

Sharpening in Photoshop with Unsharp Mask

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Unsharp mask is one of the older sharpening algorithms. The concept is as follows:

- Apply a Gaussian blur (small radius, high amplitude) to the original image (spread out the edges a little)
- Invert the Gaussian blur (dark becomes light and vice versa)
- Add it to the original image (essentially subtract the Gaussian blur from the original image)

The result is an enhancement of the contrast at edges, and the appearance of a sharper image.

Here's how we can do it in Photoshop:

1. Create a duplicate of the background image (if you screw it up, you can always delete it and start again from the background)
2. Right click the duplicate and make it a smart object (so you can adjust what you do if the result isn't quite right).
3. Select Filter – Sharpen – Unsharp Mask. This gives you a window with a small view of the layer, which can be adjusted by size and location, and three parameters to adjust: Amount, Radius and Threshold.
4. For a place to start, choose 150%, 3 pixels, and zero, respectively, to give a clearly noticeable effect.
5. Adjust for the look you want. Too much amount looks gross. Too large a radius produces halos. The threshold acts like a high-pass filter by not sharpening the smooth areas of the image. Bring it up till it starts to reduce the sharpening effect where you want it, then back off a little.
6. When done, you can go back to the smart slider icons, and right click to edit the settings.