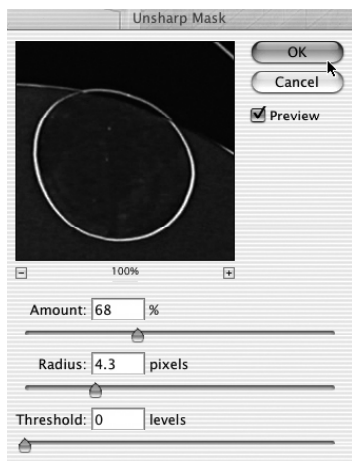


HOW TO: Sharpening



All Images Must be Sharpened

- sharpening is the last step before printing. Make a duplicate file and apply the desired sharpening technique
- sharpening will affect the contrast, making the image more contrasty
- how will sharpening affect the noise or grain in the image?

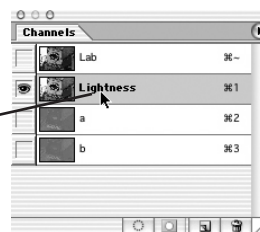
The sharpening starts here:

- 1) Bring your image to 100% magnification on screen (Double click the zoom tool) use the move tool (hand) to scroll around to an area you can see the effect.
- 2) Filter - Sharpen - **Unsharp Mask**
The unsharp mask creates a light/dark halo
- Amount** - is the intensity of the halo; The pixels being pushed to extremes of white and black.
- Radius** - is the width of the halo, wider the halo the more obvious the effect.
- Threshold** - acts as a damper holding back noise or grain from being exaggerated (Many times I find this setting softens my amount and radius settings. I usually keep this set to "0")

With your image at 100% magnification experiment with the numbers and see the effects. All Images will have different settings. For my images I usually use an Amount setting between 50-100, the Radius 1-4 and the Threshold 0-3. Some people push this up to 5. You will find that different types of images have different sharpening parameters. I have seen others who swear by a totally different approach. Whatever works... this is our starting point.

Lab Sharpening

- 1) Open RGB file
- 2) Image - Duplicate
- 3) Click OK
- 4) Image - Mode - Lab Color
- 5) Channels palette - click the lightness channel



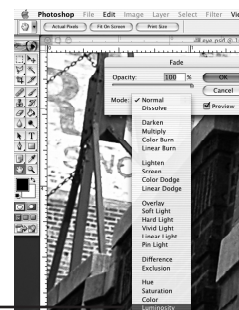
It will then be highlighted

- 6) Filter - sharpen - Unsharp Mask filter
At this point you will only be sharpening the black and white lightness channel avoiding the problem color halos that pop up in the RGB sharpening approach.
- 7) Image - Mode - RGB Color

Luminosity Sharpening

- 1) Open RGB file
- 2) Image - Duplicate
- 3) Click OK
- 4) Filter - sharpen - Unsharp Mask filter
- 5) Edit - Fade Unsharp Mask
- 6) In the dialogue box change MODE to Luminosity
- 7) Click OK

the sharpening is now only applied to the luminosity not to the color data



Layer Sharpening

this avoids noise and color shifts

- 1) Open RGB file
- 2) Image - Duplicate
- 3) Click OK
- 4) Duplicate background layer (Command - J)
- 5) Change the blend mode of the duplicated layer to Luminosity
- 6) Filter - Sharpen - Unsharp Mask Filter
- 7) Duplicate the sharpened luminosity layer (Command - J)
- 8) Filter - Blur - Gaussian Blur
 - enter a pixel setting of "3"
 - click OK

the blur takes care of exaggerated noise and halos from sharpening

- 9) Change the mode from Luminosity to Color, this gets rid of the blur
- 10) Flatten the photo

If you notice a loss of color try lowering the opacity of the blurred layer until the color pops back.

- Command C to copy
- Command V to paste
- Command D to deselect
- Command X to cut
- Command S to save
- Command Z to undo

Edge Sharpening

- 1) Open RGB file
- 2) Image - Duplicate
- 3) Click OK
- 4) Duplicate background layer (Command - J)
- 5) Edit - Select All (Command A)
- 6) Edit - Copy (Command C)
- 7) Channels Palette
 - Click new Channel
 - Command V to paste a grayscale selection into new channel
 - Command D to deselect your selection
- 8) Filter - Stylize - Find Edges
- 9) Image - Adjustments - Levels (Command - L) this is not a layer adjustment
- 10) Drag the top right input slider to the left to clean up the excess lines (The lines you don't want sharpened)
 - click OK
- 11) Filter - Blur - Gaussian Blur
 - enter a pixel setting of "1"
 - click OK
- 12) Image - Adjustments - Levels (Command - L)
 - drag both the shadow and highlight sliders toward the center until they almost meet. This will clean up the blurring and things will look defined
 - click OK
- 13) Channels palette hold the command key and click on the alpha channel to load selection
- 14) Select - Inverse
- 15) Click RGB Channel (The dancing ants will be in place, your selection)
- 16) Now apply the unsharp mask filter. The sharpening will only affect the selected edges

Applying sharpening to a portion of the image

- 1) open an image
- 2) make a duplicate layer of the background
- 3) make a selection of the portion of the image that needs additional sharpening with dancing ants dancing. Click the layer mask icon
- 4) now apply the sharpening technique of your choice to the masked portion of your image
 - remember this is a mask; You can go back and alter the area to be sharpened by painting the layer mask
 - when painting on a layer mask remember
 - Black conceals
 - White reveals