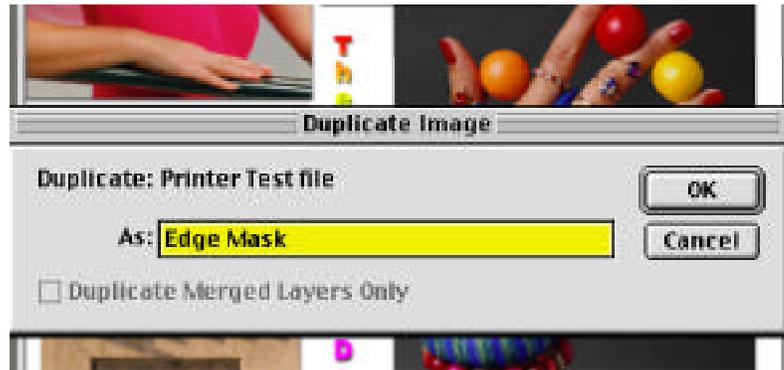


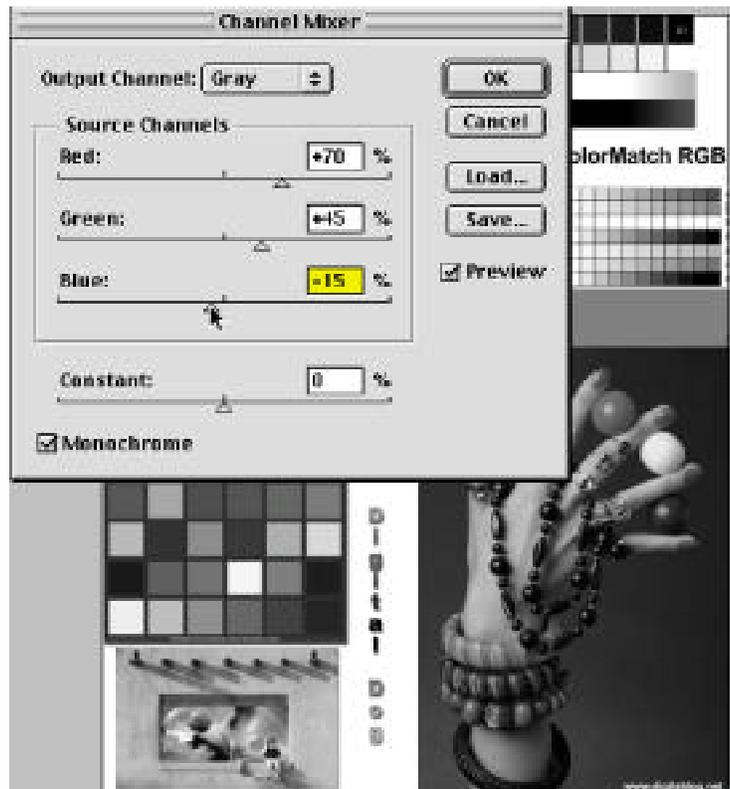
# Selective Sharpening using an image mask

This technique will work with high bit files and is ideal for doing very precise edge sharpening. Use this technique to insure that only edges are sharpened without adding noise or grain to smooth areas of scanned images.

1. Create the edge mask by duplicating the open image. Under the Image Menu, select Image>Duplicate. If the original file is a 16 bit image, set the duplicate to 8 bits pre color (Image>Mode>8 bits per/Channel).



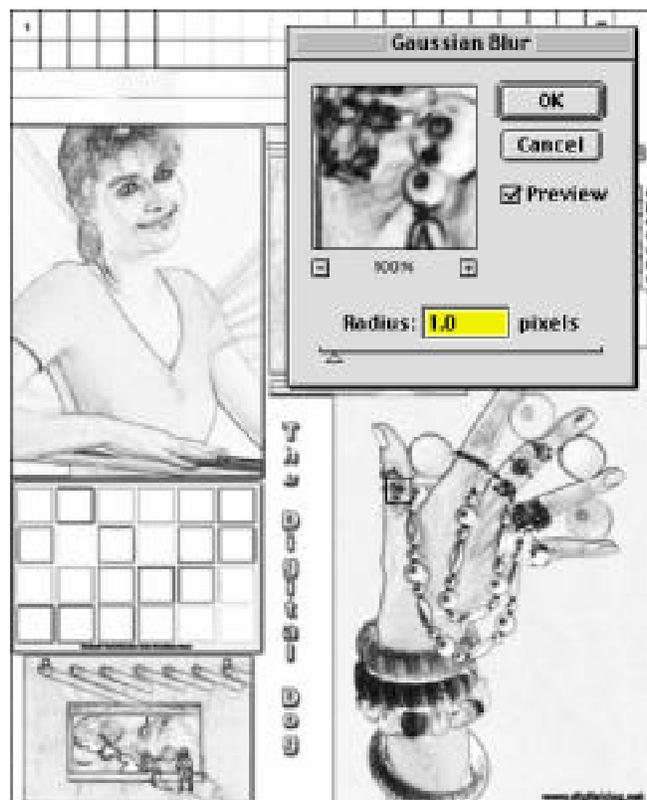
2. Convert the duplicated image to grayscale. For the most precise control using the Channel Mixer (Image>Adjust>Channel Mixer). Click on the checkbox named “Monochromatic”). Use the various sliders to control the mapping of gray. For this technique, we are not looking of pleasing image quality but rather the best contrast between colors. Ideally the total of all three sliders should equal 100%. When the effect is produced, click OK. Now convert this RGB monochromatic file to grayscale by selecting Image>Mode>Grayscale.



