Sin City

The film Sin City has been called "The most visually inventive comic book adaptation to make its way to a movie screen", "a visually arresting blitzkrieg" "like a comic book brought to life and pumped with steroids", "The look is almost like a futuristic black and white, shiny and grey with the occasional splash of a bright color..."

The essence of the Sin City look is a deep, rich, contrasty black and white with a light diffusion on the highlights and occasional use of spot color - often red. Using the simple controls of the **Sin City** plugin, it is easy to achieve this look in Final Cut Pro or Motion.

Sin City is an FxPlug plugin for use in Apple's Final Cut Pro and Motion software. It is compatible with FCP 6 and higher and Motion 3 and above. It requires at least 10.5 (Leopard) of the operating system. As with most FxPlug pl-ugins, **Sin City** makes use of the power of your GFX card to do its rendering, thus does not load down your CPU. Sin City uses a properly weighted calculation to arrive at the black and white image instead of the simpler RGB channel averaging more commonly found. To generate the mask for the spot color, Sin City performs a chroma key operation. Chroma challenged sources like DV, JPEG, HDV or the H.264 produced by record-to-memory-card cameras can make generation of a consistent strong chroma key problematic.

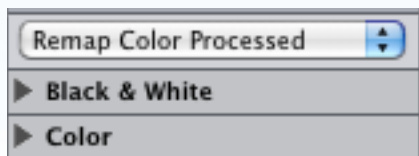## How to install the Sin City plugin

After download, you should find a folder called SinCity containing an installer, a tutorial image, and these instruc-tions. Double click on **SinCity.pkg** to install SSSinCity.fxplug into the /Library/Plug-Ins/FxPlug folder.
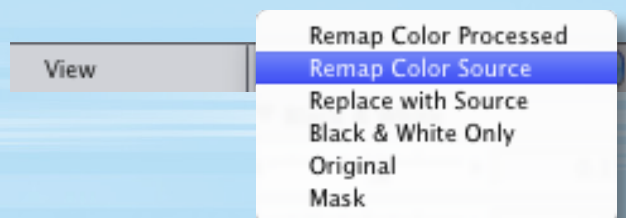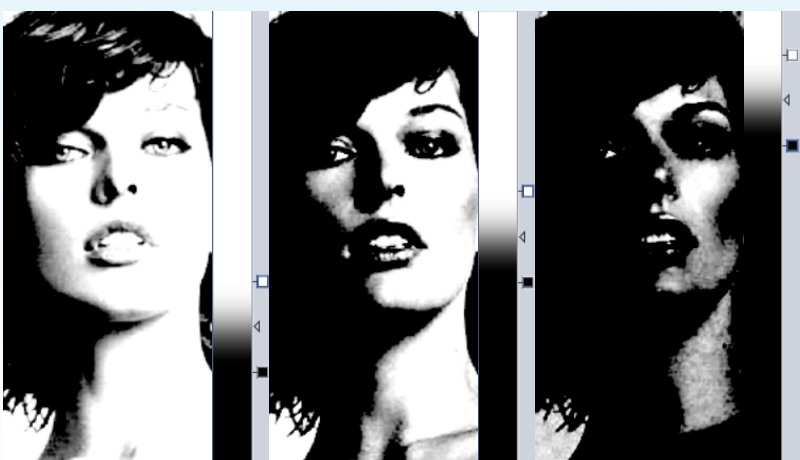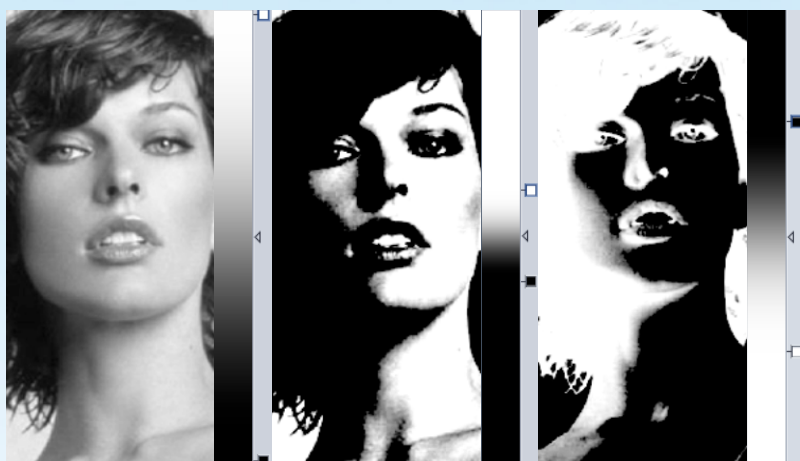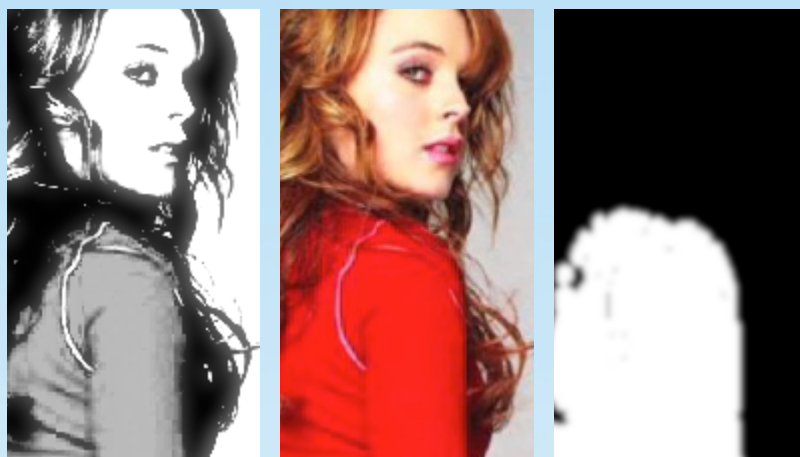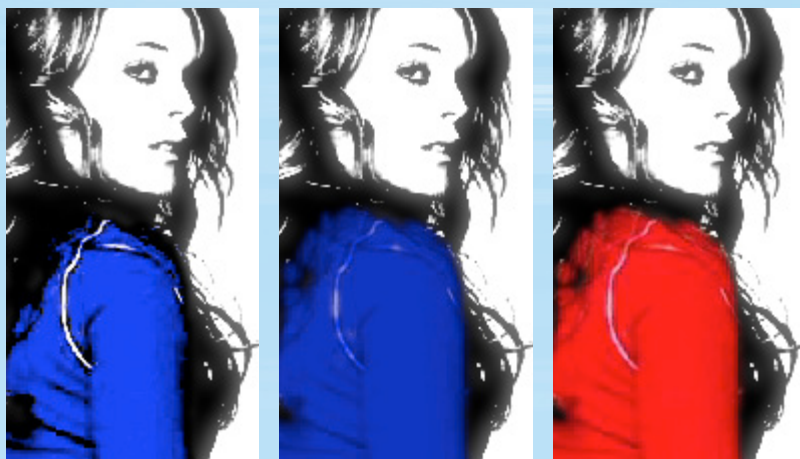
