Gray Card Readings: Exposure Control for Tricky Light

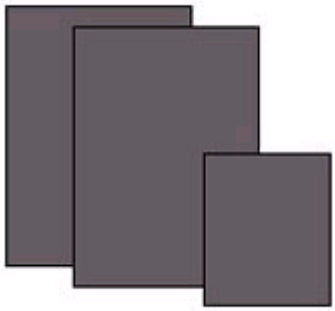
by Kris Butler

What's the best exposure for a candle-lit couple sitting in the moonlight on a darkened patio? How about for the best sunset of your vacation? Or, for bright shafts of sunlight filtering through palm fronds onto your subject?

Photo by Jan Koeslag of Orangeville, Ontario, Canada..

In tricky lighting situations like these, using your camera's built-in light meter to take a reading off your subject will often not produce the results you want. Bracketing your shot will be a good idea, but is still no guarantee. Likewise, you could use your flash, but to really capture the mood or the subtle play of light, you may not want to.

Like trying to knock down a stack of bottles only 5 feet away with the loaded ball at the county fair that won't throw straight, tricky light can be very frustrating. But, you can take home your prize photo by using the simple and inexpensive gray card.



Here's how it works: The pioneering innovators who developed photography equipment discovered that average light in an average scene is 18% gray. Therefore film, and now digital image sensors, have been designed to produce the best exposure with the average of 18% gray light. A breakthrough, but a compromise as well.

What is an average scene after all? Well, a combination of moon and candlelight is not going to be average or even close to it. Neither is a sunset average. Thus, your built-in meter does the heavy lifting and tells your camera how to compensate and get an 18% gray tone whatever you point it at. And there is the other compromise.

Your camera's built-in light meter reads reflected light from the object you are pointing it at. But, to get the truest possible exposure in tricky light, you will want to read the light falling onto your subject, rather than reflecting off it. An 18% gray card will let you read that falling light for a "true" exposure. (The same "true" exposure can also be accomplished using an incident meter, but a gray card is much less expensive.)

When you take a meter reading off a gray card, you are metering a reflection that is already balanced to 18% gray, so when your meter adjusts to the strength of the light, you get a true representation of the tones of all other objects and subjects in your photo.

These are the basic (and easy) steps you'll need to follow to use a gray card successfully:

1. Get your subject to hold the gray card up toward your camera ensuring that it is tilted to catch the light in the same way as your subject. To get the right reading, the gray card and your subject must be receiving the same illumination. Be sure not to cast your shadow in the light path to the gray card or you will get a false reading.

2. Put your camera on manual.

3. Fill the viewfinder with the gray card and take your light meter reading. If you are using a zoom lens, zoom in to get your light meter reading, set the exposure, then zoom back out and frame your photo.

4. For objects, rest your gray card against the object or hold the gray card in one hand while you take your light meter reading and adjust the camera settings with your other hand.

5. Remember, your camera must be on manual mode or be able to retain a light meter reading until you press the shutter. If your camera is on automatic, the light meter reading will change as soon as you pull back from the gray card.

Gray cards are available at most camera shops as well as online for around US$15. Happy snapping