

HOW TO: Digital Blend

HDR stands for High Dynamic Range.

Digital cameras have a dynamic range of 6 1/2 stops from the lightest (highlights) to the darkest (shadows) areas. Many times the scene we want to capture digitally or even on film exceeds the capabilities of the medium. In film we use a split neutral density filter to correct for the extended range making our scene reproducible on film. In the digital realm we can shoot two shots (on a tripod) one for the highlight area and another for the shadow area and blend them together creating one image with good highlight and shadow area.

Technique:

- 1) Photograph your subject on a tripod.
 - Expose one image for the highlights
 - Expose a second image for the shadows
- 2) Open the two images in Adobe Photoshop
- 3) Hold the shift key on the keyboard
 - Drag one image onto the other image file. (dark, shadow image on top)
- (By holding the shift key, Photoshop will center the image on the canvas)
 - The dark layer, will hide the lighter layer below. (You cannot see the other exposure)
- 4) Create a layer mask on the top layer
- 5) Choose a soft large brush and paint on the layer mask to reveal the exposure below.

Varying just the shutter speed not the aperture

-Option: Command "i", will invert the mask layer revealing the layer below. You can then paint back in the top layer. Use what ever way works for you. I use both ways depending on my image.

Another Technique (Technique credited to: George DeWolfe of CameraArt's Magazine)

- 1) Photograph your subject on a tripod.
 - Expose one image for the highlights
 - Expose a second image for the shadows
- 2) Open the two images in Adobe Photoshop
- 3) Hold the shift key on the keyboard
 - Drag one image onto the other image file. (dark, shadow image on top)
- 4) Create a layer mask on the top layer (white)
- 5) Click on the background layer
 - command "a" to select the background layer
 - command "c" to copy the background layer
- 6) Hold the option (alt for PC) key click on the white layer mask. (the image turns white)
- 7) Command "v" to paste the background layer into the layer mask. (now you have a B&W mask image)
- 8) With the B&W mask displayed -go to Filters -Blur -Gaussian Blur
 - Set the radius to 40
- 9) Click on the background layer
 - Done

Process the RAW file twice, once for the highlights and once for the shadows.

-Don't forget, white balance, color correction, and cleaning up of the image (dust etc.)

-EXPLORE

Another Another Technique

- 1) Photograph your subject on a tripod.
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- 2) Open the two images in Adobe Photoshop
- 3) Hold the shift key on the keyboard
 - Drag one image onto the other image file. (dark, shadow image on top)
- 4) Choose Layer - Layer Styles - Blending Options
 - move the upper left blend if slider to the right until you see desired shadow detail.
 - hold Option (PC- Alt) drag the left edge of the slider toward the reight until you create a smooth transition between the shadow and midtones
 - while still in the blending options dialogue box, change the blend mode to darken

Process the RAW file twice, will not work with this technique

How to: CS2 HDR

<http://www.luminous-landscape.com/tutorials/hdr.shtml>

- 1) Merge to HDR using the
- | | |
|------------|--|
| Bridge: | Tools > Photoshop > Merge To HDR. |
| Photoshop: | File > Automate > merge to HDR (this is the preferred way) |
- Turn on attempt to automatically align source images check box

-How many shots? Not less than three, and as many as five to seven, or even more. The more exposures you use the smoother the results
-place images to merge into a folder

-These shots should be taken at between one and two stops apart. They should also be done by **varying the exposure time**, not the aperture, because changing aperture also changes depth of field. And, to the inevitable question – no, you can't use different outputs of the same RAW file. They must be separate exposures covering different parts of the available brightness levels available in the scene.

-Exposure is best set to Manual mode, and Auto focus turned off.

-Shoot high .jpg or RAW

Be careful as well when RAW processing that all of the files are processed with the same parameters
Try the RAW auto settings.

Your screen is an 8 (or a best 10 bit) device, capable of only showing a limited dynamic range. There is no way that the screen can display the huge range of levels that a 32 bit floating point HDR file can contain. You can adjust the image on-screen with a slider, so that you can see various parts of the dynamic range, (the 32 bit file itself is not altered), but at this point you can't hope to see all of it at once.

2) Set the White Point Preview Slider. With the brightness beyond the range of your monitor. Set your white point slider to the right setting your desired white point. Don't worry about the shadow areas yet.

You can now save the file in 32 bit mode. It will have the extension .PBM (Portable Bit Map).

To display it properly, and more importantly to print it, you need to **convert it to a 16 bit, or an 8 bit file**. This is done with Photoshop's usual bit depth conversion tool, but, when converting down from 32 bit a new dialog is presented.

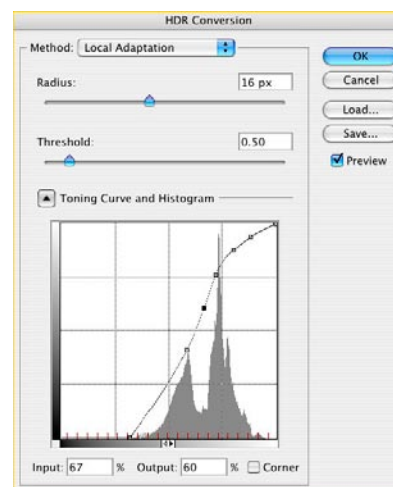
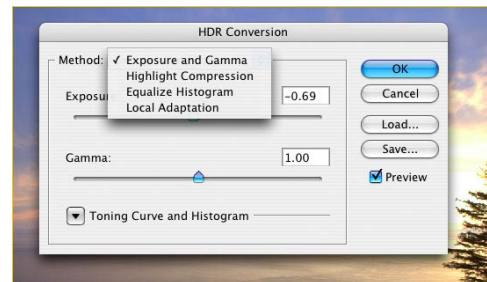
Exposure And Gamma Lets you manually adjust the brightness and contrast of the HDR image.

Highlight Compression Compresses the highlight values in the HDR image so they fall within the luminance values range of the 8- or 16-bits-per-channel image file. No further adjustments are necessary; this method is automatic. Click OK to convert the 32-bits-per-channel image.

Equalize Histogram Compresses the dynamic range of the HDR image while trying to preserve some contrast. No further adjustments are necessary; this method is automatic. Click OK to convert the 32-bits-per-channel image.

CHOOSE:

Local Adaptation Adjusts the tonality in the HDR image by calculating the amount of correction necessary for local brightness regions throughout the image.



-Click the triangle at the bottom of the box to view the Toning Curve

-drag the lower left dot to the right to set the darkest areas of the image

-drag the upper right dot to the left to control highlights

-click middle of the curve top control overall brightness of the image

-set the threshold to a low setting .25?

-adjust radius until the image looks smooth

lots of tutorials... more good info

<http://www.photoshopsupport.com/tutorials/cs2-photoshop-9.html>

<http://photoshophelp.blogspot.com/photoshophelp/>