker.

## Color 2

Sets the color for the bottom half of the image. Select the desired color using the color picker.

## Grad

Grad is the transition area between the two colors. Its direction, corners and size can be adjusted. Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

## COLOR SPOT

### Description

Tints the image using presets for common photographic filters except for a center spot which retains normal color. The center spot can be moved, sized and the amount of blur can be controlled.

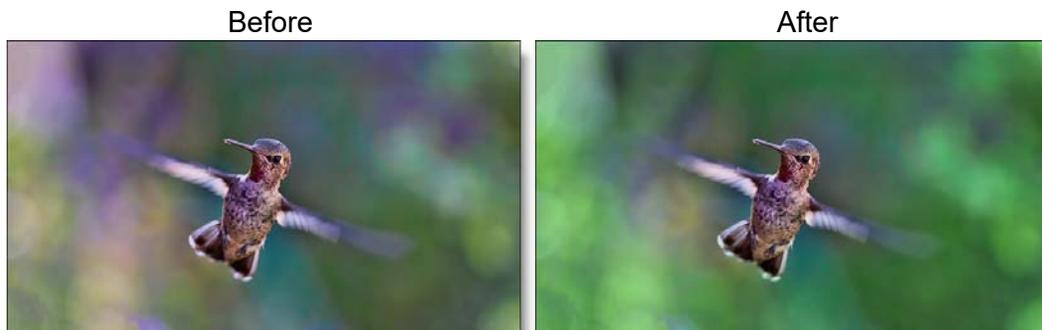


Photo by Bill Williams on Unsplash

Go to the [Color Spot Tutorial](#) to see how the filter works.

### Category

Grads/Tints.

### Controls

#### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

#### Color

##### Color

The Color parameter sets the color through the use of a standard color picker.

##### Opacity

Sets the opacity of the color filter.

## Preserve Highlights

Preserves the white areas of the image.

## Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the filter application.

## Spot

A spot in the form of a radial gradient is used to control where color is added to the image. Go to the **Spot** section of Common Filter Controls to see how the Spot controls work.



## Amount

Suppresses the color chosen from the Suppress pop-up menu. The default value of 100 should be sufficient for most situations.

## Range

Increases the range of areas that are color suppressed. If the color you want to suppress is still evident, increase this value.

## Edge

When an Alpha channel is present, Edge suppresses the color spill of the foreground edge to the color gray. This is very useful for edges that contain a lot of transparency like hair or reflections.

**Note:** The Edge parameter is not available on Avid Editing Systems.

# COMPOSITE

## Description

Composite layers a foreground over a background using a matte with the ability to add drop shadows. To create realistic composites, Color Correct, Blur, Grain and Transform controls are provided. Composite also lets you manipulate the matte using grow, shrink and blur tools. Another crucial feature in creating seamless effects, Composite's edge blending allows for color correction, blurring and controlling the opacity of the foreground images' edge.

After



Background

Foreground



Go to the [Composite Tutorial](#) to see how the filter works.

## Category

Composite.

## Input Is Premultiplied

In Nuke, the Composite filter needs to know if the input image is premultiplied. Enable if premultiplied.

## Opacity

Sets the opacity of the foreground element.

## General Controls

Composite includes Color Correct, Blur, Grain and Transform controls. Go to the [Color Correct](#), [Blur](#), [Grain](#) and [Transform](#) filters to see how they work.

## Matte

In this section, there are various controls that can be used to affect the matte. Go to the [Matte](#) parameters to see how they work.

### Input

Selects what image to use for the matte.

#### **After Effects / Premiere Pro**

Choose the layer/track to use as the matte if you don't have an embedded Alpha channel or if you want to use an Alpha channel from another clip.

#### **Avid**

When working with three tracks, the matte comes from the top track. When working with two tracks, the top track must contain a Matte Key (RGB+Alpha image) and its embedded alpha channel is used for the matte.

#### **Final Cut Pro**

Click the drop zone to the right of the Input parameter, choose a clip, and press Apply Clip below the Viewer.

#### **Motion**

Drag the image to be used as the matte source and place it onto the drop zone to the right of the Input parameter.

## OFX

Assigning the matte input requires an OFX host that supports auxiliary inputs. Consult the host documentation for instructions on how to assign an auxiliary input as this will vary by host.

**Note:** In most hosts, the Alpha channel comes from the RGB+Alpha foreground clip.

## Use

Chooses the channel from the matte input to use in the Composite.

### Alpha Channel

The Alpha Channel is used for the matte in the composite.

### Red Channel

The Red Channel is used for the matte in the composite.

### Green Channel

The Green Channel is used for the matte in the composite.

### Blue Channel

The Blue Channel is used for the matte in the composite.

### Luminance

The average luminance of the RGB channels is used for the matte in the composite.

**Note:** The Use parameter is not available in Avid Editing Systems. When applied to a Matte Key, the Alpha Channel is used, otherwise it uses the luminance of the RGB channels.

## Invert

### Off

Does nothing to the matte.

### On

Inverts the luminance values of the matte.

**Note:** Depending on what is black and white in your matte, you may need to toggle Invert to off.

## Shrink/Grow

Shrinks or grows the matte. Negative values shrink and positive values grow the matte.

## Blur

The matte is blurred by a fast, quality blur.

## Black Clip

Blacks in the matte are made blacker by increasing the value of the slider. As the slider value increases, more values are clipped to black. This is helpful for getting rid of unwanted gray areas in what should be the black part of the matte.

## White Clip

Whites in the matte are made whiter by increasing the value of the slider. As the slider value increases, more values are clipped to white. This is helpful for getting rid of unwanted gray areas in what should be the white part of the matte.

## Drop Shadow

Drop shadows can be added to any composite. All you have to do is turn up the opacity, position the drop shadow and add a little blur.

**Note:** The Drop Shadow group on Avid Systems has been truncated to “Shad”.

## Color

The Color parameter sets the color of the drop shadow through the use of a standard eyedropper or color picker. The default color is black.

## Opacity

The opacity of the shadow.

## Blur

The drop shadow is blurred by a fast, quality blur.

## Transform

Transform the drop shadow using Position, Scale, Rotate, Corner-Pin, Shear and Crop controls. Go to the **Transform** section of Common Filter Controls to see how the Transform Controls work.

**Note:** There are two sets of on-screen Transform controls in Composite. The point controls that are offset to the right and down are for the drop shadow, while the point controls located on the corners and center of the image are for the foreground. To see the on-screen controls in After Effects, you must highlight the “Composite” effect title in the Effect Controls window. On Avid Editing Systems, you may need to zoom out to see the on-screen controls.

## Edge

The Edge parameters allow you to color correct or blur only the edge of the foreground. You can also mix the edge of the foreground with the background. This is very helpful for seamlessly integrating 3D elements as well as dealing with aliased mattes.

### Size

Determines the size of the edge matte.

### Color Correct

The edge of the foreground can be color corrected. Go to the **Color Correct** filter to see how Color Correct controls work.

### Blur

The edge is blurred by a fast, quality blur.

### Opacity

Mixes the foreground back to the background, but only in areas of the edge matte.

# COLORIZE GRADIENT

## Description

Using multiple colors, Colorize Gradient colorizes the image according to the image's brightness values.

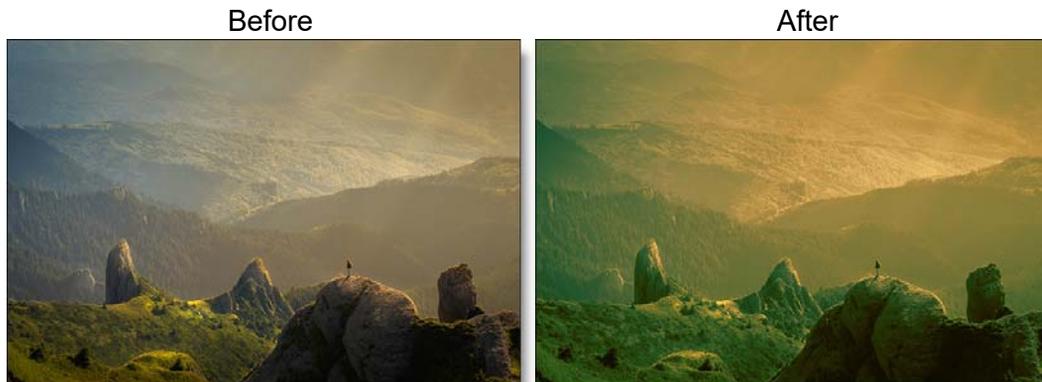


Photo by David Marcu on Unsplash

Go to the [Colorize Gradient Tutorial](#) to see how the filter works.

## Category

Grads/Tints.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Opacity

Sets the overall opacity of the colorization.

### Shadows

#### Enable

Determines whether or not the color contributes to the gradient.

## Color

Picks the color that the image will be colorized with. Select the desired color using the color picker.

## Position

Determines where the colorization is applied to the image. By default, Shadows are set to 0, which is the shadow areas. A value of 50 would be the midtones, while 100 would be highlights.

## Midtones

The Midtones controls are the same as the controls for the Shadows, except by default, the colorization is applied to the midtones of the image.

## Highlights

The Highlights controls are the same as the controls for the Shadows, except by default, the colorization is applied to the highlights of the image.

## Grad

You can optionally use a gradient that limits where the filter is applied. Grad is the transition area that goes from the colorized image to the original image. Its direction, corners and size can be adjusted. Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

# CROSS PROCESSING

## Description

Cross-processing is a photographic technique where print film (C41) is processed in the set of chemicals usually used to process slide film (E6) or vice versa. The final result yields images with oddly skewed colors and increased contrast and saturation. Different film stocks produce different results, so we have created what we feel is a representative look.



Photo by Jesse Collins on Unsplash

Go to the [Cross Processing Tutorial](#) to see how the filter works.

## Category

Film Lab.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Amount

Sets the intensity of the cross process effect.

## Mode

### **Print to Slide**

Simulates the effect of print film (C41) being processed in slide (E6) chemicals.

### **Slide to Print**

Simulates the effect of slide film (E6) being processed in print (C41) chemicals.

## DAY FOR NIGHT

### Description

Day for Night simulates a technique used for shooting exteriors in daylight made to look like they were photographed at night. Typically, it involves underexposing by two to two-and-a-half stops and using a filter to provide a tint, that is often a lavender-blue, as it mimics twilight and appears to emulate the mood of moonlight.

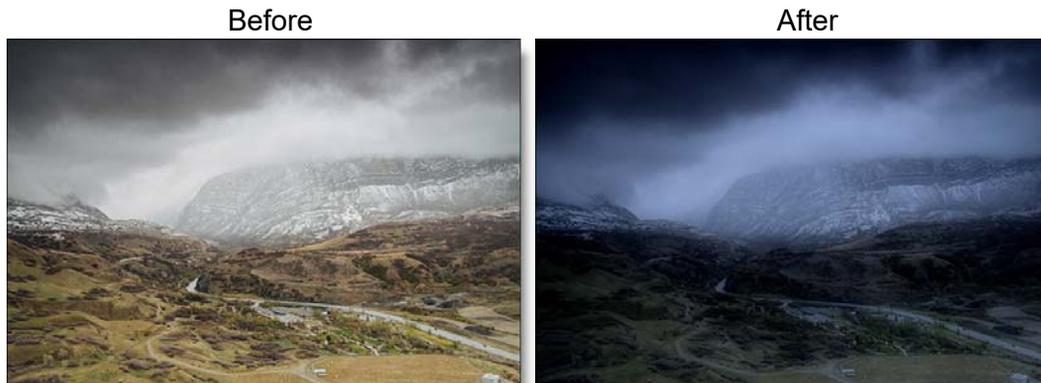


Photo by Daniel Bowman on Unsplash

Go to the [Day for Night Tutorial](#) to see how the filter works.

### Category

Special Effects.

### Controls

#### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

#### Diffusion

##### Blur

Sets how much the image is diffused.

## Opacity

Sets the amount of diffusion mixed into the original image. The higher the setting, the more the image is blurred.

## Moonlight

### Color

The Color parameter sets the color of the moonlight through the use of a standard color picker. The default color is blue.

### Opacity

Sets the opacity of the moonlight color.

### Preserve Highlights

Preserves the white areas of the image.

### Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the color application.

## Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

# DEBAND

## Description

DeBand removes banding artifacts from an image by smoothing pixels in banded areas while retaining detail.



Photo by Frantzou Fleurine on Unsplash

## Category

Image.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Amount

Sets the amount of debanding.



# DEFlicker

## Description

Removes luminance flickering.

Go to the [DeFlicker Tutorial](#) to see how the filter works.

## Category

Image.

## Controls

### Amount

Sets the amount of deflickering.

### Set Reference Image

Sets the brightness level for the scene based on the current frame in the Timeline.

# DEFog

## Description

Using advanced deweathering algorithms, Defog restores clear day contrasts and colors of a scene taken in bad weather such as fog and mist. It is also successful in removing the effects of optical Fog and Diffusion filters.



Photo by Matt Hoffman on Unsplash

Go to the [Defog Tutorial](#) to see how the filter works.

## Category

Special Effects.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Defog

#### Color

The Color parameter sets the color of the fog to be removed through the use of a standard color picker. The default color is white.

## Vanishing Point

A vanishing point along the direction of increasing distance in the image is used to remove fog. By default, the vanishing point is set to the center of the screen. Essentially, the fog is removed in a radial pattern emanating from the vanishing point. So at the default center position, fog is removed in a circular pattern with a greater amount of fog being removed from the center while falling off at the edges. For instance, if your fog moves in the direction of top right to bottom left, set your vanishing point towards the top right corner and the fog removal will be more intense at the upper right and fall off at the bottom left. However, in most cases, the vanishing point can be left in the center of the screen and you will obtain acceptable results.

There is an on-screen control in the center of the image. By clicking and dragging the on-screen control, the position of the vanishing point can be adjusted.

### Position X

The horizontal position of the vanishing point.

### Position Y

The vertical position of the vanishing point.

**Note:** To see the on-screen control in After Effects/Premiere Pro, you may need to highlight Defog in the Effect Controls window. On Avid Editing Systems, the Vanishing Point parameters are named only X and Y.

## Defog

Sets the amount of fog to be removed from the scene.

## Min Depth

Controls how much fog is removed from the darker areas of the image.

## Max Depth

Controls how much fog is removed from the brighter areas of the image.

## Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

# DEFRINGE

## Description

Purple or blue fringing around overexposed areas is a result of sensor overloading in video as well as digital still cameras. DeFringe isolates and removes the various types of color fringing.



Go to the [DeFringe Tutorial](#) to see how the filter works.

## Category

Lens.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Red

#### Red

Adjusts the saturation of red values in areas defined by the Position and Range controls. Positive values saturate, negative values desaturate.

## Position

A matte is generated to isolate red fringing. The areas that are white in the red matte are the areas that will be defringed. Moving the Position slider will change the hue that is used for the red matte.

## Range

Increases or decreases the range of values considered as red fringing. A low Range value indicates a narrow range of values, while a high Range value indicates a large range of values.

Go to the **Matte** section of Common Filter Controls to see how the Position and Range controls work.

## Green, Blue, Cyan, Magenta, and Yellow

The Green, Blue, Cyan, Magenta and Yellow groups work in a similar fashion to the Red group.

# DeNoise

## Description

Removes film grain and noise.



Photo by Brady Bellini on Unsplash

## Category

Image.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Amount

Sets the amount of denoising.

**Note:** You may not see an accurate representation of the grain and noise removal in the viewer unless your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio.

## DEPTH OF FIELD

### Description

Depth of Field can be added to a scene by isolating and blurring only a portion of the image. The amount of blurring is directly proportionate to the luminance of the matte settings, a gradient or an input image.



Photo by Ethan Robertson on Unsplash

Go to the [Depth of Field Tutorial](#) to see how the filter works.

### Category

Lens.

### Controls

#### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

#### Depth

Selects the source for the selective blur effect.

#### Matte

Use a matte for the depth source.

## Grad

Use a gradient for the depth source.

## Input

Use an image as the depth source. This is useful for 3D programs which render out depth mattes.

### After Effects / Premiere Pro

- Change Depth > Depth to Input.
- Select the layer/track you want to use from the Depth > Input selector.

### Final Cut Pro X

- Change Depth > Depth to Input.
- Click the drop zone to the right of the Depth Input parameter, choose a clip, and press Apply Clip below the Viewer.

### Motion

- Change Depth > Depth to Input.
- Drag the image to be used as the depth input and place it onto the drop zone to the right of the Depth > Input parameter.

### Avid Editing Systems

- Place images on two adjacent video tracks.
- Apply the Depth of Field filter to the upper track of the two adjacent tracks.
- Change Depth > Depth to Input.
- The track below the one that you added Depth of Field to is used as the depth source.

### OFX Hosts

- Assign the image to be used as the depth source.

**Note:** Using an image as the depth source is only available in OFX hosts that support auxiliary inputs. Consult the host documentation for instructions on how to assign a source input as this will vary by host.

- Change Depth > Depth to Input.
- The assigned input will now be used as the depth source.

## Blur

Sets how much the image is blurred.

## Grad

Depth of Field can optionally use a gradient that limits where the filter is applied. Grad is the transition area that goes from the blurred portion to the original image. Its direction, corners and size can be adjusted. Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

## Matte

A matte can be used to create the depth of field effect. Go to the **Matte** section of Common Filter Controls to see how the Matte controls work.

## DETAIL

### Description

Detail presents a new technique for performing selective sharpening, detail enhancement and edge aware smoothing. Our approach decomposes the image into three detail layers: Coarse, medium and fine. Each of the detail layers can be manipulated separately in various ways, for instance, sharpening or smoothing. Add to that sophisticated, but easy to use masking and you have quick isolation of image features for selective filtering.

Before



Smooth



Sharpen



Photo by Chris Lawton on Unsplash

Go to the [Detail Tutorial](#) to see how the filter works.

### Category

Image.

# Controls

## Coarse

Adjusts the Coarse detail layer. Increasing the value sharpens while decreasing the value smooths.

## Medium

Adjusts the medium detail layer. Increasing the value sharpens while decreasing the value smooths.

## Fine

Adjusts the fine detail layer. Increasing the value sharpens while decreasing the value smooths.

## Gang

The Coarse, Medium and Fine slider values can be ganged together so that they all move simultaneously. This will generate an overall sharpening effect if the sliders are increased and an overall smoothing effect if decreased.

## Matte

A matte can be used to limit the detail effect. Wherever there is white in the matte is where the detail adjustment will occur. Go to the **Matte** parameters to see how they work.

## DEVELOP

### Description

Provides useful developing controls for globally adjusting the color and tonal scale of your images.

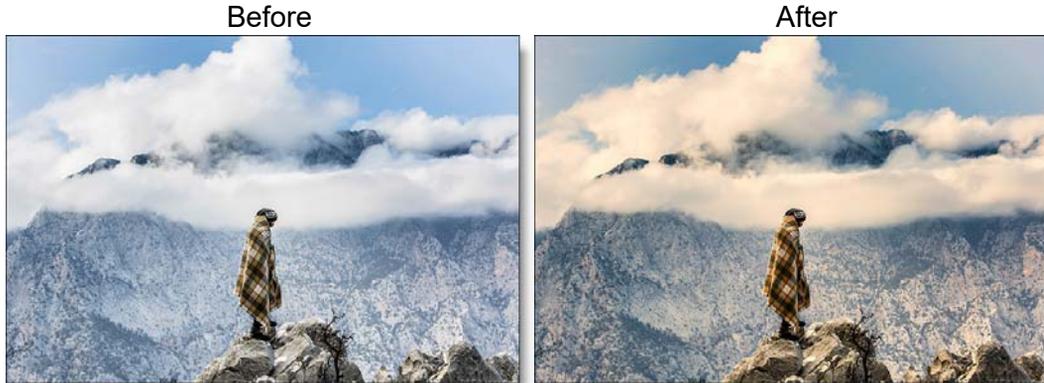


Photo by Mahir Uysal on Unsplash

### Category

Color.

### Controls

#### Auto-Equalize

Auto-Equalize uses the calculated white point for camera RAW images. This is disabled when Develop is applied to non camera RAW images, since adjusting the white point does nothing in this case.

#### Temperature

Sets the color of the image to be either warmer or cooler. Dragging the slider to the right makes the image cooler (bluer) and dragging the slider to the left makes image warmer (redder).

## Tint

Adds either Green or Magenta to the image. Dragging the slider to the right makes the image more magenta and dragging the slider to the left makes the image more green.

## Exposure

Sets the overall image brightness, with a greater effect in the high values. Adjust the slider until the image looks good and the whites are at the right level. Use Recovery to bring highlight values down. Exposure values are in increments equivalent to f-stops. An adjustment of +1.00 is similar to increasing the aperture 1 stop. Similarly, an adjustment of -1.00 is similar to reducing the aperture 1 stop.

## Recovery

Reduces the tones of extreme highlights and attempts to recover highlight detail lost because of overexposure.

## Fill Light

Lightens shadows to reveal more detail while maintaining blacks. Take care not to over apply the setting and reveal image noise.

## Blacks

Specifies which image values map to black. Moving the slider to the right increases the areas that become black, sometimes creating the impression of increased image contrast. The greatest effect is in the shadows, with much less change in the midtones and highlights.

## Brightness

Adjusts image brightness, mainly affecting midtones. Set the overall tonal scale by setting Exposure, Recovery, and Blacks. Then set the overall image brightness. Large brightness adjustments can affect shadow or highlight clipping, so you may want to readjust the Exposure, Recovery, or Blacks slider after adjusting brightness.

## Contrast

Increases or decreases image contrast, mainly affecting midtones. When you increase contrast, the middle-to-dark image areas become darker, and the middle-to-light image areas become lighter. The image tones are inversely affected as you decrease contrast.

## Vibrance

Adjusts the saturation so that clipping is minimized as colors approach full saturation, changing the saturation of all lower-saturated colors with less effect on the higher-saturated colors. Vibrance also prevents skin tones from becoming over saturated.

## Saturation

Adjusts the saturation of all image colors equally.

# DIFFUSION

## Description

Diffusion creates atmosphere by reducing contrast while creating a glow around highlights or shadows using an extensive texture library.

Before



After



Photo by Marina Vitale on Unsplash

Go to the [Diffusion Tutorial](#) to see how the filter works.

## Category

Diffusion.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Diffusion

#### Blend

Determines the blend mode to be used to create the diffusion effect.

#### Add

The diffusion is added to your image.

## Screen

The diffusion is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

## Brightness

Sets the intensity of the diffusion.

## Blur

Sets the softness of the diffusion.

## Color

The Color parameter sets the color of the diffusion through the use of a standard color picker. The default color is white.

## Color Correct

Go to the [Color Correct](#) filter to see how the Color Correct controls work.

## Texture

### Texture

Selects the texture which will be used to add diffusion to the image.

### Blend

Textures can be used as the source of the diffusion as well as combined with a matte using a variety of Blend modes. Go to [Blend Modes](#) for explanations of the various modes.

I like the Multiply blend mode for combining textures with the matte because it only puts the texture within the areas of the generated matte.

### Transform

Transform the texture using Position, Scale, Rotate, Corner-Pin, Shear and Crop controls. Go to the [Transform](#) section of Common Filter Controls to see how the Transform Controls work.

## Matte

A matte can be used to create the diffusion effect. Go to the [Matte](#) section of Common Filter Controls to see how the Matte controls work.

## DOUBLE FOG

### Description

The Double Fog filter creates a soft, misty atmosphere over the image by first applying fog using a vanishing point along the direction of increasing distance in the image. Then, a second pass blooms image highlights.



Photo by Martin Knize on Unsplash

Go to the [Double Fog Tutorial](#) to see how the filter works.

### Category

Diffusion.

### Controls

#### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

#### Fog

##### Color

The Color parameter sets the color of the fog to be added through the use of a standard color picker. The default color is white.

## Vanishing Point

A vanishing point along the direction of increasing distance in the image is used to add fog. By default, the vanishing point is set to the center of the screen. Essentially, the fog is added in a radial pattern emanating from the vanishing point. So at the default center position, fog is added in a circular pattern with a greater amount of fog being added in the center while falling off at the edges. For instance, if you would like your fog to move in the direction of top right to bottom left, set your vanishing point towards the top right corner and the fog will be more intense at the upper right and fall off at the bottom left. However, in most cases, the vanishing point can be left in the center of the screen and you will obtain acceptable results.

There is an on-screen control in the center of the image. By clicking and dragging the on-screen control, the position of the vanishing point can be adjusted.

### Position X

The horizontal position of the vanishing point.

### Position Y

The vertical position of the vanishing point.

**Note:** There is an on-screen control in the center of the image. By clicking and dragging the on-screen control, the position of the vanishing point can be adjusted. To see the on-screen control in After Effects/Premiere Pro, you may need to highlight Double Fog in the Effect Controls window. On Avid Editing Systems, the Vanishing Point parameters are named only X and Y.

## Fog

Sets the amount of fog to be added to the scene.

## Min Depth

Controls how much fog is added in the darker areas of the image.

## Max Depth

Controls how much fog is added in the brighter areas of the image.

## Glow

The Glow controls are used to add additional atmosphere and are useful in adding glow to highlights. By default, a wide matte of highlights are glowed in the image and blended with the Screen blend mode. This works well for adding additional fog. To add glow around highlights such as light sources, it is best to set the Blend mode to Add and lower the Matte > Range parameter to limit the areas of glow to only include the light sources.

### Blend

Determines the blend mode to be used to create the glow effect.

### Add

The glow is added to your image.

### Screen

The glow is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

### Brightness

Sets the intensity of the glow.

### Blur

Sets the softness of the glow.

### Color

The Color parameter sets the color of the glow through the use of a standard color picker. The default color is white.

## Matte

A matte is used to create the glow effect. Go to the [Matte](#) section of Common Filter Controls to see how the Matte controls work.

## DROP SHADOW

Drop shadows can be added to an image that has an Alpha channel. The opacity, color, blur and transformation of the drop shadow can all be adjusted.

Before



After



Go to the [Drop Shadow Tutorial](#) to see how the filter works.

### Category

Composite.

## Input Is Premultiplied

In Nuke, the Drop Shadow filter needs to know if the input image is premultiplied. Enable if premultiplied.

## Color

The Color parameter sets the color of the drop shadow through the use of a standard eyedropper or color picker. The default color is black.

## Opacity

The opacity of the shadow.

## Blur

The drop shadow is blurred by a fast, quality blur.

## Transform

Transform the drop shadow using Position, Scale, Rotate, Corner-Pin, Shear and Crop controls. Go to the **Transform** section of Common Filter Controls to see how the Transform Controls work.

# DUAL GRADIENT

## Description

Dual Gradient applies two photographic filters to the image which are blended together with a gradient. Presets for your favorite Color Gradient filters are provided as well as the ability to create custom colors.

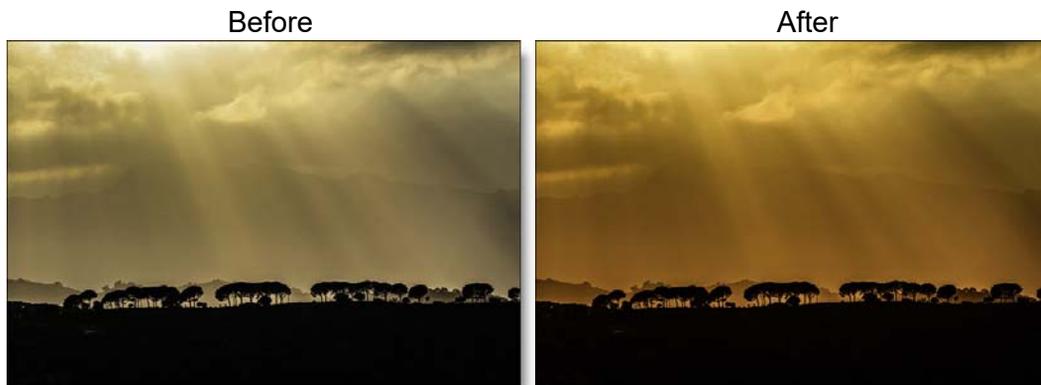


Photo by Heather Emond on Unsplash

Go to the [Dual Gradient Tutorial](#) to see how the filter works.

## Category

Grads/Tints.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Color 1

Sets the color for the top half of the image. Select the desired color using the color picker or choose a filter preset.

### Presets

Select one of the filters from the pop-up menu.

## Color

The Color parameter sets the color of the grad through the use of a standard color picker.

## Opacity

Sets the opacity of the color filter.

## Color 2

The Color 2 controls are the same as the controls for Color 1 except it is applied to the bottom half of the image.

## Preserve Highlights

Preserves the white areas of the image.

## Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the filter application.