How to use the Sin City plugin

This is a brief sketch of how to use the **Sin City** plugin. Consult the tutorial after the control description for more insight into how you can get the most from Sin City.

Set the View to Black & White Only. Use the Black & White section to set the look (Range and Center to adjust con-trast and brightness, then Diffusion Amount and Intensity to suit). If spot color is to be used, Set the View to Original and use the eyedropper to set Select Color to the tone most representative of color to be isolated. Switch the View to Mask and adjust the Hue, Saturation, and Luma thresholds to isolate the color. Adjust the mask controls (Grow, Soften, and Clamp mask) to get the strongest cleanest mask you can. What you set the View to now will depend on your source material and the effect you want to achieve. See the Control Description section below to decide your options.

Sin City plugin Control Description

Remap Color Processed

▶ **Black & White**

▶ **Color**

Sin City has three sections: The **Viewing** popup, **Black & White**, and **Color**. View-ing controls what is shown, Black and White has adjustments to control the contrast and diffusion. The Color section concerns itself with the spot color.

View	Remap Color Processed
	Remap Color Source
	Replace with Source
	Black & White Only
	Original
	Mask

The **View** popup has 6 options, shown in order to the left.

Remap Color Processed remaps the Select Color to the Remap Color and uses the contrast as set in the Black & White section.
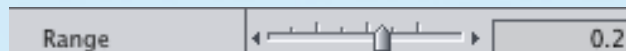
Remap Color Source remaps the Select Color to the Remap Color and uses the contrast of the original image. Use this if the Black & White section causes the Select Color area of the to become black or white (as no color could be shown then).

