



## Digital Photo Imaging Photoshop Film Scanning

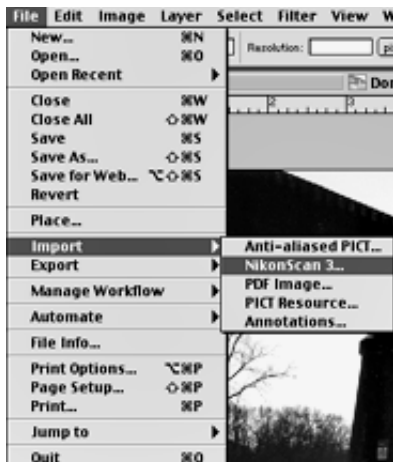
### Photoshop Scanning Procedures Using The Nikon Coolscan LS - 2000

Acquire accurate and complete information from scanning personal color and b/w negatives and slides using the Nikon 35mm Coolscan. Follow these exact steps in order to alleviate any potential problems with color casts, limited pixel information, and restricted tonal ranges.

Mounted slides and strips of images can be accommodated when functioning with the Nikon Coolscan. Each has a separate adapter that inserts directly into the scanner.

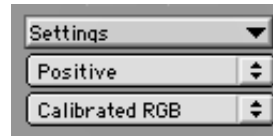
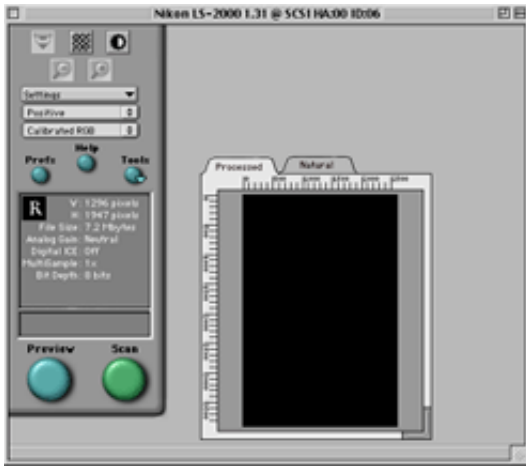
### 35mm Negative And Slides:

1. Make sure the Nikon film scanner is **OFF** before attempting to switch or attach it to a computer. The film scanner is connected with a firewire cable.
2. Choose the appropriate negative or slide adapter and fully insert it into the scanner. Turn the scanner switch to the **ON** position. The green light on the scanner flashes when information is being transferred to the computer.  
  
\* It is best to wait until the green light is solid before launching any computer programs or making any changes.
3. Insert a strip of images (4 or 5 images per strip only) by slowly feeding them into the connected adapter. Images should be placed in the scanner emulsion side down (the dull side should face down, or the numbers should read correctly up at you).  
  
\* When scanning single mounted slides, just insert the image into the slide carrier.
4. Launch Photoshop and Select **File>Import>NikonScan 3** from the menu. This will activate the NikonScan software from which you will acquire your imagery.



5. The **Nikon LS - 2000** software should now be displayed in front of the Photoshop program. First, choose the proper media Settings for the job (**Negative/Positive**). The **Calibrated RGB** profile should already be selected.

\* Photoshop's tools and options are not active while the NikonScan 3 window is open.

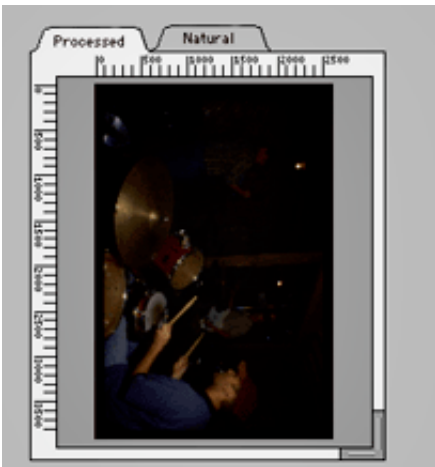


6. When scanning images that are on a strip, a new tab is available in the upper right corner of the scanner panel. Click on this tab and select an image number to preview. Press the **Preview** Button. A **Progress Monitor** window is displayed while the scanner acquires the preview information. Wait until this window goes away before performing another function.

\* When scanning single mounted slides, just press the Preview button to view the image.



7. Next, an image will be displayed in the preview area. The **Natural** tab displays the original scan appearance, the **Processed** tab displays any changes that occur when using options and tools. To view current changes, it is best to leave the **Processed** tab in front.