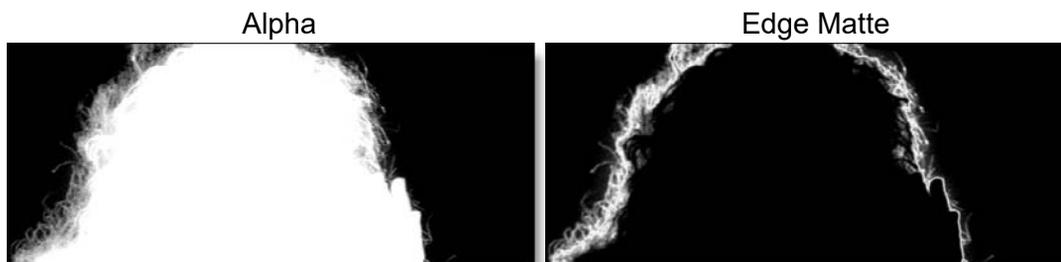
## Grad

Grad is the transition area between the two tints. Its direction, corners and size can be adjusted. Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

## EDGE COMPOSITE

### Description

Edge Composite automatically generates an edge matte from an existing Alpha channel and allows you to color correct or blur only the edge of the foreground. You can also mix the edge of the foreground with the background. This is very helpful for seamlessly integrating images as well as dealing with aliased mattes.



Go to the [Edge Composite Tutorial](#) to see how the filter works.

### Category

Composite.

### Size

Determines the size of the edge matte.

### Color Correct

The edge of the foreground can be color corrected. Go to the [Color Correct](#) filter to see how the Color Correct controls work.

### Blur-Horizontal

The edge of the composite is blurred by a fast, quality blur along the X-axis, but only in areas of the edge matte.

## Blur-Vertical

The edge of the composite is blurred by a fast, quality blur along the Y-axis, but only in areas of the edge matte.

## Gang

The horizontal and vertical slider values can be ganged together. Adjust the horizontal slider to affect both values.

## Opacity

Mixes the foreground back to the background, but only in areas of the edge matte.

# ENHANCING

## Description

Selectively enhance any color to make it pop with little to no effect on other colors.



Photo by Phil Coffman on Unsplash

Go to the [Enhancing Tutorial](#) to see how the filter works.

## Category

Color.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Enhancing

Adjusts the saturation of red, green or blue hues.

### Matte

#### Presets

A matte is created based on the hue of the image to create the enhancement effect. Select from Red, Green or Blue preset hue mattes from the pop-up menu or use the Hue eyedropper to pick a color off of the screen.

## Hue

When adjusting the Hue parameter, you are selecting the hue of the image which will be enhanced.

**Note:** The Hue Color picker allows you to select a custom matte color, but is only active when the Custom option has been selected in the Presets pop-up menu.

## Range

Increases or decreases the range of values in the hue matte. A low Range value indicates a narrow range of values. A high Range value indicates a large range of values included in the matte.

## Blur

Sets the softness of the matte by using a fast, quality blur.

Go to the [Matte](#) parameters to see how they work.

# EYE LIGHT

## Description

Creates a targeted light to be placed around a person's eyes.

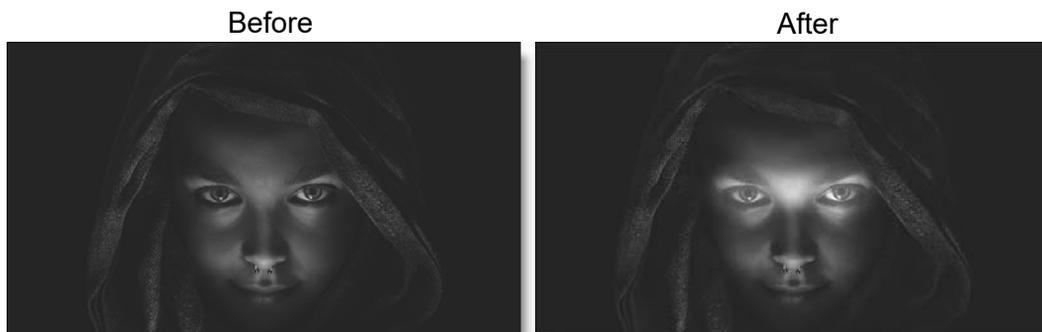


Photo by Sebastian Unrau on Unsplash

Go to the [Eye Light Tutorial](#) to see how the filter works.

## Category

Light.

## Controls

### Light

#### Blend

Determines the blend mode to be used to add the light.

#### Add

The light is added to your image.

#### Screen

The light is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

#### Brightness

Sets the intensity of the light.

## Blur

Sets the softness of the light.

## Gels

Photographers, cinematographers and lighting designers use colored filters or gels in front of lights. Whatever mood you wish to create, we have the colors needed to achieve the effect. Select one of the Gels presets from the pop-up menu.

## Color

Sets the color of the light through the use of a standard color picker.

## Shadow

### Brightness

Sets the intensity of the shadows. The Brightness parameter will darken only those areas that are not being brightened by the Light settings.

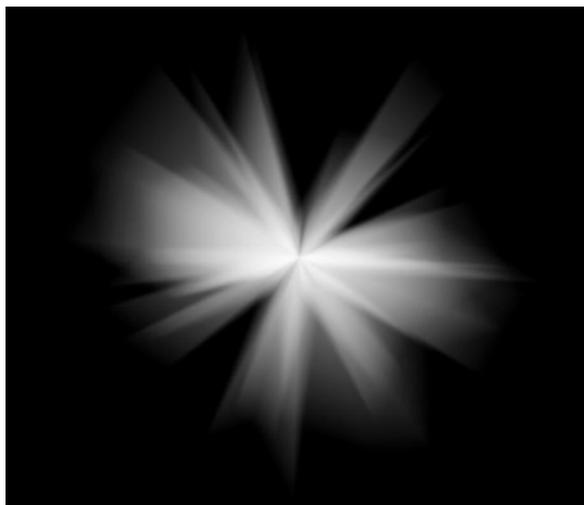
## Transform

Transform the eye light pattern using Scale and Rotate controls. Go to the **Transform** section of Common Filter Controls to see how the Transform Controls work.

## FAN RAYS

### Description

Generates asymmetric fanned rays.



Go to the [Fan Rays Tutorial](#) to see how the filter works.

### Category

Light.

### Controls

#### Blend

Determines the blend mode used to create the rays effect.

#### Add

The rays are added to your image.

#### Screen

The rays are combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

## Brightness

Controls the brightness.

## Color

Sets the color.

## Scale

Changes the size.

## Aspect

Sets the aspect ratio.

## Angle

Sets the angle.

## Element Count

Determines the number of rays.

## Softness

Blurs the rays.

## Randomize

Randomizes the size and position.

## Jitter

Randomizes the angle.

# FILM STOCKS

## Description

Film Stocks is a unique filter that simulates 329 different color and black and white still photographic film stocks, motion picture films stocks and historical photographic processes.

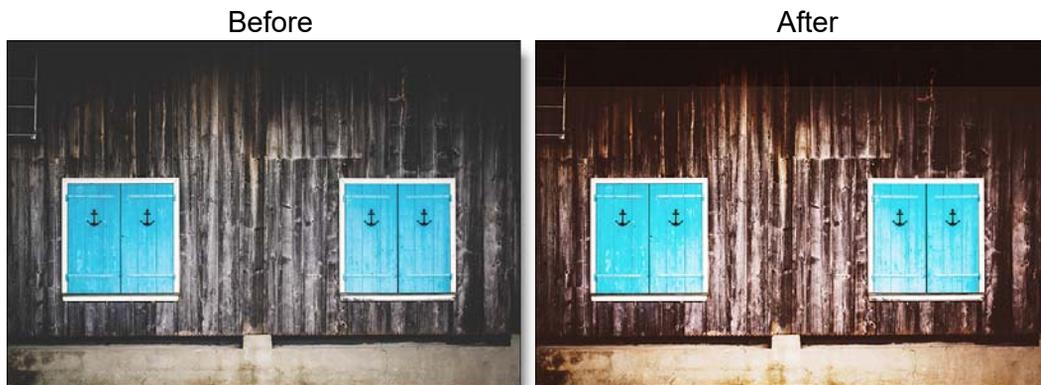


Photo by Teresa Kluge on Unsplash

Go to the [Film Stocks Tutorial](#) to see how the filter works.

## Category

Film Lab.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

### Amount

Sets the amount of the selected preset.

### Black and White

Red, Green and Blue controls allow you to determine the contribution of each color channel in the black and white conversion.

## **Enable**

Enables the Black and White conversion.

## **Red**

Sets the amount of the red channel that contributes to the black and white conversion.

## **Green**

Sets the amount of the green channel that contributes to the black and white conversion.

## **Blue**

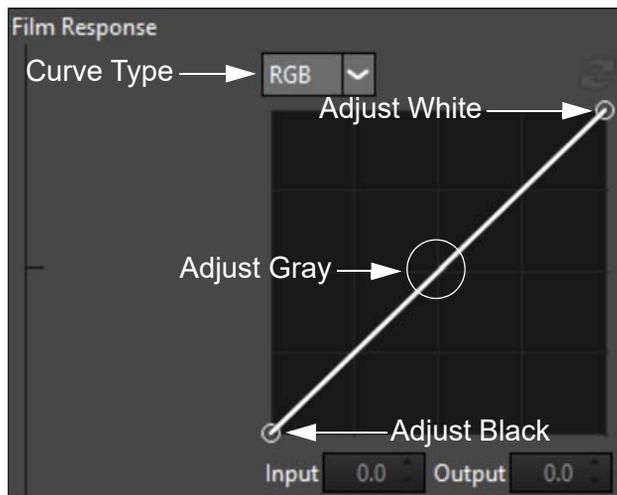
Sets the amount of the blue channel that contributes to the black and white conversion.

## **Film Response**

To mimic the characteristics of a particular film stock, a combination of settings for the RGB channels have been set.

## Curves

You can use Curves to adjust the entire tonal range of an image by changing the shape of the curve in the Curves adjustment. The Curves adjustment lets you adjust points throughout the tonal range of an image (from shadows to highlights).



**Note:** Curves are only available in the DFT interface.

### Selecting Curves

- Select RGB, Red, Green or Blue from the Curve Type pop-up menu.



- Click directly on an existing curve in the graph to select it.

### Adding and Deleting Points:

- Click directly on the curve to add a new point. Up to five points can be added.
- Points can be deleted by clicking and dragging a point to the edge of the graph.

### Adjusting Points:

- Moving a point in the top portion of the curve adjusts the shadows.
- Moving a point in the center of the curve adjusts the midtones.

- Moving a point in the top portion of the curve adjusts the highlights.
- Moving the curve upward or downward lightens or darkens the image. The steeper sections of the curve represent areas of higher contrast; flatter sections represent areas of lower contrast.
- To darken highlights, move a point near the top of the curve downward. Moving a point either down or to the right maps the input value to a lower output value, and the image darkens.
- To lighten the shadows, move a point near the bottom of the curve upward. Moving a point either up or to the left maps a lower input value to a higher output value, and the image lightens.

## RGB

Controls the RGB film response curve. If you are using a black and white preset, the grayscale film response curve will be adjusted.

## Red

Controls the Red film response curve.

## Green

Controls the Green film response curve.

## Blue

Controls the Blue film response curve.

## Color Correct

Color Correct manipulates the Temperature, Cyan/Magenta, Brightness, Contrast, Shadow, Midtone, Highlight, and Saturation values of the image. Go to the [Color Corrector](#) filters to see how it works.

## Filter

Adds a color filter to the image.

## Presets

Select one of the filters from the pop-up menu.

## Color

Sets the color through the use of a standard color picker.

## Opacity

Sets the opacity of the color filter.

## Highlights

Preserves the white areas of the image.

## Sharpen

### Amount

Determines how much contrast is added at the edges.

### Radius

Controls the size of the edges you wish to sharpen.

### Threshold

The threshold setting is used to sharpen more pronounced edges, while leaving more subtle edges untouched. Low values sharpen more image areas while higher threshold values sharpen less.

## Diffusion

### Blend

Determines the blend mode to be used to create the diffusion/glow effect.

### Add

The diffusion/glow is added to your image.

### Normal

The diffusion is mixed with the original image. In this mode, the Amount slider only shows changes up to a value of 100.

### Screen

The diffusion/glow is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

### Amount

Sets the amount of diffusion.

### Blur

Sets the softness of the image.

## Color

The Color parameter sets the color of the diffusion/glow through the use of a standard color picker or eyedropper. The default color is white.

## Position

When using the Add and Screen blend modes, Position selects the values used to create the glow effect. A higher Position value uses the brightest image values to create the glow. A lower Position value uses the darkest image values to create the glow.

## Range

When using the Add and Screen blend modes, Range controls the range of values to be used for the glow. Once you've selected the "Position", you can then add or subtract the "Range" of values to be used in the glow source. A higher Range value includes more values in the glow source while a lower Range value includes less values.

## Vignette

A vignette is a popular photographic effect where the photo gradually fades into a color. Go to the **Vignette** filter to see how it works.

## Grain

Grain simulates film grain with control of the size, softness and intensity. In addition, a Film Response parameter controls where you will see grain in the image. Go to the **Grain** filter to see how it works.

**Note:** You may not see an accurate representation of the grain in the viewer unless your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio.

## FLAG / DOT

### Description

Flags and Dots are rectangular and circular lighting control devices used to create shadow areas on a motion picture or photographic set. This concept has been extended to digital so that areas of the image can be selectively darkened.



Photo by Marcelo Matarazzo on Unsplash

Go to the [Flag / Dot Tutorial](#) to see how the filters work.

### Category

Light.

### Controls

#### Flag / Dot

##### Brightness

Sets the intensity of the flag or dot.

##### Blur

Sets the softness of the flag or dot.

## Transform

Transform the flag or dot shape using Scale and Rotate controls. Go to the **Transform** section of Common Filter Controls to see how the Transform Controls work.

# FLASHING

## Description

Flashing allows you to use photographic filters to lower the contrast of your shadows or highlights. The motion picture lab can expose a small amount of light to the film at various stages of the developing and printing process. For example, Negative plus Dupe Negative flashing lifts blacks, while Print plus Master Positive flashing softens whites.



Photo by Stainless Images on Unsplash

Go to the [Flashing Tutorial](#) to see how the filter works.

## Category

Film Lab.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Shadows

#### Brightness

Raises the brightness of the shadows using either the Shadow > Color or Shadow > Presets.

#### Presets

Select one of the filters from the pop-up menu.

## Color

The Color parameter sets the color of the flashing through the use of a standard color picker.

## Position

Selects the shadow values to be adjusted.

## Range

Controls the range of values to be used for the shadows. A higher Range value considers more values as shadows.

## Highlights

### Brightness

Lowers the brightness of the highlights using either the Highlights > Color or Highlights > Presets.

### Presets

Select one of the filters from the pop-up menu.

## Color

The Color parameter sets the color of the flashing through the use of a standard color picker.

## Position

Selects the highlight values to be adjusted.

## Range

Controls the range of values to be used for the highlights. A higher Range value considers more values as highlights.

Go to the [Matte](#) section of Common Filter Controls to see how the Position and Range controls work.

# FLUORESCENT

## Description

Removes the green cast caused by fluorescent bulbs.

Before



After



Photo by Jens Lindner on Unsplash

Go to the [Fluorescent Tutorial](#) to see how the filter works.

## Category

Color.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Temperature

Removes the greenish tone caused by photographing under fluorescent lights.

# FOG

## Description

The Fog filter creates a soft, misty atmosphere over the image and glows highlights.



Photo by Alex Klopcic on Unsplash

Go to the [Fog Tutorial](#) to see how the filter works.

## Category

Diffusion.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Fog

#### Blend

Determines the blend mode to be used to create the fog effect.

#### Add

The fog is added to your image.

#### Screen

The fog is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

## Brightness

Sets the intensity of the fog.

## Blur

Sets the softness of the fog.

## Color

The Color parameter sets the color of the fog through the use of a standard color picker. The default color is white.

## Matte

A matte is used to create the fog effect. Go to the [Matte](#) section of Common Filter Controls to see how the Matte controls work.

## FROST

### Description

#### Frost

Frost glows highlights and reduces contrast while softening facial blemishes and wrinkles.

Before



After



Photo by Alexandru Zdrobau on Unsplash

#### Black Frost

Black Frost offers all the benefits of the Frost filter in a more subtle form. This filter subtly controls highlights, reduces contrast and provides a harder look than the Frost filter, while suppressing facial blemishes and wrinkles.

Before



After



Photo by Alexandru Zdrobau on Unsplash

Go to the [Frost Tutorial](#) to see how the filters work.

#### Category

Diffusion.

# Controls

## Presets

To select a preset, open the DFT interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

## Detail

### Smoothing

Fine image details, such as facial wrinkles and blemishes, are minimized using edge aware smoothing.

## Mist

The Mist controls add a mild glow to image highlights.

### Blend

Determines the blend mode to be used to create the mist effect.

#### Add

The mist is added to your image.

#### Screen

The mist is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

### Brightness

Sets the intensity of the mist.

### Blur

Sets the softness of the mist.

### Color

Sets the color of the mist.

## Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

## Matte

A matte is used to create the mist effect. Go to the **Matte** section of Common Filter Controls to see how the Matte controls work.

# GELS

## Description

Photographers, cinematographers and lighting designers use colored filters or gels in front of lights. Whatever mood you wish to create, we have the colors needed to achieve the effect.



Photo by Jacob Sapp on Unsplash

Go to the [Gels Tutorial](#) to see how the filter works.

## Category

Grads/Tints.

## Controls

### Presets

To select a gel, open the DFT interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

### Color

#### Color

The Color parameter sets the color through the use of a standard color picker.

#### Opacity

Sets the opacity of the color filter.

## Preserve Highlights

Preserves the white areas of the image.

## Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the gel application.

## Grad

Gels can optionally use a gradient that limits where the filter is applied. Grad is the transition area between the colored portion and the original image. Its direction, corners and size can be adjusted. Go to the [Grad](#) section of Common Filter Controls to see how the Grad controls work.

# GLOW

## Description

The Glow filter creates glows around selected areas of the image.



Photo by Pascal Muller on Unsplash

Go to the [Glow Tutorial](#) to see how the filter works.

## Category

Light.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Glow

#### Blend

Determines the blend mode to be used to create the glow effect.

#### Add

The glow is added to your image.

## Screen

The glow is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

## Brightness

Sets the intensity of the glow.

## Blur

Sets the softness of the glow.

## Color

The Color parameter sets the color of the glow through the use of a standard color picker. The default color is white.

## Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

## Matte

A matte is used to create the glow effect. Go to the **Matte** section of Common Filter Controls to see how the Matte controls work.

# GLOW DARKS

## Description

Glow and grows the darks areas of the image.



Photo by Ariel Lustre on Unsplash

Go to the [Glow Darks Tutorial](#) to see how the filter works.

## Category

Light.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Glow

#### Amount

Sets the intensity of the glow.

#### Blur

Sets the softness of the glow.

### Color Correct

Go to the [Color Correct](#) filter to see how the Color Correct controls work.

## Matte

A matte is used to create the glow effect. Go to the **Matte** section of Common Filter Controls to see how the Matte controls work.

# GLOW EDGES

## Description

Glow Edges isolates lines and edges in an image and then adds glow only to these areas resulting in a stylized look.

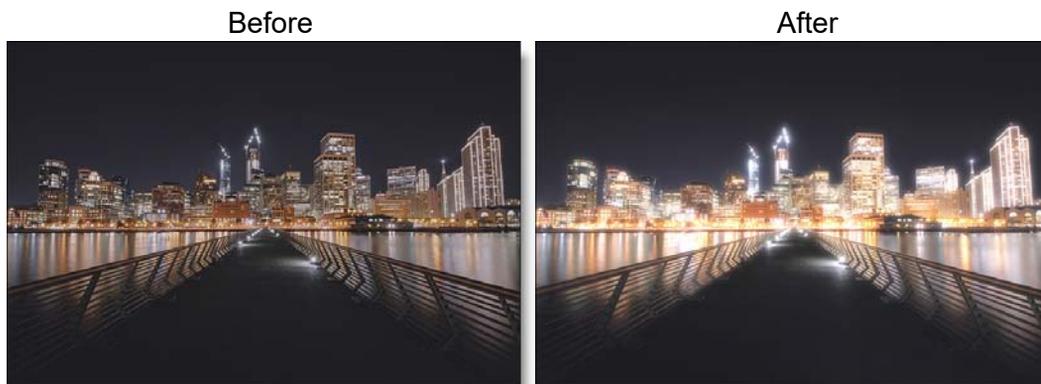


Photo by Jan Senderek on Unsplash

Go to the [Glow Edges Tutorial](#) to see how the filter works.

## Category

Light.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Glow

#### Blend

Determines the blend mode to be used to create the edge glow effect.

#### Add

The edge glow is added to your image.

## Screen

The edge glow is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

## Brightness

Sets the intensity of the edge glow.

## Blur

Sets the softness of the edge glow.

## Color

The Color parameter sets the color of the edge glow through the use of a standard color picker. The default color is white.

## Edge

An edge matte is created to produce the edge glow effect.

## Brightness

Determines the brightness of the edge matte.

## Blur

Blurs the edge matte.

# GRAIN

## Description

Grain simulates film grain with control of size, intensity and softness. In addition, a Film Response parameter controls where you will see grain in the image. Popular film stock presets are provided as a starting point to adding grain.



Photo by Jorge Gonzalez on Unsplash

Go to the [Grain Tutorial](#) to see how the filter works.

## Category

Film Lab.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

## Monochrome

When checked, the grain is monochrome. In this mode, only the Red Size, Red Amount and Red Softness sliders are active. Since the grain is monochrome, only one slider is needed.

## Size

The Size parameter controls the size of the grain. The larger the Size setting, the larger the grain will be.

**Note:** You may not see an accurate representation of the grain in the viewer unless your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio.

## Amount

The Amount parameters set the red, green and blue intensities of the grain. Film stocks generally have varying amounts of red, green and blue intensities with the blue intensity generally higher than the rest. If you turn the red, green and blue amount sliders to a value of 0, the grain will disappear.

### Red Amount

Controls the intensity of the red grain.

### Green Amount

Controls the intensity of the green grain.

### Blue Amount

Controls the intensity of the blue grain.

## Softness

The Softness parameter controls the softness of the grain. Normally, only minor softness adjustments are necessary, usually between a value of 0-1.

## Film Response

The Film Response parameter allows the adjustment of where you will see grain in the image. In most cases, film grain is apparent over the entire image except the brightest whites with the black areas being the most affected.

## Position

The Position slider defines the portions of the image where grain will be added. A low Position value places grain in the darkest image values, while a high Position value places grain in the brightest areas.

## Range

Increases or decreases the area where grain is added to the image based on the value of the Position slider. A low Range value indicates a narrow range of values, while a high Range value indicates a large range of values.

## Minimum

Sets the minimum level of grain that is always added to the image.

**Note:** A Position value of 0 and a Range of 80 is typical of standard film, with grain applied to the entire range except the brightest whites with black being the most affected.

# GRUNGE

## Description

Adds film dirt, hair, scratches, stains, splotches, gate weave, flicker, vignetting and grain--all to make your pristine image look like damaged film.



Photo by Oskar Wimmerman on Unsplash

Go to the [Grunge Tutorial](#) to see how the filter works.

## Category

Film Lab.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Randomize

Randomizes the applied elements.

### Dirt

#### Opacity

The opacity of the dirt.

## **Amount**

The number of pieces of dirt.

## **Size**

The size of the dirt.

## **Type**

### **Positive**

The dirt is black as it is in positive film.

### **Negative**

The dirt is white as it is in negative film.

## **Hair**

### **Opacity**

The opacity of the hair.

### **Amount**

The number of hairs.

### **Size**

The size of the hairs.

### **Type**

#### **Positive**

The hair is black as it is in positive film.

#### **Negative**

The hair is white as it is in negative film.

## **Scratches**

### **Opacity**

The opacity of the scratches.

### **Amount**

The number of scratches.

## **Width**

The width of the scratches.

## **Length**

Randomly changes the length of the scratches.

## **Variance**

Determines how fast the scratches move from side to side.

## **Roughness**

The roughness of the scratches.

## **Type**

### **Positive**

The scratches are black as they are in positive film.

### **Negative**

The scratches are white as they are in negative film.

## **Stains**

### **Opacity**

The opacity of the stains.

### **Amount**

The number of stains.

### **Size**

The size of the stains.

### **Type**

#### **Positive**

The stains are black as they are in positive film.

#### **Negative**

The stains are white as they are in negative film.

## Spotches

### Opacity

The opacity of the spotches.

### Amount

The number of spotches.

### Size

The size of the spotches.

### Type

#### Positive

The spotches are black as they are in positive film.

#### Negative

The spotches are white as they are in negative film.

## Gate Weave

### Amount

The amount of weave.

### Speed

The speed of the weave.

## Flicker

### Amount

The amount of flicker.

### Speed

The speed of the flicker.

## Vignette

A vignette is a popular photographic effect where the photo gradually fades into a color. Go to the [Vignette](#) filter to see how it works.

## Grain

Grain simulates film grain with control of the size, softness and intensity. In addition, a Film Response parameter controls where you will see grain in the image. Go to the [Grain](#) filter to see how it works.

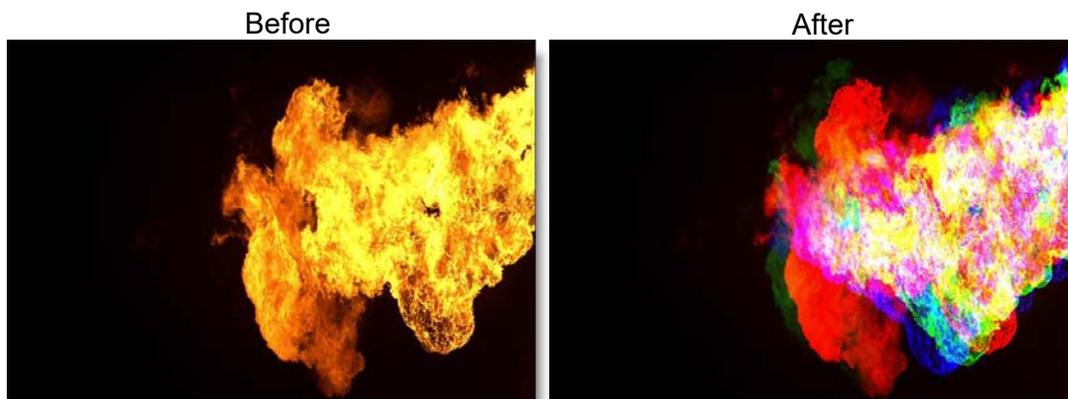
**Note:** You may not see an accurate representation of the grain in the viewer unless your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio.

# HARRIS SHUTTER

## Description

Invented by Robert S. “Bob” Harris of Kodak, the Harris Shutter was originally a strip device with three color filters used for making color photographs with the different primary color layers exposed in separate time intervals in succession. The same frame of film was re-exposed through red, green and blue filters in turn, while keeping the camera steady.

Our digital version of the Harris Shutter can use separate images for the red, green and blue channels or offset the individual channels of a sequence in time. Offsetting the channels creates a rainbow of color around any object that moves within the frame. Some good candidates for subjects include waterfalls, clouds blowing over a landscape or people walking across a busy street.



Go to the [Harris Shutter Tutorial](#) to see how the filter works.

## Category

Special Effects.

# Controls

## Red / Green / Blue

### Source

Sets the source image to be used as the Red, Green and Blue channels. If an image is not assigned using Source, the original image's color channel will be used.

- **After Effects:** Select the layer from the Red, Green, and Blue > Source selector.
- **Premiere Pro:** Select the track from the Red, Green, and Blue > Source selector.
- **Final Cut Pro X:** Click the drop zone to the right of the Red, Green, or Blue > Source parameter, choose a clip, and press Apply Clip below the Viewer.
- **Avid Editing Systems:** Place the source clips on a track below the clip you applied Harris Shutter to. Source 1, Source 2, and Source 3 are numbered from top to bottom where Source 1 is the first track below the one Harris Shutter is applied to.
- **OFX Hosts:** Assign the images to be used as the Red, Green, or Blue > Sources.

**Note:** The Red, Green and Blue source inputs are only available in OFX hosts that support auxiliary inputs. If auxiliary inputs are not supported, they will not be visible. Consult the host documentation for instructions on how to assign a source input as this will vary by host.

### Offset

Allows you to offset the frames used for the Red, Green and Blue channels.

### Amount

Controls how much of the Red, Green or Blue image is contributed to the composite image.

## HAZE / SKY

### Description

#### Haze

Reduces excessive blue by absorbing UV light and eliminates haze which tends to wash out color and image clarity.

Before



After



Photo by Thomas Kelley on Unsplash

#### Sky

Reduces UV light, haze and is pink tinted for added warmth and better colors. It is especially useful for images shot in outdoor open shade and on overcast days

Before



After



Photo by Thomas Kelley on Unsplash

Go to the [Haze / Sky Tutorial](#) to see how the filter works.

