

Power Retouche

Retouching Suite

How to edit radial exposure and brightness and remove vignetting

Get even exposure from center to corner throughout the photo. Most lenses, home digital cameras and all photos taken with a single flash will produce uneven radial exposure.

- 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.



Radial Density plug-in - Tutorial

Benefits of the plug-in

- Edit radial exposure
- Edit radial brightness
- Even exposure throughout the photo from center to corner
- Create radially transparent masks for radial color-correction

The radial density filter plug-in works with these image modes (Windows and Mac)...
8,16 bit / channel: RGB, Grayscale, Duotone, CMYK, Multichannel, Lab.

Radial Density filter controls

This is the Radial Density plug-ins control panel (Windows). Click the image to enlarge. The control panel and preview area can be changed by dragging the edges.

The filter has only three basic sets of controls:

1. radius of the density filtering.
2. radial exposure filters.
3. radial brightness filters.



Example -



The Radial Density plug-in is the only one of its kind for correction of uneven radial exposure and brightness.



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What is "Density"?

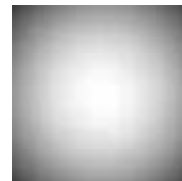
"Density" refers to the combined effect of exposure and brightness -- and to some extent saturation.

"Radial density" refers to the changes in these from the center to the corner of an image.

What is "Vignetting"?

"Vignetting" refers to radial change in exposure by the lens of the camera.

Lenses - especially wide-angle lenses and home digital cameras - do not expose evenly, but tend to expose the corners less than the center. If you were to photograph a monochrome white surface under uniform light, you would get an image of the vignetting of the lens that looked somewhat like this...



Vignetting is clearly visible in this photo...



Below we will show you how it looks after being corrected with the plug-in.

The plug-ins filtering controls

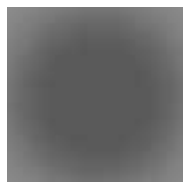
Vignetting

Here you can quickly fix vignetting.

These two controls are independent of the other controls of the plug-in.



Size 50



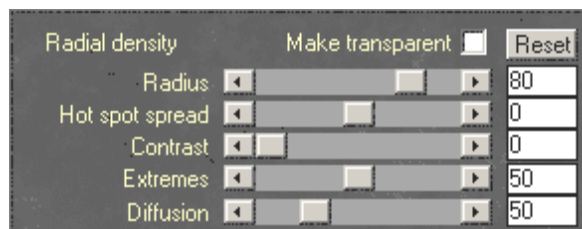
Size 100



Radial Density

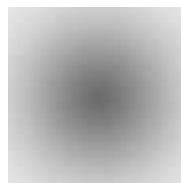
Radial density is somewhat more complicated and therefore needs more controls to be properly corrected. Radial density is a matter of radial exposure and to some degree radial brightness.

What is most important is what is known as the "hot spot" and the characteristic way in which it spreads. The hot spot is the bright area in the centre of the image. The hot spot is determined by its radius, its spread-curve, its contrast and its extremes.

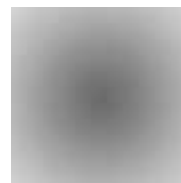


Radius

This changes the size of the hot spot.



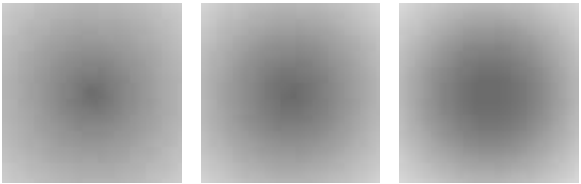
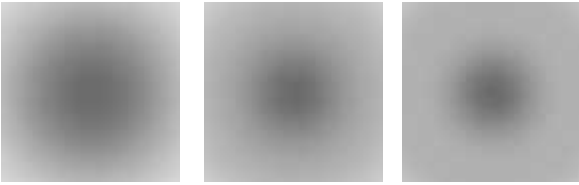



Radius = 0



Radius = 50



Radius = 100

| | | |
|--------------------------------|--|--|
| <p>Hot spot spread</p> | <p>Here we used size 50 for illustration.</p> |  <p>Hot spot -100 Hot spot 0 Hot spot 100</p> |
| <p>Contrast</p> | <p>Here we used size 50 and hot spot spread 100 for illustration.</p> |  <p>Contrast 0 Contrast 50 Contrast 100</p> |
| <p>Diffusion</p> | <p>This slider is not something you should be too concerned about. Just leave it at 50.</p> <p>Diffusion blends the individual compensation steps into each other and produce a more smooth effect.</p> <p>Without any diffusion the individual steps of the radial compensation gradient might be very clear and appear as rings. Too much diffusion on the other hand may appear grainy.</p> | |
| <p>Edges</p> | <p>Here you can raise or lower the exposure and brightness at the edges.</p> <p>Normally you will be most interested in raising the exposure of the edges.</p> |  |
| <p>Center</p> | <p>Here you can raise or lower the exposure and brightness at the center.</p> |  |
| <p>Make transparent</p> | <p>With transparency you can create radial correction layers. This means, for example, that if your image has a radial discoloration, then you can create a correction layer with the plug-in and correct it. To do this you will have to work on an extra layer in Photoshop and then adjust color after creating transparency. Finally blend with the original. We will show how below.</p> | |
| <p>Retouch levels</p> | <p>As with most Power Retouche plug-ins you can control the amount of retouching in the lights, mid tones and darks.</p> <p>White Alert and Black Alert will apply their respective colors to areas in the preview that are pure white or pure black. You can change the color of the mask by clicking in the colored rectangle.</p> |  |

Examples of Radial Exposure

Vignetting



Original, with vignetting



After

To get a perfect result, we had to focus the filtering to mid tones by setting Lights to 0 and Darks to 50.

