# Apply Sharpening in Photoshop using High Pass Filter

The technique known as "High Pass sharpening" is a method that emphasizes texture and detail in a photo, rather than sharpening to compensate for softness. The High Pass technique enhances contrast along existing contrast edges in a photo, but it does so across a larger area. In other words, the contrast being enhanced along edges in a photo spreads out from those edges more than would otherwise be the case with typical sharpening methods. High Pass filter technique works well at sharpening images because any areas in the image that are not an edge are left untouched. The High Pass filter can help enhance detail and reduce the appearance of haze in a photo, much like the Clarity adjustment does in Adobe Camera Raw.

The disadvantage to sharpening with a High Pass Filter is the potential for increasing or adding noise to a photo. Therefore, you should capture your photo as clean as possible by using a tripod and choosing the lowest possible ISO setting then remove noise during your post processing process before applying High Pass sharpening.

- **1ˢᵗ Method:**

  - Do all your adjustment in Photoshop prior to sharpening.

  - Merge all the visible layers into a new layer on top of all the others (**Ctrl+Shift+Alt+E**). Then change the blend mode to **Overlay**. This will allow you to see the adjustment being applied in the document window. It's recommended to convert this layer into a Smart Object (right-click the layer and select **Convert to Smart Object)** so that your workflow is reversible and non-destructive.

  - Be sure to zoom in to 100% and use the hand tool (depress and hold the **H** key or **Spaceba**r) to bring an area of the photo you want to sharpen to the center of the screen.

  - Select **Filter>Other >High Pass**.

  - Check the **Preview** box. Start by moving the radius slider all the way to the left so the preview looks completely gray with no detail. Then slowly drag the slider to the right until the edges are just barely visible. The lines represent the edges that will be sharpened. The farther you drag, the more intense the sharpening will be, but if you drag too far, you will start getting halos and color in the preview image. Usually a radius setting between 1.5–4 pixels is sufficient. Click **OK** to apply the sharpening.

  - In the Layers panel, change the layer blend mode to **Hard Light**. This leaves the edges accentuated, making the entire photo appear much sharper. If you want to reduce the amount of sharpening, change the blend mode to **Soft Light**. Also you can reduce the layer **Opacity** slider to fine-tune the amount of sharpening.

  - If there are local areas you don't want sharpen such as dark areas or sky, add a layer mask to the High Pass filtered layer and use a soft brush, set to a low opacity (20-40%), to blend in the original image.

  - If you want even more sharpening, duplicate the High Pass layer to double-up the sharpening affect. If that's too much, lower the Opacity of the duplicated sharpening layer.

  - If halos form along some edges, use the following technique to remove them:

    - Double-click the [High Pass filtered] on the right side of the layer to bring up the **Layer Style** dialog box Refer to the "Blend If" sliders section at the bottom of the dialog box. You will be adjusting **This Layer** bar sliders which affects only the current layer. Dragging the black stop towards the right makes dark areas transparent and dragging the white stop towards the left makes highlight areas transparent.   This techniques removes the effect from near black and near white areas in the photo.
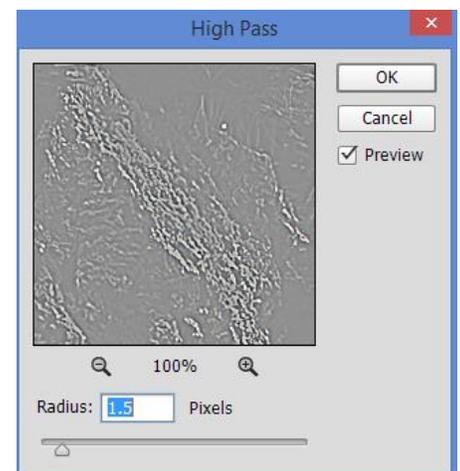
- o Start by moving the This Layer white slider to 235 and then hold down the **Alt** key to split the slider. Then move the left half of the slider to a value of 215.   Finally move the This Layer black slider to 25 and split the right half of the slider to 45. Splitting the slider bars smooths out the blending.

Blend If: Gray

This Layer: 25 / 45   215 / 235

Underlying Layer: 0   255
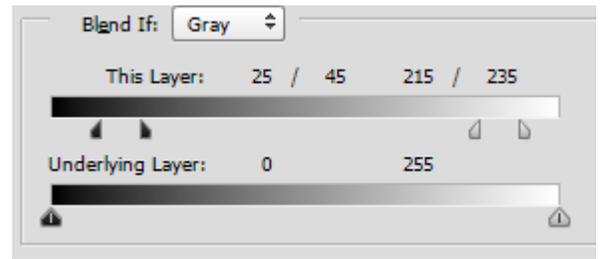
- **2ⁿᵈ Method (using Blend If to remove sharpening in highlight and shadow areas):**

  - Duplicate all your layers (**Ctrl+Shift+Alt+E**).

  - Choose F**ilter>Other>High Pass**. Set the Radius to a small value (0.7) so you barely see lines when you zoom in on the gray image.

  - Change the Blend Mode to **Linear Ligh**t.

  - To remove the sharpening from your highlight (sky areas) use the **Blend If** blending option. First make sure you are zoomed into your image to see the adjustments you will be making with the **Blend If** sliders. Bring up the Layer Style dialog box by double-clicking on the right side of the High Pass layer. To protect the harsh shadow areas split the **Underlying Layer** black slider by holding down the **Alt** key and move the right side of the black slider to the right. Then move the white slider to the left until you remove most of the sharpening in your sky area. Then to smooth out the blending, split the white slider and move the left side of the white slider to the left. Only the midtones (the center area between the split sliders) will receive the full sharpening. Note moving the bottom bar sliders will allow areas of the currently selected layer to begin showing through to the layer(s) below. The shades on the bar have nothing to do with the layer you're working on—it's about the shades of the lower layer(s).

Blend If: Gray

This Layer: 0   255

Underlying Layer: 0 / 43   161 / 219