## Category

Color.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Haze

Sets the amount of haze to be removed from the scene.

### Temperature

Sets the color of the image to be either warmer or cooler. Dragging the slider to the right makes the image cooler (bluer) and dragging the slider to the left makes the image warmer (redder).

### Cyan/Magenta

Adds either Cyan or Magenta to the image. Dragging the slider to the right makes the image more magenta and dragging the slider to the left makes the image more cyan.

**Note:** Cyan/Magenta is only included in the Sky filter.

# HIGH CONTRAST

## Description

Creates an extreme high contrast image.

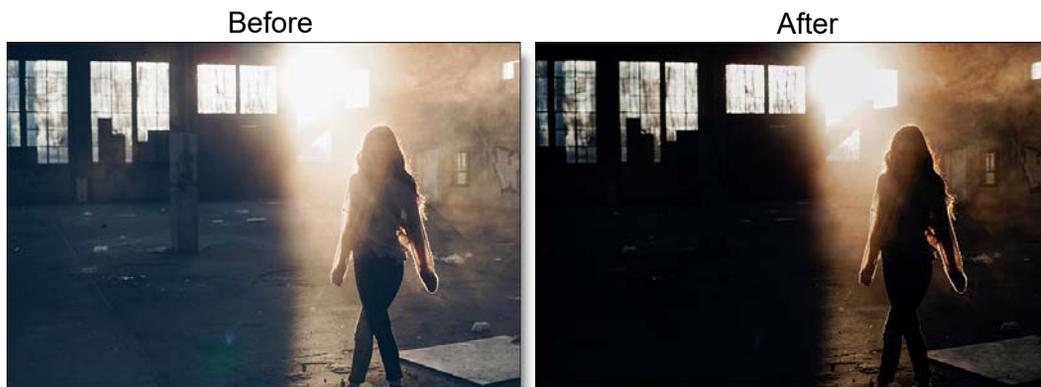


Photo by Alex Ronsdorf on Unsplash

Go to the [High Contrast Tutorial](#) to see how the filter works.

## Category

Color.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Contrast

Sets the amount of contrast to be applied to the scene.

### Amount

Sets the mix amount between the original and filtered version.

## HOLDOUT COMPOSITE

### Description

The Holdout Composite is a two-layer/track effect that effectively composites images such as fire, explosions and smoke. This filter first creates a luminance matte of the foreground and pastes it as black (or other color) over the background. You then use one of the Blend Modes to place the foreground over the “held out background”.

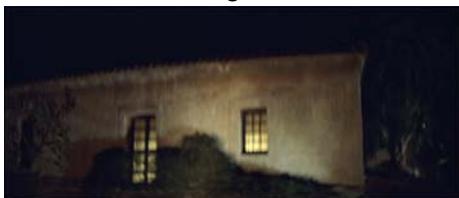
To add practical fire, explosions, smoke or other footage not containing an Alpha channel is normally a challenge. A normal Math Composite Add function would cause areas of the background to get brighter. This is bad. Using a key of some type would most likely generate unwanted edge fringing. This is also bad. Holdout Composite solves these problems.

Composite



Background

Foreground



Go to the [Holdout Composite Tutorial](#) to see how the filter works.

### Category

Composite.

# Background

Selects what image to use as the background.

## After Effects / Premiere Pro

Choose the layer/track to use as the background.

## Avid

The track below the current track is automatically used as the background.

## Final Cut Pro

Click the drop zone to the right of the Background parameter, choose a clip, and press Apply Clip below the Viewer.

## Motion

Drag the image to be used as the background and place it onto the drop zone to the right of the Background parameter.

## OFX

### Node Based Hosts

Hook up the background clip in the Node Graph.

### Layer Based Hosts

The layer/track below the current layer/track is automatically used as the background.

**Note:** Assigning the background input requires an OFX host that supports auxiliary inputs. Consult the host documentation for instructions on how to assign an auxiliary input as this will vary by host.

# Blend

This selects the type of Math Composite to use for the foreground element.

## Add

The pixels of the foreground are added to the background.

## Screen

The foreground and background are combined using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

## Lighten

Compares the foreground and background and takes the pixels with the higher value.

## Level

Sets the level of the foreground element.

## Black Clip

Blacks are made blacker by increasing the value of the slider. As the slider value increases, more values are clipped to black.

**Note:** Often times the black portion of an image is not entirely black. This becomes an issue if something like fire is shot against a black background. If the black is not entirely black, then these impure black areas will be added to the background image as part of the Holdout Composite causing the final result to have milky blacks. Black Clip will improve these milky blacks and make them darker.

## Matte

The Holdout Composite first creates a luminance matte of the foreground and then pastes it as black (or other color) over the background. You can see the extracted matte with the View set to Matte.

Matte



## Black Clip

Blacks in the matte are made blacker by increasing the value of the slider. As the slider value increases, more values are clipped to black. This is helpful for getting rid of unwanted gray areas in what should be the black part of the matte.

## White Clip

Whites in the matte are made whiter by increasing the value of the slider. As the slider value increases, more values are clipped to white. This is helpful for getting rid of unwanted Grey areas in what should be the white part of the matte.

## Holdout

The Holdout Composite takes the luminance matte of the foreground and pastes it as black (or other color) over the background. You can see the matte pasted onto the background with the View set to Holdout.



## Color

The Color parameter sets the color of the Holdout matte through the use of a standard eyedropper or color picker. The default color is black.

**Note:** There may be times when you want to select a color from the background as the Holdout color. This will appear to give the foreground some atmosphere.

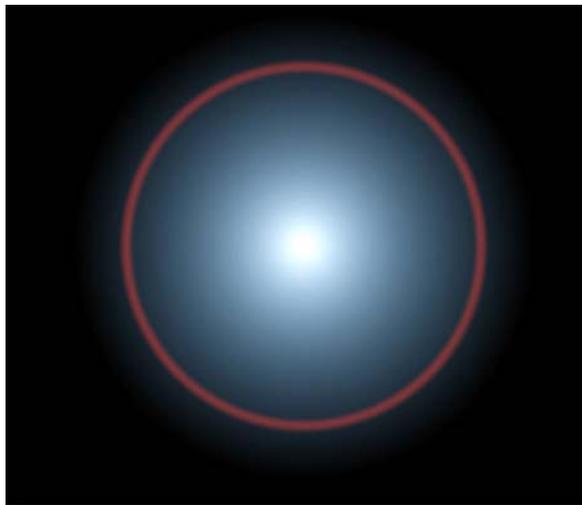
## Opacity

The opacity of the color.

## HOT SPOT

### Description

Utilized in most lens flares, Hot Spot simulates the circular glow created when a light source interacts with a lens.



Go to the [Hot Spot Tutorial](#) to see how the filter works.

### Category

Light.

### Controls

#### Blend

Determines the blend mode used to create the hot spot effect.

#### Add

The hot spot is added to your image.

#### Screen

The hot spot is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

## Brightness

Controls the brightness.

## Inner Color

Sets the inner color.

## Outer Color

Sets the outer color.

## Total Scale

Adjusts the size of all elements.

## Aspect

Sets the aspect ratio.

## Ramp Scale

Changes the Hot Spot's size.

## Ramp Gamma

Determines the Hot Spot's black point.

## Ring Brightness

Sets the brightness of the ring.

## Ring Softness

Softens the ring.

## Ring Size

Changes the size of the ring.

# ICE HALOS

## Description

Ice halos are created when small ice crystals in the atmosphere generate halos by reflecting and refracting light. Most notably, circles form around the sun or moon as well as rare occurrences when the entire sky is painted with a web of arcing halos.



Photo by Ales Krivec on Unsplash

Go to the [Ice Halos Tutorial](#) to see how the filter works.

## Category

Light.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Light

#### Blend

Determines the blend mode to be used to add the ice halo.

#### Add

The ice halo is added to your image.

## Screen

The ice halo is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

## Brightness

Sets the intensity of the ice halo.

## Displacement

Displaces the ice halo by the luminance values of the image. This “fakes” the effect of the ice halo wrapping over objects in the image.

## Blur

Sets the softness of the ice halo.

## Halo

### Blend

The ice halo can be added to the entire image or limited to a matte.

### Halo Only

The ice halo is added to the entire image.

### Matte

The ice halo is added only in areas of the matte.

## Sun Altitude

Selects the appropriate ice halo pattern based on the sun’s altitude.

## Position

The ice halo position can be adjusted by clicking and dragging an on-screen control in the center of the image.

### Position X

The horizontal position of the ice halo.

### Position Y

The vertical position of the ice halo.

## Scale

### Scale X

The horizontal scale of the ice halo.

### Scale Y

The vertical scale of the ice halo.

### Gang Scale

The Scale X and Scale Y slider values can be ganged together.

## Matte

A matte can be used to limit where the ice halo will be placed. Wherever there is white in the matte is where the ice halo will be added. Go to the [Matte](#) parameters to see how they work.

**Note:** To use a matte to limit where the ice halo will be added, Halo > Blend must be set to Matte.

# INFRARED

## Description

Infrared simulates infrared filters used in conjunction with infrared sensitive film or sensors to produce very interesting black and white images with glow in highlight areas.



Photo by Fab Lentz on Unsplash

Go to the [Infrared Tutorial](#) to see how the filter works.

## Category

Special Effects.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Black and White

Selects the type of black and white filter to be applied to your color image. Go to the [Black and White](#) section of Common Filter Controls to see how the Black and White controls work.

## Mist

### Blend

Determines the blend mode to be used to create the glow effect.

### Add

The glow is added to your image.

### Screen

The glow is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

### Brightness

Sets the intensity of the glow.

### Blur

Sets the softness of the glow.

## Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

## Matte

A matte is used to create the glow effect. Go to the **Matte** section of Common Filter Controls to see how the Matte controls work.

# KELVIN

## Description

Degrees Kelvin is the standard unit of measure for color temperature which is a way to characterize the spectral properties of a light source. Low color temperature implies warmer (redder) light, while high color temperature implies a colder (bluer) light. Presets for a number of different light sources and conditions are provided in degrees Kelvin.



Photo by Christiane Nuetzel on Unsplash

Go to the [Kelvin Tutorial](#) to see how the filter works.

## Category

Color.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Color Temperature

The Color Temperature of the image is determined by the difference of the Destination and Source Kelvin parameters. For instance, if your Source Kelvin is 3200 degrees Kelvin and you adjust the Destination Kelvin to 6500 degrees,

your image would turn blue. This is the same as using tungsten indoor film meant to be used with lighting balanced for 3200 degrees Kelvin outside in daylight which is 6500 degrees Kelvin.

### **Destination Kelvin**

Sets the destination color temperature of the image in degrees Kelvin.

### **Source Kelvin**

Sets the source color temperature of the image in degrees Kelvin.

### **Opacity**

Sets the opacity of the color temperature adjustment.

### **Preserve Highlights**

Preserves the white areas of the image.

### **Exposure Compensation**

Exposure Compensation adds back the brightness loss as a result of the color temperature application.

## **Grad**

Kelvin can optionally use a gradient that limits where the filter is applied. Grad is the transition area between the colored portion and the original image. Its direction, corners and size can be adjusted. Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

# KEY LIGHT

## Description

Using Key Light, an image can be relit by with either a directional or point light. The result looks natural even though the relighting is done without computing any scene geometry.



Photo by Samuel Zeller on Unsplash

Go to the [Key Light Tutorial](#) to see how the filter works.

## Category

Light.

## Controls

### Type

#### Parallel

A directional light source.

#### Point

A point light where the light either emanates from or fades into a vanishing point. Move the point control in the center of the screen to change the Point light location.

### Strength

Sets the strength of the light.

## Angle

Used in conjunction with Parallel, Angle sets the direction of the light source.

## Invert

Used in conjunction with Point, Invert determines whether the light source emanates from or fades into a vanishing point.

# LENS DISTORTION

## Description

Lens Distortion corrects for pin-cushioning and barrel distortion of camera lenses. It is also useful for creating the look of a wide angle lens.

Before



After



Photo by Vincent Guth on Unsplash

Go to the [Lens Distortion Tutorial](#) to see how the filter works.

## Category

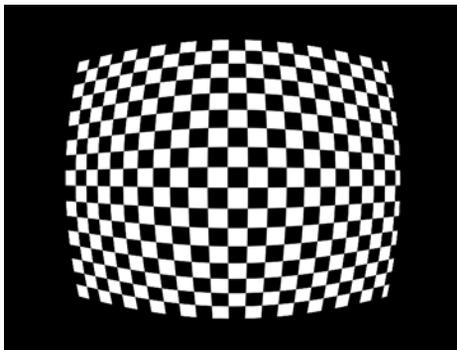
Lens.

# Controls

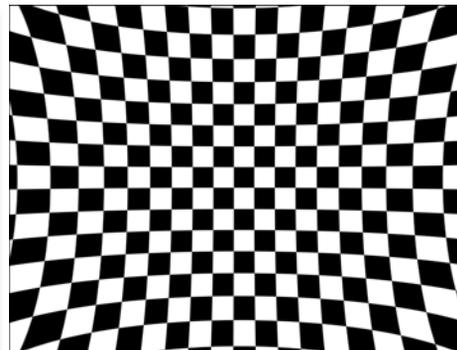
## Distortion

Pulls the corners of the image in or out. Negative values pull the corners of the image outward while positive values pull the corners of the image inward.

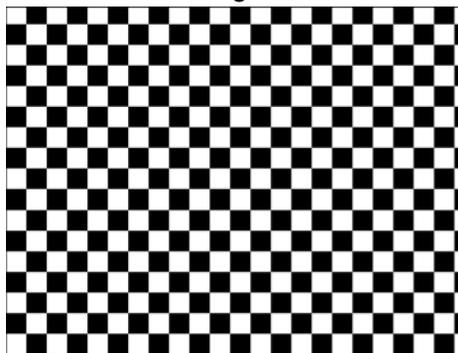
Barrel Distortion



Pin Cushion Distortion



Original



## Anamorphic Squeeze

Anamorphic Squeeze corrects for the squeeze found in anamorphic motion picture lenses.

## Curvature X and Y

Curvature X and Y correct for non-radial, asymmetric distortions found in anamorphic motion picture lenses.

**Note:** Anamorphic Squeeze and Curvature X and Y only work once the Distortion parameter has been moved.

## Center

Determines the center point for the distortion. There is an on-screen control in the center of the image. By clicking and dragging the on-screen control, the Center can be adjusted.

## LENS FLARE

### Description

Lens flares are produced by the scattering or flaring of light within a lens when pointed into a bright light. Although an image aberration, lens flares can be added for dramatic effect and are created by combing the following elements: Caustic, Chroma Bands, Chroma Ring, Circle, Circles, Disc, Edge Streak, Ellipse, Fan Rays, Hot Spot, Polygon, Polygons, Radial Streaks, Random Spikes, Ring, Spikes, Spiral Rays, Star, Star Caustic, and Stripe.



Go to the [Lens Flare Tutorial](#) to see how the filter works.

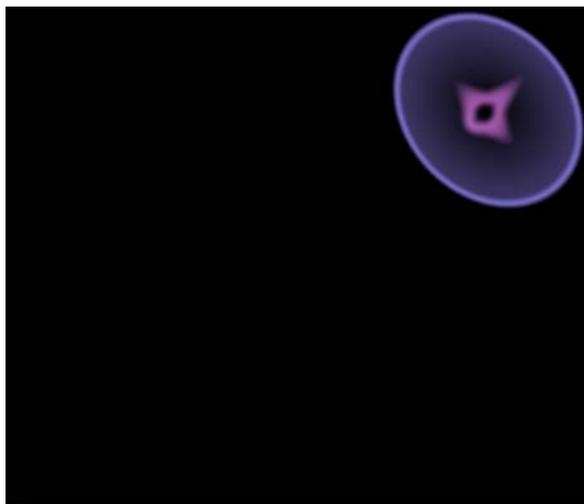
### Category

Light.

# Elements

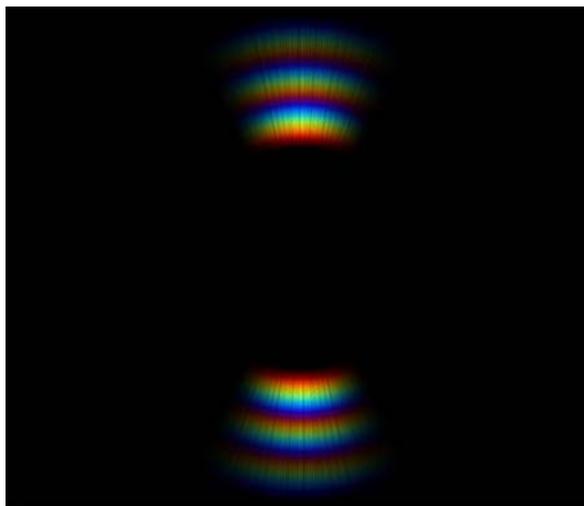
## Caustic

Simulates an optical distortion created by the envelope of light rays reflected or refracted by a curved surface.



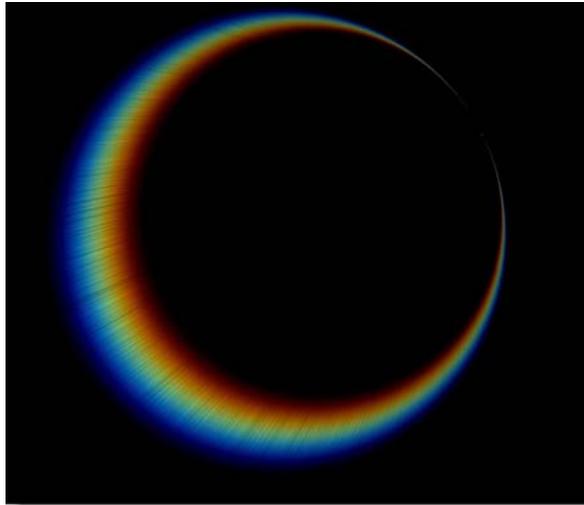
## Chroma Bands

Creates rainbow diffraction patterns.



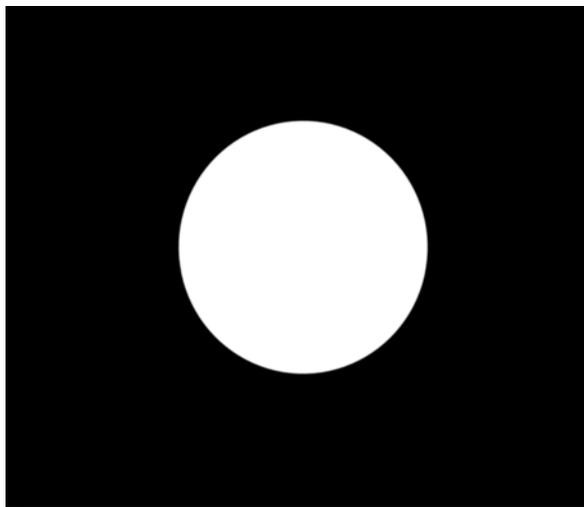
## Chroma Ring

Rainbow lines that emanate from the center of the light source.



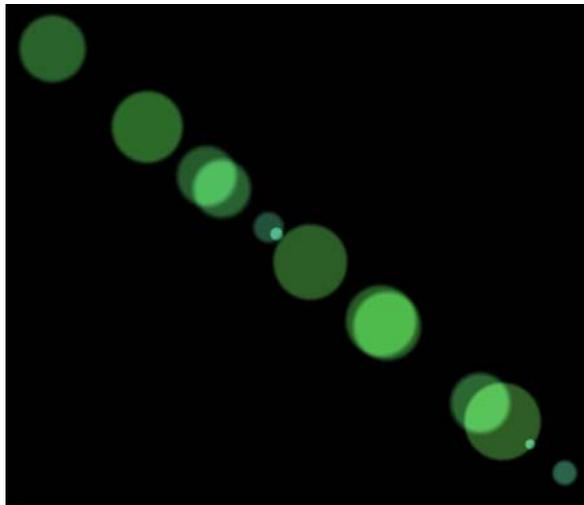
## Circle

An individual circle.



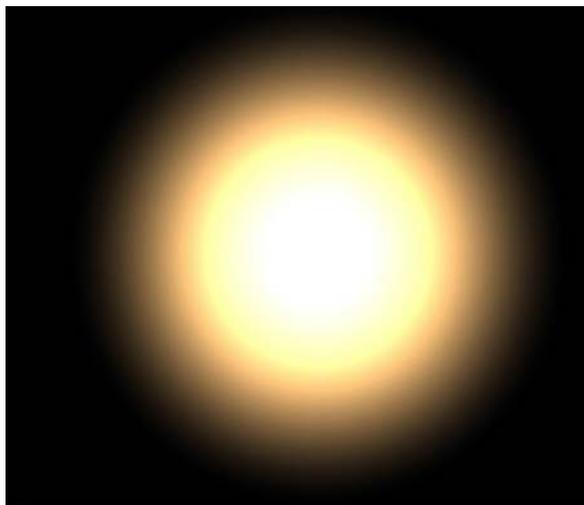
## Circles

Creates a specified number of random circles often seen in lens flares.



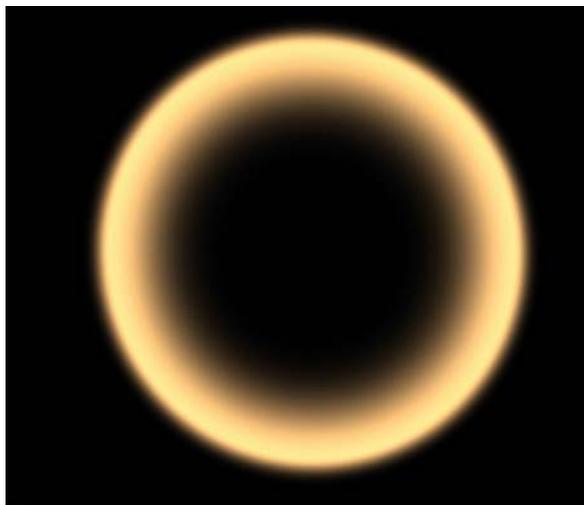
## Disc

Generates a circular ramp with individual control of the inner, middle and outer areas.



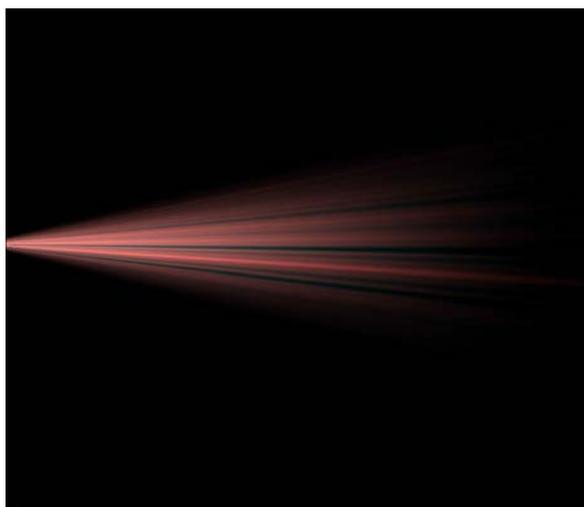
## Ellipse

Ellipse is similar to Disc, but elliptical in shape.



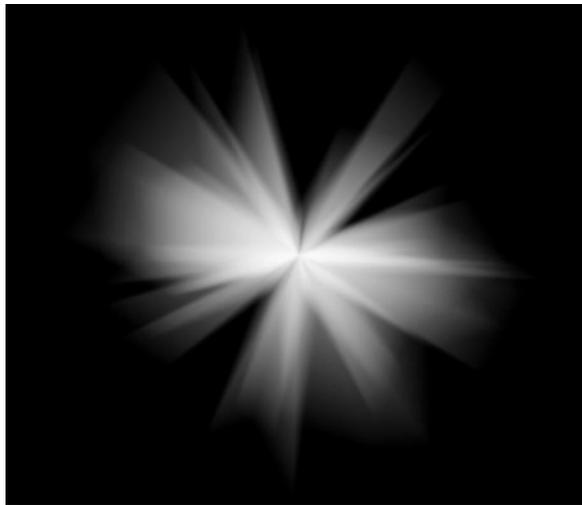
## Edge Streak

Caused by a light source at the edge of the frame reflecting off of the shiny lens aperture. It only appears when the light source is positioned outside of the frame.



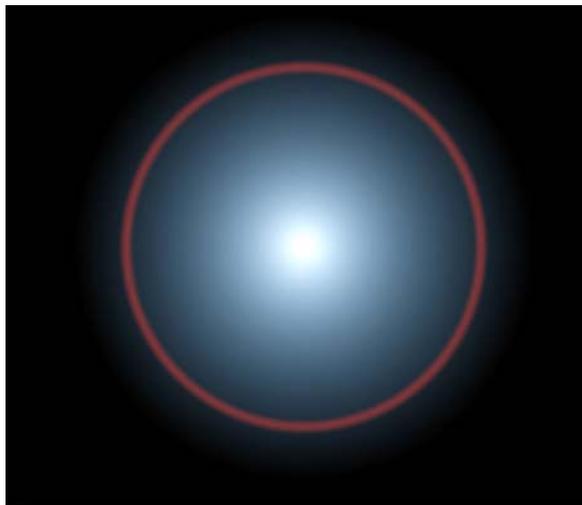
## Fan Rays

Generates asymmetric fanned rays.



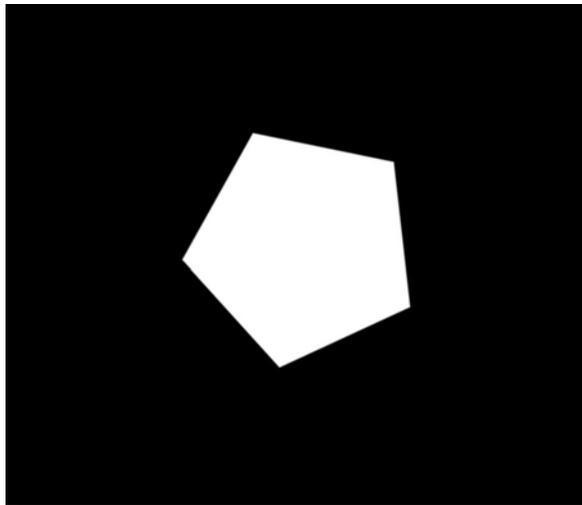
## Hot Spot

Utilized in most lens flares, glow ball simulates the circular glow created when a light source interacts with a lens.



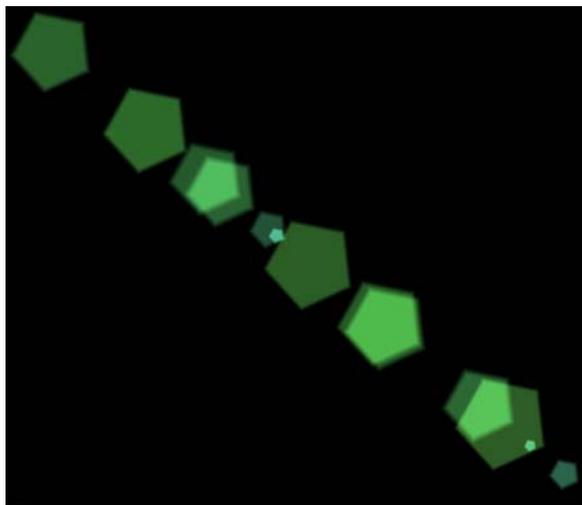
## Polygon

An individual polygon.



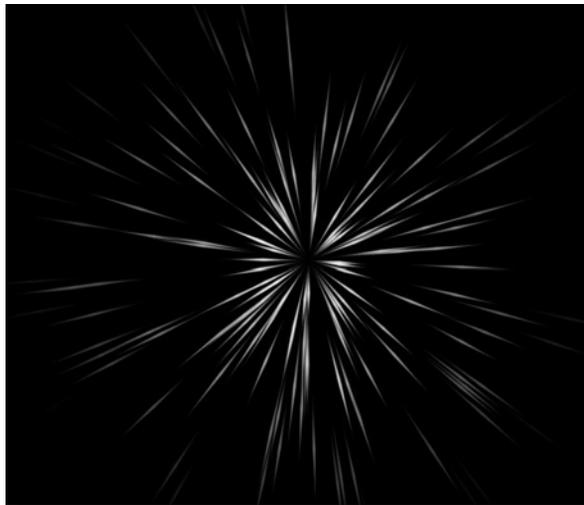
## Polygons

Creates a specified number of random polygons. These are reflections caused by light interacting with the lens's polygonal bladed aperture.



