

Power Retouche

correct lens-distortion

sharpen without artefacts ... & more...

Photo-retouching plug-ins

A Photoshop plugin for advanced equalization

Most photo software comes with a primitive equalization method. Power Retouche has improved both the equalization algorithm as well as integrated it with Power Retouche's regular retouching abilities so you can control amount of equalization as well as target equalization to lights, midtones and darks, as well to specific colors. You can even equalize the image with a graduated effect.

- **Windows** version is for all versions of Photoshop, Elements, Fireworks, Paint Shop Pro, Corel Draw, Illustrator and other software that supports Photoshop plug-ins. See [list](#).
- **Mac** version is for all versions of Photoshop and Elements and all OS versions.



Equalization plugin - Tutorial

Benefits of the plugin

- **Full control over the amount of equalization**
- **Novel equalization methods**
- **Adjust amount of equalization in lights, midtones and darks**
- **Apply graduated equalization**
- **Restrict equalization to a specific color range**

The Equalization plugin works with these image modes (Windows and Mac)...
8 & 16 bit / channel: All image modes.

Equalization controls

This is the Equalization plug-ins control panel (Mac). Click on the photo or the links to the right to see the plugin at full size. The filter has two main controls:

1. Amount of equalization
2. Two equalization modes

In addition there are sliders for controlling the retouch common to most Power Retouche plugins.



Example -



The Equalization plug-in offers full control over the amount of equalization as well as the method.

The left rectangle is the original.


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What is equalization?

Theory

Basically equalization means that you take a look at the overall impression of the image (its histogram) and accordingly change the values of the pixels so that there is an equal distribution of values across the entire range. For example, if a grayscale image is predominantly gray with no highlights and deep shadows, equalizing will change the image so that there is an equal amount of shadow, midtone and highlight. It is obvious that this in its simplicity is a crude operation that can both ruin or improve a picture. Please see examples with histograms below.

Equalization is a traditional image transformation that has not been improved upon since its invention decades ago. Power Retouche offers a great improvement to equalization.



Original image



PR Equalized 60%



Equalizing a color image

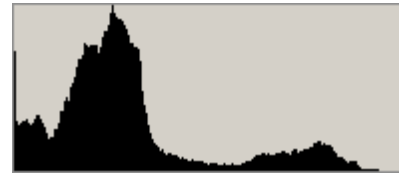
Examples

This example is rather dark and without contrast. As you can see from its histogram, as well as from the image itself, it is dominated by a large mass of darkness and no real light. Equalizing will change the histogram, so there is equal amounts of the various levels.

Please compare with the example of traditional equalization to see the great improvement Power Retouche offers over the traditional method. In order to compare, we equalized 100%, because traditional equalization offers no means of adjusting the amount. In an actual retouching situation, this image is over-equalized and about 50% would have been appropriate. Also note that Power Retouche equalization does not posterize the histogram, like traditional equalization always does.



Original image

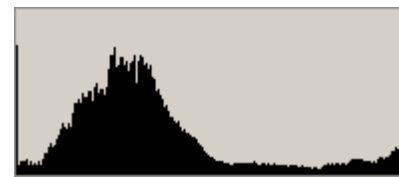


Original images histogram



Equalized with Power Retouche (100%)

Photographic mode. This mode usually preserves more details; observe the small hairs on the leaf.

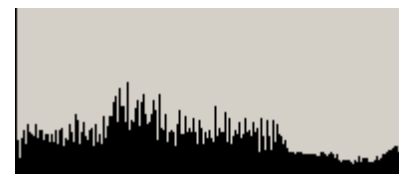


Histogram without anti-posterization



Equalized with Power Retouche (100%)

Not Photographic mode.



PR Equalized images histogram without anti-posterization

In this case 100% equalization is too much, but for the sake of illustrating our unique histogram, please compare to below image.



Equalized traditionally (Photoshop)



Traditionally equalized images histogram

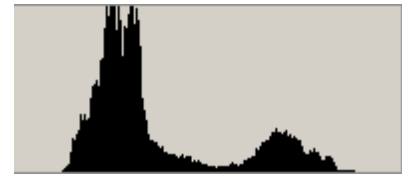
Equalizing a grayscale image

Equalization can produce very aesthetically pleasing results when used on grayscale images.