Replace with Source replaces the black and white image in the area defined by the Select color with the original source portion of the image.

Black & White Only does no Select/Remap color processing.

Original displays the original unprocessed image. Use this for choosing the Select Color.

Mask Shows the mask generated by the Select Color.

Range	◄———————⌂———————►	0.2

Range affects the contrast of your image. It controls the spread of white to black. You can consider the **Range** as a gradient where everything above the Range is mapped to white and everything below it is mapped to black. The smaller the **Range** setting, the greater the contrast and the more "graphic" the result. A Range 0f 1.0 is normal contrast. Negative **Range** values give an inverted image.

Center	◄———⌂———————————►	0.34

Center determines where the **Range** you've set falls within your image. The higher the **Center**, the more black, the lower the **Center**, the more white. Use the Range setting to control the contrast, then use the Center slider to control the degree of detail and where the black/white regions fall within your image.

| Diffusion Amount | | 5 |
| Diffusion Intensity | | 0.25 |

Diffusion is a blurring of the highlights. **Diffusion Amount** controls how much they are blurred. **Diffusion Intensity** controls how strongly they are mixed back over the original image.
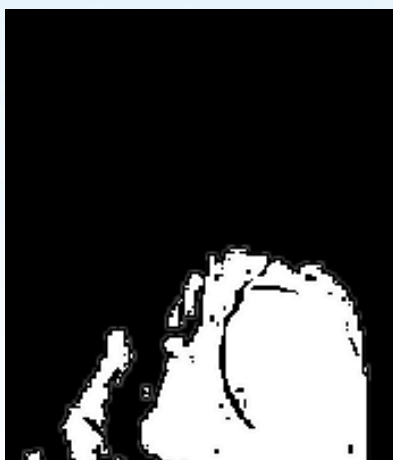

| Select Color | ▶ | | | (blue) |
| Remap Color | ▶ | | | (red) |

The Select and Remap Colors are used to add spot color to your image. Select Color is the color you want to isolate. Remap Color is what you want to change it to. It's best to use a Select Color that is unique. For instance, because skin tones contain red, it can be harder to isolate an item of clothing that is red. It would be better to have your subject wear a blue or green item of clothing and use the Remap Color to change it to red.

Grow Mask		1.92
Soften Mask		10
Clamp Mask		0
Invert Mask	☐	

Grow, **Soften**, **Clamp** and **Invert Mask** alter the mask generated by the **Select Color**. At Left you can see an example of each effect. **Grow** expands the mask. **Soften** blurs the mask. **Clamp** is a threshold, the lower it is set, the higher the mask's contrast. **Invert** unsurprisingly inverts the mask.

Hue Threshold		0.92
Sat Threshold		0.73
Luma Threshold		0.73

Hue, **Sat**, and **Luma Threshold**s adjust the chroma key that is used for the spot color. They determine how close an image color has to be to be in order to be included. The higher the thresholds, the closer the color must be to be included.

Sin City plugin Tutorial 1

In this tutorial we'll learn the basics of the Sin City plug-in. This hands-on approach should give you better insight into how the plug-in works and how you might use it in your own projects. We'll be using Final Cut Pro for this.

We'll begin with the tutorial1.jpg image included. It's just a wallpaper, readily available on the Internet. You may try it with an image of your own if you please. Load the image into your project, and place it on your timeline. Apply the Sin City plug-in, then double click on the clip to place it in the viewer and select the Filters tab.

View	Black & White Only
	▼ **Black & White**
Range	0.82
Center	0.52
Diffusion Amount	5
Diffusion Intensity	0.25

First lets adjust the black and white look. Set **View** to **Black & White Only**. Then set **Range** to 0.82, **Center** to 0.52. Leave **Diffusion Amount** & **Intensity** at their defaults.

