HDR Photograhy Part 2 by (by Steve Zimic)

If you're not familiar with the basics of HDR imaging please read the introduction to HDR. Before we get into the software used to create an HDR image, there are some basic shooting tips you should follow.

• For cameras with an auto bracketing feature, the camera should be in Aperture Priority mode. The reasoning here is that as the camera creates an exposure bracketed series, the aperture needs to remain constant so there is no change in depth of field, resolution, or lens aberrations between shots. For cameras with no autobracketing, you will have to set each exposure manually by varying only the shutter speed. For either method make sure that any auto ISO feature is turned off.

• The camera's drive mode should be set to continuous high speed. This setting will minimize any differences between shots due to subject movement. Note that compositions with foliage in the scene on windy days may be problematic even with high frame rate cameras.

• Focus should be set to single or manual so there are no changes in focus between shots.

• Even though most HDR software contain an "auto-align image" feature, a tripod and cable release is advisable for the best results, especially in low light. Cameras with a high frame rate may be able to create a well aligned series without a tripod, letting the software handle the minor misalignment of images. If you're creating the series without auto bracketing, a rock solid tripod is strongly advised to prevent any camera movement due to adjusting the camera's shutter speed.

The available number of bracketed shots and exposure variation between shots, will vary greatly between camera models. Somewhere between 5 and 9 shots total is ideal for most situations, but even cameras limited to only 3 shots, 1 stop apart, can produce excellent results when the lighting isn't too harsh. My personal experience is that 3 images 2 stops apart yield the best results for most lighting situations.

Processing a bracketed series into an HDR image can be done in Photoshop without any optional software. Starting with CS4 Adobe has an 'auto blend layers' command. This method gives you no control over the final result but it does a good job aligning images and combining the different exposures. You will need to load

all of the bracketed images into one document in Photoshop as layers for this to work. Here's a link to a quick Adobe tutorial on the 'auto blend' feature.

Starting with CS5, you can use the HDR pro feature built directly into Photoshop. Simply select the bracketed series of images in either Bridge or Lightroom and select 'merge to HDR pro'. There's a host of controls and even some presets available. One unique feature of HDR Pro is the ability to turn on or off the images in the series that are used to render the HDR image. Here's a link to a video tutorial on how to use HDR Pro.

Optional Software

PHOTOMATIX - This is probably the first popular software for HDR imaging to hit the market and is still a viable contender. Reasonably priced at only $39 for the basic version, it is available for both Mac and Windows. With lots of controls and plenty of presets, you can create either natural or over-the-top style images with a minimum of fuss. Supposedly the software only acts as a plugin, but on my Mac it works as a standalone program as well. The software also allows batching from a folder of many bracketed images. The number of bracketed images of each scene must be the same, plus you can only apply one set of adjustments to all, but once it's running you can go make dinner and come back to a completed set of HDR images. Click here to download and learn more about this software.

NIK HDR EFEX PRO 2 - At $99 it's a bit pricier than the basic Photomatix but in my opinion worth every penny. The controls are very intuitive and quite similar to Adobe's Lightroom and Camera Raw so you're up and running in very short order. There's also local control using 'U Point' technology - very useful and easy compared to Photoshop. It works very smoothly as a plugin for both Photoshop, Lightroom and Aperture. I've also been able to use it as a stand-alone program on my Mac. Even if you're not able to create a set of bracketed images you can use the software on a single image to create some truly dramatic images. You can also download a trial version here.

In part 3 we'll discuss how to create the HDR look with only a single image. This is not the preferred method but it can work fairly well. In the meantime, you may like to view some of the HDR images I've created by clicking here.