

# Sharpening

Sharpening creates contrast between pixels. What may look unnatural on the screen may be correct for printing. It is the last step that is done before printing. I suggest that you duplicate the layer or merge layers first, then apply sharpening to a duplicate layer, so that if it does not look right, you can make another layer and apply sharpening to it. Do not scan with sharpening on, do not shoot digitally with sharpening etc. Those options are at the beginning of the workflow, not at the end, which is when you want to sharpen.

**Amount** = Amount of sharpening applied to photo: The higher the number, the stronger the sharpening becomes.

**Radius** = How many pixels out from edge that the sharpening will affect; the width of the edge contrast.

**Threshold** = How different a pixel must be from its surrounding area before it is considered an edge pixel to be sharpened. The higher the number, the more subtle the sharpening. This tells Photoshop to ignore similar tones, for example, a threshold of 5 will ignore all tones that are within 5 level values of each other. A setting of 3-6 is usually a good rule.

## Scott Kelby's Sharpening Recommendations

### Unsharp Mask

	Amount	Radius	Threshold
Normal	125%	1	3
Soft Subjects	150%	1	10
Portraits	75%	2	3
Moderate	225%	.5	0
Maximum	65%	4	3
All Purpose	85%	1	4
Web	400%	.3	0

### Sharpening tips from Katrin Eismann

- \* Images that are uniformly sharp are unnatural; softening less important parts of an image will accentuate the sharp parts.
- \* Selectively sharpen by masking out parts that do not need it.
- \* Print sharpening tests with the printer and paper that will be used for the final print.

- \* Avoid resizing or retouching a sharpened image; therefore it is the last thing you do before printing.
- \* If you are sending a file to a service bureau, tell them whether you have sharpened the image or not, and whether you want them to apply sharpening.

## **Sharpening Tricks**

### **Emboss:**

Merge layers so that you have only one (after saving a file with all of the layers!)

Copy background layer (either select all and apple+J to jump it, copy and paste it, or just drag the layer to the new layer icon at the bottom of the palette.)

On background copy-> Filter->Stylize->Emboss (use defaults)

On background copy ->Layer->blend mode->hard light

### **High Pass**

Copy background layer as above

On background copy-> Filter->Other->High Pass

On background copy ->Layer->blend mode->hard light (or soft light, or overlay; whichever looks best)

### **Smart Sharpen**

Photoshop now has a filter called Smart Sharpen. It works very well on some images. Refer to the amounts above for sharpening. If you click on Advanced, you can fade the amount of sharpening in the highlights, shadows and change the radius. It also has the advantage of removing a lens, Gaussian or motion blur with an angle direction. Check more accurate for fine detail. You can save your settings and apply them to other images. Below are the steps:

Duplicate background layer

Filter->convert for smart filters (this turns your layer into a smart object, which will allow you to re-edit if you don't like your sharpening)

Basic Menu: Check more accurate

Basic Menu: Remover: Gaussian Blur

Basic Menu: Radius: 1 2.5 pixels

Basic Menu: Amount: 60- 110%

Advanced Menu: to fade the effect in the shadows and highlights: Shadow:  
Radius: 5-10 tonal Width controls the range of midtones affected, Fade Amount  
reduces the oversharpening in the shadows. (If the tonal width is too low, this has  
no effect.)

Advanced Menu: Repeat as above for highlights

You can save the settings

You can re-edit the settings because it is a smart object layer!

## **Edge Sharpening**

Edge sharpening requires about 10 steps which you can download as an action  
for photoshop from [Katrin Eismann's website](http://www.photoshopmasking.com/): ( HYPERLINK "<http://www.photoshopmasking.com/>" <http://www.photoshopmasking.com/> )

When you reach the first page, click on download images, then go to chapter 12.  
At the bottom of the list is smart sharpen.atn.exe (for windows) or smart  
sharpen.atn.sit (for mac) Click on the appropriate one (make sure photoshop is  
open) and it will load into your actions palette as a new folder.

## **Edge Sharpening in steps:**

Select all of a background layer (or the green channel) (apple + a)

Copy (apple + c)

Go to the channels palette: make a new channel, name it edges

Paste (apple + v)

Filter: Stylize: Find Edges

Image: Adjustments: Levels (apple + L)

Drag the highlight and shadow sliders close together to eliminate the noise in the  
highlights

Filter: Blur: Gaussian Blur (1-3 pixels depending upon your image) The blurring will feather out the selection so that your sharpening doesn't get jagged.

Deselect (apple + d)

Click on the RGB in the channels palette

Go to the layers palette and select your background layer

Select: Load Selection: edges and check invert

With the edges selected now, Sharpen: Unsharp Mask

After applying the amount of sharpening you want, deselect and admire your work!