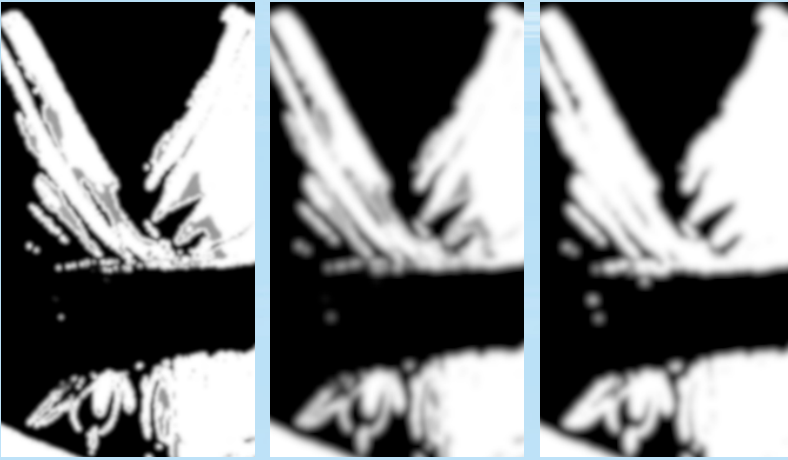| View	Original
	▼ **Color**
Select Color	▶
Remap Color	▶

Set the **View** to **Original**, then click on the eye dropper for **Select Color**. Sample the blue dress right at the knee.. Switch the **View** to **Mask**.

Hue Threshold	0.64
Sat Threshold	0.38
Luma Threshold	0.3

Skip down to the Thresholds and let's adjust to pick up more of the dress: Set Hue Threshold to 0.64, Sat to 0.38, and Luma to 0.3.

Sin City plugin Tutorial 1 continued.

Grow Mask		0.17
Soften Mask		1.44
Clamp Mask		0.43

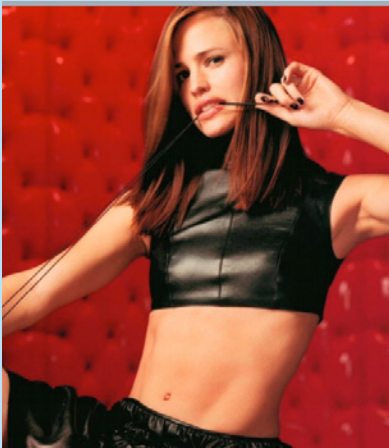Now let's adjust the mask. Set the **Grow Mask** to 0.78, the **Soften Mask** to 3, and the **Clamp Mask** to 0.

View	Remap Color Source

Finally, change the **View** to **Remap Color Source**.

That gives you the basic Sin City look. Rich contrasty black and white with some diffusion on the highlights and use of spot color. However, Sin City is a sophisticated plugin and more versatile than one look The next 2 tutorials will show you how to use it to produce unique and interesting looks...

Sin City plugin Tutorial 2

In this tutorial we'll see some interesting ways the Sin City plug-in can be tweaked to achieve novel looks. Again, we'll be using Final Cut Pro for this.

Use the tutorial2.jpg image included. It's also a wallpaper, readily available on the Internet. You may try it with an image of your own if you please. Load the image into your project, and place it on your timeline. Apply the Sin City plug-in, then double click on the clip to place it in the viewer and select the Filters tab.

View	Black & White Only
	▼ **Black & White**
Range	0.64
Center	0.57
Diffusion Amount	4.81
Diffusion Intensity	0.25

First lets adjust the black and white look. Set **View** to **Black & White Only**. Then set **Range** to 0.64, **Center** to 0.57, **Diffusion Amount** to 4.81, **Diffusion Intensity** to 0.25.

View	Original
Select Color	▶
Remap Color	▼ H 214.24
	S 98
	B 82

Set the **View** to **Original**, then click on the eye dropper for **Select Color**. Sample the red background. Switch the **View** to **Mask**. Set **Remap Color** to H 214.24, S 98, B 82.

Grow Mask	1.92
Soften Mask	10
Clamp Mask	0
Hue Threshold	0.95
Sat Threshold	0.86
Luma Threshold	0.53

Now let's adjust the mask. Change the **Hue Threshold** to 0.75, **Sat Threshold** to 0.86, **Luma Threshold** to 0.53. Set the **Grow Mask** to 1.92, the **Soften Mask** to 10, and the **Clamp Mask** to 0.

Sin City plugin Tutorial continued.

View — Remap Color Source

We're almost there... Change the **View** to **Remap Color Source**. That looks cool, but let's get some skin tone in there (The Spirit got its look by faintly ghosting the original color over the black and white).

