

HOW TO EXPOSE & SET UP A DIGITAL CAMERA TO TAKE GREAT PHOTOGRAPHS

BY JEFFREY L. ARMSTRONG

The following will outline the ETTR (exposing to the right) method of exposure in digital DSLR type cameras. These methods have proven successful for me after years of learning & practicing from some very knowledgeable professional photographers.

These methods are:

- a. Use the “RAW” file format.
- b. Use either Manual “M” or Aperture priority “Av” mode for exposure.
- c. Use ETTR (expose to the right) method.
- d. Use Lightroom, Adobe CS or Apple Aperture software to process that “RAW” image. “RAW” images are an unprocessed file & must be processed by software such as LR to see the full advantage of the “RAW” file image. There are other software programs available other than the above.

Following is how I set my **Canon** cameras for exposure for any given scene and some other helpful tips.

- a. Cameras are always set on “M” or “Av” exposure mode depending on the light, photographic conditions & subject matter. I almost never use Shutter “Tv” or Program “P” mode.
- b. “RAW” exposure is the default file setting. I almost never use jpeg (joint professional exposure group) setting. If, I do shoot jpeg photos I then will most likely use the “P” program mode exposure setting.
- c. Use Canon drive mode “AI servo” for action or “one shot” for static object shots. I generally leave my drive mode set to “AI Servo” as it works as well for action and static shots for most situations.
- d. Depending on the available light, the “ISO” is set to the lowest possible (100 ISO). “ISO” 100 is for well-lighted scenes and a higher setting is needed as the lighting gets worse, clouds, overcast, etc. My in camera “ISO” settings are set for 1/3 increments. The higher the “ISO” setting the more digital noise is

apparent in the photo and this will vary from one camera model to another. Lesser expensive cameras will have lower noise thresholds and more expensive cameras will have a higher noise threshold.

- e. Metering is set to “Evaluative” for landscape type photos and “Partial Metering” for single object photos, such as birds. I do on occasion use spot metering depending on the conditions & subject matter. White Balance is set to “Auto White Balance” (AWB) as the default. When using “RAW” exposure it generally makes no difference which white balance setting is used, as it can be re-adjusted in a post-processing program such as Lightroom. This not so for jpeg exposures where white balance setting is more critical.
- f. The f-stop is set depending on the lens focal length and scene; use higher stops, f/8-16 for landscape (a deeper “depth-of-field”) and a lower f-stops, f/2.8-8 for portraits (a shallow “depth-of-field”). My in camera f-stop adjustments are set in 1/3 increments.
- g. Then set the shutter speed, again depending on the scene. Lower speeds, 1/60 – 1/250sec. for static subjects, and higher usually 1/1250 to 1/2000sec. and for action scenes, such as flying birds, rodeos when ever you need to stop the action. For pleasing blurs, such as running water, use 1/8 or 1/4 second shutter speeds or whatever the scene needs. My in camera shutter speed adjustments are set for 1/3 increment.
- h. Also, the in camera “highlights” menu-setting (aka the “blinkies”) needs to be enabled.
- i. The camera’s metering scale, viewed through the rear eyepiece or top right LCD panel, needs to be used to achieve a properly exposed picture. Start by setting the cursor at the center of the scale and take a picture and evaluate the photo’s Histogram. If more or less exposure is needed move the cursor to the + or – side as need. This metering scale is generally referred to the Exposure Compensation scale.
- j. I do not evaluate the image capture quality by viewing it in the cameras rear LCD monitor. The image displayed in the LCD monitor is an in-camera compressed jpeg and is NOT an accurate representation of the final image. I look at the Histogram displayed

in the rear LCD monitor as a more accurate representation of the Exposure and check the LCD jpeg image “ Highlights” (Blinkies) for over exposure and adjust accordingly usually by changing the “ISO” or shutter speed. Remember that when using ‘M’ mode all settings are set by you. When using ‘A’ mode, the aperture is fixed at what you have set and the shutter speed auto adjusts depending on the fixed ISO setting, so then the usual adjustment you have to make is the ISO setting to change the exposure.

- k. In using the in camera metering scale an axiom taught to me by Arthur Morris (Artie) of “BirdasArt.com” is that; in the early and late hours of the day, (2 hours after sunrise and 2 hours before sunset), the meter is DUMB and in the mid-day the meter is SMARTER. What this means is at mid-day the meter can be set closer to, or at, the meters mid point, “ O ”, and in the earlier and later hours of the day the meter will most likely need to be set to either the, + or –, side of the exposure scale by approximately 1 to 2 stops, depending on the scene and light.
- l. I set the “Picture Style” to “Neutral” as this is what Canon recommends for images to be processed in a computer using software such as Lightroom.
- m. As a in the field “depth-of-field” check I use an iPhone app called ‘simpleDOF’.

All of the above applies mostly to outdoor photography. For indoor photography, some settings may need to be changed such as the White Balance may need to be adjusted for artificial lighting, i.e. incandescent or fluorescent, and/or flash usage and possibly some others as well. There a lot of variables to all of the above depending on the camera, field conditions and the style of photo you want, nothing is set in stone. Photography is a creative art so just go do it.

Should you have any questions, please feel free to contact me at
(510) 604-6100
Jeff Armstrong
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