

Your World 60D

The Still Photographer's Guide to Operation and
Image Creation with the Canon EOS 60D



full stop.
good writing for better photography

an eBook by:
Douglas J. Klostermann

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INTRODUCTION

With the introduction of the 60D, Canon has continued its well respected line of powerful and versatile digital SLR cameras. Boasting features such as an 18 megapixel sensor, 63-zone dual-layer exposure metering system, high ISO performance, and Digic 4 image processor, the 60D shares many of the capabilities of Canon's higher-end models. And with its 5.3 frames per second shooting speed, articulating high resolution rear LCD Monitor, and customization options it has the ability to meet most any dedicated photographer's needs. The Canon 60D is a powerful, advanced tool for digital photography and is fully capable of capturing professional quality images in most any situation you wish to use it. But it is merely a tool.

It is up to you to make use of its features and capabilities to create the images you envision. Since the camera is a tool to take the images *you* want to take, you can't always allow the camera to make decisions for you. You have to take control of the camera to ensure that you capture exactly the images you intend – by autofocusing where you want, setting the aperture or shutter speed that you want, and obtaining the exposure you want. While the 60D is an intelligent camera, it cannot read your mind and your intentions and does not know that you wish to focus on and properly expose the small blossoms in the foreground, while making the background appear out of focus, and the branches to be caught still and not be blurred from the motion of the wind, on this bright, sunny day (see *Figure 1*). You have to tell the camera to do all of this, through the various controls and settings, such as the Auto Focus Point (focus on the blossoms), the Exposure Metering Mode (properly expose the blossoms), the Aperture setting (the out-of-focus background), the Shutter Speed (freezing the motion of the branches), the ISO (bright day) and the White Balance (sunny day).



Figure 1 – Japanese Garden, Brooklyn, NY – Autofocus, exposure metering mode, aperture, shutter speed, ISO, and white balance all considered in creating this image. Shutter speed 1/125, aperture f/6.3, ISO 200

One has to think about all this stuff for every photo? Well, yes, that is what digital SLR photography is all about. At least if you wish to consistently create dramatic and compelling images. That is why the 60D has all these controls and features for you to make use of. You're not in the realm of point-and-shoots and entry-level digital SLR cameras anymore!

While the camera's manual can tell you about all the settings and controls and how they function, this guide will build upon that and tell you when and why you might want to use them. Every button, menu item, and custom function of the 60D is there for a reason: to help you capture the images you want. Some of them are more useful to different types and levels of photographers, and you don't necessarily need to learn and use them all, but this guide should help to give you the knowledge to confidently use the ones that turn your Canon 60D into an image capturing tool that works best for you.

There are many different ways to use a digital SLR (dSLR) camera and its controls to capture images, and I'm not going to attempt to explain them all. I am going to concentrate on the ways that I believe are the most practical, useful, and effective. The settings and techniques I discuss apply to general photography, which includes most travel photography. I will point out other options for users who might wish to work differently and I encourage you to experiment and find the techniques that work best and are most comfortable or intuitive for you.

Since this guide is intended to help you get the most out of your 60D, it will not go into detail about all the automatic features and basic modes. The Canon 60D is a sophisticated tool that deserves to be used to its full potential, and that means taking control of the camera and its functions. And since this guide is about image creation – the capturing of a photograph – it will not discuss features that deal with image processing, such as the Creative Filters (which are pretty self-explanatory). And finally, while it will discuss basic video settings and options to get you started, the guide will focus on still photography and image creation. However there is a great deal to be learned about everything else including the autofocus system, the exposure metering system, white balance, and even basic composition.