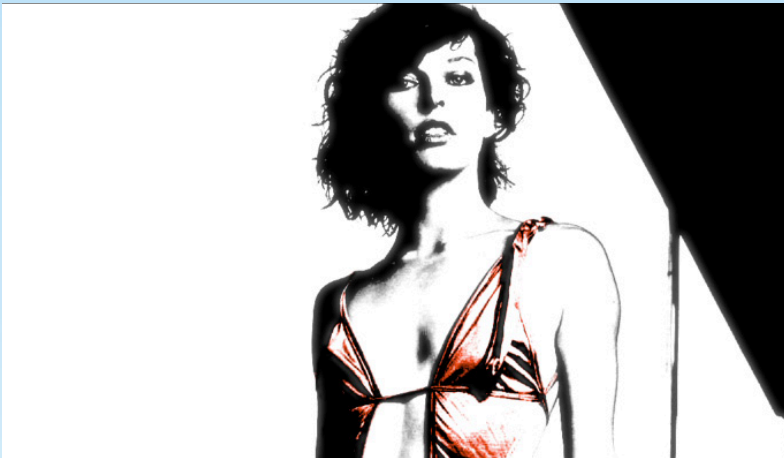**Mix** — 65

Set the Mix to 65 and we're done...

In the next tutorial, we'll learn how to create a "colorized" contrasty black and white photo look...

Sin City plugin Tutorial 3

In this tutorial we'll include the Invert Mask into our palette to build a new look. Once again, we'll be using Final Cut Pro for this.

Begin with the tutorial2.jpg image included. It's another wallpaper, readily available on the Internet. You may try it with an image of your own if you please. Load the image into your project, and place it on your timeline. Apply the Sin City plug-in, then double click on the clip to place it in the viewer and select the Filters tab.
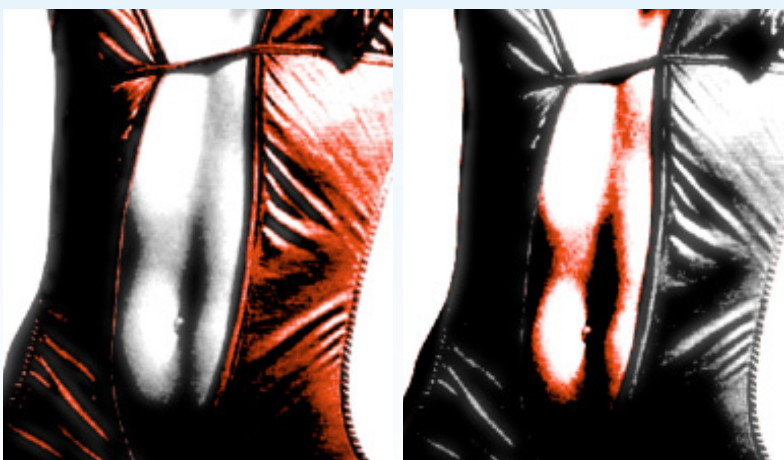
	▼ Black & White	
Range	◄———⬆———►	0.13
Center	◄———⬆———►	0.4
Diffusion Amount	◄———⬆———►	5
Diffusion Intensity	◄⬆———►	0.21

First we'll adjust the black and white look. We're going for very graphic and contrast now. Set **Range** to 0.13, **Center** to 0.4. Leave **Diffusion Amount** at 5, but set **Diffusion Intensity** to 0.21.

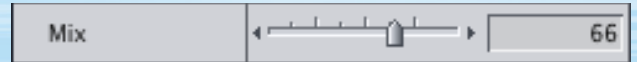| View	Original
Select Color	▼ 🔵 H ◄———⬆———► 213.1
	S ◄———⬆———► 60
	B ◄———⬆———► 56

Set the **View** to **Original**, then click on the eye dropper for **Select Color**. Sample the blue bathing suit, or set your color to the value shown above. Switch the **View** to **Mask** to check your work if you like.

View	Remap Color Processed
Invert Mask	☑

Now change the View to Remap Color Processed, then click the Invert Mask checkbox.

Sin City plugin Tutorial 3 continued.

Mix	◄———————————|———►	66

Finally, adjust the Mix to 66 to complete our look.

I hope that gives you some ideas on how to use the Sin City plug-in. The possibilities are infinite... Time to get started.