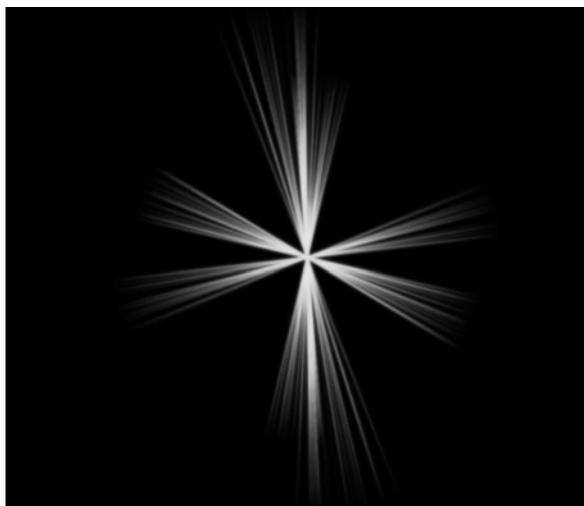
## Radial Streaks

Short radial streaks emanating from the center point.



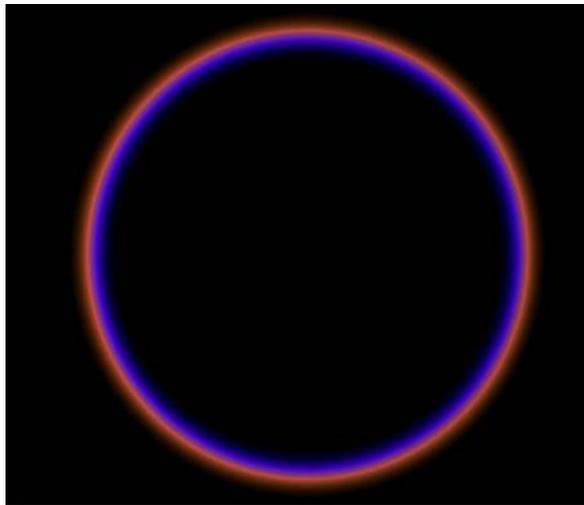
## Random Spikes

Generates asymmetric radial rays.



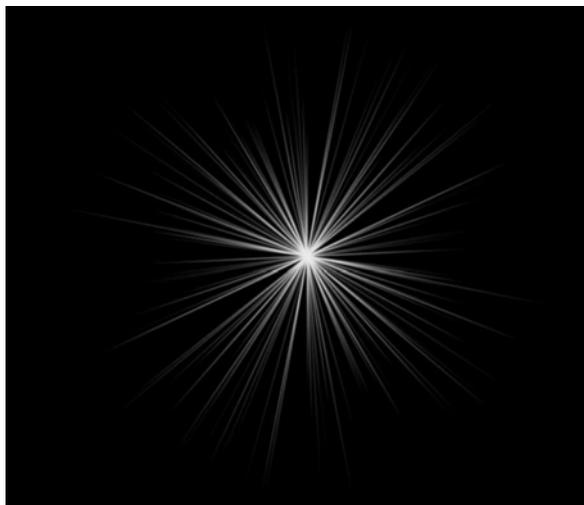
## Ring

A rainbow ring that fades as it is moved to the edges of the screen.



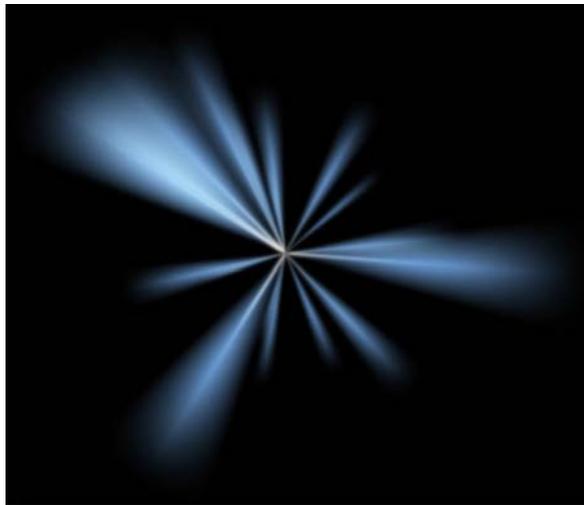
## Spikes

Long radial rays emanating from the center point.



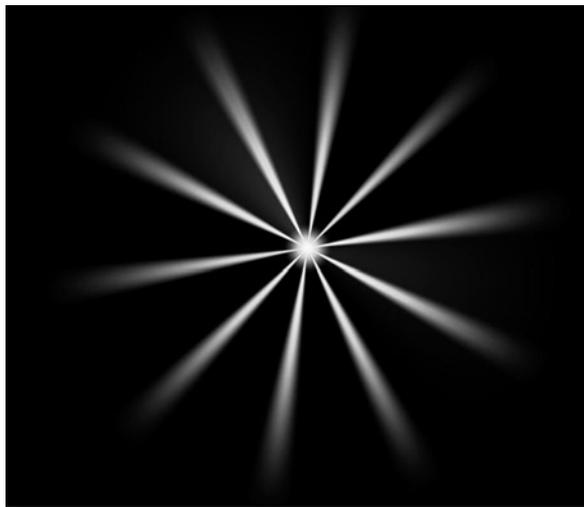
## Spiral Rays

Creates spiral rays.



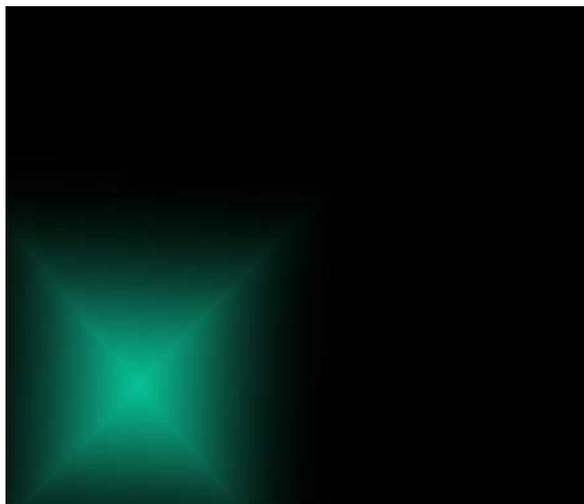
## Star

A star pattern is created when light reflects off the intersection of the lens's aperture blades.



## Star Caustic

A star shaped caustic created by the envelope of light rays reflected or refracted by a lens's reflective coatings.



## Stripe

A tapered stripe that simulates anamorphic lens flares.



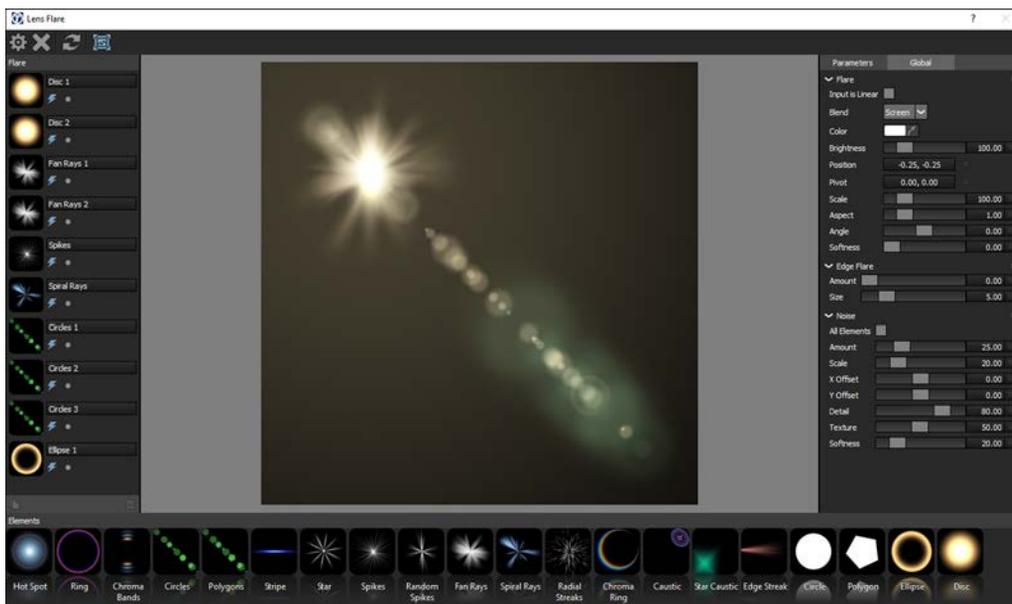
## Controls - Global

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Edit Flare

Click the Edit Flare button to edit the current preset or to create a custom lens flare. The Flare Editor interface consists of a Viewer, Parameters, Global, Flare (currently used flare elements) and Elements (all available elements).



## User Interface

### Toolbar

The Toolbar contains Done, Cancel, Reset, and Show Image icons.



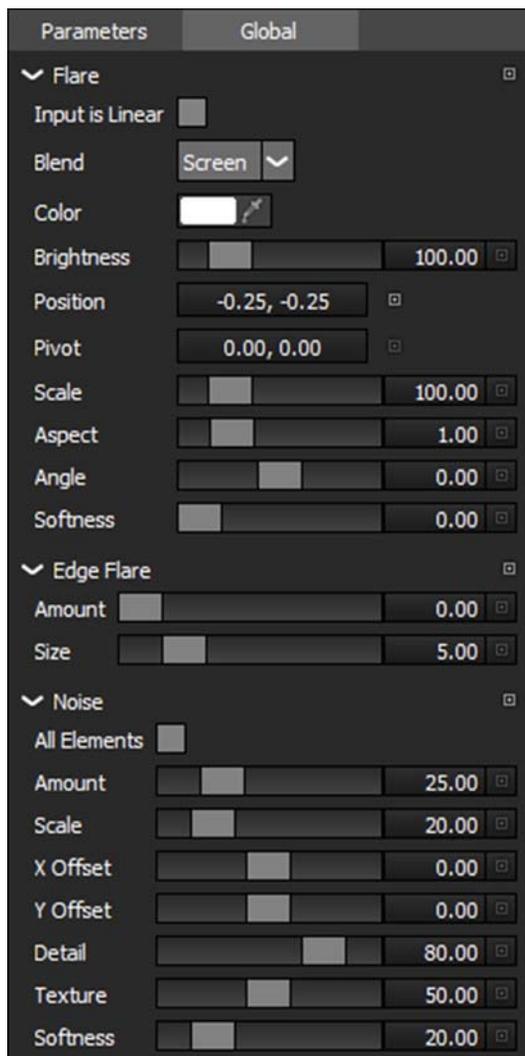
## Viewer

The Viewer displays the composite of all added flare elements.



## Parameters and Global

Parameters and Global share the same window space on the right side of the screen, with Global shown as the default. Either Parameters or Global are selectable in a tab at the top of the window.



## Elements

The Elements window displays lens flare building blocks to be used in the creation of a flare.



## Flare

The Flare window displays all elements that make up the current lens flare.



### Enable (E)

Enables and disables the element.



### Solo (S)

Displays only the soloed element.



## Working With Elements

### Select Elements

Select elements using the Shift or Ctrl(Win)/Cmd(Mac) keys.

### Add Elements

- **Double-click an element in the Elements window and it is added to the end of the stack in the Flare window. If an element is selected in the Flare window prior to the double-click, the new element is added after the selection.**
- **Drag and drop from the Elements window to the Flare window or Viewer. Multiple selected elements can be dragged and dropped simultaneously.**

### Delete Elements

Delete selected elements.

- **Press the Delete key.**

or

- **Click the Delete Element icon at the bottom of the Flare window.**



### Duplicate Elements

Duplicate selected elements using the Duplicate Element icon at the bottom of the Flare window.



### Edit Elements

- **Select an element in the Flare window and it's controls are displayed in the Parameters window.**
- **When multiple elements are selected, the controls for all selected elements are displayed in the Parameters window.**
- **Click and drag the point controls in the viewer to move the flare around.**
- **Ctrl(Win)/Cmd(Mac)-click and drag in the viewer to move the selected elements along the flare line.**

### Moving Elements In The Flare Window

Drag the icon of an element to a new position in the stack. Multiple elements can be moved at once.

## Rename Elements

Click in the element text box and type to rename it.

## Flare

### Input is Linear

Enable this if your image is in true linear color space. Gamma corrected images should have this parameter disabled.

### Blend

Determines the blend mode used to composite the lens flare.

### Add

The lens flare is added to your image.

### Screen

The lens flare is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

### Color

Sets the color.

### Brightness

Controls the brightness.

### Position

Adjusts the origin of the lens flare.

### Pivot

Changes the end position of the lens flare.

### Scale

Determines the size.

### Aspect

Sets the aspect ratio.

### Angle

Sets the angle.

## Softness

Blurs the lens flare.

## Occlusion

The Occlusion parameters allow you to block the lens flare. Using a source input, the brightness of the lens flare will automatically animate based on the source input channel.

### Source

Use an image as the occlusion source.

- **After Effects:** Select the layer from the Occlusion > Source selector.
- **Premiere Pro:** Select the track from the Occlusion > Source selector.
- **Final Cut Pro X:** Click the drop zone to the right of the Occlusion > Source parameter, choose a clip, and press Apply Clip below the Viewer.
- **Avid Editing Systems:** Place the source clip on a track below the clip you applied Lens Flare to.
- **OFX Hosts:** Assign the image to be used as the Occlusion > Source.

**Note:** The Source input is only available in OFX hosts that support auxiliary inputs. If auxiliary inputs are not supported, they will not be visible. Consult the host documentation for instructions on how to assign a source input as this will vary by host.

### Channel

Determines which channel to use for the occlusion source.

### Invert

Inverts the source channels.

### Threshold

Controls how much the occlusion source affects the flare.

## Flicker

Flickers the lens flare.

### Amount

The amount of flicker.

## Speed

The speed of the flicker.

## Edge Flare

Flares the frame as the lens flare enters or exists the frame.

### Amount

Controls the amount of the edge flare.

### Size

Sets the size of the edge flare.

## Noise

Adds noise to the lens flare elements. Noise can selectively be added to elements based on whether an element's Lens Noise parameter is enabled. Alternatively, you can apply noise to all elements using the parameter below.

### All Elements

Applies the noise pattern to all lens flare elements.

### Amount

Sets the amount of the noise.

### Scale

Determines the size of the noise.

### X Offset

Moves the noise horizontally.

### Y Offset

Moves the noise vertically.

### Detail

Sets the detail of the noise.

### Texture

Controls the complexity of the noise.

## Randomize

Randomizes the size and position of the noise.

## Controls - Elements

Each flare element uses a subset of the parameters below.

### Angle

Sets the angle.

### Aspect

Sets the aspect ratio.

### Blur

Blurs the element.

### Brightness

Controls the brightness.

### Brightness Variance

Randomizes the brightness between multiple elements.

### Center

Determines the center of the Chroma Ring along the flare.

### Center Brightness

Sets the brightness of the stripe's center.

### Center Offset

Pushes all the Disc edges outwards.

### Chroma

Changes the saturation of the Chroma Ring.

### Color

Sets the color.

### Color Variance

Randomizes the color between multiple elements.

### Cycles

Determines the number of Chroma Bands.

## Density

Sets the amount of rays.

## Edge Fade

Fades the element as it moves towards the edge of the screen.

## Element Count

Sets the number of elements.

## Hotspot

Sets the size of the Star's center hotspot.

## Inside Width

Changes the size of the inner ramp.

## Jitter

Randomizes the angle.

## Length

Sets the length of the stripe.

## Lens Noise

Determines whether the Lens Noise controls affect the enabled element.

## Lock To

### **X Axis**

Locks the element to the X axis so it will only move vertically.

### **Y Axis**

Locks the element to the Y axis so it will only move horizontally.

## Match Flare Angle

Matches the Circle and Polygon element's angle to the flare angle. This is especially useful when the Aspect parameter has been adjusted.

## Middle Width

Adjusts the size of the middle ramp.

## Noise

Controls the amount of noise in an element.

## Noise Density

The strength of the noise.

## Offset

For most elements, Offset determines the element's inner diameter. For Circles and Polygons, it shifts the shapes along the flare axis.

## Outside Width

Sets the size of the outer ramp.

## Position

Sets the position of the element along the flare.

## Position Variance

Randomizes the position between multiple elements along the flare.

## Ramp Gamma

Sets the Hot Spot's black point.

## Ramp Scale

Changes the Hot Spot's size.

## Randomize

Randomizes size and position.

## Ring Brightness

Sets the brightness of the Hot Spot's ring.

## Ring Size

Changes the size of the Hot Spot's ring.

## Ring Softness

Softens the Hot Spot's ring.

## Scale

Sets the size.

## Sides

Determines the number of sides.

## Size Variance

Randomizes the size between multiple elements.

## Softness

Blurs the element.

## Softness Variance

Randomizes the softness between multiple elements.

## Spread

Determines the distribution of an element.

## Taper

Tapers the Chroma Band's edges.

## Total Scale

Sets the size of all elements.

## Vertical Variance

Randomizes the vertical position between multiple elements.

## Weight

Polygons and Circles can be weighted to either the beginning or end of the lens flare.

## Warp

Enables the warping of the Ellipse and Ring elements as they exit the frame.

## Width

Adjusts the width.

## X Offset

Offsets the element horizontally.

## Y Offset

Offsets the element vertically.

# LIGHT

## Description

Light can be added to a scene where none existed before just as if you were adding light at the time of shooting. Realistic lighting and shadow is introduced using digital versions of lighting gobos.



Photo by Julia Komarova on Unsplash

Gobos (patterns) are widely used by designers in theatre, film, photography and television to create atmosphere, project scenery, and generally enhance the visual impact of their lighting. Normally used in front of lights during photography, these same exact gobos can be applied digitally to the entire image or inside a matte.

Go to the [Light Tutorial](#) to see how the filter works.

## Category

Light.

## Presets

To select a gobo, open the DFT interface and pick one from the Presets window. If you would like to view gobos from a different category, use the pop-up menu at the top left of the Presets window.



## Light

### Blend

Determines the blend mode to be used to add the light.

### Add

The light is added to your image.

### Screen

The light is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

### Subtract

The light is subtracted from your image creating shadow instead of light.

## Brightness

Sets the intensity of the light.

## Displacement

Displaces the gobo by the luminance values of the image. This “fakes” the effect of light wrapping over objects in the image.

Displaced Gobo



## Blur

Sets the softness of the light.

## Gels

Photographers, cinematographers and lighting designers use colored filters or gels in front of lights. Whatever mood you wish to create, we have the colors needed to achieve the effect. Select one of the Gels presets from the pop-up menu.

## Color

Sets the color of the light through the use of a standard color picker.

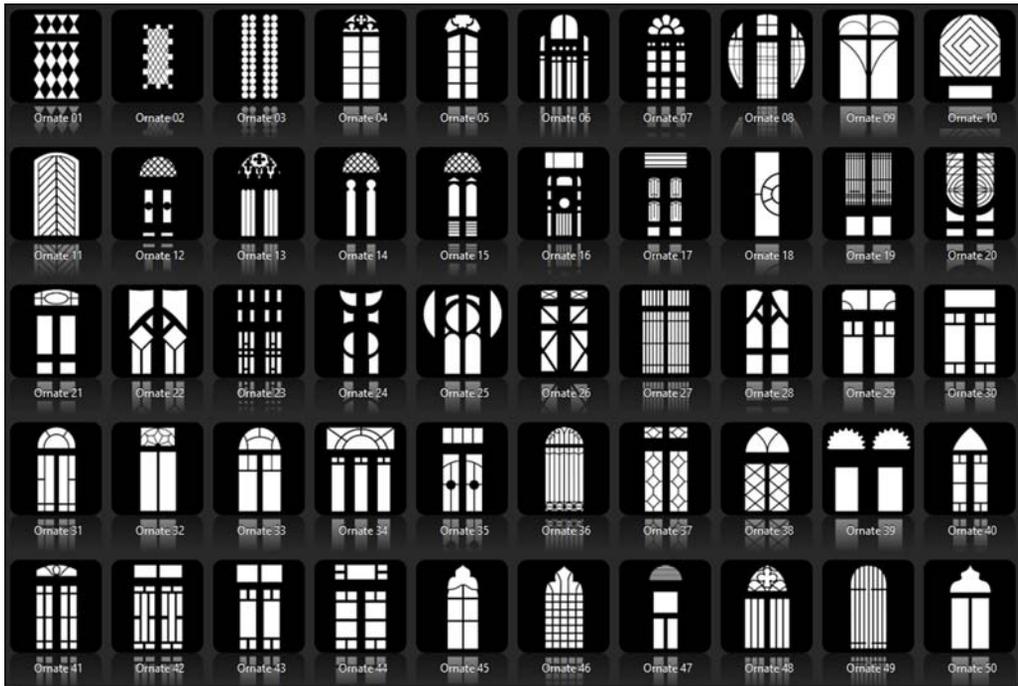
# Shadow

## Brightness

Sets the intensity of the shadows. The Brightness parameter will darken only those areas that are not being affected by the Light settings.

# Gobos

The gobos are organized into various categories including: Abstract, Doors, Elements, Foliage, Snowflakes, Textures and Windows groups.



## Type

### Gobo

Uses the gobo selected in the Presets window.

### Input

Input allows you to use your own image or sequence as the light source.

**Note:** You must first select Input from the Gobo > Type pop-up menu before you can use your own image or sequence as the light source.

## To use your own image or sequence as a light source:

### After Effects

- Select Input from the Gobo > Type menu.
- Select a layer from the Gobo > Input menu.

### Final Cut Pro X

- Select Input from the Gobo > Type menu.
- Click the drop zone to the right of the Gobo Input parameter, choose a clip, and press Apply Clip below the Viewer.

### Motion

- Select Input from the Gobo > Type menu.
- Drag and drop a clip onto the clip icon to the right of the Gobo > Input parameter.

### Avid Editing Systems

- Select Input from the top most pop-up in the Gobo group.
- Place the light source clip on a track below the clip you applied Light to.

**Note:** If the camera is moving and you want to add a gobo, the gobo won't automatically follow the camera. You will either need to manually move the gobo to follow the camera or better, use Motion Tracking software to Match Move the gobo to the camera move. Track the motion of your source image, set your View to Gobo, apply the tracker motion to your gobo and render it. To use the newly tracked and rendered gobo as a light source, follow the previous instructions listed for using your own image or sequence as the light source.

### OFX Hosts

- Assign the image to be used as the light source.

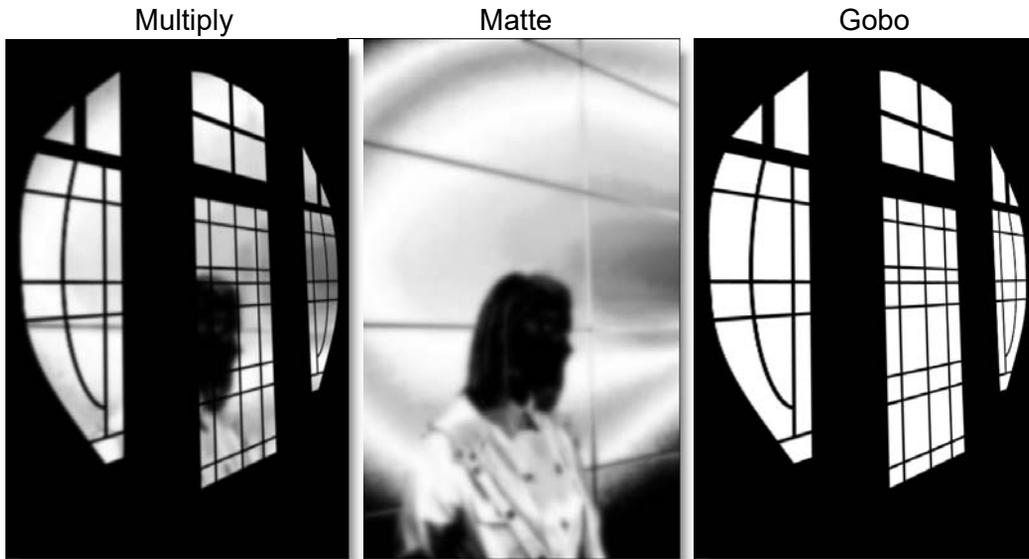
**Note:** Using an image as the light source is only available in OFX hosts that support auxiliary inputs. Consult the host documentation for instructions on how to assign a source input as this will vary by host.

- Select Input from the top most pop-up in the Gobo group.
- The assigned input will now be used as the light source.

## Blend

The gobo can be added to a matte using a variety of Blend modes. Go to [Blend Modes](#) for explanations of the various modes.

I like the Multiply blend mode for combining gobos with the matte because it only puts the gobo within the areas of the matte.



## Opacity

Sets the opacity of the gobo.

## Blur

Sets the softness of the gobo.

## Transform

Transform your gobo using Position, Scale, Rotate, Corner-Pin, Shear and Crop controls. Go to the **Transform** section of Common Filter Controls to see how the Transform Controls work.

## Matte

A matte can be used to create areas of light or limit where gobos will be added. Wherever there is white in the matte is where the light will be added. When using the Light and Gobo filters, it is usually helpful to blur the matte. Go to the [Matte](#) parameters to see how they work.

Matte

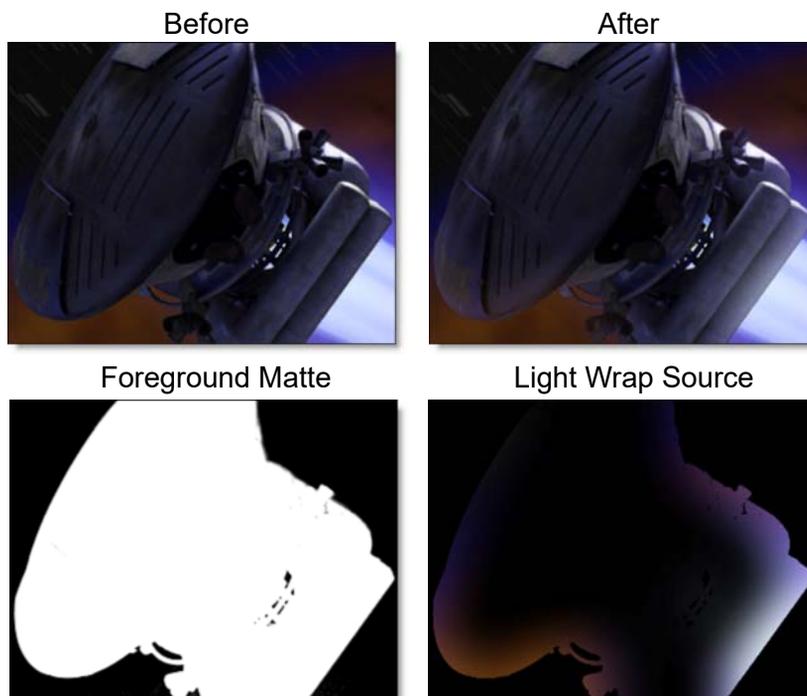


**Note:** To use a matte to create light, Gobo > Blend must be set to something other than Gobo Only for the Matte controls to be active.

## LIGHT WRAP

### Description

Light Wrap helps blend the foreground into the background by making the color of the background wrap into the foreground edges without softening the edge.



This is accomplished by placing the background layer into a special matte and then combining it with the foreground.

Go to the [Light Wrap Tutorial](#) to see how the filter works.

### Category

Composite.

### Background

Selects the background clip to be used as Light Wrap source.

## After Effects / Premiere Pro

Choose the layer/track to use as the Light Wrap source.

## Avid

The track below the current track is automatically used as the Light Wrap source.

## Final Cut Pro

Click the drop zone to the right of the Background parameter, choose a clip, and press Apply Clip below the Viewer.

## Motion

Drag the image to be used as the Light Wrap source and place it onto the drop zone to the right of the Background parameter.

## OFX

### Node Based Hosts

Hook up the background clip to be used as the Light Wrap source in the Node Graph.

### Layer Based Hosts

The layer/track below the current layer/track is automatically used as the as the Light Wrap source.

**Note:** Assigning the background input requires an OFX host that supports auxiliary inputs. Consult the host documentation for instructions on how to assign an auxiliary input as this will vary by host.

## Brightness

Sets the intensity of the Light Wrap.

## Wrap

Sets the size of the Light Wrap.

# LOOKS

## Description

Looks is a unique filter meant to simulate a variety of color and black and white photographic/film looks, diffusion and color grad camera filters, lighting gels, film stocks and optical lab processes. By selecting from the available presets, parameters in the various modules are automatically set to achieve a variety of different effects.

