

Color Negative Scanning Process

Scanning:

Scanning should be done in a clean workspace to insure as little contamination as possible from dust and other airborne and surface particles.

1. With a clean, lint-free cloth, wipe off all surfaces of the scanner and the surrounding work area.
2. Put on clean white cotton gloves.
3. Wipe negative off with an anti-static cloth that has been formulated for use on film (not prints).
4. Follow your scanner's instructions for loading the film into the film holder.
5. Remove loose dust with a soft photo brush or with compressed air.
6. Scan as a positive at 16-bits per color channel (48-bits total), creating a TIFF file.

To create raw or archival scans:

- Do not make any scanner corrections.
- Set all quality settings at maximum.
- Scanner profile should be embedded in file.
- Set a file-naming convention for your image files.
- Add metadata by opening the file in PhotoShop and going to *File*, then *File Info*.
- Saved as an uncompressed TIFF file.



The following steps are a guideline and require a bit of judgment and artistry. It usually takes a few tries to get it right, but you will find that the results are well worth it.

In PhotoShop:

1. **Invert Negative to Positive (⌘I)**



2. Set Black Point

Layer > New Adjustment Layer > Curves "Black Point"

Find an area in the image that is a neutral black.

(see *Black Point Curve* under *Steps* below).



3. Adjust Contrast

Layer > New Adjustment Layer > Curves "Brightness/Contrast"

Adjusting the contrast is different for each image. The customization of this process is necessary to get the best results for your print.

It is a good practice to keep sample images as reference files, so you can consult them when you are adjusting the contrast.

(see *Contrast Curve* under *Steps* below)



4. 1st (Coarse) Color Adjustment

Layer > New Adjustment Layer > Curves "Color Balance 1"

Adjust color in each color channel. You may have to go back and forth between channels to get the best color balance.

(see *Coarse Color "Color 1" Curve* under *Steps* below)



5. Adjust Saturation

Go to Image > Adjustments > Hue/Saturation.

Click on Master, then on the color you want to adjust: Red, Yellow, Green, Cyan, Blue, or Magenta. Adjust as needed.

(see *Hue Saturation Adjustment* under *Steps* below)



6. 2nd (Fine tuning) Adjustment

Go back to Steps 3, 4, or 5 to adjust as needed.

You may want to create a new layer for this 2nd adjustment:

Layer > New Adjustment Layer > Curves "Color 2"

(see *Fine Color "Color 2" Curve* under *Steps* below)



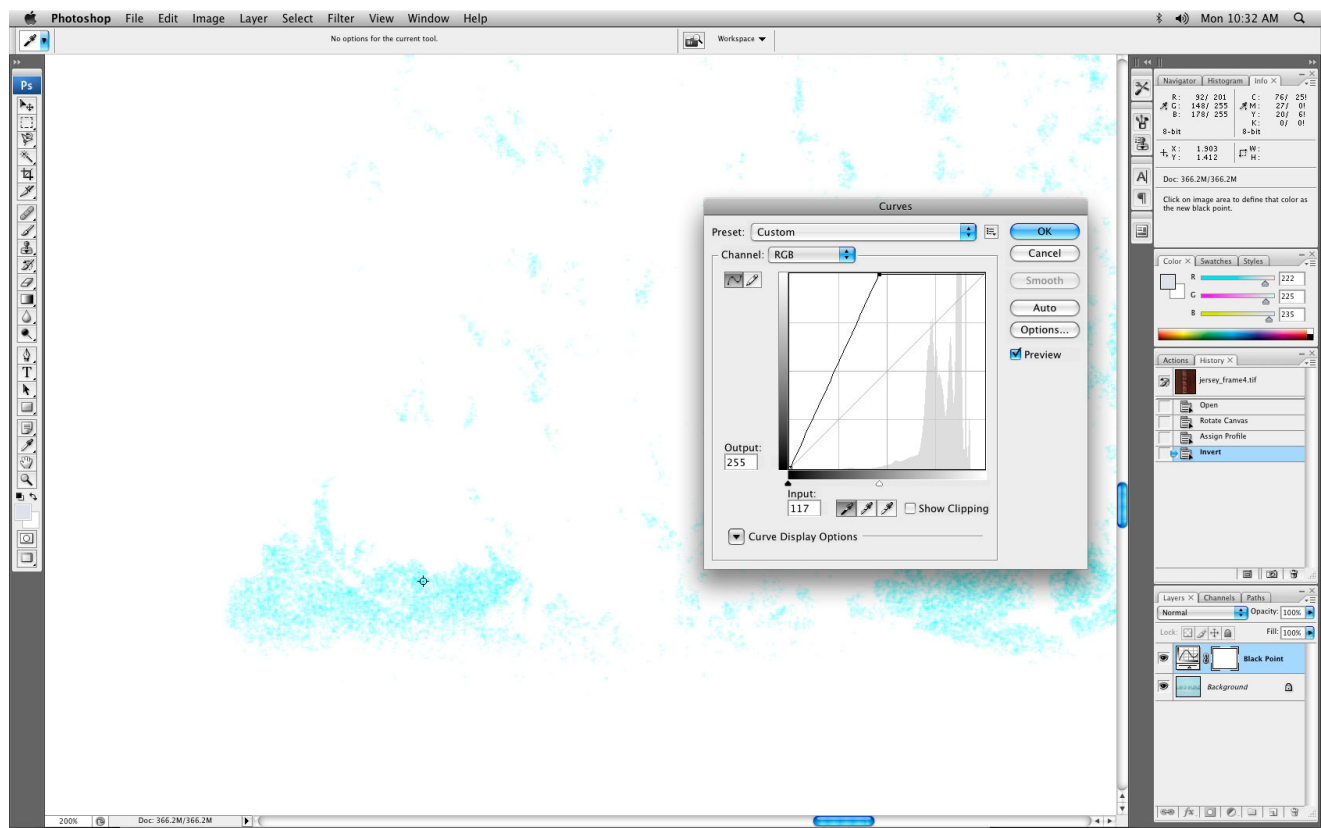
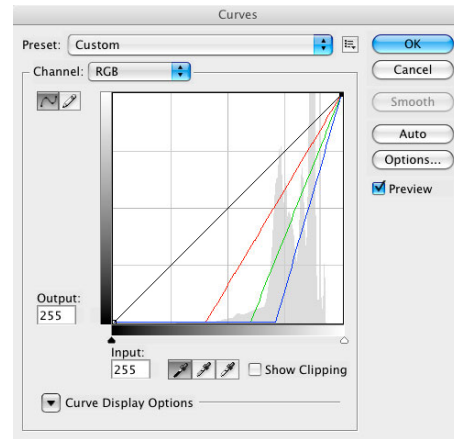
Tip: Title each layer. If more than one person will be working on this file, add your initials as part of the layer's name.

