



Sheffield Softworks

Cinemage

Cinemage is not your father's color corrector. It's both more sophisticated and streamlined than almost anything out there. If you're looking for something to make your footage look ordinary - to balance your whites and tone your highlights, midrange and shadows, Cinemage is not that plugin. If you're looking for something that will make your footage look gorgeous, you've come to the right place.



With powerful onscreen controls, **Cinemage** encourages experimentation and because it's smart, it guides you to find the beauty in your footage. Plus, Cinemage uses your graphics processor efficiently, so everything happens right before your eyes. Using paired tints, blend modes, masks, sharpening and smoothing, **Cinemage** brings you the best image possible.

Cinemage comes with named presets to get you started and allows you to save your own. **Cinemage** is based on FxFactory's plugin engine which makes use of the power of your GFX card to do its rendering, thus does not load down your CPU. It is compatible with the hosts that FxFactory supports, currently FCP 7 through Final Cut X, Motion 4 and Motion 5, Adobe Premier, and After Effects. It requires at least 10.8 (Mountain Lion) of the OSX operating system.

Cinemage Overview

Cinemage is based around the concept of paired tints. The hue and intensity of these tints as well as their relationship to each other is adjusted via onscreen controls consisting of a double hue ring and the pairing slider. The hue and saturation of the tints are controlled through the central tint rings - (current hue is easily seen by a white line), and the further from the center the tint ring control is pulled, the more intense the tints become. How the hues are aligned with each other is controlled by the pairing slider (below the hue rings). The default is to pair the hues 180° apart. This means that when averaged, the overall effect on your image is neutral, however, in practice, each tint can affect the image differently (especially when used with the built in masks) generating warm highlights and cool shadows, for instance.

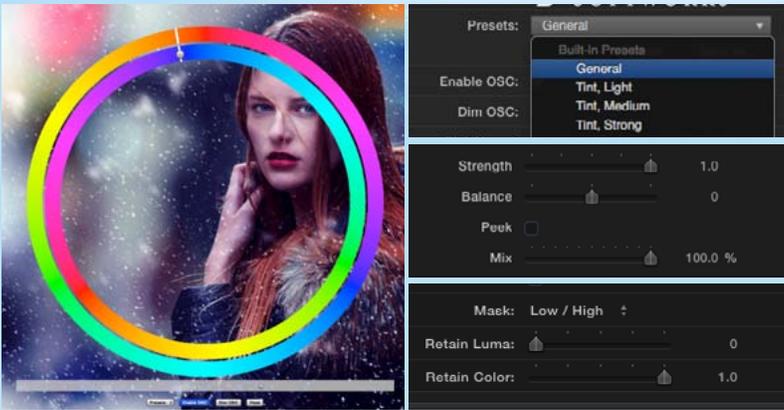
You may dim the onscreen control guides or remove them entirely. The controls will function the same. You can also click the Peek button to take a look at your image with no color correction on it to compare. As well as the onscreen controls, **Cinemage** sports both basic and advanced (available below a disclosure triangle) controls in the inspector. Basic inspector controls allow for the loading and saving of presets, controlling the **Strength** of the tint's effect on the image, the **Balance** between the effect of the tints, and the **Mix** between the corrected and original image. Under the "hood", the Advanced controls are Soften/Sharpen, Blend modes, Masking, and the ability to Retain Luma and/or Color.

Both tints are applied to your footage using Blend Modes. Blend modes are mathematical formulas for combining the RGB of your image with the RGB of the tint (more on this in the appendix). The blend modes available are standard Photoshop blend modes with a few extensions. They may be combined through Masks of either Luminance (Light for one tint, Dark for the other) or Saturation (High for one, Low for the other).

The two tints have mostly the same function, save for two. First, Tint 1 (T1) may be used to decrease local contrast (or Smooth), and Tint2 (T2) may be used to increase local contrast (or Sharpen). The second difference is that Tint 2 is applied after Tint 1. In practice, it generally helps to sharpen highlights and soften shadows.

It is important to note that the On Screen Control guides (tint rings and pairing slider) are rendered within the image buffer, so **Enable OSC** should be unchecked before you render.