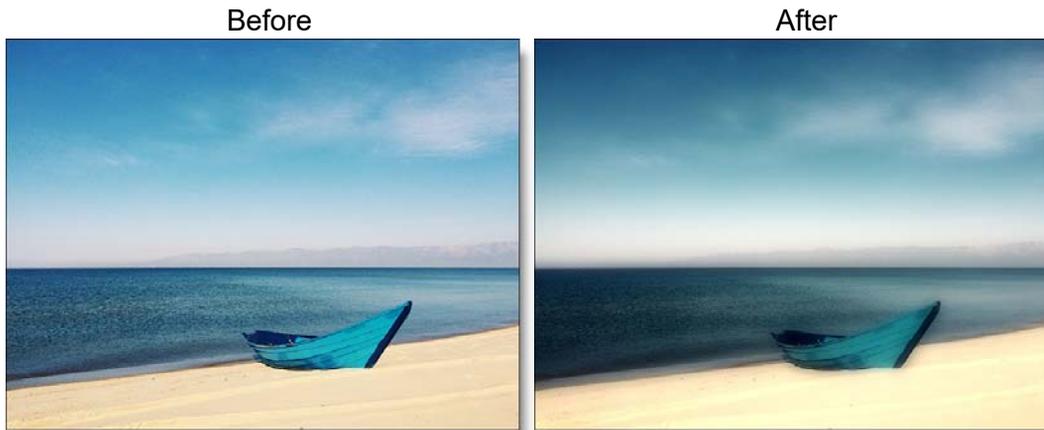


Photo by Mickey O'neil on Unsplash

## Category

Special Effects.

## Controls

The Looks filters are made up of Color Correct, Diffusion, Color Gradient, Gels, Lab, Grain and Post Color Correct groups. Together, they simulate a variety of photographic and film looks. By selecting from the available presets, parameters in the various groups are automatically set to achieve a variety of different effects.

## Presets

To select a preset, open the DFT interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

## Color Correct

Color Correct manipulates the Black and White, Hue, Saturation, Brightness, Contrast, Gamma, Red, Green and Blue values of the image. Go to the **Color Correct** filter to see how it works.

## Diffusion

Diffusion creates atmosphere by reducing contrast while creating a glow around highlights or shadows. It simulates diffusion and fog filters as well as glows. Go to the Diffusion section of the **Film Stocks** filter to see how it works.

## Color Gradient

Color Gradient colors and or darkens only a portion of the image giving you the ability to simulate any Color Gradient filter. Presets for your favorite color gradient filters are provided as well as the ability to create custom colors. There is a graduated transition for a smooth color blend between the colored/darkened portion and the original image. Color Gradient is especially useful for changing and enhancing the color of the sky. Go to the **Color Gradient** filter to see how it works.

## Gels

Photographers, cinematographers and lighting designers use colored filters or gels in front of lights. Whatever mood you wish to create, we have the colors needed to achieve the effect. Go to the **Gels** filter to see how it works.

## Lab

The Lab group simulates a variety of different optical lab processes including Bleach Bypass, Cross Processing, Flashing and Overexposure. Go to the **Bleach Bypass** filter, **Cross Processing** filter, **Flashing** and the **Overexpose** filter to see how they work.

## Grain

Grain simulates film grain with individual control of red, green, and blue grain size, softness and intensity. In addition, a Film Response parameter controls where you will see grain in the image. Go to the **Grain** filter to see how it works.

**Note:** You may not see an accurate representation of the grain in the viewer unless your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio.

## Post Color Correct

Post Color Correct gives you further color correction after all other operations have been processed. This is often helpful as some of the operations affect the brightness, contrast and color of the image. In addition, Temperature controls allow you to make the scene warmer or cooler, and cyan or magenta. Go to the **Color Correct** filter to see how it works.

## LOW CONTRAST

### Description

Low Contrast spreads highlights into darker areas, lowers contrast and keeps bright areas bright.

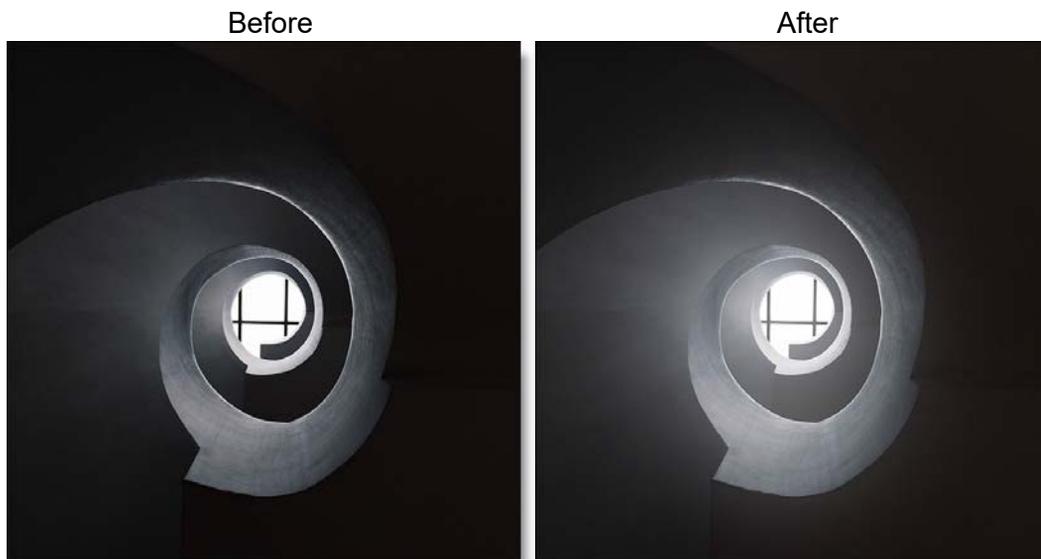


Photo by Len Dela Cruz on Unsplash

Go to the [Low Contrast Tutorial](#) to see how the filter works.

### Category

Color.

### Controls

#### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

#### Contrast

##### Light Brightness

Sets the intensity of the light that is spread into darker areas.

## Light Spread

Sets how far light is spread from bright areas to darker areas.

## Shadow Brightness

Adjusts the brightness of the shadow areas.

## Matte

A matte is used to create the light spread effect. Go to the **Matte** section of Common Filter Controls to see how the Matte controls work.

# MATCH

## Description

Matches the brightness and color from one image and applies it to another.



Source/After: Photo by Paula Borowska on Unsplash

Target: Photo by Saud Sarosh on Unsplash

Go to the [Match Tutorial](#) to see how the filter works.

## Category

Color.

## Controls

### Source

- Selects a source image to be matched.**After Effects:** Select the layer from the **Source** selector.
- **Premiere Pro:** Select the track from the **Source** selector.
- **Final Cut Pro X:** Click the drop zone to the right of the **Source** parameter, choose a clip, and press **Apply Clip** below the **Viewer**.

- **Avid Editing Systems: Place the source clip on a track below the clip you applied Match to.**

## Mode

Determines the frame to color match.

### Reference Image

The frame of the source clip defined by the Set Reference Image button is matched.

### First Frame

The first frame of the source clip is matched.

### Every Frame

Every frame of the source clip is matched.

## Brightness

Sets the amount of the brightness match.

## Color

Sets the amount of the color match.

## Set Reference Image

Matches the source clip at the frame the Timeline is parked on when this button is pressed.

## **Matching Clips:**

- 1 Apply the Match filter to a target clip.**
- 2 Select the source image to be matched with the Source selector.**

Using the Mode parameter, the match can occur on the first frame, every frame or using a reference image from a particular frame.
- 3 To use a reference image from a particular frame, change the View from Output to Source.**
- 4 Find the frame in the sequence that you would like to match.**
- 5 Set the Mode to Reference Image and then press the Set Reference Image button.**

The color and brightness of the source image are analyzed and applied to your target image.
- 6 Switch the View from Source to Output to see the result.**
- 7 Adjust the Color and Brightness parameters to your liking.**

# MATH COMPOSITE

## Description

Math Composite combines two clips using one of the Blend modes. You can choose from Add, Subtract, Multiply, Screen, Difference, Darken and Lighten.

After



Background

Foreground



Background: Photo by Austin Neill on Unsplash

Foreground: Photo by Vincent Guth on Unsplash

Go to the [Math Composite Tutorial](#) to see how the filter works.

## Category

Composite.

## Input Is Premultiplied

In Nuke, the Math Composite filter needs to know if the input image is premultiplied. Enable if premultiplied.

## Background

Selects what image to use as the background.

### After Effects / Premiere Pro

Choose the layer/track to use as the background.

### Avid / Vegas

The track below the current track is automatically used as the background.

### Final Cut Pro

Click the drop zone to the right of the Background parameter, choose a clip, and press Apply Clip below the Viewer.

### Motion

Drag the image to be used as the background and place it onto the drop zone to the right of the Background parameter.

### OFX

#### Node Based Hosts

Hook up the background clip in the Node Graph.

#### Layer Based Hosts

The layer/track below the current layer/track is automatically used as the background.

**Note:** Assigning the background input requires an OFX host that supports auxiliary inputs. Consult the host documentation for instructions on how to assign an auxiliary input as this will vary by host.

## Blend

Selects the Blend mode that is used to combine the foreground and background.

### Add

The pixels of one image are added to another image.

## Subtract

The pixels of one image are subtracted from another image.

## Multiply

Produces a result where there is a union of pixels from two images.

## Screen

Looks at each images color information and multiplies the inverse of the two images. This looks kind of like the Add blend mode, but highlights are retained.

## Difference

Produces a result where a value exists in each image, but not in both.

## Darken

Compares two images and takes the pixels with the lower value.

## Lighten

Compares two images and takes the pixels with the higher value.

## Level

Sets the level of the foreground element.

## Black Clip

Blacks are made blacker by increasing the value of the slider. As the slider value increases, more values are clipped to black.

**Note:** Often times the black portion of the image is not entirely black. This becomes an issue if something like fire is shot against a black background. If the black is not entirely black, then these impure black areas will be added to the background image as part of the Math Composite causing the final result to have “milky” blacks. The Black Clip parameter has been added to easily adjust the foreground image’s black level.

## MATTE REPAIR

### Description

Matte Repair grows, shrinks or blurs a matte. It also is handy for cleaning up impurities in the black or white areas.



Go to the [Matte Repair Tutorial](#) to see how the filter works.

### Category

Key.

### Premultiply Result

In Nuke, Composite premultiplies the output by default.

### Use

Chooses the channel from the input image to use for the Matte Repair.

#### Alpha Channel

The Alpha Channel is used for the Matte Repair.

#### Red Channel

The Red Channel is used for the Matte Repair.

#### Green Channel

The Green Channel is used for the Matte Repair.

## Blue Channel

The Blue Channel is used for the Matte Repair.

## Luminance

The average luminance of the RGB channels is used for the Matte Repair.

**Note:** The Use parameter is not available in Avid Editing Systems. When applied to a Matte Key, the Alpha Channel is used, otherwise it uses the luminance of the RGB channels.

## Matte

Go to the **Matte** parameters to see how they work.

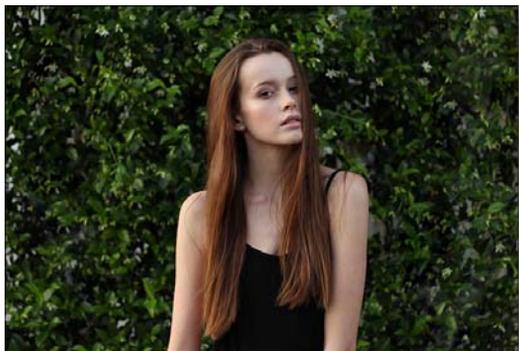
# MIST

## Description

### Mist

Creates atmosphere by reducing contrast while creating a glow around highlights.

Before



After

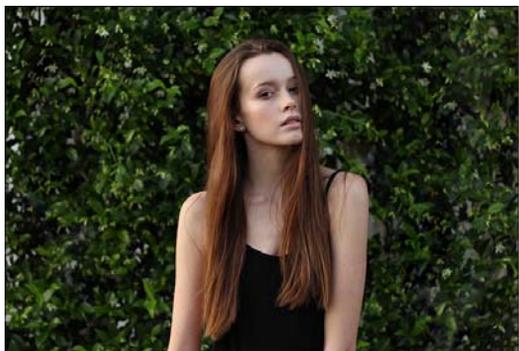


Photo by Christopher Campbell on Unsplash

### Warm Mist

Same as Mist but combined with a warming filter.

Before



After

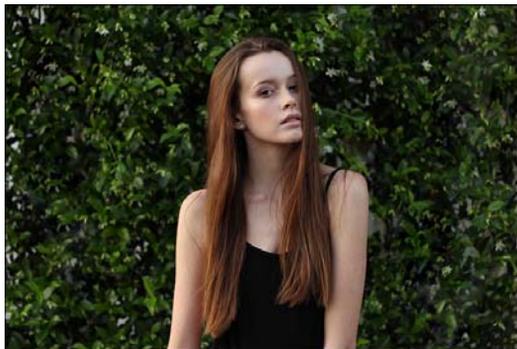


Photo by Christopher Campbell on Unsplash

## Cool Mist

Same as Mist but combined with a cooling filter.

Before



After



Photo by Christopher Campbell on Unsplash

## Black Mist

A more subtle version of Mist, the Black Mist filter creates atmosphere by reducing contrast, but with minimal glow around highlights.

Before



After



Photo by Christopher Campbell on Unsplash

## Warm Black Mist

Same as Black Mist but combined with a warming filter.

Before



After



Photo by Christopher Campbell on Unsplash

Go to the [Mist Tutorial](#) to see how the filter works.

## Category

Diffusion.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Mist

The Mist controls add a mild glow to image highlights.

#### Blend

Determines the blend mode to be used to create the glow effect.

#### Add

The glow is added to your image.

#### Screen

The glow is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

## Brightness

Sets the intensity of the glow.

## Blur

Sets the softness of the glow.

## Color

Sets the color of the glow.

## Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

## Matte

A matte is used to create the mist effect. Go to the **Matte** section of Common Filter Controls to see how the Matte controls work.

# MULTI-STAR

## Description

User definable multi-point star patterns are generated on highlights in the image.

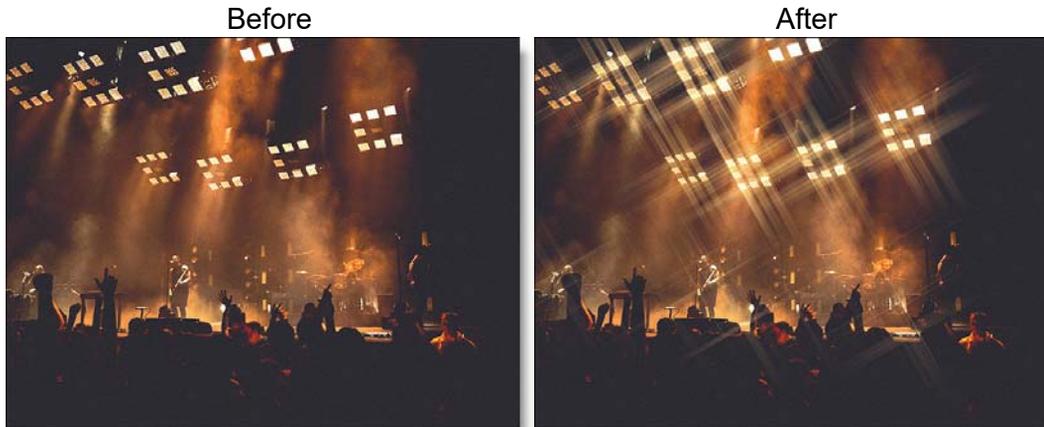


Photo by Pawel Bukowski on Unsplash

Go to the [Multi-Star Tutorial](#) to see how the filter works.

## Category

Light.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Star

The Star settings control the various qualities of the generated star patterns.

### Blend

Determines the blend mode to be used when adding the stars.

### Add

The stars are added to your image.

## Screen

The stars are combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

## Brightness

Determines the brightness of the stars.

## Spokes

Controls the number of star spokes.

## Size

Sets the star size.

## Angle

Rotates the stars.

## Color

Sets the star color.

## Matte

A matte is used to create the star effect. Go to the [Matte](#) section of Common Filter Controls to see how the Matte controls work.

# ND GRADIENT

## Description

ND (Neutral Density) Gradient darkens only a portion of the image using a graduated transition between the darkened portion and the original image. It selectively adjusts brightness without affecting color balance. The most likely use for ND Gradient would be to balance the difference between the sky and ground in a landscape.



Photo by Sam Ferrara on Unsplash

Go to the [ND Gradient Tutorial](#) to see how the filter works.

## Category

Grads/Tints.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### F-Stop

#### Presets

Select one of the ND Gradient presets from the pop-up menu.

## Exposure

Darkens the image using F-Stops as the unit of measure.

## Preserve Highlights

Preserves the white areas of the image.

## Grad

Grad is the transition area between the darkened portion and the original image. Its direction, corners and size can be adjusted. Go to the [Grad](#) section of Common Filter Controls to see how the Grad controls work.

## NET

### Description

#### Net

Softens and minimizes facial imperfections while retaining image clarity. Great for portraits and people photography.

Before



After



Photo by Rachael Crowe on Unsplash

#### Warm Net

Combines all of the benefits of Net with a warming filter.

Before



After



Photo by Rachael Crowe on Unsplash

Go to the [Net Tutorial](#) to see how the filter works.

#### Category

Diffusion.

## Presets

To select a preset, open the DFT interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

## Blur

Sets the softness of the image.

### Opacity

Sets the amount of diffusion mixed into the original image. The higher the setting, the more the image is blurred.

## Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

# NIGHT VISION

## Description

The Night Vision filter creates the effect of a Night Vision lens--that green, glowy, grainy look.

Before



After



Photo by Thomas Shellberg on Unsplash

Go to the [Night Vision Tutorial](#) to see how the filter works.

## Category

Special Effects.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Black and White

Selects the type of black and white filter to be applied to your color image. Go to the [Black and White](#) section of Common Filter Controls to see how the Black and White controls work.



## Tint

### Color

Sets the color that the image will be tinted with. The color is preset to a night vision green, but feel free change it by using the color picker.

### Opacity

Sets the opacity of the tint color.

## Glow

### Blend

Determines the blend mode to be used to create the glow effect.

#### Add

The glow is added to your image.

#### Screen

The glow is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

### Brightness

Sets the intensity of the glow.

### Blur

Sets the softness of the glow.

## Additional Controls

### Grain

#### Grain Size

Controls the size of the grain.

**Note:** You may not see an accurate representation of the grain in the viewer unless your timeline/composition is set to high quality and the viewer is set to a 1:1 pixel ratio.

#### Grain Amount

Controls the intensity of the grain.



## Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

## Matte

A matte is used to create the glow effect. Go to the **Matte** section of Common Filter Controls to see how the Matte controls work.

## NON-ADDITIVE MIX

### Description

Known as a NAM, non-additive mix combines two images by controlling their luminance level relative to each other as well as a set mix percentage. Back in the day of video switchers and online editing, effects editors used a NAM to combine smoke and fire to another image.

Partial Mix



Background



Foreground



Background: Photo by Lucas Filipe on Unsplash  
Foreground: Photo by Oleg Zhilko on Unsplash

Go to the [Non-Additive Mix Tutorial](#) to see how the filter works.

### Category

Composite.

## Input Is Premultiplied

In Nuke, the Non-Additive Mix filter needs to know if the input image is premultiplied. Enable if premultiplied.

## Background

Selects what image to use as the background.

### After Effects / Premiere Pro

Choose the layer/track to use as the background.

### Avid

The track below the current track is automatically used as the background.

### Final Cut Pro

Click the drop zone to the right of the Background parameter, choose a clip, and press Apply Clip below the Viewer.

### Motion

Drag the image to be used as the background and place it onto the drop zone to the right of the Background parameter.

## OFX

### Node Based Hosts

Hook up the background clip in the Node Graph.

### Layer Based Hosts

The layer/track below the current layer/track is automatically used as the background.

**Note:** Assigning the background input requires an OFX host that supports auxiliary inputs. Consult the host documentation for instructions on how to assign an auxiliary input as this will vary by host.

## Mix

Sets the mix level of the foreground element.



## Black Clip

Blacks are made blacker by increasing the value of the slider. As the slider value increases, more values are clipped to black.

**Note:** Often times the black portion of an image is not entirely black. This becomes an issue if something like fire is shot against a black background. If the black is not entirely black, then these impure black areas will be added to the background image as part of the Non-Additive Mix causing the final result to have “milky” blacks. The Black Clip parameter has been added to easily adjust the foreground image’s black level.



# OPTICAL DISSOLVE

## Description

Optical Dissolve uses a power function to simulate an optical film dissolve. The bright areas of the B side of the dissolve appear sooner than the darker areas.

Partial Dissolve



Background

Foreground



(Background) Photo by Rafael Leao on Unsplash

(Foreground) Photo by Laura Ockel on Unsplash

Go to the [Optical Dissolve Tutorial](#) to see how the filter works.

## Category

Composite.

## Opacity

Sets the mix level.

# OVEREXPOSE

## Description

Overexpose simulates the overexposure that occurs when a film camera is stopped.

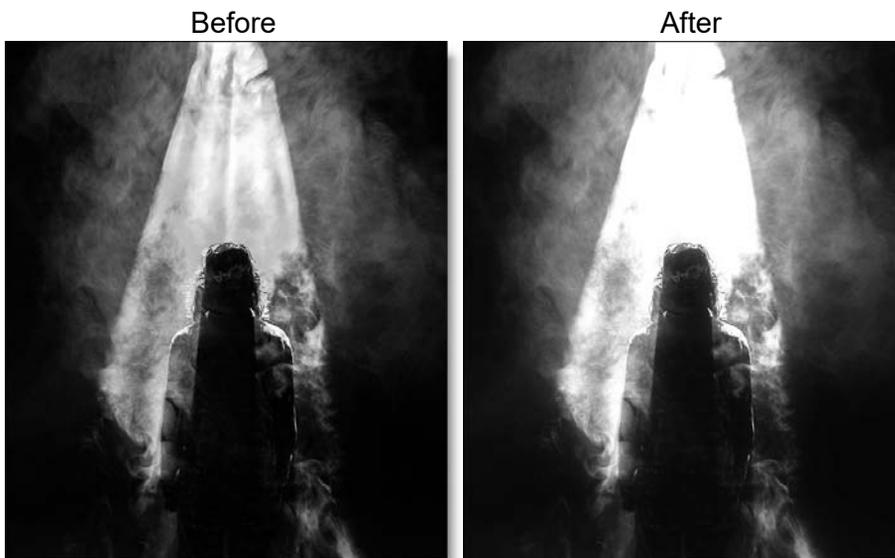


Photo by Mads Schmidt on Unsplash

Go to the [Overexpose Tutorial](#) to see how the filter works.

## Category

Film Lab.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Amount

Controls the amount of overexposure.

## Intensity

Sets the intensity of the overexposure.

## Blur

Sets the softness of the overexposure.

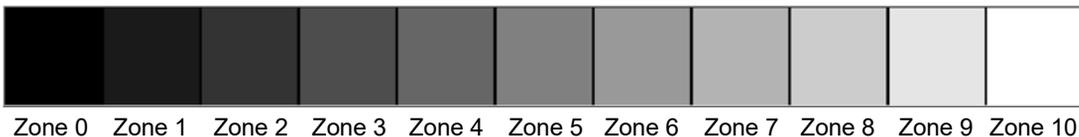
## Description

Ozone allows you to manipulate the color of an image with incredible flexibility and accuracy.



Photo by Annie Spratt on Unsplash

Inspired by Ansel Adams' Zone System for still photography, we have created "The Digital Zone System". Just what is the Digital Zone System? The world around us contains an infinite palette of colors, tones and brightness. To reproduce this vast range of brightness, the Digital Zone System takes the spectrum of image values and divides them into 11 discrete zones using proprietary image slicing algorithms.



Zones can be created using luminance, hue, saturation, average, red, green, blue, cyan, magenta, and yellow values. Look at how the image below is divided into hue zones.

With Ozone, the color values of each zone can be independently adjusted until you've painted a new picture. Your adjustments occur on a zone by zone basis, but you view the result of all color corrections simultaneously.

Go to the [Ozone Tutorial](#) to see how the filter works.

## Category

Color.

## Extract On

The Extract On pop-up menu allows you to specify the image values to be used for dividing the image into the 11 individual zones.

### Luminance

Zones are created using the image's luminance values.

### Hue

Zones are created using the image's hue. When adjusting the Position parameter, you are selecting different hues.

### Saturation

Zones are created using the image's saturation values.

### Average

Zones are created based on the average of the image's RGB values.

### Red

Zones are created using the image's red values.

### Green

Zones are created using the image's green values.

### Blue

Zones are created using the image's blue values.

### Cyan

Zones are created using the image's cyan values.

## Magenta

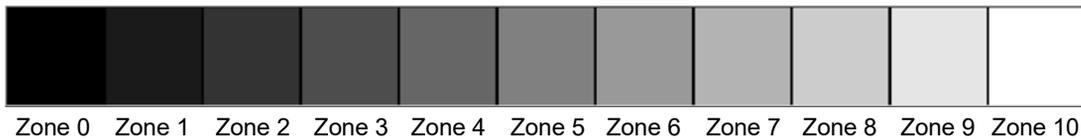
Zones are created using the image's magenta values.

## Yellow

Zones are created using the image's yellow values.

## Zone Controls

When using Luminance as the method for slicing up the image, the Position and Range sliders are preset so that each zone is twice as bright as the previous zone, proceeding from black towards white.



Pure black is defined as Zone 0, Zone 5 as middle gray and pure white as Zone 10. By using the View menu, you can look at the zone which is helpful in determining the portions of the image you are going to adjust. The values shown as white in the selected zone are the areas of the image that will be modified by the color adjustments. **Position**

The Position value pinpoints the color values to be used in the selected zone. This value has been preset according to the Digital Zone System, but can be changed if you choose. If the zones are created using Luminance, a high Position value shows the brightest image values as white values in the zone. A low Position value shows the darkest image values as white values in the zone.

## Range

The Range value increases or decreases the range of values in the selected zone. This value has been preset according to the Digital Zone System, but can be changed if you want.

Go to the **Matte** section of Common Filter Controls to see how the Position and Range controls work.

## Hue

Rotates the hue of the zone.

## Saturation

Adjusts the saturation of the zone. Positive values saturate, negative values desaturate.

## Brightness

Adjusts the brightness of the zone. Positive values brighten, negative values darken.

## Contrast

Adjusts the contrast of the zone. Positive values increase contrast, negative values decrease contrast.

## Gamma

Adjusts the gamma of the zone. The gamma adjustment leaves the white and black points the same and only modifies the values in-between. Positive values lighten the midtones, negative values darken the midtones.

## Red

Adds or subtracts red from the zone.

## Green

Adds or subtracts green from the zone.

## Blue

Adds or subtracts blue from the zone.

## Temperature

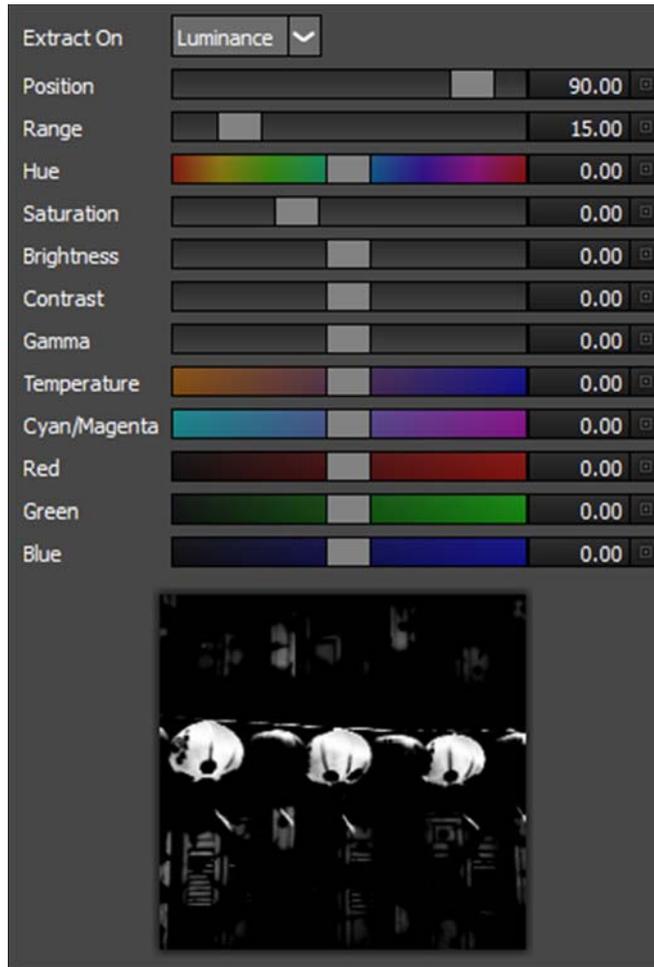
Sets the color temperature of the zone. Dragging the slider to the right makes the image cooler (bluer) and dragging the slider to the left makes the image warmer (redder).

## Cyan/Magenta

Adds either Cyan or Magenta to the zone. Dragging the slider to the right makes the image more magenta and dragging the slider to the left makes the image more cyan.

## Zone Thumbnail

At the bottom of the Parameter window is a thumbnail of the selected zone to help you see which areas of the image will be adjusted.