This guide is intended to be used in conjunction with and in addition to the camera's manual, not to replace it, so every bit of information in the *Canon 60D Instruction Manual* will not be repeated here. Note that the 60D manual can also be obtained as a PDF file from the Canon website here:

http://www.usa.canon.com/cusa/consumer/products/cameras/slr_cameras/eos_60d#BrochuresAndManuals

For example, I may explain the use of AI Servo autofocus mode, but not necessarily walk through how to change this setting on your camera. If you don't yet know how to change it please read the manual where it will tell you to press the AF Mode Selection Button on top of the camera and turn the Main Dial until the desired mode appears on the top LCD Panel screen.

As you can see, there is a lot to make sense of regarding terminology and controls, so I recommend that you familiarize yourself with the controls and displays of the camera body, as shown on pages 16-20 of the *Canon 60D Instruction Manual*, as well as read through the manual and attempt to understand as much as possible. Yes, much of it may be complicated and

Shutter Sync. – Leave this on 1st Curtain unless you are going to be shooting a scene with a slow shutter speed and you want the light trails or blur lines of a moving object to appear behind the object, thus looking more “realistic” (or cartoon-like). In that situation, use 2nd Curtain.

Flash Exp. Comp – set this to minus 1 for now. It will be discussed later in the **Flash** section.

E-TTL II – Evaluative

Wireless Func. – Disable for now unless you plan to use it with external flashes.

External flash settings are more advanced, and may vary with user and situation.

Shooting 2 menu

Exposure compensation/AEB

You can use the Quick Control Dial for changing Exposure Compensation, but you need to access this menu item for Auto Exposure Bracketing (AEB). More about **Exposure Compensation** and **Auto Exposure Bracketing** later. Put this in **My Menu** if you bracket often, such as for High Dynamic Range (HDR) shooting.

Auto Lighting Optimizer

Disable so that the camera isn't doing something with your exposures without you having control over it. Hopefully after reading this guide you will know how to meter, read your histogram, and use **Exposure Compensation** to make proper exposures. A little more about **Auto Lighting Optimizer** later.

Picture Style

User preference for those shooting JPEGs. Not needed if you shoot in RAW because the selected style applies to JPEG files only, although please note that the Picture Style you set applies to the images you see on the rear LCD Monitor *even* if you are shooting in only RAW. So the exposure shown on the LCD Monitor may not be the same as the exposure in the RAW files. So it is somewhat important that you leave this set at *Standard* (or *Neutral*) if you shoot RAW. Also choose *Standard* or *Neutral* if you shoot JPEGs but plan to edit in Photoshop later. More about **Picture Styles** below.

White Balance

Consider putting this in your **My Menu** since there is no dedicated button for it on this camera. Leave on *Auto White Balance* (AWB) most of the time, especially if you shoot RAW. You will learn about using **White Balance** (WB) with JPEGs and to creatively use the other WB settings later.

Custom White Balance

This is for setting a custom white balance rather than using one of the standard White Balance (WB) settings like *Cloudy* or *Fluorescent*. For advanced users. Particularly handy for studio work where the lighting will remain constant or in a situation with mixed lighting. This will be covered in the **White Balance** section.

WB Shift/BKT

This is White Balance Shift and White Balance Bracketing. Also for advanced users. Used for adjusting to a very precise WB, or bracketing exposures using different WB settings.

session where you are bracketing, then use your camera the next day, you will probably have forgotten that it is set on bracketing, and then 2 out of 3 of your shots are going to be improperly exposed.

recommend: 0

C.Fn I-5

This setting determines the sequence of exposures when using **Auto Exposure Bracketing**. The setting depends how you like to sequence your bracketing. This may be important to you if you do a lot of HDR work. Setting 0 means the correct exposure is taken first, then the darker exposure, then the lighter exposure. Setting 1 means the order is darker, normal, lighter. I prefer setting 0 but an HDR shooter may prefer setting 1. This also affects the bracketing sequence for white balance (WB) bracketing so determine what sequence you want if you make use of WB bracketing.

