

HDR photography

High dynamic range photography also benefits from the autoexposure bracketing technique. You can use bracketing to take a series of between three and nine precisely aligned photos at various exposures. You then use a program that evaluates the dynamic range in each image and creates a 32-bit master file that contains the best exposed areas from each photo. It is then a simple step to convert the master file into a regular 8- or 16-bit image file with a dynamic range that exceeds that of any of the single photographs.

Photomatix

All versions of Photoshop CS from CS2 onwards have a HDR function. If you don't have Photoshop then Photomatix is a widely used alternative. Designed specifically for HDR photography it gives you more options and greater control over the final result than you will get from Photoshop.

You can download a trial version of Photomatix at www.hdrsoft.com. The trial is not time limited, but it produces photos embedded with a visible watermark until you pay for the software. It takes a while to learn how to use it properly, so the unlimited trial period is helpful.

Unnatural images

HDR has a reputation for producing unnatural looking photos. You will find many such images on the internet. However, this is down to the way the software is used. It is just as easy to make subtle adjustments, which extend the dynamic range of an image without making it obvious that HDR is at work.

It is a worthwhile technique to learn if you regularly find yourself taking photos of high contrast scenes. In most cases you can obtain a wider range of detail in both the highlights and the shadows than is possible from just a single image. In this respect it is little different to the variety of darkroom techniques used to display the maximum range of tones from a black-and-white negative when making prints.



Above The Photomatix software is available from www.hdrsoft.com. You can download a free trial to evaluate the program. The licence fee is US\$99.

Case study David Marsh

We use HDR as a means to produce real life images – we do not favour the ‘overcooked’ effects that many photographers go for. We have found that the best number of images for HDR is five.

If you are shooting in a city at night and you use just three images, the lights from the windows of the buildings tend to be burnt out. However, using seven images creates a very dark night sky. Using five images enhances the night sky.

To get the range of exposures needed we set the bracketing to 2/3 stop apart. We use an EOS 1Ds Mark III shooting JPG images files rather than RAW. Using an EF 24-70mm 2.8L lens we set the aperture to f8 and ISO 200. On a camera with 21 megapixels ISO 200 is fine despite having five images compounding the noise.

In certain conditions an exposure time of 30 seconds can be too short and we then have to use the bulb setting, which makes things much more complicated. We’ve found that exposures that are too long can cause ‘glare’ from the light sensors in the camera body, creating a purple effect to the edges of the camera frame.

With a very sturdy Manfrotto tripod and the focus set to manual, we compose the image and then use the Live View mode to get a crisp focus.

2-second delay

The camera is fired using the self-timer for a 2 second delay. With the camera set to autoexposure bracketing, this automatically shoots the five images at the different exposures we require with no movement of the camera.

We don’t bother with setting the white balance as the auto white balance setting is fine. When combining five images, the difference in white balance appears irrelevant. The only exception to this is if the scene is only lit by street lighting, which gives that horrid orange glow.

We’ve tested many HDR software packages but much prefer Dynamic Pro HDR by www.mediachance.com. This offers more control, more creative tools and greater ease of use over alternatives. Once the image has been created using this package we then open the same image in Photoshop CS3 and use the tools to control the colour and hue.

Finally, we might take one of the five images that we initially used and cut certain elements from it and paste them over the final HDR image to help make it look more realistic.

David Marsh is Project Director at mbcrc8 – a company which specialises in HDR images for business clients. You can see more examples of their work at: www.hdrimaging.co.uk

Below and right Here are just three of the images (below) used to create a single HDR image (right). The aim is to capture detail in most areas of the subject without giving the image an ‘overcooked’ effect often produced by newcomers to the technique.



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