# PASTEL

## Description

Converts the image into pastel artwork.

Before



After



Photo by Boris Smokrovic on Unsplash

Go to the [Pastel Tutorial](#) to see how the filter works.

## Category

Special Effects.

## Controls

### Amount

Adjusts the amount of the pastel effect.

### Detail

Adjusts the detail. If the slider is increased, you will see more detail while decreasing the slider will have an overall smoothing effect.

# PENCIL

## Description

Pencil converts your image to a pencil sketch.



Photo by Ludde Lorentz on Unsplash

Go to the [Pencil Tutorial](#) to see how the filter works.

## Category

Special Effects.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Amount

Sets the intensity of the pencil effect.

### Color

The Color parameter sets the color of the pencil effect through the use of a standard color picker.

### Background

Mixes in the original image.

# PHOTOGRAPHIC

## Description

The most complete line of Kodak® filters for photographic uses is available in the form of gelatin films and are known as Wratten® Gelatin Filters. Our Photographic filter is a digital equivalent of the Wratten set and were created using the spectral transmission curves for each optical filter. The Color Conversion, Light Balancing and Color Compensating preset groups are subsets of the Photographic filters.



Photo by Paul Morris on Unsplash

Go to the [Photographic Tutorial](#) to see how the filter works.

## Photographic

Digital versions of the complete line of Kodak® Wratten® Gelatin Filters.

## Color Conversion

Color Conversion filters correct for significant differences in color temperature between your light source and recording media.

## Light Balancing

Light Balancing filters correct for minor differences in color temperature between your light source and recording media.

## Color Compensating

Color Compensating filters control color by attenuating specific parts of the spectrum. They can be used to make changes in color balance or compensate for deficiencies in the image's spectral quality.

### Category

Grads/Tints.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

### Color

#### Color

The Color parameter sets the color of the filter through the use of a standard color picker.

#### Opacity

Sets the opacity of the color filter.

#### Preserve Highlights

Preserves the white areas of the image.

#### Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the filter application.

### Grad

These filters can optionally use a gradient that limits where the filter is applied. Grad is the transition area between the colored portion and the original image. Its direction, corners and size can be adjusted. Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

## POLARIZER

### Description

#### Polarizer

The greatest use of polarizing filters is to achieve a darkened, deep blue sky. Our digital version of the Polarizer is designed to do just that. Through the use of a matte and an adjustable gradient, the color of the sky can be adjusted.

Before



After

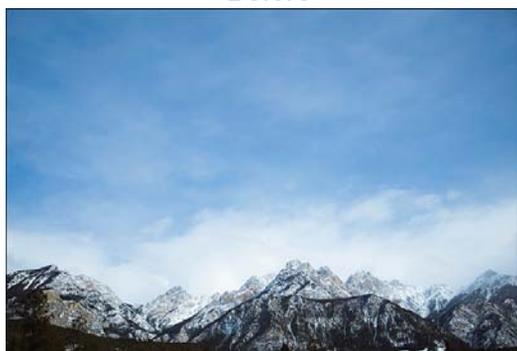


Photo by Takahiro Sakamoto on Unsplash

#### Warm Polarizer

Combines the benefits of the Polarizer with a warming filter making it ideal for portraits and scenics.

Before



After



Photo by Takahiro Sakamoto on Unsplash

Go to the [Polarizer Tutorial](#) to see how the filter works.

## Category

Color.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

### Sky

Color Correct controls are provided to adjust the sky.

#### Hue

Rotates the hue of the sky.

#### Saturation

Adjusts the saturation of the sky. Positive values saturate, negative values desaturate.

#### Brightness

Adjusts the brightness of the sky. Positive values brighten, negative values darken.

#### Contrast

Adjusts the contrast of the sky. Positive values increase contrast, negative values decrease contrast.

#### Gamma

Adjusts the gamma of the sky. The gamma adjustment leaves the white and black points the same and only modifies the values in-between. Positive values lighten the midtones, negative values darken the midtones.

#### Red

Adds or subtracts red from the sky.

## Green

Adds or subtracts green from the sky.

## Blue

Adds or subtracts blue from the sky.

## Temperature

Sets the color temperature of the sky. Dragging the slider to the right makes the sky cooler (bluer) and dragging the slider to the left makes the sky warmer (redder).

## Temperature

Applies a warming filter to the image. Go to the **Temperature** section of Common Filter Controls to see how the Temperature controls work.

## Grad

The Polarizer can optionally use a gradient that limits where the filter is applied. For instance, if the polarization is affecting areas other than the sky, enable the Grad and adjust it to limit the areas of polarization. Go to the **Grad** section of Common Filter Controls to see how the Grad controls work.

## Matte

### Hue

The Polarizer isolates the sky using a matte based on a blue hue. Use the Hue eyedropper to select the exact color of the sky if you are not seeing enough polarization.

### Range

Increases or decreases the range of values in the hue matte. A low Range value indicates a narrow range of values. A high Range value indicates a large range of values included in the matte.

### Blur

Sets the softness of the matte by using a quality blur.

Go to the **Matte** parameters to see how they work.

## PREMULTIPLY

### Description

Multiplies the RGB channels by the alpha channel.

### Category

Composite.

**Note:** Premultiply is not included with the Avid version because of the way Avid treats RGBA images.

# RACK FOCUS

## Description

Rack Focus replicates a true camera defocus by introducing lens Bokeh effects. Bokeh is the Japanese term that describes the quality of out-of-focus points of light. In defocused areas, each point of light becomes a shape--either a circle or a polygon. The shape grows in size as the amount of defocusing is increased.

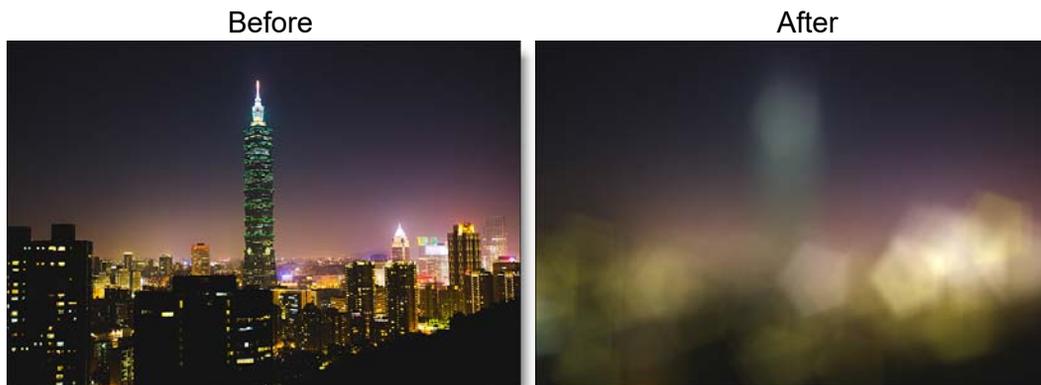


Photo by Steven Hung on Unsplash

Go to the [Rack Focus Tutorial](#) to see how the filter works.

## Category

Lens.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Blur

The image is blurred by using a quality blur.

## Aperture

### Blend

Determines the blend mode to be used when adding Bokeh.

### Add

Bokeh's are added to your image.

### Screen

The Bokeh are combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

### Brightness

Brightens the Bokeh.

### Facets

Set the number of Bokeh facets when the Curvature parameter is set to 0.

### Curvature

Controls the curvature of the Bokeh. When set to 100, the Bokeh are completely round. Set to a value of 0 to see a polygonal shape.

### Angle

Rotates the Bokeh.

### Color

Sets the Bokeh color.

### Blur

Sets the softness of the Bokeh. This can be useful when using high threshold values.

## Matte

A matte is used to create the Bokeh effect. Go to the [Matte](#) section of Common Filter Controls to see how the Matte controls work.

# RADIAL EXPOSURE

## Description

Lightens and/or darkens the center or edges of an image to correct lens vignetting.

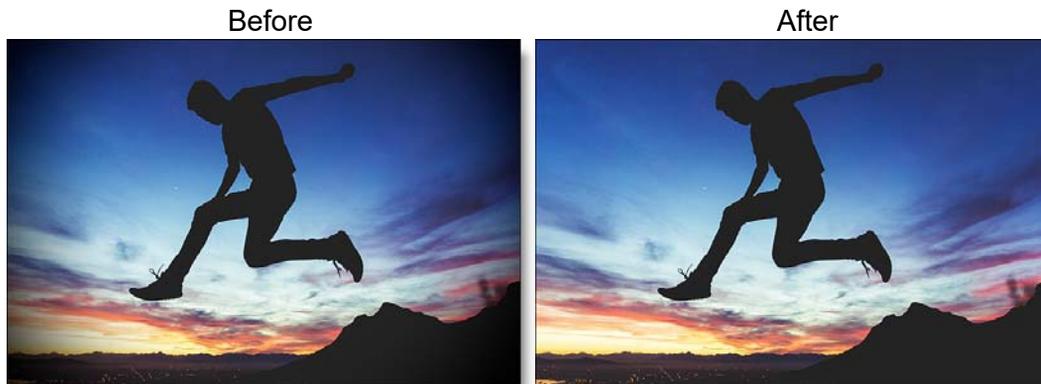


Photo by Joshua Earle on Unsplash

Go to the [Radial Exposure Tutorial](#) to see how the filter works.

## Category

Lens.

## Controls

### Exposure

#### Edges

Lightens or darkens the edges of the image.

#### Center

Lightens or darkens the center of the image.

### Spot

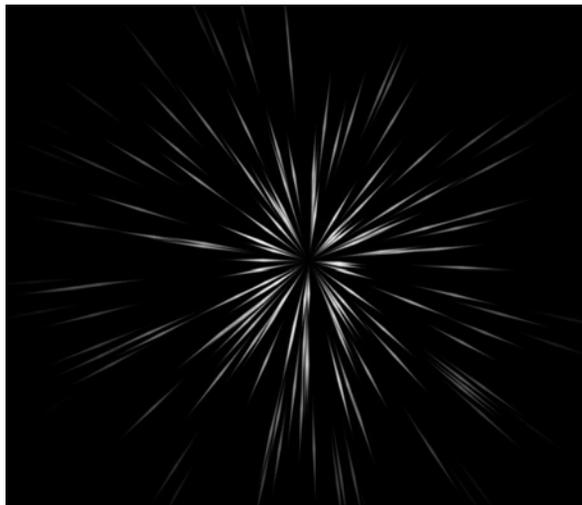
A radial gradient is used to lighten or darken the edges or center of the image.

Go to the [Spot](#) section of Common Filter Controls to see how the Spot controls work.

# RADIAL STREAKS

## Description

Short radial streaks emanating from the center point.



Go to the [Radial Streaks Tutorial](#) to see how the filter works.

## Category

Light.

## Controls

### Blend

Determines the blend mode used to create the streaks effect.

### Add

The streaks are added to your image.

### Screen

The streaks are combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

## Brightness

Controls the brightness.

## Color

Sets the color.

## Scale

Changes the size.

## Aspect

Sets the aspect ratio.

## Angle

Sets the angle.

## Element Count

Determines the number of streaks.

## Randomize

Randomizes the size and position.

## Jitter

Randomizes the angle.

# RADIAL TINT

## Description

Tints the image using multi-color, radially graduated filters.



Photo by Jason Wong on Unsplash

Go to the [Radial Tint Tutorial](#) to see how the filter works.

## Category

Grads/Tints.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Tint Mode

Selects how color is applied to the image.

#### Normal

Tints the image while retaining highlights.

#### Tint

The image is tinted by replacing hue and saturation.

## Hue

The image is tinted by only replacing hue.

## Lighten

Pixels darker than the color are replaced, and pixels lighter than the color do not change.

## Darken

Pixels lighter than the color are replaced, and pixels darker than the color do not change.

## Color 1

Sets the color for the top left quadrant of the image.

### Color

Sets the color through the use of a standard color picker.

### Opacity

Sets the opacity of the color.

## Color 2

The Color 2 controls are the same as the controls for Color 1 except it is applied to the top right quadrant of the image.

## Color 3

The Color 3 controls are the same as the controls for Color 1 except it is applied to the bottom right quadrant of the image.

## Color 4

The Color 4 controls are the same as the controls for Color 1 except it is applied to the bottom left quadrant of the image.

## Radial Grad

Sets the position, rotation and aspect ratio of the radial gradient.

### Position

There is an on-screen control in the center of the image. By clicking and dragging the on-screen control, the position of the grad can be adjusted.

## Position X

The horizontal position of the grad.

## Position Y

The vertical position of the grad.

**Note:** In some host programs, you must highlight the effect title in the Effect Controls window to see the on-screen controls.

## Size

The size of the grad.

## Rotation

The rotation of the grad.

## Aspect

The aspect ratio of the grad.

## Highlights

### Preserve Highlights

Preserves the white areas of the image.

### Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the filter application.

## Spot

A spot in the form of a radial gradient can optionally be used to control where color is added to the image. Go to the **Spot** section of Common Filter Controls to see how the Spot controls work.

# RAINBOW

## Description

Recreates arced rainbows of spectral colors, usually identified as red, orange, yellow, green, blue, indigo, and violet, that appear in the sky as a result of the refractive dispersion of sunlight in drops of rain or mist.

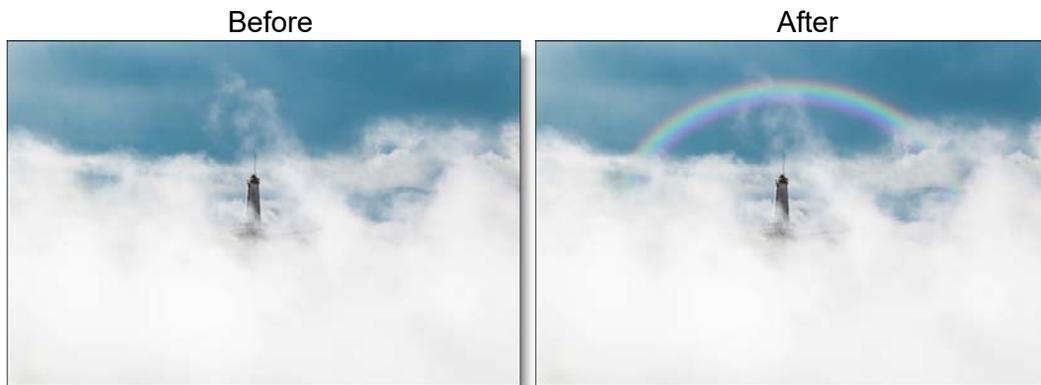


Photo by Jeremy Bishop on Unsplash

Go to the [Rainbow Tutorial](#) to see how the filter works.

## Category

Light.

## Controls

### Light

#### Blend

Determines the blend mode to be used to add the rainbow.

#### Add

The rainbow is combined with the image using an Add blend mode.

#### Screen

The rainbow is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

## Normal

The rainbow is added to the image using a normal composite function.

## Amount

Sets the intensity of the rainbow.

## Displacement

Displaces the rainbow by the luminance values of the image. This “fakes” the effect of the rainbow wrapping over objects in the image.

## Blur

Sets the softness of the rainbow.

## Rainbow

### Blend

The rainbow can be added to the entire image or limited to a matte.

### Rainbow Only

The rainbow is added to the entire image.

### Matte

The rainbow is added only in areas of the matte.

### Position

The rainbow position can be adjusted by clicking and dragging an on-screen control in the center of the image.

### Position X

The horizontal position of the rainbow.

### Position Y

The vertical position of the rainbow.

### Radius

The size of the rainbow.

### Aspect

Sets the aspect ratio of the rainbow. Positive values stretch the rainbow horizontally and negative values stretch it vertically.

## Thickness

Sets the thickness of the rainbow's bands.

## Crop

### Offset

The rainbow is cropped based on the Offset value. The higher the value, the more rainbow you see. A value of -100 shows no rainbow at all while 100 displays a complete 360 degree rainbow.

### Angle

Sets the angle of the crop.

### Softness

Sets the softness of the crop's edge.

## Matte

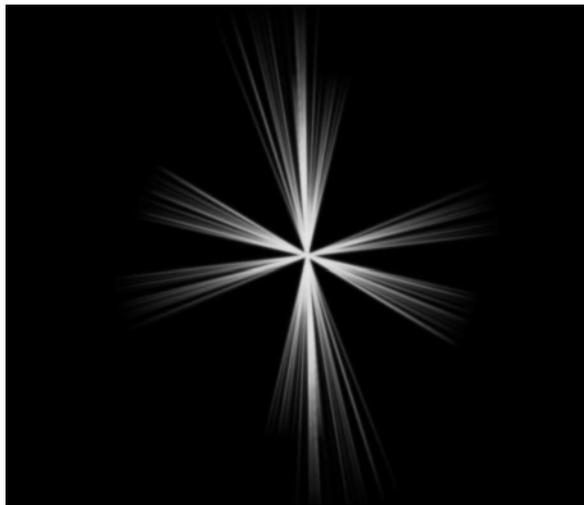
A matte can be used to limit where the rainbow will be placed. Wherever there is white in the matte is where the rainbow will be added. Go to the [Matte](#) parameters to see how they work.

**Note:** To use a matte to limit where the rainbow will be added, Rainbow > Blend must be set to Matte.

# RANDOM SPIKES

## Description

Generates asymmetric radial rays.



Go to the [Random Spikes Tutorial](#) to see how the filter works.

## Category

Light.

## Controls

### Blend

Determines the blend mode used to create the spikes effect.

### Add

The spikes are added to your image.

### Screen

The spikes are combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

## Brightness

Controls the brightness.

## Color

Sets the color.

## Scale

Changes the size.

## Aspect

Sets the aspect ratio.

## Angle

Sets the angle.

## Element Count

Determines the number of rays.

## Softness

Blurs the rays.

## Randomize

Randomizes the size and position.

# RAYS

## Description

Create stunning and realistic light ray effects quickly and easily. Known as volumetric lighting in computer graphics or crepuscular rays in atmospheric optics, this dramatic effect adds polish and style. Since the rays are only added to highlight areas, they have the effect of passing through objects and add a third dimensional quality. Add shafts of light streaming through clouds, rays filtering through a forest canopy, beams of light on a foggy night or rays shooting out from text. Rays adds a striking and dramatic quality to any image.

Before



After



Photo by Filipe Dos Santos Mendes on Unsplash

Go to the [Rays Tutorial](#) to see how the filter works.

## Category

Light.

## Controls

### Rays

#### Position

Move the point control in the center of the screen to change the source point from which the rays will emanate.

## Length

Sets the ray length.

## Brightness

Sets the brightness of the rays.

## Color

Sets the color of the rays.

## Blur

Blurs the rays.

## Threshold

Controls the amount of rays based on a brightness threshold. Fewer rays with more definition are generated at higher threshold values.

## Light Source

A circular light source can be used to enhance the generation of the light rays. It is particularly useful when the image does not have strong highlights.

## Brightness

Sets the brightness of the light source.

## Size

Sets the size of the light source.

## Texture

Adds texture to the rays.

## Amount

Sets the amount of texture.

## Size

Sets the size of the texture.

## Phase

Sets the randomness of the texture.

## Shimmer

Randomizes the rays.

### Amount

Sets the amount of shimmering.

### Phase

Sets the randomness of the shimmering.

## Opacity

### Rays

Sets the opacity of the rays.

### Source

Sets the opacity of your image.

# REFLECTOR

## Description

One of the oldest and still most popular means of lighting an exterior set is by taking a reflective surface and redirecting sunlight or artificial light exactly where it is needed. Unfortunately, it is nearly impossible for actors to keep their eyes open when looking into a reflector, resulting in squinting eyes. Our silver and gold reflectors allow you to add white or gold light into shadow areas without the squinting.

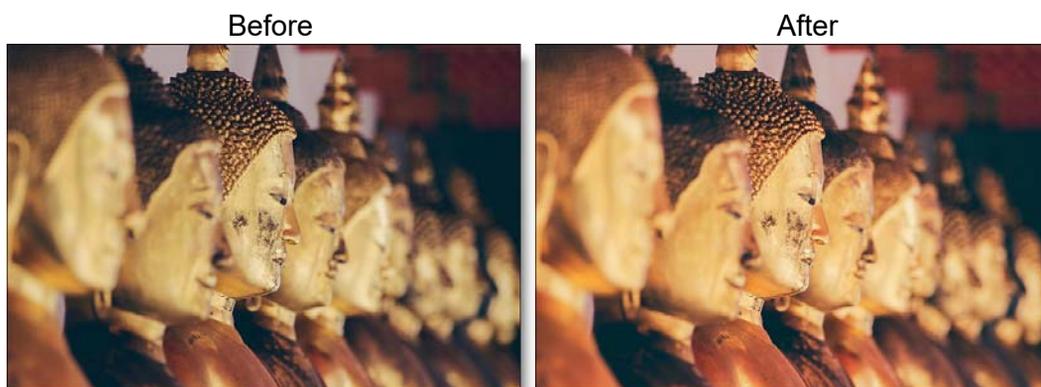


Photo by Alexandre Chambon on Unsplash

Go to the [Reflector Tutorial](#) to see how the filter works.

## Category

Light.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

### Brightness

Sets the intensity of the reflector.

## Color

The Color parameter sets the color of the reflector through the use of a standard color picker. The default color is gold for Gold Reflector and white for Silver Reflector.

## Position

Selects the shadow values that will be adjusted with the Brightness slider.

## Range

Controls the range of shadow values that will be adjusted with the Brightness slider.

Go to the **Matte** section of Common Filter Controls to see how the Position and Range controls work.

# RELIGHT

## Description

Light can be added to a scene where none existed before. A complete set of light source controls allow you to adjust the light just as you would at the time of shooting.



Photo by Blake Lisk on Unsplash

Go to the [ReLight Tutorial](#) to see how the filter works.

## Category

Light.

## Light

### Blend

Determines the blend mode to be used to add the light.

### Add

The light is added to your image.

## Screen

The light is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

## Brightness

Sets the intensity of the light.

## Displacement

Displaces the light source by the luminance values of the image. This “fakes” the effect of light wrapping over objects in the image.

## Blur

Sets the softness of the light.

## Gels

Photographers, cinematographers and lighting designers use colored filters or gels in front of lights. Whatever mood you wish to create, we have the colors needed to achieve the effect. Select one of the Gels presets from the pop-up menu.

## Color

Sets the color of the light through the use of a standard color picker.

# Light Source

## Blend

The light source can be added to the matte using a variety of Blend modes. Go to **Blend Modes** for explanations of the various modes.

I like the Multiply blend mode for combining the light source with the matte because it only puts the light source within the areas of the matte.

## Opacity

Sets the opacity of the light source.

## Aspect

The aspect ratio of the light source.

## Radius

The un-blurred radius of the light source.

## Falloff Radius

The blurred edge radius.

## Falloff

Moves the falloff towards the light centerpoint.

## Invert

Inverts the light source.

## Transform

Transform your light pattern using Position, Scale, Rotate, Corner-Pin, Shear and Crop controls. Go to the **Transform** section of Common Filter Controls to see how the Transform Controls work.

## Matte

A matte can be used to limit the area of added light. Wherever there is white in the matte is where the light will be added. When using ReLight, it is usually helpful to blur the matte. Go to the **Matte** parameters to see how they work.

**Note:** Light Source > Blend must be set to something other than Shape Only for the Matte controls to be active.

# SELECTIVE COLOR CORRECT

## Description

Colors can be selectively isolated through the use of a matte and adjusted using hue, saturation, brightness, gamma, contrast, temperature, cyan/magenta, red, green, and blue controls.



Photo by Pietro De Grandi on Unsplash

Go to the [Selective Color Correct Tutorial](#) to see how the filter works.

## Category

Color.

## Color Correct

Certain parts of the image are isolated by the creation of a matte. Whatever is shown as white in the matte can be adjusted by the color controls below.

### Hue

Rotates the hue of the image.

### Saturation

Adjusts the saturation of the image. Positive values saturate, negative values desaturate.

## Brightness

Adjusts the brightness of the image. Positive values brighten, negative values darken.

## Contrast

Adjusts the contrast of the image. Positive values increase contrast, negative values decrease contrast.

## Gamma

Adjusts the gamma of the image. The gamma adjustment leaves the white and black points the same and only modifies the values in-between. Positive values lighten the midtones, negative values darken the midtones.

## Temperature

Sets the color of the image to be either warmer or cooler. Dragging the slider to the right makes the image cooler (bluer) and dragging the slider to the left makes the image warmer (redder).

## Cyan/Magenta

Adds either Cyan or Magenta to the image. Dragging the slider to the right makes the image more magenta and dragging the slider to the left makes the image more cyan.

## Red

Adds or subtracts red from the image.

## Green

Adds or subtracts green from the image.

## Blue

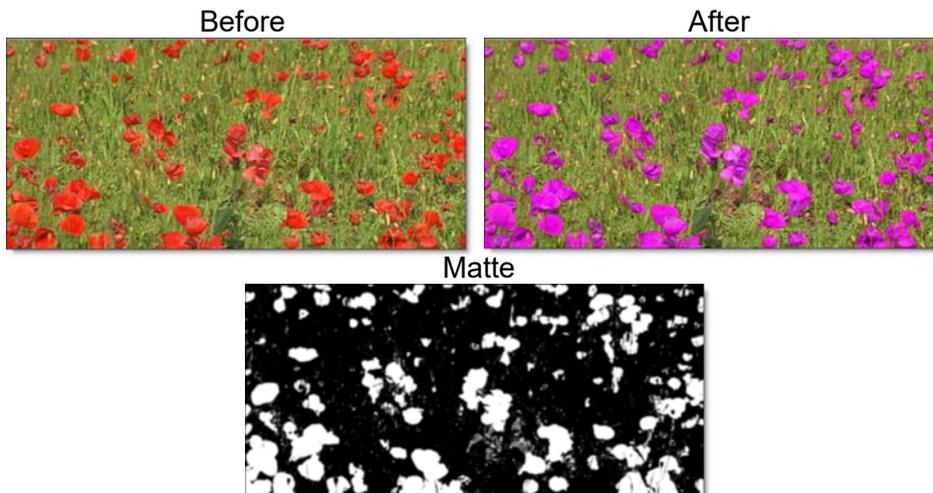
Adds or subtracts blue from the image.

## Temperature

Sets the color temperature of the image. Dragging the slider to the right makes the image cooler (bluer) and dragging the slider to the left makes the image warmer (redder).

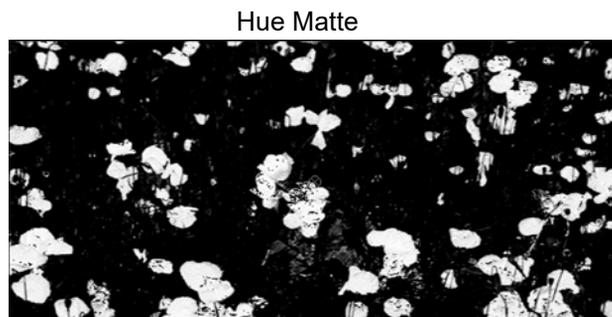
# Matte

A matte is created to isolate areas to be color corrected. Using advanced image slicing algorithms, mattes are created using luminance, hue, saturation, average, red, green, blue, cyan, magenta, and yellow values.



## Extract On

Extract On selects the type of matte. Select whichever type isolates the desired values.



A matte is created based on one of the following:

### Luminance

A matte is created based on the luminance of the image.

## Hue

A matte is created based on the hue of the image. When adjusting the Position parameter, you are selecting different hues.

## Saturation

A matte is created based on the saturation of the image.

## Average

A matte is created based on the average of the image's RGB values.

## Red

A matte is created based on the image's red values.

## Green

A matte is created based on the image's green values.

## Blue

A matte is created based on the image's blue values.

## Cyan

A matte is created based on the image's cyan values.

## Magenta

A matte is created based on the image's magenta values.

## Yellow

A matte is created based on the image's yellow values.

## Position

The Position value pinpoints the color values to be used in the matte. For a luminance matte, a Position value of 100 would make a white matte of the highlights and a value of 0 would make a white matte of the shadows. In the

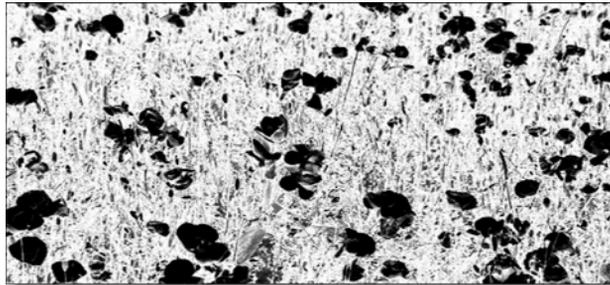
flower image below, look at how the matte varies for different Position values in a red extraction. When the Position is at a value of 100, the red flowers are shown as white in the matte.

Position=100, Range=25



When the Position is moved to 50, the red flowers turn black.