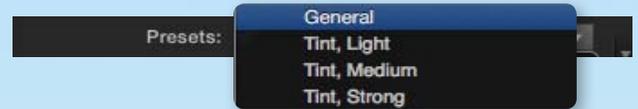
Cinemage Usage and Controls



The easiest way to learn Cinemage is to simply choose one of the presets and play with the On Screen and basic controls. It also pays to try different Mask modes or to adjust the Retain Luma / Color under the Advanced controls.

Four presets at the top are designed as general purpose color corrections that work well with any hue selection. Other presets are more special purpose and may have a limited hue range where they are most effective, but I encourage your to play with all the presets and find out what works for you.

Presets



The **Presets** section gives you access to the named preset looks provided and gives you the ability to save and load your own.

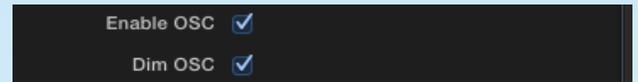
On Screen Controls



Enabled

Dimmed

Off



The On Screen Controls are the heart of Cinemage's interaction. The guiding tint rings and pairing slider may be Enabled, Dimmed, or once you're used to their function, you can leave them off entirely. The control points themselves will still be visible and active on the screen.



Pairing slider controls tint relationship

Option Key allows reset

The central tint ring control allows your to select the hue of the tint pair and the further you pull it from the center of the screen, the more intense (saturated) the tint is. The pairing slider, below the tint ring, allows you to adjust the relationship between the paired tints. Holding down Option and clicking on either of the onscreen controls allows you to reset them.

Note: The On Screen Control guides (tint rings and pairing slider) are rendered within the image buffer, so **Enable OSC** should be unchecked before you render.



Presets

OSC display guide control

Peek toggles between corrected and original

As well as the tint rings and pairing slider, you have access to loading and saving of presets, and controlling the On Screen guides. The Peek button toggles between your original image and your color corrected image.

The On Screen Controls enable your to color correct in Full Screen mode on a single monitor system.

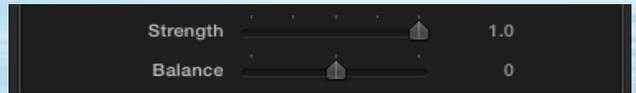
Basic Controls



Balance -.5 (Tint 2)

Balance 0.0

Balance +.5 (Tint 1)



You may adjust the **Strength** of the tint blend and the **Balance** between the tints. Positive values for **Balance** tilt the effect toward Tint 1, negative toward Tint 2. Even with the balance pushed all the way toward one tint or the other, some influence is still there. If you wish a tint to have no effect, change its **Blend Mode** (in the **Advanced** controls) to **None**.



Mix 100%

Mix 50%



Mix controls the mixture between the corrected image and the original and can be used to "dilute" a setting that may be too strong. A correction that is too intense at 100%, might be just right if brought down to 50%.

Mix is saved with the presets.

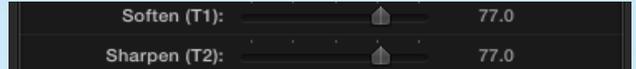
Advanced Controls



Sharpen

Normal

Soften



Soften and Sharpen embed a contrast map into the tints that may be used with contrast affecting blend modes to reduce local contrast (soften - Tint 1) or increase local contrast (sharpen - Tint 2). Contrast affecting blend modes include: Overlay, Softlight, Vivid and Linear Light. Other blend modes may show no sensitivity to the Soften and Sharpen sliders. Used with masks, these controls can allow you to sharpen highlights while softening shadows.



Reflect

Stamp has a strong effect

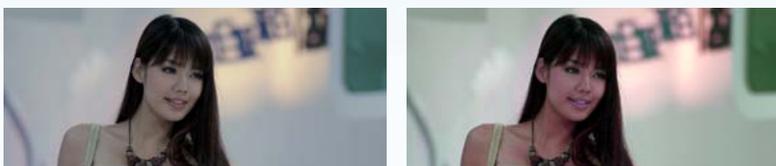


Blend modes are the key to Cinemage's processing. Blend modes are mathematical formulas for combining the RGB of your image with the RGB of the tint (more on this in the appendix). The blend modes available are standard Photoshop blend modes with a few extensions (see left). Invert reverses the tint and the image. It should be noted that not all blend modes will produce pleasant effects. See the Blend Mode Appendix for a more detailed explanation of blend modes.



