HIGH PASS SHARPENING

Many photographers prefer High Pass sharpening to the simple use of the Unsharp Mask filter which can easily produce over-sharpening artefacts if it is used without care.

High Pass sharpening can also produce artefacts if used carelessly but it does offer control flexibility that allows you sharpen effectively while controlling the formation of by-product artefacts such as halos and hairs that take on the appearance of tinsel.

1. Open the image in Photoshop or Photoshop Elements.
2. Create a duplicate layer.
3. Apply the High Pass filter (Filter>Other>High Pass) to the duplicate layer.
4. Change the Blending mode to Overlay.

Settings

The degree of sharpening is controlled by the **Radius** setting. The way in which the sharpening is applied, its aggressiveness, and the consequent formation of undesirable artefacts are controlled by the choice of **Blending Mode** used. The following table provides a guide to some starting settings.

Image type:	Fine detail with lots of high contrast edges (e.g. Hair, grasses etc.)
Radius	**Blending Mode**
0.4 – 1.5	Overlay, Hard light, Vivid light, Linear light
1.5 – 2.5	Soft light
Image type:	Smoother image with lower contrast edges (e.g. Skin, flowers, fruit etc.)
Radius	**Blending Mode**
2 - 3	Soft light

Having chosen a starting radius, try the various blending modes and examine the effect of each. Overlay, Hard, Vivid and Linear lights are much more aggressive than Soft light. Usually, therefore, these require lower radius settings.

Soft light combined with a higher radius setting can often produce good sharpening without halos and other artefacts, particularly when dealing with images that do not have fine, high contrast edges.

If you decide your starting settings are unsuitable, users of Photoshop Elements have no option other than to discard the duplicate layer and start again with different settings. (or you can undo the incorrect settings). However, you can paint on the High Pass filtered layer with 50% grey to remove halos along edges or other artefacts.

Using Smart Filters in Photoshop

Recent full versions of Photoshop offer an option to convert a layer for use with a "Smart filter" (**Filter>Convert for Smart Filters**). This changes the selected layer so that when a filter is applied it can be reopened and the filter settings changed while watching the effect in the main image (not only in the filter's tiny preview window). Simply double click the filter's name under the filtered layer in the layers palette to open the filter dialogue if you want to change settings. This avoids having to undo settings before trying new ones.

The Smart filter approach automatically provides a blank **Reveal All layer mask**. You can paint on this in the normal way if you want, wholly or partly to suppress halos or other artefacts along edges or other parts of your image.