recommend: 0

C.Fn I-6

This option, Safety Shift, allows your camera to change an exposure setting without your expressed permission when it is vital to getting the shot. This is a good thing in certain situations, such as when shooting at a concert and the lighting and lighting levels are changing erratically, or when shooting in very dim light without flash, and proper exposure may not occur based on your current aperture or shutter speed settings. It only functions in Tv and Av modes. I would enable it *except* when shooting with a flash in dim light and you need more precise control of the exposure settings to avoid blur.

recommend: 1

C.Fn I-7

This setting determines the flash sync shutter speed setting or range that will be selected by the camera when using a flash (internal or external) in Av mode. This really depends on your use and experience with a flash, and whether or not you are using a tripod. Setting 0 will choose a wide range, which may give you a 1 second or even slower shutter speed, which will obviously be too long to hand-hold. Setting 1 will keep it in a more reasonable range for hand holding, but won't allow you to "drag the shutter" slower than 1/60s. Setting 2 keeps it fixed at the camera's sync speed of 1/250 at all times. I use 0: Auto but must then keep a close eye on the shutter speed to make sure it doesn't get too slow. But if you have less experience with flash and with shooting, it would be wise to keep it on 1

recommend: 1

C.Fn II: Image

C.Fn II-1

This setting is for the camera to apply noise reduction to long exposures. It does this by taking a blank image right after you take your image, for the same length of time as your image. It then compares where the noise is on your image and on the blank image, and then cancels it out. This setting will most likely result in more accurate noise reduction than any attempt in Photoshop. If you typically take long exposures, especially at high ISOs, you should determine if you want to apply this sometimes when the camera thinks it should, setting 1; or all the time, setting 2. Note

read the light, and set their exposure manually. But the truth is, digital photography just isn't done like that. There is no need to turn yourself into a human light meter and spend years honing your ability to detect subtle changes in lighting levels. Aperture Priority Mode and Shutter Priority Mode are perfectly acceptable and common ways to use your camera and its intelligent built-in exposure metering system that Canon spent years developing.

But there are times you may wish to use Manual Exposure. For example, if you are taking several photos to stitch together into a panorama, you want them all to be taken with the same exposure so that they are consistent across the entire scene. Or if you are working in a studio setting and the lighting will remain consistent, you can set the exposure once and then not worry about it. Or in any other situation where the lighting will remain consistent such as an indoor performance where the lighting does not change.

To determine the exposure settings, first meter the scene with your metering mode of choice (you will learn about metering modes immediately below) by setting your camera on Av or Tv and selecting the aperture or shutter speed you desire (depending on which mode you are in: Av – select aperture; Tv – select shutter speed). Look through the viewfinder at your scene, half-press the shutter button to start the camera's metering, and make note of the aperture and shutter speed in the viewfinder. Or press the AE Lock Button [*] and note the settings on the top LCD Panel. Then set your Mode Dial on M, and dial in those settings. Use the Main Dial to set shutter speed and the Quick Control Dial to set aperture. Focus and take the picture. The Exposure Level Mark in the viewfinder will indicate if the scene will be properly exposed, or under- or over-exposed. You can adjust the aperture or shutter speed to bring this level to 0.

Metering Modes

It is one thing to know that your new Canon 60D provides you with four different metering modes to choose from. It's another thing to know how they differ and when and how to actually use them in real life photo situations. The 63-zone metering system of the 60D is an excellent improvement over the metering system of the 50D, and the Evaluative Metering Mode can be counted on to determine the proper exposure for your images nearly all of the time. But there are situations you may want or need to use the other modes.