Radial exposure correction

This is a different case where the central face has become underexposed because of the hard light to the left. In order to correct this we used radial exposure to raise the face and darken the edges.



Original



Central exposure raised. Edges darkened.

Creating frames and working with transparency

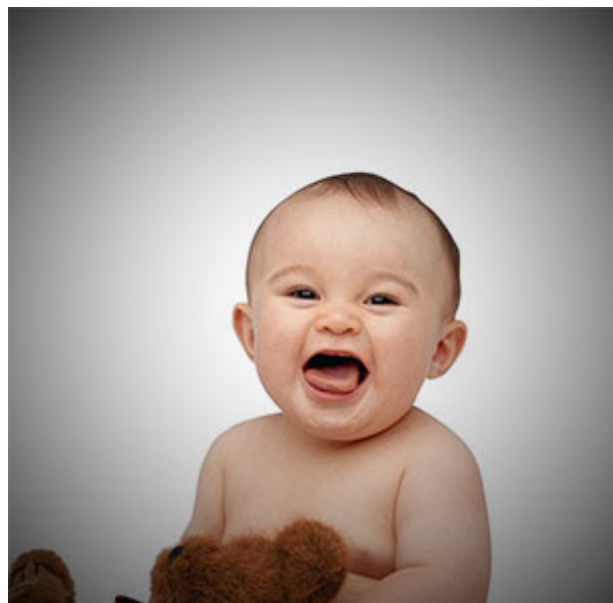
With the Radial Density plug-ins controls you can also create frames. If you use the transparency option, you can create toned frames.

In the first instance we simply reduced radial brightness. Since the background is white, this creates a gray frame.

In the second instance we wanted a warm frame, so we copied the picture of the baby and pasted it onto a monochrome warm background. We then used the plug-in on the baby-layer to create radial transparency.



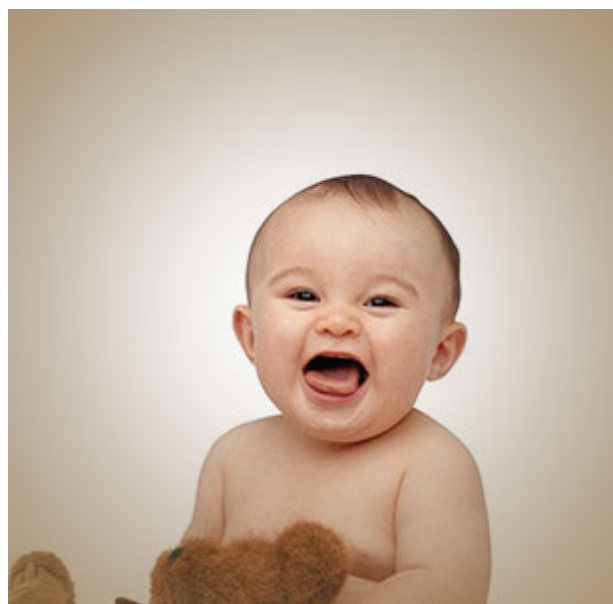
Original



Radial brightness reduced

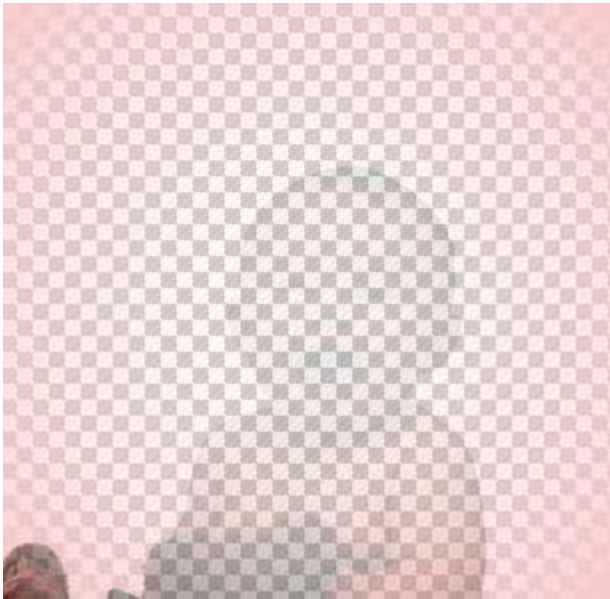


Radial transparency



When the left image is pasted on a warm monochrome background

You could also create a create a toned frame by making the center transparent and pasting the result onto the original image and then editing the top layer with the transparent center with other plug-ins. In the following example we edited the transparent top layer with Power Retouche Color Editor.



After creating a layer with a transparent center, we toned it with the Color Corrector plug-in.



The result of combining the two layers