

## **Balancing Exposures with Wide Dynamic Range Raw and JPEG**

### **Exposure Balance from Raw Format**

For a subject with a wide dynamic range, the photo should be exposed for the highlights. The histogram should be checked to make certain that the highlight areas are not clipped. From Raw, open two versions of the photo, one in which the exposure is adjusted for the highlights and one adjusted for the shadows. Then, blend the two photos and come up with the best of both (see below).

Because of the wide range between the highlights and the shadows, when exposed for the highlights, the deep shadow areas of the photo may fall off the histogram, leaving no pixels to work with. In that case, the photo should be shot twice, once exposing for the highlights and once exposing for the shadows. Check both histograms to make sure there are pixels to work with at each end of the histogram scale when the photos are blended. Also, of course, the shots need to be done on a tripod to make certain that the two photos are a perfect match. If two photos are taken, they do not need to be shot in Raw format.

### **Working with JPEG**

There are several ways in which better exposure balance may be achieved with a JPEG photo with a wide dynamic range between highlights and shadows.

#### *Magic Marker*

The Magic Marker will work pretty well on some photos but not on others. In the Photoshop tool box (on the left side of the screen) click on Magic Marker (second tool down on the right). In the photo, click on a dark area with the Magic Marker. Look to see what the Marker has highlighted. You can adjust this by changing the number under Tolerance at the top of your screen. The higher the number, the more inclusive the highlighting will be. If there are shadow areas in the picture that are not picked up by the highlighting but which should be included, hold down the shift key and click on the area you want. To make the highlighting go away, hit Control-D.

In the Layers Palette, click on the half-white, half-black circle at the bottom. In the popup, click on Curves. Click on a shadow area of the photo which has some pixels. A little dark square should appear toward the bottom of the diagonal line in Curves. (If there are no pixels, no square will appear.) Click on the little dark square. Use the up arrow on the keyboard to drag the diagonal upward at the point of the square. Keep dragging until you like what you see.

If you want to darken a light area, rather than lighten a dark area, follow the same instructions using the light areas of the picture. In curves, drag the little square down with the down arrow.

The Magic Marker might not work well on most pictures because the highlighting creates very distinct edges which would create an unnaturally sharp line between the pictures shadows and highlights or a halo.

### *Creating Two Exposures*

In JPEG it is possible to create two exposures, one for the highlights and one for the shadows, and then blending them. Blending exposures probably works better than the Magic Marker in almost every instance.

From JPEG there are two ways to change exposures.

1. Make two copies of the picture, labeling one “dark” and the other “light.” With Photoshop CS3, JPEG photos can be put into a Raw format and adjusted. With Photoshop CS2, activate the “light” image and go into Image>Adjustments>Exposure. Move the exposure slider to the right to see if it brings out the desired exposure and color in the shadow areas of the pot. If so, click o.k. Then go into the “dark” image and follow the same procedure, moving the slider to the left until the highlights are in better exposure balance. The two photos may then be blended.

2. I think the Photoshop Exposure slider produces rather extreme results. When lightening the shadows, the highlights get blown out rather quickly and vice versa. So, here’s another way to get two exposures. Make two copies of the photo as before. Activate the “light” copy and do Select>Select All (Control or Command A). In the Layers Palette, click on the half-white, half-black circle and select Curves. Control (or Command) click on an area in the mid-range of highlights in the picture. Use the down arrow on the keyboard to drag the Curves diagonal downward until the highlights look good. Do the same on the “light” image, click on a mid-range in the shadows and use the up arrow until the shadows look good. Then blend the two images.

### **Blending Two Exposures from Raw or JPEG**

Activate the “dark” image (in which you have adjusted for the highlights). Do Select>Select All (Control or Command A).

Activate the Move tool (top right in the tool box).

Holding down the Alt and Shift keys, click and hold anywhere on the picture and use the Move tool to drag the dark image on top of the light image.

In the Layers Palette, the lighter image should now be the Background layer while the dark image has become Layer 1.

Click on the Layer Mask icon at the bottom of the Layers Palette (it’s a circle within a rectangle).

Click on the Background Layer in the Layers Palette and do Select>Select All (Control A).

Do Control C.

In the Layers Palette, do an Alt-click on the Layer Mask created on Layer 1. The screen should turn all white.

Do Control V. The image should now be black & white.

Do Window>Navigator. You need to be able to see the image in Navigator as you work on the picture.

Do Filter>Blur>Gaussian Blur. Set the pixels at 20 – 50, probably closer to 20. The picture should be blurred so that there is no texture or detail showing.

Do Control M (or Image>Adjustment>Curves).

Click at the top end of the Curves diagonal and drag it to the left until you like what you see in the Navigator image (you won't be able to see what you are doing on the blurred image).

Click at the bottom end of the Curves diagonal and drag it to the right until you like what you see. (Rather than dragging the two ends of the diagonal, you can also click in the middle of the diagonal and drag it down. That might work better for a few photos).

When you think you've got what you want, click on the Background layer in the Layers Palette. Until you flatten the layers (Layers>Flatten), you can go back in and continue to tweak the Curves settings.

After all this, other Photoshop tools can be used to fine tune the photo – Levels, Curves, Saturation, Shadows/Highlights, additional dodging and burning of small areas, Sharpening, etc.

The photos illustrate the various stages of the blending – the original JPEG, “dark”, “light”, and the two blended. I used the Curves method of changing exposures. The fifth photo was done with the Magic Marker. Even though the photo was shot with a flash, I thought the background was too light and the foreground too dark.

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Adapted from John Shaw's Photoshop Field Guide – [www.johnshawphoto.com](http://www.johnshawphoto.com)