3. To create edges that can be used for a selection mask, select Filter>Stylize>Find Edges. Click OK.

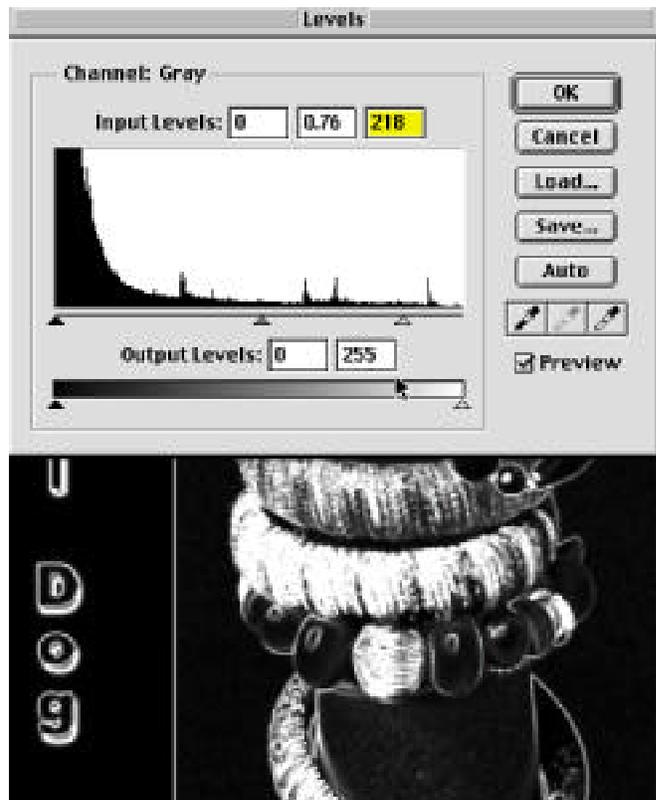


4. The filter produces a good starting point for an edge mask but it is far too sharp. Apply some Gaussian Blur (Filter>Gaussian Blur) to soften the edges.

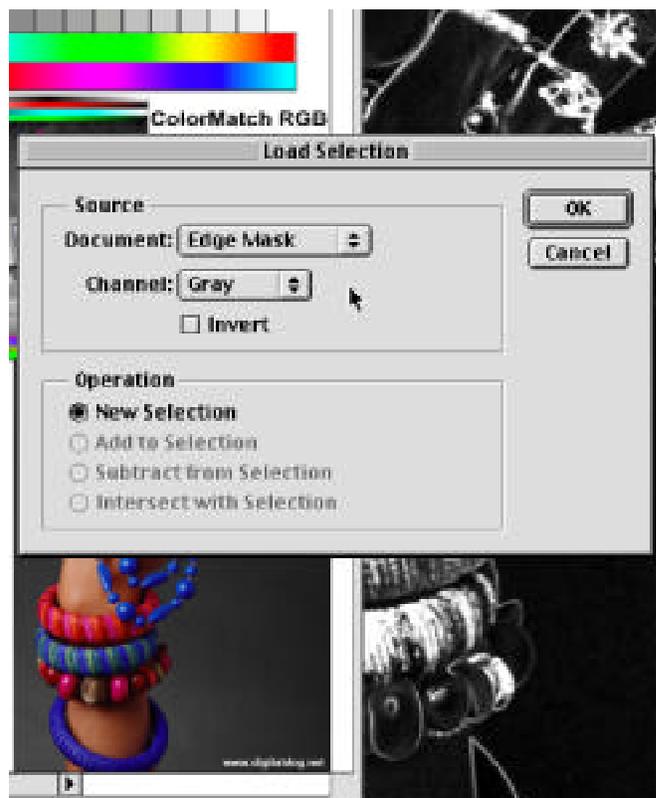


5. Invert the mask so the edges appear white by choosing Image>Adjust>Invert or Command I.

6. The mask needs to be high contrast so to do this, chose Image>Adjust>Levels and move the white input slider to the left to exaggerate the contrast.



7. Make the original image active by selecting it. To load your edge mask, chose Select>Load Selection and pick the duplicate file made using the steps above. Be sure you pick the duplicate file should other images be open!



8. You should see the edge mask now loaded in the original file. Hide the matching ants by pressing Command-H

9. At this point, use the Unsharp Mask filter to sharpen just the edges that were selected from the edge mask. You can toggle the effect on and off pick clicking on preview check box in the Unsharp Mask dialog. When you find the settings you like, click OK.



Try using the Unsharp Mask on the original image with various settings without the edge mask you made in this tutorial. You'll probably find that you cannot produce as clean an effect doing a global sharpening. While edges will get sharp, noise and grain will be far more evident than sharpening through an edge mask.