Simply equalizing a grayscale image at 100% will superficially produce similar results with Power Retouche as with the traditional method, but Power Retouche will be far less posterized. Traditional equalization offers no advanced retouching options, like the ability reduce the amount or to equalize some part of the image more than others. Below is an example of equalizing with Power Retouche graduated effect, where the lower area is more equalized than the upper. This graduated effect produces a far more satisfying retouch as it gives great depth to the image and more variety of texture.



Original grayscale image



Original images histogram



Equalized with Power Retouche (100%).

Equalizing with traditional equalization will produce an almost similar result, however the traditional will be far more posterized. Actually equalizing this image 100% is too much; please see example below...



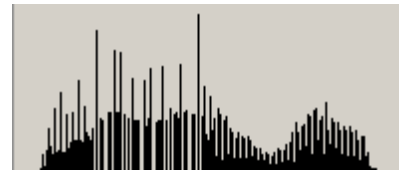
Power Retouche without anti-posterization



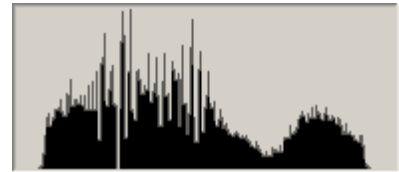
Traditional (Photoshop)



Equalized with Power Retouche (50%).



Power Retouche without anti-posterization



Power Retouche with anti-posterization

Amount of equalization

Amount of Equalization

This slider simply lets you control the amount of equalization. This is unique to Power Retouche as regular equalization does not allow for this.



As you can see in the example below, Power Retouche equalization can greatly enhance an image, but 100% may be way too much. In this case 40% is appropriate.



Original image



PR Equalized 40%



PR Equalized 100%

Photographic mode

This option will generally give a more natural look to the equalization. Near highlights and near blacks will remain unchanged.



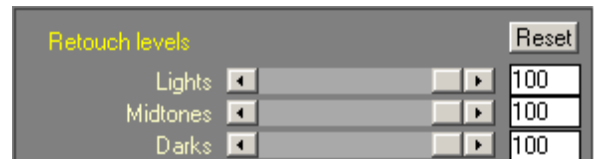
Original image



Photographic mode
Equalization = 100%

Retouch levels

Retouch levels is common to most Power Retouche plug-ins. The sliders let you control the amount of equalization to apply to lights, midtones and darks.



You can for example use this as a means to bring details out from the dark. Unlike the Shadow/Highlights adjustment in Photoshop, this will not create halos.

Compare to equalizing uniformly for lights, midtones and darks, but using Photographic mode instead (see above).



Original image



Equalization = 100%
Lights = 0
Midtones = darks = 100



Original image



Equalization = 60%
Lights = midtones = 0
Darks = 100

Graduated effect

These controls are common for many of the Power Retouche plug-ins. Using graduated effect will cause the filter to apply its filtering at full strength in one side of the image and then fade the effect out towards the other side. You can change direction by right clicking the preview. Midpoint will shift the balance between how large an area will be filtered at full strength and how much will have a faded out effect. Contrast will change the acceleration and spread of the fade-out.

Graduated effect Right click preview for direction.
 Show Direction

Direction	<input type="text"/>	0
Midpoint	<input type="text"/>	0
Contrast	<input type="text"/>	25
Diffusion	<input type="text"/>	5



Original image



Uniformly equalized



Graduated equalization towards upper right corner

Color range

Use Color range This is also common for several of the Powerretouches.

Color range will restrict filtering to colors in the range from the right side of the "From" slider to the left side of the "Up to" slider. This also if the "from" slider is to the right of the "to" slider. If you only selected what was in between, you would not be able to select everything except red (for example).

Mask unchanged will apply a mask over areas outside the range.



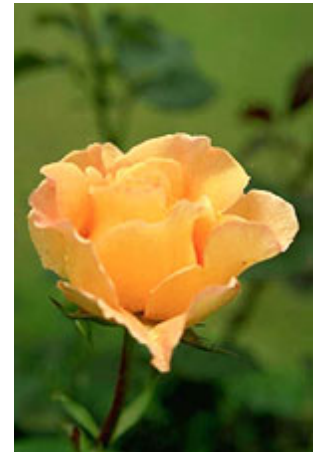
Original image



Illustrating the mask



Equalized 100%
Lights = 100%
Midtones = 100%
Darks = 100%



Equalized 100%
Lights = 100%
Midtones = 50%
Darks = 0%

Softness This slider determines if the changes should be applied evenly to the selected color range or if (and how much) it should fade out towards the extremes.