Evaluative Metering

This is the default mode for your camera, and it can be used for almost every situation you shoot. Maybe 90% of the time, maybe more. The camera evaluates the entire scene, as divided into 63 zones, and chooses the best exposure based on its algorithms and database of thousands of images. The metering system is so good it can even be relied on for backlit or other challenging lighting situations. An important feature of this mode is that the Canon 60D takes into account the selected or active focus point in its determination of exposure settings. It assumes the active focus point is on your most important subject, so under challenging and critical situations, it is wise to confirm that the camera has chosen the focus point you want (well, this is always wise). Even better, as was previously discussed, you should manually choose the focus point. So in special situations, such as dramatically back-lit scenes or a situation with bright light plus deep shadows, make sure you are not using the center point to focus and meter, and then recomposing to take the shot – because some of the zones that the camera evaluated are now no longer in your

shot after recomposing, and other new areas are, so the camera has set the exposure for an scene different than the one you are capturing. This was discussed in the **Exposure** section and with AE Lock.

Partial Metering

This mode meters a small central area, about 6.5% of the viewfinder area of the 60D. The area is approximately a circle that is larger than the spot metering circle you see in the viewfinder, but not large enough to reach the top and bottom focus points. This mode is useful where there is a dramatic difference in lighting between the foreground or subject and the background. For example, when your subject is backlit – maybe standing in front of a bright window or the sun – and consequently their face is in shadow. I know I said evaluative mode can often handle this type of situation, but if you want the face or the subject to be properly exposed and not risk blowing the shot, it is worth it to use Partial Metering mode. Again, another time to use this is when there is a wide range of light in your scene, from bright sunlight to deep shadows. You will need to determine and lock the exposure settings of a critical area of the scene - a face or a middle tone in the area you want properly exposed (see *Figure 9*). Remember, this mode is *not* linked to your focus point. The partial area that is metered is always in the center, so meter on a face or middle tone in the part of the scene that is most critical and that you want properly exposed, using the central area of the viewfinder. Lock in that exposure, then focus, recompose and take the shot.



Figure 9 – Lion Sculpture – Partial Metering used to properly expose for the subject, then focus and exposure locked, and framing recomposed to place subject off center. (Very carefully hand-held at very slow shutter speed.) Shutter speed 1/13, aperture f/4.0, ISO 800

What Readers are Saying About Doug's Previous Guide, T2i Experience

Best Guide to Using a T2i - I don't know how I could fully take advantage of all the features the T2i has to offer without this publication! It's well-organized, easy to understand, and succinct enough to keep your attention while still containing a wealth of tips and tricks to get the most out of your camera. I'm very happy that I found this guide.

-Nathan K.

Essential Travel Companion - Alas, a comprehensive and concise guide for hobbyists who desire to enhance their photography experiences. I highly recommend this guide to anyone who wants to ease out of auto mode and learn how to take high-quality photos. It brilliantly explains how to apply advanced techniques and tips, walks you through the daunting task of menu settings, and smoothly guides you through the image-taking process. The guide is a portable class on digital photography! A must-have if you want to learn how to use your camera to its fullest advantage.

-Elizabeth J.

A Fantastic Book For T2i Users - This book has exactly the no frills condensed practical advice on camera settings that I was looking for. The author has a gift for separating the wheat from the chaff. I didn't have a clue how to operate a digital camera, let alone know the definition of the technical terms. After reading this book, I now understand all the critical functions of the Canon T2i and how to take advantage of them. This is a book I plan to keep handy for years to come.

-TP

What Readers are Saying About Doug's Other dSLR User's Guides

This book, together with the manual that came with your camera, is all you need to start discovering all the potential of this camera.

-Max M.

It's the first guide I've read which has taken me through all the settings in an understandable way. I now feel that I have control over the camera

-Peter S.

I would recommend this to anyone who wants to get a quick start to using their camera. Manuals are nice, but this eBook highlights the important information and gives a quick easy to understand explanation of most all of the functions and controls.

-Ray M.

This guide is a clearly written, concise and useful explanation of the rationale for the seemingly infinite and often confusing settings options. Used in conjunction with the (camera's) manual I feel a bit more confident in understanding how to at last proceed in getting better photographs.

-WLS

Learn more and purchase *Your World 60D* here:
<http://www.dojoklo.com/Full Stop/your world 60d.htm>