Position=50, Range=25



## Range

Increases or decreases the range of values in the matte. A low Range value indicates a narrow range of values. A high Range value indicates a large range of values included in the matte.

Position=100, Range=50



## Black Clip

Blacks in the matte are made blacker by increasing the value of the slider. As the slider value increases, more values are clipped to black. This is helpful for getting rid of unwanted gray areas in what should be the black part of the matte.

Matte with No Black Clip



Black Clip=50



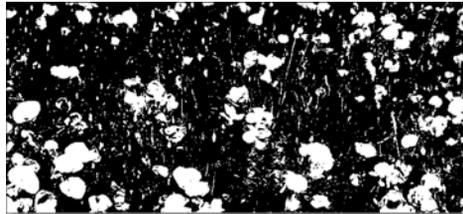
## White Clip

Whites in the matte are made whiter by increasing the value of the slider. As the slider value increases, more values are clipped to white. This is helpful for getting rid of unwanted gray areas in what should be the white part of the matte.

Matte with No White Clip



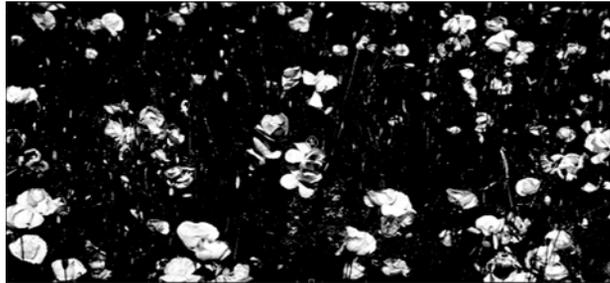
White Clip=50



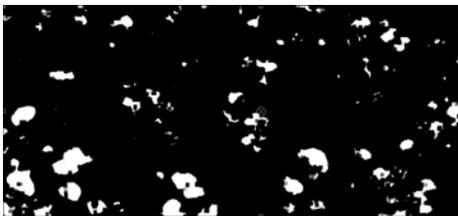
## Shrink/Grow

Shrinks or grows the matte. Negative values shrink and positive values grow the matte.

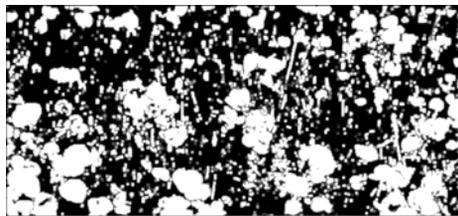
Original



Shrink=-2



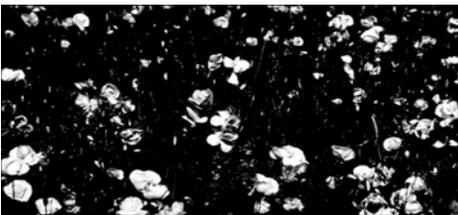
Grow=1.5



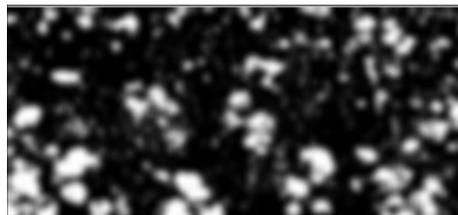
## Blur

Blurs the matte.

No Blur



Blur=10



## Invert

- Off

Does nothing to the matte.

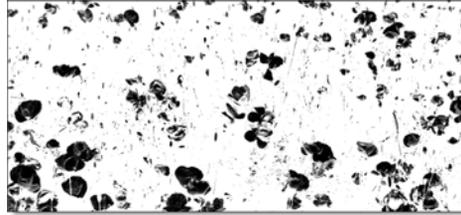
- On

Inverts the luminance values of the matte.

Invert Off



Invert On



# SCREEN SMOOTHER

## Description

Smooths out unevenly lit blue and green screens. By default, darker screen areas are brightened.



When working with poorly lit blue and green screens, it is useful to apply the Screen Smoother prior to using zMatte. This will result in a better key.

Go to the [Screen Smoother Tutorial](#) to see how it works.

## Category

Key.

## Color Correct

The Color Correct parameters allow you to adjust the color of the blue or green screen based on an extracted matte. Go to the [Color Correct](#) filter to see how the Color Correct controls work.

## Matte

### Extract On

Extract On selects the type of matte extraction.

### Blue Screen

Choose blue screen if you have a blue screen.

## Green Screen

Choose green screen if you have a green screen.

## Position

The Position value pinpoints the blue or green screen values to be used in the matte. White values in the matte are the areas that will be adjusted by the color correction.

## Range

Increases or decreases the range of values in the matte. A high Range value indicates a large range of values included in the matte.

## Blur-Horizontal

The matte is blurred by a fast, quality blur along the X-axis resulting in a smoother, more even color correction.

## Blur-Vertical

The matte is blurred by a fast, quality blur along the Y-axis resulting in a smoother, more even color correction.

## Gang

The horizontal and vertical slider values can be ganged together.

# SELECTIVE SATURATION

## Description

The saturation of the image can be adjusted independently in the shadows, midtones and highlights.



Photo by Oswaldo Martinez on Unsplash

Go to the [Selective Saturation Tutorial](#) to see how the filter works.

## Category

Color.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Shadows

#### Saturation

Adjusts the saturation of the image in the shadows. Positive values saturate, negative values desaturate.

#### Position

Selects the shadow values to be adjusted.

## Range

Controls the range of values to be used for the shadows. A higher Range value considers more values as shadows.

## Midtones

### Saturation

Adjusts the saturation of the image in the midtones. Positive values saturate, negative values desaturate.

### Position

Selects the midtones values to be adjusted.

### Range

Controls the range of values to be used for the midtones. A higher Range value considers more values as midtones.

## Highlights

### Saturation

Adjusts the saturation of the image in the highlights. Positive values saturate, negative values desaturate.

### Position

Selects the highlight values to be adjusted.

### Range

Controls the range of values to be used for the highlights. A higher Range value considers more values as highlights.

Go to the [Matte](#) section of Common Filter Controls to see how the Position and Range controls work.

# SEPIA

## Description

### Sepia

Creates a warm brown tone for that nostalgic feeling.

Before



After



Photo by Andrew Neel on Unsplash

Go to the [Sepia Tutorial](#) to see how the filter works.

### Category

Grads/Tints.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Color

#### Amount

Determines the intensity of the color added to the image.

#### Opacity

Sets the opacity of the filter.

## Preserve Highlights

Preserves the white areas of the image.

## Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the filter application.

## Grad

Sepia can optionally use a gradient that limits where the filter is applied. Grad is the transition area between the colored portion and the original image. Its direction, corners and size can be adjusted. Go to the [Grad](#) section of Common Filter Controls to see how the Grad controls work.

# SHADOWS/HIGHLIGHTS

## Description

Shadows/Highlights lowers contrast evenly throughout the image by brightening shadow areas and darkening highlights. It is useful for correcting dark foreground subjects due to strong backlighting as well as highlights that are slightly washed out.

Before



After



Photo by Jonatan Pie on Unsplash

Go to the [Shadows/Highlights Tutorial](#) to see how the filter works.

## Category

Color.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Shadows

#### Shadows

Raises the brightness of the shadows.

#### Position

Selects the shadow values to be adjusted.

## Range

Controls the range of values to be used for the shadows. A higher Range value considers more values as shadows.

## Highlights

### Highlights

Lowers the brightness of the highlights.

### Position

Selects the highlight values to be adjusted.

### Range

Controls the range of values to be used for the highlights. A higher Range value considers more values as highlights.

Go to the [Matte](#) section of Common Filter Controls to see how the Position and Range controls work.

# SILK

## Description

### Silk

Silk softens wrinkles, blemishes and fine detail to produce smooth skin textures while retaining detail in coarse features such as the eyes, nose and mouth.

Before



After



Photo by Joe Gardner on Unsplash

### Warm Silk

Warm Silk offers all the benefits of the Silk filter while adding a diffuse warm tint to the shadows.

Before



After



Photo by Joe Gardner on Unsplash

Go to the [Silk Tutorial](#) to see how the filter works.

## Category

Diffusion.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

### Detail

#### Smoothing

Fine image details, such as facial wrinkles and blemishes, are minimized using edge aware smoothing.

### Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

### Matte

A matte can be used to limit the smoothing effect. Wherever there is white in the matte is where the smoothing will occur. Go to the **Matte** parameters to see how they work.

# SKIN TONE

## Description

A set of colorization filters to enhance skin tones.

Before



After



Photo by Roksolana Zasiadko on Unsplash

Go to the [Skin Tone Tutorial](#) to see how the filter works.

## Category

Grads/Tints.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Color

#### Color

The Color parameter sets the color through the use of a standard color picker.

## Opacity

Sets the opacity of the color filter.

## Preserve Highlights

Preserves the white areas of the image.

## Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the filter application.

## Grad

The Skin Tone filters can optionally use a gradient that limits where the filter is applied. Grad is the transition area between the colored portion and the original image. Its direction, corners and size can be adjusted. Go to the [Grad](#) section of Common Filter Controls to see how the Grad controls work.

# SOFT LIGHT

## Description

Provides soft, digitally diffused and virtually shadowless light.

Before



After



Photo by Chris Abney on Unsplash

Go to the [Soft Light Tutorial](#) to see how the filter works.

## Category

Light.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Blend

Determines the blend mode to be used to add the light.

#### Add

The light is added to your image.

#### Screen

The light is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

## Brightness

Sets the intensity of the light.

## Blur

Sets the softness of the light.

## Gels

Photographers, cinematographers and lighting designers use colored filters or gels in front of lights. Whatever mood you wish to create, we have the colors needed to achieve the effect. Select one of the Gels presets from the pop-up menu.

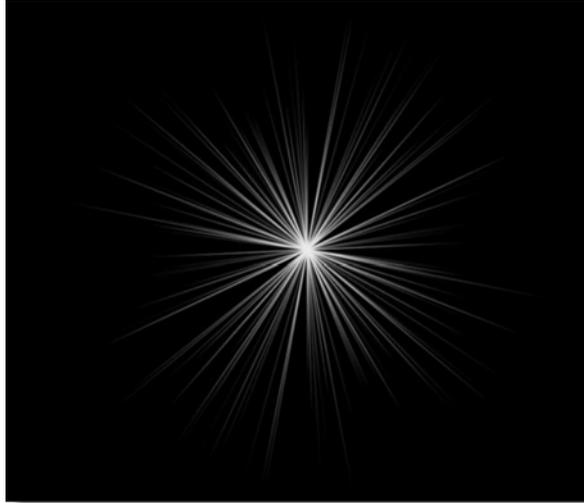
## Color

Sets the color of the light through the use of a standard color picker.

# SPIKES

## Description

Long radial rays emanating from the center point.



Go to the [Spikes Tutorial](#) to see how the filter works.

## Category

Light.

## Controls

### Blend

Determines the blend mode used to create the spikes effect.

### Add

The spikes are added to your image.

### Screen

The spikes are combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

## Brightness

Controls the brightness.

## Color

Sets the color.

## Scale

Changes the size.

## Aspect

Sets the aspect ratio.

## Angle

Sets the angle.

## Element Count

Determines the number of rays.

## Softness

Blurs the rays.

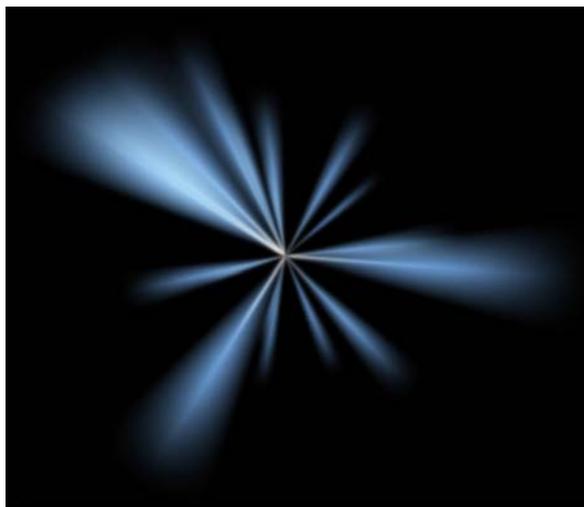
## Randomize

Randomizes the size and position.

## SPIRAL RAYS

### Description

Creates spiral rays.



Go to the [Spiral Rays Tutorial](#) to see how the filter works.

### Category

Light.

### Controls

#### Blend

Determines the blend mode used to create the rays effect.

#### Add

The rays are added to your image.

#### Screen

The rays are combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

## Brightness

Controls the brightness.

## Color

Sets the color.

## Scale

Changes the size.

## Aspect

Sets the aspect ratio.

## Angle

Sets the angle.

## Element Count

Determines the number of rays.

## Softness

Blurs the rays.

## Randomize

Randomizes the size and position.

# SPLIT FIELD

## Description

Split Field splits the image with a line that can be positioned, rotated and blurred. On one side of the line, the image is blurred and on the other, it is in focus.



Photo by Anthony Cantin on Unsplash

Go to the [Split Field Tutorial](#) to see how the filter works.

## Category

Lens.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Blur

Sets the softness of the split portion of the image.

### Split

The Split controls manipulate the position, rotation and blur of the split line.

## Position

There is an on-screen control in the center of the image. By clicking and dragging the on-screen control, the position of the split line can be adjusted.

### Position X

The horizontal position of the split line.

### Position Y

The vertical position of the split line.

**Note:** On some host programs, you must highlight the effect title in the Effect Controls window to see the on-screen controls.

## Rotate

Rotates the split line.

## Blur

Blurs the split line using a quality blur.

# SPLIT TONE

## Description

Shadows, midtones and highlights can be individually tinted with the Split tone filter.



Photo by Aaron Burden on Unsplash

Go to the [Split Tone Tutorial](#) to see how the filter works.

## Category

Grads/Tints.

## Controls

### Shadows

#### Opacity

Set the opacity of the tint color.

#### Color

The Color parameter sets the color of the shadow tint through the use of a standard color picker.

#### Position

Selects the shadow values to be adjusted.

## Range

Controls the range of values to be used for the shadows. A higher Range value considers more values as shadows.

## Midtones

### Opacity

Set the opacity of the tint color.

### Color

The Color parameter sets the color of the midtone tint through the use of a standard color picker.

### Position

Selects the midtone values to be adjusted.

### Range

Controls the range of values to be used for the midtones. A higher Range value considers more values as midtones.

## Highlights

### Opacity

Set the opacity of the tint color.

### Color

The Color parameter sets the color of the highlight tint through the use of a standard color picker.

### Position

Selects the highlight values to be adjusted.

### Range

Controls the range of values to be used for the highlights. A higher Range value considers more values as highlights.

Go to the [Matte](#) section of Common Filter Controls to see how the Position and Range controls work.

## Preserve Highlights

Preserves the white areas of the image.

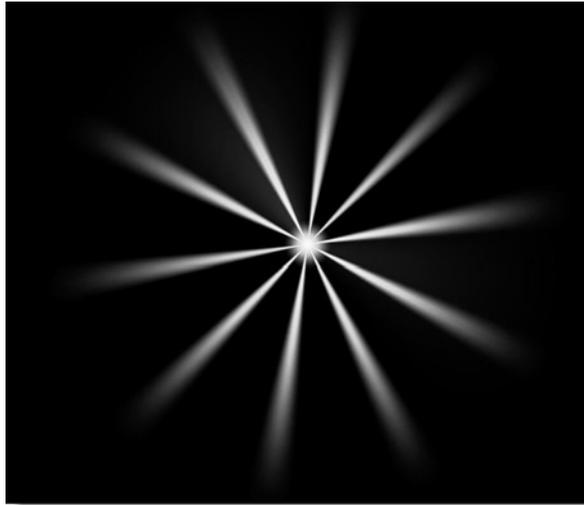
## Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the tinting.

## STAR

### Description

A star pattern similar to those created by lens flares.



Go to the [Star Tutorial](#) to see how the filter works.

### Category

Light.

### Controls

#### Blend

Determines the blend mode used to create the star effect.

#### Add

The star is added to your image.

#### Screen

The star is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

## Brightness

Sets the brightness.

## Color

Changes the color.

## Element Count

Determines the number of spikes.

## Hotspot

Adjusts the size of the center hotspot.

## Offset

Sets the inner diameter.

## Scale

Changes the size.

## Aspect

Sets the aspect ratio.

## Width

Determines the width.

## Angle

Adjusts the angle.

## Spread

Sets the spike distribution.

## Noise

Controls the amount of noise applied to the spikes.

## Noise Density

Changes the strength of the noise.

## Randomize

Randomizes the size and position.

## Softness

Blurs the star.

# STREAKS

## Description

The Streaks filter creates horizontal or vertical streaks around highlights in the image.

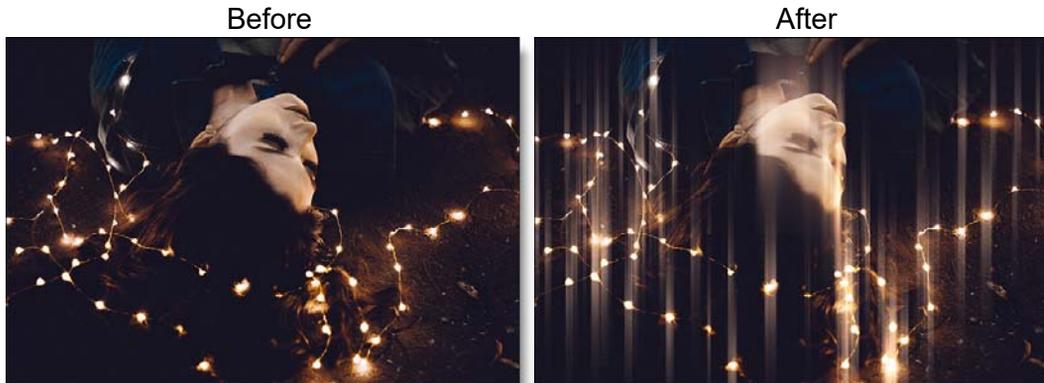


Photo by Allef Vinicius on Unsplash

Go to the [Streaks Tutorial](#) to see how the filter works.

## Category

Light.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Streaks

#### Blend

Determines the blend mode to be used to create the streak effect.

#### Add

The streaks are added to your image.

## Screen

The streaks are combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

## Brightness

Sets the intensity of the streaks.

## Streaks

### Horizontal Streaks

Creates horizontal streaks.

### Vertical Streaks

Creates vertical streaks.

## Color

The Color parameter sets the color of the streaks through the use of a standard color picker. The default color is white.

## Matte

A matte is used to create the streak effect. Go to the [Matte](#) section of Common Filter Controls to see how the Matte controls work.

# SUNSET

## Description

Sunset applies three photographic filters to the image which are blended together with a gradient. Presets for your favorite Color Gradient filters are provided as well as the ability to create custom colors.

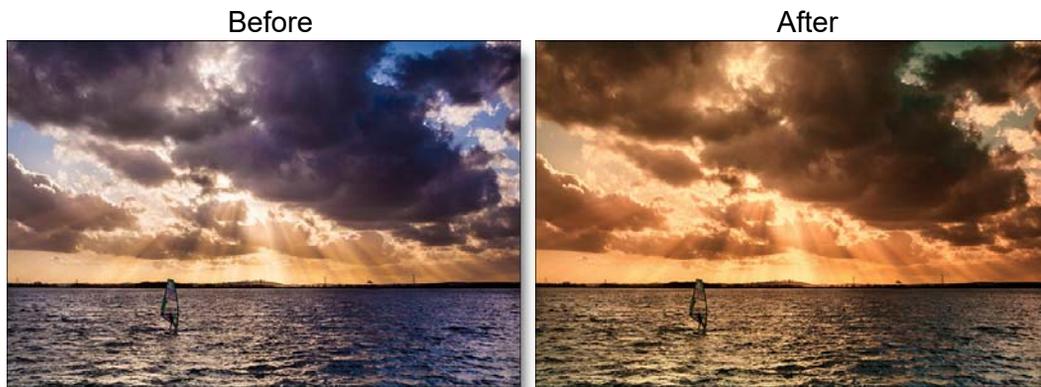


Photo by Mark Harpur on Unsplash

Go to the [Sunset Tutorial](#) to see how the filter works.

## Category

Grads/Tints.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Color 1

Sets the color for the top third of the image. Select the desired color using the color picker or choose a filter preset.

### Presets

Select one of the filters from the pop-up menu.

## Color

The Color parameter sets the color of the grad through the use of a standard color picker.

## Opacity

Sets the opacity of the color filter.

## Color 2

The Color 2 controls are the same as the controls for Color 1 except it is applied to the middle third of the image.

## Color 3

The Color 3 controls are the same as the controls for Color 1 except it is applied to the bottom third of the image.

## Highlights

### Preserve Highlights

Preserves the white areas of the image.

### Exposure Compensation

Exposure Compensation adds back the brightness loss as a result of the filter application.

## Grad

Grad is the combination of the three blended tints. Its direction, corners and size can be adjusted. Go to the [Grad](#) section of Common Filter Controls to see how the Grad controls work.

# TEXTURE

## Description

Applies textures to an image for a stylized look.



Photo by Luke Braswell on Unsplash

Go to the [Texture Tutorial](#) to see how the filter works.

## Category

Special Effects.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Amount

Sets the amount of texture applied to the image.

### Complexity

Generates a more detailed, repetitive texture.

## Randomize

Randomizes the texture.

## Transform

Transform the texture using Position, Scale, Rotate, Corner-Pin, Shear and Crop controls. Go to the **Transform** section of Common Filter Controls to see how the Transform Controls work.

## THREE STRIP / TWO STRIP

### Three Strip

Known and celebrated for its ultra-realistic, saturated levels of color, the Technicolor® Three Strip process was commonly used for musicals, costume pictures and animated films. It was created by photographing three black and white strips of film each passing through red, green and blue filters on the camera lens and then recombining them in the printing process.

Before



After

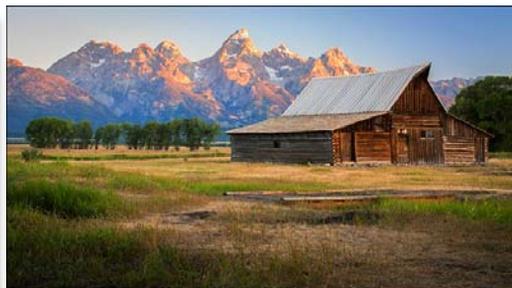


Photo by Rob Jaudon on Unsplash

### Two Strip

The Technicolor® Two Strip process was the first stab at producing color motion pictures and consisted of simultaneously photographing two black and white images using red and green filters. This look creates an odd but pleasing hand-painted look where faces appear normal and green takes on a blue-green quality, while the sky and all things blue appear cyan.

Before



After



Photo by Rob Jaudon on Unsplash

Our Three Strip and Two Strip filters were created under the direction of Academy Award Winning Visual Effects Supervisor Rob Legato.

Go to the [Three Strip / Two Strip Tutorial](#) to see how the filters work.

## Category

Film Lab.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

### Opacity

Sets the intensity of the of the effect.

### Strips

#### Red Intensity

Intensifies red values in the image.

#### Red Smooth

Blurs the red matte that is used to isolate the red values. Use this control to smooth out any noise that may appear if the Red Intensity is turned up to a high value.

#### Green Intensity

Intensifies green values in the image.

#### Green Smooth

Blurs the green matte that is used to isolate the green values. Use this control to smooth out any noise that may appear if the Green Intensity is turned up to a high value.

## Blue Intensity

Intensifies blue values in the image when using the Three Strip filter, but darkens image areas that were blue in the source image when using the Two Strip filter.

## Blue Smooth

Blurs the blue matte that is used to isolate the blue values. Use this control to smooth out any noise that may appear if the Blue Intensity is turned up to a high value.

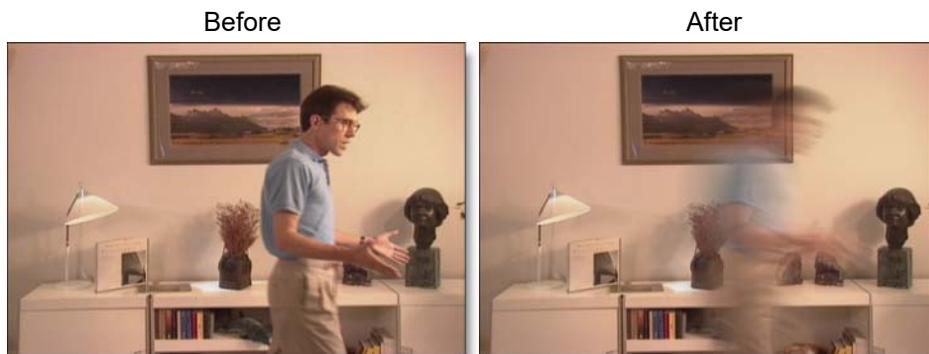
## Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

## TIME BLUR

### Description

Time Blur mixes frames together to create interesting motion effects. This filter is also useful for smoothing out film grain and video noise which can cause problems when pulling a key or generating a matte.



Go to the [Time Blur Tutorial](#) to see how the filter works.

### Category

Special Effects.

### Frames

Sets the amount of frames to be blended.

### Frame Window

Determines the positioning of the frame averaging window.

#### Past

The frame averaging window uses past frames.

#### Centered

Centers the frame averaging window around the current frame.

#### Future

The frame averaging window uses future frames.

# TINT

## Description

Tints the entire image with a selected color using a variety of colorization modes.

Before



After



Photo by Joshua Medway on Unsplash

Go to the [Tint Tutorial](#) to see how the filter works.

## Category

Grads/Tints.

## Controls

### Presets

To select a preset, open the DFT interface and pick one from the Presets window. If you would like to view presets from a different category, use the pop-up menu at the top left of the Presets window.

## Black and White

### Enable

Converts the image to Black and White.

### Filter

The Filter pop-up selects the type of black and white filter to be applied to your color image. Go to the [Black and White](#) section of Common Filter Controls to see how the Black and White controls work.

### Brightness

Adjusts the brightness of the image. Positive values brighten, negative values darken.

### Contrast

Adjusts the contrast of the image. Positive values increase contrast, negative values decrease contrast.

### Gamma

Adjusts the gamma of the image. The gamma adjustment leaves the white and black points the same and only modifies the values in-between. Positive values lighten the midtones, negative values darken the midtones.

## Tint

### Color

Sets the color that the image will be colorized with. Select the desired color using the color picker.

### Opacity

Sets the opacity of the color.

### Mode

Selects how color is applied to the image.

### Normal

Tints the image while retaining highlights.

## Tint

The image is tinted by replacing hue and saturation.

## Hue

The image is tinted by only replacing hue.

## Lighten

Pixels darker than the color are replaced, and pixels lighter than the color do not change.

## Darken

Pixels lighter than the color are replaced, and pixels darker than the color do not change.

## Grad

Tint can optionally use a gradient that limits where the filter is applied. Grad is the transition area that goes from the tinted image to the original image. Its direction, corners and size can be adjusted. Go to the [Grad](#) section of Common Filter Controls to see how the Grad controls work.

# TONE ADJUST

## Description

Tone Adjust approximates the appearance of high dynamic range images by adjusting the tonal values. Specifically, detail is recovered from the darker portions of the images and can optionally be denoised.



Photo by Brand X Design

Go to the [Tone Adjust Tutorial](#) to see how the filter works.

## Category

Color

## Controls

### Amount

Lightens shadows to reveal more detail. Take care not to over apply this setting and reveal image noise.

### DeNoise

Removes film grain and noise in the shadow areas.

## Position

Selects the shadow values to be adjusted.

## Range

Controls the range of values to be used for the shadows. A higher Range value considers more values as shadows.

# TRANSFORM

## Description

Transform an image using Position, Scale, Rotation, Corner-Pin, Shear and Crop controls.

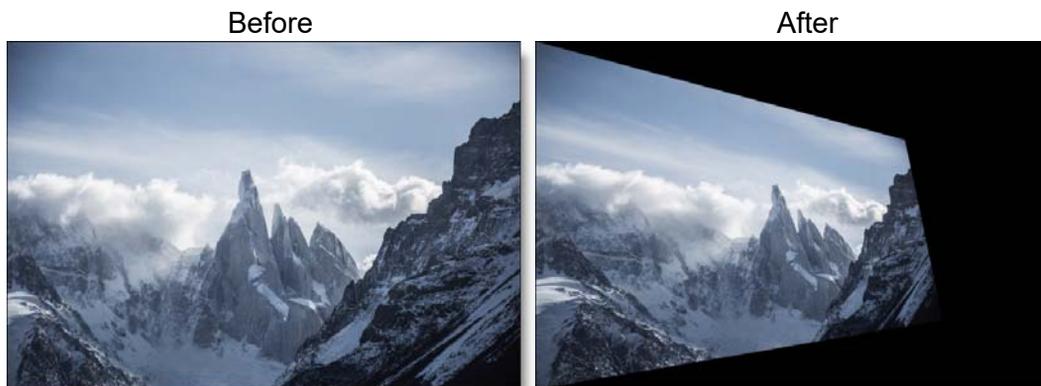


Photo by Christopher Burns on Unsplash

Go to the [Transform Tutorial](#) to see how the filter works.

