

# High Dynamic Range (HDR) Photography Using Photomatix

by Simone Koffman

This technique should really be called "High Brightness Range Photography" because the best time to shoot for HDR is when the brightness range is too great for our cameras to capture, such as on an extremely bright, sunny day at noon. This is where HDR really shines.

You still need a very interesting subject or scene to make this work. The image has to be able to stand on its own. Just because you're doing HDR doesn't mean that it's going to work. Remember that the image has to be more important than the effect.

**Subjects that work well for HDR are high contrast scenes with lots of fine detail, textures and colour.** The enemy of HDR is any movement in the scene because the images won't align precisely and you get ghosting.

In the field, set your camera to Aperture Priority, Continuous Shooting and Auto Bracketing and ensure that your camera is set to "see blinkies". "Blinkies" refers to the Highlight Alert warning that causes overexposed highlight areas to blink when the image is reviewed on the LCD screen. Always use a tripod and remote release.

The suggested total exposure range for the images is +/- 2 stops, in 1 stop increments. I shoot Nikon and I dial in, 0 exposure compensation (right on the meter reading), plus 1, minus 1, plus 2, minus 2. In total I have 5 separate exposures.

Every shot, except 1, should have blinkies. The darkest one should have no blinkies at all. If there's a lack of blinkies in your brightest shot, you need to brighten, (add to the exposure) until you get sufficient blinkies.

Back at the computer, I use Photomatix to process the multiple photographs. You can obtain a free demo version of Photomatix at [www.hdrsoft.com](http://www.hdrsoft.com).

1. Bring your images into Photomatix, using whatever method works for you. I just drag my images into the program.
2. Click on **Tone Mapping > Details Enhancer** - You'll get a **General HDR Options Menu**.
3. This is where you play with all the sliders:
  - a) **Strength slider**: At zero, you get a more photographic effect and at 100 you get a very illustrative or cartoonish effect. Play with it until you find something you like.
  - b) **Colour Saturation** is just that, colour saturation, slide to taste.

- c) **Light Smoothing:** The higher the number the more photographic and the lower the number the more illustrative the image will be.
- d) **Luminosity:** Overall Brightness
- e) **Tone Settings:** White Point - Whitens whites - Black Point darkens blacks.
- f) **Gamma:** Brightens or Darkens mid tones.
- g) **Colour Tab:** Temperature, Saturaton Hightlights, Saturation Shadows, I leave all three at zero. I prefer to tweak in Photoshop.
- h) **Micro Tabs:** Micro Contrast I keep all the way to the right and micro smoothing all the way to the left. Play with them in tiny increments to see what you like.
- i) **S/H Tab:** Shadow/Highlight - If you put your cursor on these, a pop up menu will explain what they do. Again, I just leave them all at zero and tweak in Photoshop.

Once I see what I like, I hit "Process" and wait for Photomatix to do its thing. If you think this is the end of the process, you're wrong! This is just the beginning.

At this point, do a 'save as'. I have a folder called "Tone Mapped Only", where I save all my tone mapped images. Now, take this saved image into Photoshop and treat it as you would any other image, making either very basic adjustments, or go crazy and have fun!

### HDR Using Photoshop

I do not use this method, but here's a basic outline of the HDR steps, using Photoshop:

Shoot a bracketed series of images, ensuring you have both lush shadow and highlight detail (this could run from 3, to any number of exposures, using plus and minus on the auto-bracket feature on your camera.) Use a solid tripod and cable release.

Select the bracketed series in Bridge and go to Tools>Photoshop>Merge to HDR.

Convert your 32-bit image to 16 bit, using Image>Mode>16 Bit. Once this is done, make adjustments to your image as you like.