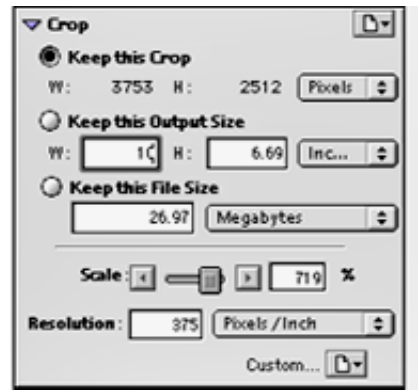
8. To modify the orientation of the image in the preview area, use the **Layout Tools** displayed in the **Tool Palette**.

\* If there is no Tool Palette displayed, press the Tools button on the scanner panel.



9. Draw a crop using the mouse cursor and grabbing an edge on the image in the preview area. Dancing ants are displayed, and each edge of the crop marquee is independently adjustable. After drawing a successful crop, in the **Crop** palette select to **Keep this Crop**. Next, only specify width or height value in inches in the **Keep this Output Size** area (enlarge the maximum value to 10 inches to get near 8x10" images). **Resolution** should be set to **200** Pixels/Inch.

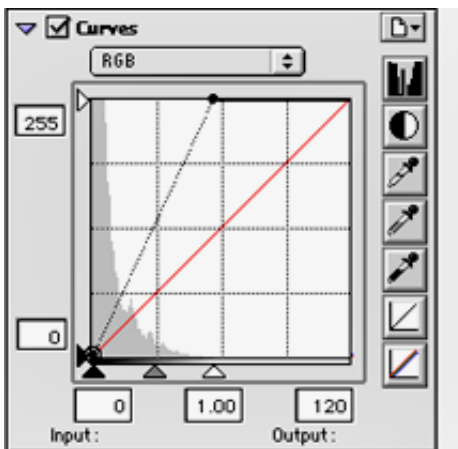
\* At this time it is best to remove any white or black edges that are not part of the image area using the crop tool. Inaccurate scans can result from careless cropping.



10. Open the **Curves** palette to view the pixel information that was gathered at the time of the preview. Adjust the **two end points** of the bottom triangles (the white and black points of the image) to meet with the **histogram** information. The **Processed** preview should immediately display the effects of any changes. Some further adjustments may have to be made for extreme photos. Adjustment methods may include placing anchor points on the black curve in the histogram and pulling up or down to reveal more specific and crucial information.

\* Do not draw the end points past the information that is displayed in the histogram, this results in lack of essential detail in highlight and shadow areas.

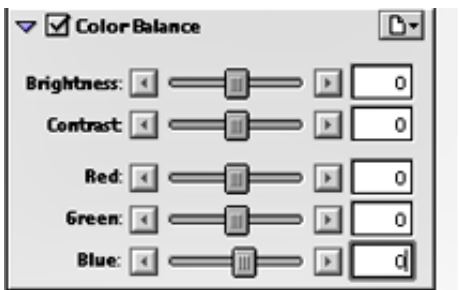
\*\* Slides that are lacking detail in highlight areas have no original information for the scanner to acquire.



11. If there are any inaccurate color casts that are detected on the preview image, open the **Color Balance** palette and make adjustments. Use the **RGB color sliders** to dial in or out color casts.

\* Do not adjust the tones of the image using the brightness and contrast sliders.

\*\* To reset changes, press the down arrow in the upper right corner of each panel.



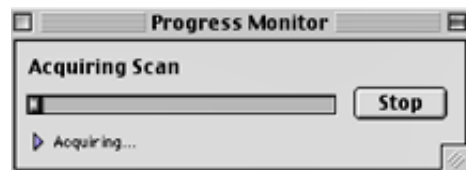
12. In the **Digital ICE cubed** palette, select **Enable Digital ICE On (Normal)** for all color images. This option removes subtle blemishes, scratches, and dust particles that are magnified during the enlarging process.

\* Do not select the Enable Digital ICE feature when scanning b/w images, this results in posterization and banding of the image.



13. Lastly, press the **Scan** button to acquire the pixel information from the original. The **Progress Monitor** is again displayed. Wait until this window disappears before performing another function. When the scan is complete, the final result will be automatically displayed in Adobe Photoshop. When finished scanning, press the **Eject** button located in the upper left corner of the scanner panel.

\* Be sure to save your original scans descriptively and store them in a safe place.



**Note-**

When making changes to an original scan file in Photoshop, it is best to rename the file by

selecting the Save As function. This will ensure that the original scan information stays intact without destructive changes.

For resolution basics:

<http://www.magicpixel.com.au/magicpixel/html/scan1a.html>

For scanning tips and tricks:

<http://www.scantips.com/faq2.html#slides>

For Nikon scanner descriptions and comparisons:

[http://www.nikonusa.com/usa\\_category/category.jsp?cat=7](http://www.nikonusa.com/usa_category/category.jsp?cat=7)

*© 2002-2006 by Tonal Range, L.L.C.. All Rights Reserved.  
Copying of this material is strongly encouraged for the benefit of education.*