## Category

Image.

## Transform

### Crop

#### Top

Crops the image from the top down.

#### Bottom

Crops the image from the bottom up.

#### Left

Crops the image from left to right.

#### Right

Crops the image from right to left.

## Corner-Pin

The image can be corner pinned by adjusting the Corner-Pin sliders as well as dragging the four points on the corners of the screen.

**Note:** On some host programs, you must highlight the effect title in the Effect Controls window to see the on-screen controls.

### Upper-Left

Controls the X and Y position of the Upper Left Point.

### Upper-Right

Controls the X and Y position of the Upper Right Point.

### Lower-Right

Controls the X and Y position of the Lower Right Point.

### Lower-Left

Controls the X and Y position of the Lower Left Point.

There are four points around the four corners of the image. By clicking and dragging any of the four points, the image can be adjusted.

## Position

### Offset X

The horizontal position of the image.

### Offset Y

The vertical position of the image.

## Scale

### Scale X

The horizontal scale of the image.

### Scale Y

The vertical scale of the image.

### Gang Scale

The horizontal and vertical slider values can be ganged together.

## Rotate

In addition to the standard position and scale controls, the image can be rotated. Positive values rotate clockwise and negative values rotate counter-clockwise.

## Shear

### Shear X

Skews the image left and right.

### Shear Y

Skews the image up and down.

## Anchor

### Anchor X

Defines the point on the X axis where the image will be positioned, rotated, scaled or sheared.

### Anchor Y

Defines the point on the Y axis where the image will be positioned, rotated, scaled or sheared.

## Filter

Chooses the filtering method when transforming the image. Mitchell is the default.

### Triangle

The Triangle filter is not the highest quality, but fine for scaled images.

### Quadratic

Quadratic is like triangle, but more blur with fewer artifacts. It offers a good compromise between speed and quality.

### Cubic

Cubic is the default filter in Photoshop. It produces better results with continuous tone images, but is slower than Quadratic. If the image contains fine details, the result may be blurrier than desired.

## **Catmull-Rom**

This produces good results with continuous tone images which are scaled down, producing sharp results with fine detailed images.

## **Gaussian**

Gaussian lacks in sharpness, but is good with ringing and aliasing.

## **Mitchell**

A good balance between sharpness and ringing, Mitchell is a good choice when scaling up.

## **Sinc**

Keeps small details when scaling down with good aliasing.

# TURB DISTORT

## Description

Distorts the image by pulling it in a random manner.

Go to the [Turb Distort Tutorial](#) to see how the filter works.

## Category

Special Effects.

## Controls

### Scale

Sets the size of the distortion.

### Stretch

Stretches the distortion horizontally.

### Angle

Rotates the distortion.

### Amount

Sets the amount of distortion.

### Speed

Automatically animates the distortion by multiplying by the frame number. So, if you set speed to 100, it uses the frame number as the time value directly. A speed of 200 makes it animate twice as fast, etc.

### Time

Shifts the distortion animation by shifting it in time.

**Note:** The Viewer should be at 100% to accurately determine the final result.

# UNPREMULTIPLY

## Description

Divides the RGB channels by the alpha channel.

## Category

Composite.

**Note:** Unpremultiply is not included with the Avid version because of the way Avid treats RGBA images.

## VIGNETTE

### Description

A vignette, or soft fade, is a popular photographic effect where the photo gradually fades into the background, usually in a circular or rectangular shape. The vignette can be any color as well as thrown out of focus.

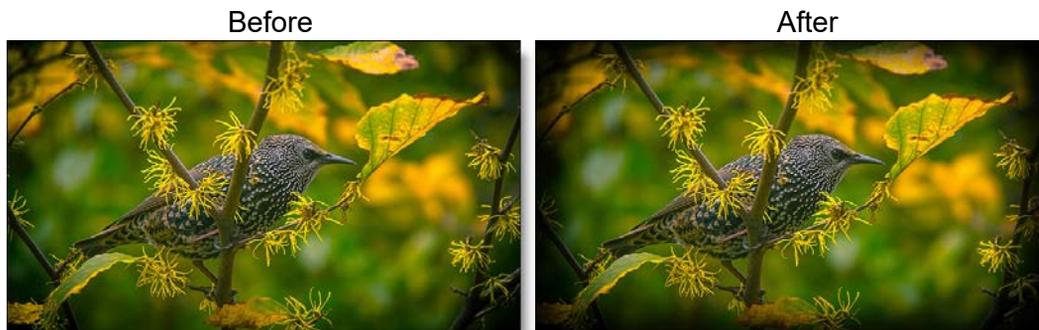


Photo by Srikanta H. U. on Unsplash

Go to the [Vignette Tutorial](#) to see how the filter works.

### Category

Lens.

### Controls

#### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

#### Vignette

##### Color

The Color parameter sets the color of the vignette through the use of a standard color picker. The default color is black.

##### Opacity

Sets the opacity of the colored vignette. For defocused vignettes, you may want to turn down the Opacity so you can see the defocused effect.

## Blur

Sets the softness of the image in the area of the vignette.

## Shape

### Roundness

Sets the roundness of the vignette. The vignette can either be circular or square or anywhere in between.

### Size

Sets the size of the vignette.

### Aspect Ratio

Changes the aspect ratio of the vignette. A value of -100 would be wider, and 100 would be taller.

### Rotation

Rotates the vignette.

### Distortion

Distorts the edge of the vignette.

### Distortion Size

Sets the size of the distortion.

### Randomize

Randomizes the distortion.

### Softness

The Softness parameters control the softness of the vignette edge.



## Screen

The rainbow is combined with the image using a Screen blend mode. This looks kind of like the Add blend mode, but highlights are retained.

## Brightness

Sets the intensity of the rainbow.

## Displacement

Displaces the rainbow by the luminance values of the image. This “fakes” the effect of the rainbow wrapping over objects in the image.

## Blur

Sets the softness of the rainbow.

## Rainbow

### Blend

The rainbow can be added to the entire image or limited to a matte.

### Rainbow Only

The rainbow is added to the entire image.

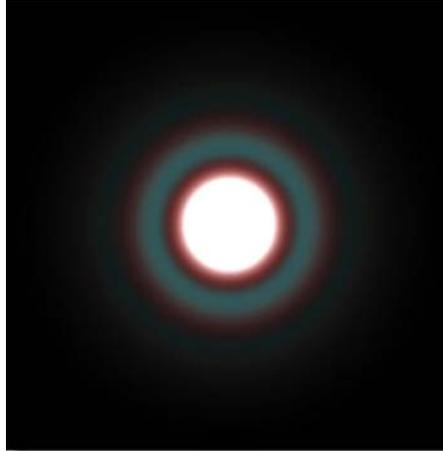
### Matte

The rainbow is added only in areas of the matte.

## Type

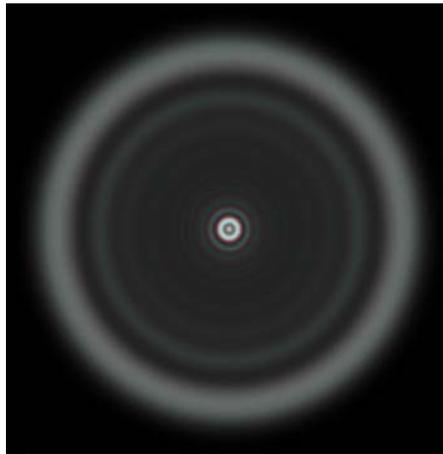
### Corona

A corona has a bright center and is surrounded by a number of concentric colored rings.



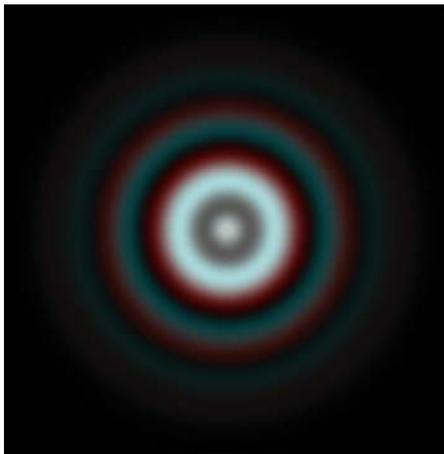
### Fogbow

A fogbow is similar to a rainbow, but because of the very small size of water droplets that cause fog, the fogbow has little color and appears white.



## Glory

Formed when light is scattered backwards by water droplets, glories have multiple colored rings with a bright center, but not as bright as a corona's. In addition, the rings dissipate much slower than those of the corona.



### Position

The rainbow position can be adjusted by clicking and dragging an on-screen control in the center of the image.

### Position X

The horizontal position of the rainbow.

### Position Y

The vertical position of the rainbow.

### Scale

#### Scale X

The horizontal scale of the rainbow.

#### Scale Y

The vertical scale of the rainbow.

### Gang Scale

The Scale X and Scale Y slider values can be ganged together.

## Matte

A matte can be used to limit where the rainbow will be placed. Wherever there is white in the matte is where the rainbow will be added. Go to the [Matte](#) parameters to see how they work.

**Note:** To use a matte to limit where the rainbow will be added, Rainbow > Blend must be set to Matte.1

# WIDE ANGLE LENS

## Description

Simulates the effect of a wide angle lens.



Photo by Dawid Zawila on Unsplash

Go to the [Wide Angle Lens Tutorial](#) to see how the filter works.

## Category

Lens.

## Distortion

Pulls the corners of the image outward.

## X and Y Correction

X and Y Correction compensate for the deformation introduced with the Distortion parameter.

## X-RAY

### Description

Simulates the look of X-Ray images.

Before



After



Photo by Clem Onojeghuo on Unsplash

Go to the [X-Ray Tutorial](#) to see how the filter works.

### Category

Special Effects.

### Controls

#### Presets

To select a preset, open the DFT interface and pick one from the Presets window.

#### Black and White

##### Filter

The Filter pop-up selects the type of black and white filter to be applied to your color image. Go to the [Black and White](#) section of Common Filter Controls to see how the Black and White controls work.

## Brightness

Adjusts the brightness of the image. Positive values brighten, negative values darken.

## Contrast

Adjusts the contrast of the image. Positive values increase contrast, negative values decrease contrast.

## Gamma

Adjusts the gamma of the image. The gamma adjustment leaves the white and black points the same and only modifies the values in-between. Positive values lighten the midtones, negative values darken the midtones.

## Color

### Opacity

Sets the opacity of the color.

### Color

The Color parameter sets the color of the x-ray through the use of a standard color picker and defaults to blue.

## Description

Using proprietary matte extraction techniques, zMatte quickly and simply creates mattes with minimal parameters even if you are dealing with fine hair detail, smoke, or reflections. It is easy to use, yet provides the needed tools when faced with good, bad, or ugly shots--tools such as multiple matte creation, automatic spill suppression, sophisticated matte and edge manipulation, and color correction.

After



Foreground



Background



Go to the [zMatte Tutorial](#) to see how it works.

## Category

Key.

## Premultiply Result

In Nuke, zMatte premultiplies the output by default.

## DeArtifact

The DeArtifact parameters are handy for cleaning up artifacts caused by DV and HD video footage. In fact, they are useful for cleaning up foregrounds that have aliased or jaggy edges.

When activated, a RGB to YUV conversion takes place so that you can blur only the U and V color channels. Since this is where most of the artifacting shows up, this has the effect of cleaning up the ratty edges encountered when keying DV or HD video footage. It is usually best to blur mostly on the horizontal axis.

**Note:** The DeArtifact parameters default to settings that are good for DV footage. If you are working at higher resolutions, you will want to increase the Horizontal and Vertical Blur settings.

### DeArtifact

Activates DeArtifacting.

### Blur-Horizontal

Prior to pulling the matte, the U and V color channels are blurred by a fast, quality blur along the X-axis.

### Blur-Vertical

Prior to pulling the matte, the U and V color channels are blurred by a fast, quality blur along the Y-axis.

### Gang

The horizontal and vertical slider values can be ganged together.

# Primary Matte

zMatte can utilize up to two mattes in the creation of the final composite. If only one matte is needed, you would use the Primary Matte. When adjusting the Primary Matte, you should select Primary Matte in the View pop-up menu so you can see what you are doing.

**Note:** Keep in mind when creating your matte that wherever you see black in the matte, you will see background in the final composite. Wherever you see white in the matte, you will see foreground in the final composite--foreground being anything that is extracted from the blue or green screen.

## Extract On

Extract On selects the type of matte extraction. Select whichever type isolates the desired values. A matte is extracted based on one of the following:

### Blue Screen

Choose blue screen if you have a blue screen.

### Green Screen

Choose green screen if you have a green screen.

### Luminance

A matte is extracted based on the luminance of the image.

### Hue

A matte is extracted based on the hue of the image. When adjusting the Position parameter, you are selecting different hues.

### Saturation

A matte is extracted based on the saturation of the image.

### Average

A matte is extracted based on the average of the image's RGB values.

### Red

A matte is extracted based on the image's red values.

## **Green**

A matte is extracted based on the image's green values.

## **Blue**

A matte is extracted based on the image's blue values.

## **Cyan**

A matte is extracted based on the image's cyan values.

## **Magenta**

A matte is extracted based on the image's magenta values.

## **Yellow**

A matte is extracted based on the image's yellow values.

## **Background and Foreground**

When using the Extract On > Blue Screen or Green Screen settings, the Background and Foreground sliders are used while all other matte extraction methods use Position and Range.

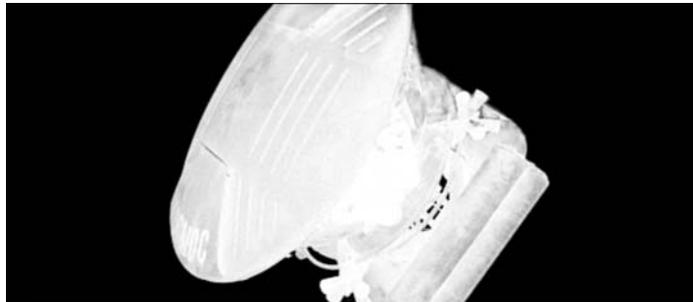
## Background

Sets the background value. The lower the value, the harder or blacker the matte will become in background areas

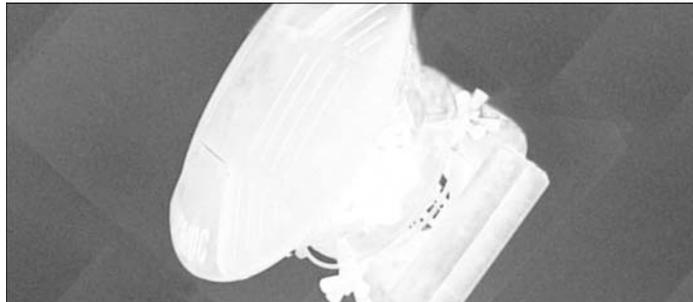
Original



Background / Position = 40



Background / Position = 80

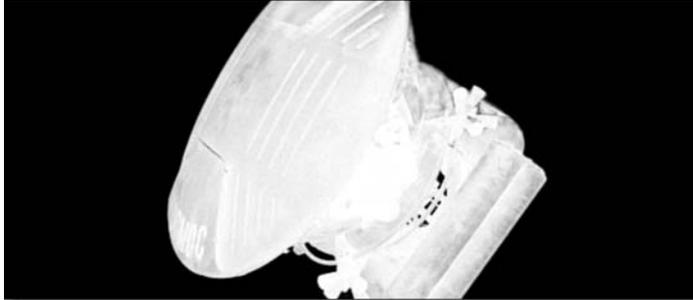


It is best to set the Background value as high as possible, while at the same time making sure that the background is completely black.

## Foreground

Sets the foreground value. The higher the value, the harder or whiter the matte will become in foreground areas.

Foreground / Range = 0



Foreground / Range = 17



It is best to set the Foreground value as low as possible, while at the same time making sure that the foreground is completely white for any areas that should be opaque in the final composite.

## Position and Range

When using matte extraction methods other than the Extract On > Blue Screen or Green Screen settings, Position and Range are used instead of Foreground and Background.

### Position

The Position value pinpoints the values to be used in the matte. For a luminance extraction, a Position value of 100 would make a white matte of the highlights and a value of 0 would make a white matte of the shadows.

## Range

Increases or decreases the range of values in the matte. A low Range value indicates a narrow range of values. A high Range value indicates a large range of values included in the matte.

## Black Clip

Blacks in the matte are made blacker by increasing the value of the slider. As the slider value increases, more values are clipped to black. This is helpful for getting rid of unwanted gray areas in what should be the black part of the matte.

## White Clip

Whites in the matte are made whiter by increasing the value of the slider. As the slider value increases, more values are clipped to white. This is helpful for getting rid of unwanted gray areas in what should be the white part of the matte.

## Shrink/Grow

Shrinks or grows the matte. Negative values shrink and positive values grow the matte.

Shrink/Grow = -5



## Blur-Horizontal

The matte is blurred by a fast, quality blur along the X-axis.

## Blur-Vertical

The matte is blurred by a fast, quality blur along the Y-axis.

## Gang

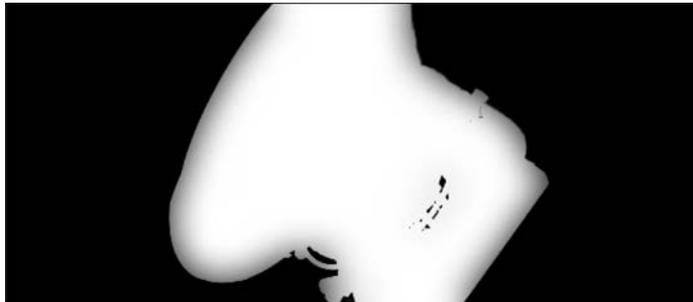
The horizontal and vertical slider values can be ganged together.  
Horizontal and Vertical Blur = 10



## Wrap

Helps blend the foreground into the background by making the background “wrap” into the foreground edges without completely losing the edge. The edge of the foreground starts to become transparent.

Wrap = 30



## Secondary Matte

Sometimes two mattes are needed to create a good key. zMatte allows you to create two different mattes and combine them with various Blend modes.

### Enable

Activates the Secondary Matte.

### Blend

Once a blend mode is selected, the Secondary Matte is combined with the Primary Matte.

## Add

The Secondary Matte is added to the Primary Matte.

## Subtract

The Secondary Matte is subtracted from the Primary Matte.

## Multiply

Produces a result where there is a union of the Primary and Secondary Mattes.

## Screen

This looks kind of like the Add blend mode, but highlights are retained as opposed to being burnt out.

## Difference

Produces a result where a value exists in the Primary and Secondary Mattes, but not in both.

## Darken

Compares the two mattes and takes pixels with the lower value.

## Lighten

Compares the two mattes and takes pixels with the higher value.

## Amount

Sets the opacity of the secondary matte.

The remaining parameters for the Secondary Matte are the same as the Primary Matte: Extract On, Background, Foreground, Position, Range, Shrink/Grow, Blur, and Wrap.

## Color Suppress

Removes either blue or green spill from the foreground object.

## Color

Chooses the color to be suppressed and is automatically set based on the Primary Matte > Extract On > Blue Screen or Green Screen selections.

**Note:** You can alternatively choose Foreground in the View menu and select the Suppress Color with the eyedropper.

## Amount

Suppresses color spill in the foreground. The default value of 100 should be sufficient for most situations.



## Range

Increases the range of areas that are color suppressed. If color spill is still evident, increase this value.

## Edge

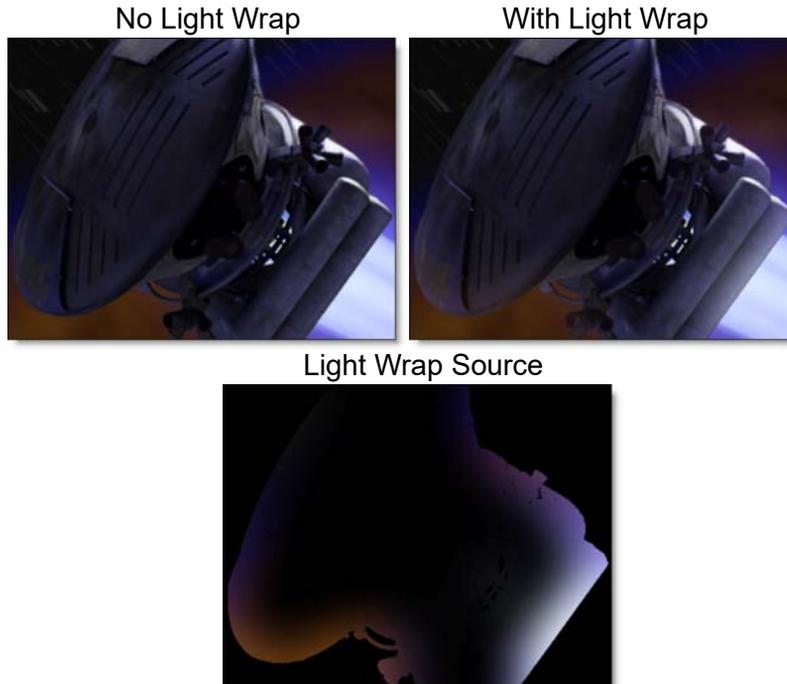
Suppresses the color spill of the foreground edge to the color gray. This is very useful for edges that contain a lot of transparency like hair or reflections.

## Color Correct

Go to the **Color Correct** filter to see how the Color Correct controls work.

# Light Wrap

Helps blend the foreground into the background by making the color of the background “wrap” into the foreground edges without completely losing the edge.



This is accomplished by placing the background layer into a special matte and then combining it with the foreground. You can look at the Light Wrap element in the View menu.

## Background

Selects what image to use as the source for the Light Wrap.

### After Effects / Premiere Pro

Choose the layer/track to be used for the Light Wrap source.

### Avid

The track below the current track is automatically used as the source for the Light Wrap.

## Final Cut Pro

Click the drop zone to the right of the Light Wrap Background parameter, choose a clip, and press Apply Clip below the Viewer.

## Motion

Drag the image to be used as the Light Wrap source and place it onto the drop zone to the right of the Background parameter.

## OFX

### Node Based Hosts

The background clip is automatically used as the source for the Light Wrap.

### Layer Based Hosts

The layer/track below the current layer/track is automatically used as the as the Light Wrap source.

**Note:** Assigning the background input requires an OFX host that supports auxiliary inputs. Consult the host documentation for instructions on how to assign an auxiliary input as this will vary by host.

## Brightness

Sets the brightness of the Light Wrap.

## Wrap

Sets the size of the Light Wrap.

# Edge

The Edge parameters allow you to color correct or blur only the edge of the foreground. You can also mix the edge of the foreground with the background. Before using the Edge tools, it is a good idea to take a look at the Edge Matte in the View Menu so that you can see what your edge actually looks like.

Edge = 1



## Size

Determines the size of the edge matte.

## Color Correct

The edge of the key can be color corrected. Go to the **Color Correct** filter to see how the Color Correct controls work.

## Blur-Horizontal

The edge of the foreground is blurred by a fast, quality blur along the X-axis, but only in areas of the edge matte.

## Blur-Vertical

The edge of the foreground is blurred by a fast, quality blur along the Y-axis, but only in areas of the edge matte.

## Gang

The horizontal and vertical slider values can be ganged together.

## Opacity

Mixes the foreground back to the background, but only in areas of the edge matte.



# Transform

Transform the foreground using Position, Scale, Rotate, Corner-Pin, Shear and Crop controls. Go to the [Transform](#) section of Common Filter Controls to see how the Transform Controls work.



## ***BLEND MODES***

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Blend modes are used to combine images in a variety of different ways.

### **Normal**

Edits each pixel to make it the result color. This is the default mode. Changing the opacity results in a mix between two layers.

### **Darken**

Looks at the color information in each channel and selects the base or blend color—whichever is darker—as the result color. Pixels lighter than the blend color are replaced, and pixels darker than the blend color do not change.

### **Multiply**

Looks at the color information in each channel and multiplies the base color by the blend color. The result color is always a darker color. Multiplying any color with black produces black. Multiplying any color with white leaves the color unchanged.

### **Color Burn**

Looks at the color information in each channel and darkens the base color to reflect the blend color by increasing the contrast between the two. Blending with white produces no change.

### **Linear Burn**

Looks at the color information in each channel and darkens the base color to reflect the blend color by decreasing the brightness. Blending with white produces no change.

### **Darker Color**

Compares the total of all channel values for the blend and base color and displays the lower value color. Darker Color does not produce a third color, which can result from the Darken blend, because it chooses the lowest channel values from both the base and the blend color to create the result color.

## Lighten

Looks at the color information in each channel and selects the base or blend color—whichever is lighter—as the result color. Pixels darker than the blend color are replaced, and pixels lighter than the blend color do not change.

## Add

The pixels of one image are added to another image

## Screen

Looks at each images color information and multiplies the inverse of the two images. This looks kind of like the Add blend mode, but highlights are retained.

## Color Dodge

Looks at the color information in each channel and brightens the base color to reflect the blend color by decreasing contrast between the two. Blending with black produces no change.

## Linear Dodge (Add)

Looks at the color information in each channel and brightens the base color to reflect the blend color by increasing the brightness. Blending with black produces no change.

## Lighter Color

Compares the total of all channel values for the blend and base color and displays the higher value color. Lighter Color does not produce a third color, which can result from the Lighten blend, because it chooses the highest channel values from both the base and blend color to create the result color.

## Overlay

Multiplies or screens the colors, depending on the base color. Patterns or colors overlay the existing pixels while preserving the highlights and shadows of the base color. The base color is not replaced, but mixed with the blend color to reflect the lightness or darkness of the original color.

## Soft Light

Darkens or lightens the colors, depending on the blend color. The effect is similar to shining a diffused spotlight on the image. If the blend color (light source) is lighter than 50% gray, the image is lightened as if it were dodged. If the blend color is darker than 50% gray, the image is darkened as if it were burned in.

## Hard Light

Multiplies or screens the colors, depending on the blend color. The effect is similar to shining a harsh spotlight on the image. If the blend color (light source) is lighter than 50% gray, the image is lightened, as if it were screened. This is useful for adding highlights to an image. If the blend color is darker than 50% gray, the image is darkened, as if it were multiplied. This is useful for adding shadows to an image.

## Vivid Light

Burns or dodges the colors by increasing or decreasing the contrast, depending on the blend color. If the blend color (light source) is lighter than 50% gray, the image is lightened by decreasing the contrast. If the blend color is darker than 50% gray, the image is darkened by increasing the contrast.

## Linear Light

Burns or dodges the colors by decreasing or increasing the brightness, depending on the blend color. If the blend color (light source) is lighter than 50% gray, the image is lightened by increasing the brightness. If the blend color is darker than 50% gray, the image is darkened by decreasing the brightness.

## Pin Light

Replaces the colors, depending on the blend color. If the blend color (light source) is lighter than 50% gray, pixels darker than the blend color are replaced, and pixels lighter than the blend color do not change. If the blend color is darker than 50% gray, pixels lighter than the blend color are replaced, and pixels darker than the blend color do not change. This is useful for adding special effects to an image.

## Difference

Looks at the color information in each channel and subtracts either the blend color from the base color or the base color from the blend color, depending on which has the greater brightness value. Blending with white inverts the base color values; blending with black produces no change.

## Exclusion

Creates an effect similar to but lower in contrast than the Difference mode. Blending with white inverts the base color values. Blending with black produces no change.

## Subtract

Looks at the color information in each channel and subtracts the blend color from the base color. In 8 and 16-bit images, any resulting negative values are clipped to zero.

## Hue

Creates a result color with the luminance and saturation of the base color and the hue of the blend color.

## Saturation

Creates a result color with the luminance and hue of the base color and the saturation of the blend color.

## Color

Creates a result color with the luminance of the base color and the hue and saturation of the blend color. This preserves the gray levels in the image and is useful for coloring monochrome images and for tinting color images.

# KEYBOARD SHORTCUTS

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## Help Shortcuts

Shortcut	Action
F1	Opens the DFT User Guide

**Viewer Keyboard Shortcuts**

<b><u>Shortcut</u></b>	<b><u>Action</u></b>
Middle-mouse drag	Pans the image
<b>Space Bar</b> +drag	Pans the image
<b>I</b> Key	Zooms the image in
<b>O</b> Key	Zooms the image out
Zoom icon+Drag a square	Zooms into the defined area
Scroll wheel over image	Zooms the image in and out
Middle-mouse double click	Fits the image to the window
<b>F</b>	Fits the image to the window
<b>H</b>	Opens the Histogram window