



THE NEXT STEP IN LIGHT METERS

Sekonic's L-758DR Digital Master reads light the way your camera's sensor reads light.

SO WHO NEEDS A NEW LIGHT METER?

There's nothing new about handheld light meters. They've been around for quite sometime, and there are more than a few meters on the market capable of taking dead-on accurate exposure readings. And the kicker is that some of the least expensive meters are as accurate as their top-of-the-line brethren. As for

getting squirrely, and it has nothing to do with the accuracy of your meter. It has to do with the light gathering characteristics, i.e., the accuracy, of the imaging sensor in your camera.

Truth be told, no two digital cameras respond to light the same way. The sensor in your camera, be it CCD or CMOS, started off as a small portion of a larger sheet, or

els of the sensor in your particular camera may or may not jive with the numbers touted on the manufacturer's website. According to a knowledgeable product manager of a major camera manufacturer, a variance of plus/minus 1/2 stop is considered acceptable for consumer DSLRs. (Case in point: three 'identical' pro-quality DSLRs tested for this article differed in ISO ratings, dynamic range, and clipping points).

“By accurately profiling your camera's imaging sensor, your image files should prove to require far less post-production diddling.”

the meter built into your camera? It's also quite accurate - in three modes, no less. So the question is: who needs yet another meter?

The answer to this question is a two-parter. The answer to the first part of the equation is 'yes' - the meters you currently own are terrific. Light is light, and most all light meters do a fine job converting light values into F-stops and shutter speeds.

The second part of the equation is where it starts

wafer, that while designed to be equally light sensitive across the board, typically varies from one end to the other. The prime cuts, usually located around the center of the wafer, are usually ferried off for scientific and/or military applications. The balance of the wafer is divided up for DSLRs, with smaller and less critical edge sections diced up for digicams and cell phones. As said in the meat packing industry, nothing goes to waste.

The end result is that the specified sensitivity lev-

SPEC SHEETS VERSUS REALITY

What this means is that just as it's imperative to test new film emulsions before heading out on assignment, it's equally imperative to calibrate the precise sensitivity levels of your camera's imaging sensor, which like film, can vary in dynamic range, ISO sensitivity, as well as at which points it starts blowing out highlights and clogging up shadow details. The bottom line is just as you profile your computer monitor, your scanner, and your printer to a common standard, it makes equal sense to profile the exposure accuracy of the sensor in your camera. And this is what separates the Sekonic L-758DR Digitalmaster from the light meters you currently use.



PROFILING YOUR CAMERA SENSOR

The actual test procedure is a fairly easy chore. It entails photographing the 'A' side of the Sekonic Exposure Profile Target (optional from your Sekonic dealer), which contains a series of grey patches in 1/6th-stop increments. The target should be photographed +/- 5-stops in full-stop increments, for a total of eleven exposures. If you are calibrating a 35mm-based DSLR under daylight or tungsten conditions, stop the lens down about 3-stops from the widest aperture and bracket your exposures using the camera's shutter speeds. If you are

In addition to running a profile test at the camera's native ISO rating, you should also test an additional profile at a different ISO rating (i.e., ISO 100 and 400). By entering exposure profiles of two separate ISO ratings into Sekonic's Data Entry Software, the software automatically calculates correct exposure parameters for all other ISO sensitivities from 3 to 8000.

The next step is to open the resulting image files in Photoshop (or other image editing software), set the medicine dropper to an area of 25 (5x5) pixels, and locate the patch closest to 18% (medium) grey

Using the supplied USB cable, you can now upload the new profile data from your computer to your L-758DR meter. Up to three separate exposure profiles (Camera 1, Camera 2 and Camera 3) can be stored in the L-758DR for instant recall. When using these profiles the meter automatically adjusts profile parameters based on your choice of exposure mode, i.e., Ambient, Flash, Incident, or Reflected, at any ISO rating you set it for. By accurately profiling your camera's imaging sensor, your image files should prove to require far less post-production diddling. ■

“Just as it’s imperative to calibrate your monitor, scanner, and printer to a common standard, it makes equal sense to profile the sensor in your camera if you’re serious about exposure accuracy.”

profiling electronic flash, set the lens to about f/8 (allowing for 5-stops over and under the 'correct' exposure) and bracket via F-stops. Make sure your strobes are fully recycled before each exposure to ensure uniform exposure times.

Separate profiles should be created for ambient, tungsten, and electronic flash as your camera sensor reacts differently to each of these light sources. (The meter can store up to three custom settings). When creating profiles for tungsten and electronic flash, it's important to use the same reflectors, umbrellas, and/or soft boxes you normally shoot with to further minimize the variables.

in the green channel (118G). A variance of +/- 2 is acceptable. Once you determine the patch closest to medium grey, you next determine the dynamic range parameters and clipping points of highlights and shadows by sampling the various test patches.

After launching Sekonic's Data Entry Software (Mac or PC, included with meter), open a Data Transfer Template and enter the results of your profile tests using the dropdown-style data boxes. When you are finished entering all relevant data, click on 'Calculate', followed by 'OK'. You now have a custom profile of your camera's imaging sensor.

►► THE CORRECT EXPOSURE VS. THE BEST EXPOSURE

It would be wrong to leave out the one factor that affects what we consider the 'correct' exposure, and that is our eye and how it perceives the image we captured. The point is that the 'correct' exposure is often not the best exposure for the mood and feel of any given photograph. Some photographs look better slightly overexposed, others slightly under. The image determines the correct light value and it's your job as the photographer to decide where that point lies. The key is to know the starting mark, as in, your camera's true native ISO, and a clear understanding of where you start losing highlights and shadows. Once you know where you stand, anything is possible.