Value should be used with masks

Churn adds hue of tint to image hue



Luma Key works best with masks

Attract pulls hue toward tint



Dark / Light

Light / Dark



Low / High

High / Low



Retain Luma

After Processing

Retain Color



Mask allows you to limit the tints to different areas of the image. **Dark / Light** applies tint 1 to the darker areas of the image, Tint 2 is applied to the lighter areas. **Light / Dark** inverts this. **Low / High** builds the mask on saturation where Tint 1 is applied to low sat areas and Tint 2 high saturation. **High / Low** inverts this.



Retain Luma and **Retain Color** attempt, after the processing, to bring back the Luma or Color from the original image. Because of the differences produced in the color or luminance during processing, this may produce novel effects.

Blend Mode Appendix

Let's start with some basics. All the pixels in your layers are really just numbers. For our purposes, think of them as a range from 0 for black to 1 for full brightness. Pixel values of 0.5, 0.5, 0.5 for RGB, for instance, yield middle gray.

If you get that, the rest is easy. Blend modes are simply mathematical ways of combining Source 1 with Source 2.

All of the Blend Modes are affected by the percentage that Opacity is set to. Basically, it takes the result of the blend and mixes it by back into the Source 1 (or Base) image. If Opacity is set to 50%, the result will be a mixture of half of the Source 1 image and half of the blended image.

Let's establish a naming convention. We'll call Source 1 the "Base" and Source 2 we'll call the "Blend".



Dissolve simply takes Blend.

$$\text{Final} = \text{Blend}$$



Subtract takes the Blend and subtracts it from the Base.

$$\text{Final} = \text{Base} - \text{Blend}$$



Add is Blend added to the Base.

$$\text{Final} = \text{Blend} + \text{Base}$$



Multiply is the Blend multiplied by the Base.

$$\text{Final} = \text{Blend} * \text{Base}$$



Screen inverts Blend, multiplies it by the inverse of Base, then inverts the result

$$\text{Final} = \text{invert}(\text{invert}(\text{Blend}) * \text{invert}(\text{Base}))$$



Darken compares Blend and Base and chooses the darkest value.

$$\text{Final} = \text{minimum}(\text{Base}, \text{Blend})$$



Lighten compares Blend and Base and chooses the lightest value.

$$\text{Final} = \text{maximum}(\text{Base}, \text{Blend})$$

Blend Mode Appendix Continued



Color Burn takes the inverse of Base and divides it by the Blend, then inverts the result.

$$\text{Final} = \text{invert} (\text{invert} (\text{Base}) / \text{Blend})$$



Color Dodge is Base divided by the inverse of Blend.

$$\text{Final} = \text{Base} / \text{inverse} (\text{Blend})$$

The next ones are somewhat complicated...



Overlay takes each pixel from the Base and if it is brighter than .5, it performs a Screen operation, otherwise it performs a Multiply.

$$\text{Final} = \text{Base} > .5 ? \text{Screen} (\text{Base}) \text{ else } \text{Multiply} (\text{Base})$$



Hard Light is the same as Overlay, but it switches Blend and Base.

$$\text{Final} = \text{Blend} > .5 ? \text{Screen} (\text{Blend}) \text{ else } \text{Multiply} (\text{Blend})$$



Vivid Light takes each pixel from the Blend and if it is brighter than .5, it performs a Color Dodge operation, otherwise it performs a Color burn.

$$\text{Final} = \text{Blend} > .5 ? \text{Color Dodge} (\text{Base}) \text{ else } \text{Color Burn} (\text{Base})$$

Now, we take each channel (RGB) and performs the blend operation on them. Starting with a Color gradient for Base and Blend, here's how they look.



Subtract



Multiply



Darken



Lighten



Screen



Color Burn



Color Dodge



Linear Burn



Linear Dodge/Add



Overlay



Softlight



Hard Light



Vivid Light



Linear Light



Pin Light

If you'd like to learn more about blend modes, visit this web page for an in-depth discussion.
<http://photoblogstop.com/photoshop/photoshop-blend-modes-explained>