Steps

Black Point Curve

Tip: In histogram, click on upper right hand point and pull it to the left until you find the darkest point in the image. Click on the black (left-hand) dropper in the screen and then click on the darkest (black) point in the image.

Dialog Boxes

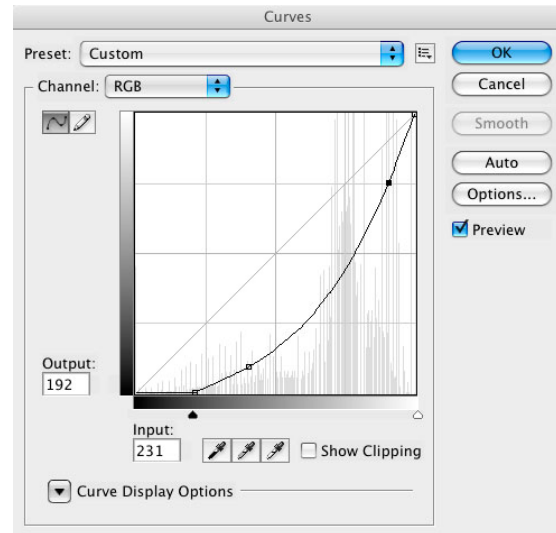


Steps

Contrast Curve

Note: Using the White point eye dropper can be unpredictable, often resulting in clipping, or making the color correcting process more difficult. Use it with caution and try to adjust the white point manually for each RGB channel.

Dialog Boxes

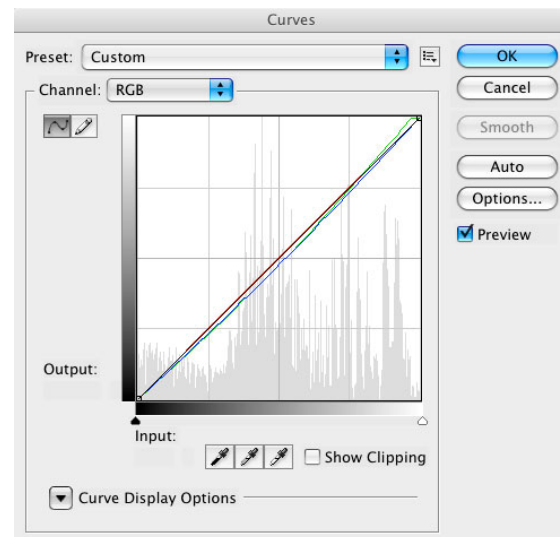


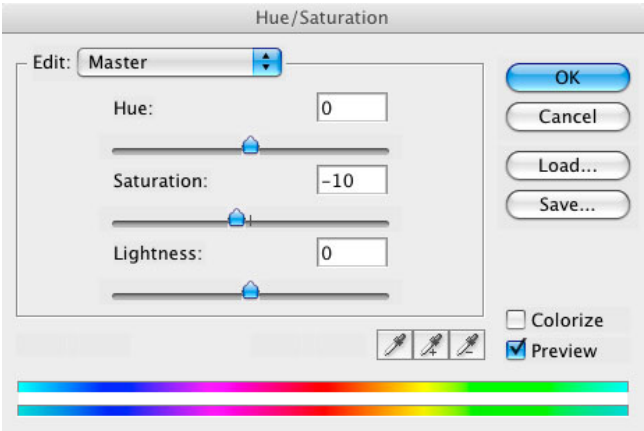
Coarse Color "Color 1" Curve

Red: Press ⌘1. Click on the center point of the graph to create a control point. Drag the center of the curve upward to intensify the reds; drag it down to make the image greener. You can also click in the Input box and use the up and down arrow keys for a finer adjustment.

Green: Press ⌘2 and continue as above.

Blue: Press ⌘3 and continue as above.



Steps	Dialog Boxes
<p><i>Hue Saturation Adjustment</i></p> <p>If you added a lot of contrast in the previous steps, the saturation may have increased and should be reduced either globally or for individual colors.</p>	
<p><i>Fine Color "Color 2" Curve</i></p> <p>This is an optional step. In some cases it is easier to create a new curve to make final contrast and color adjustments. Experience will guide you on the best choice for each image.</p>	