

Your World 60D

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

an eBook by:
Douglas J. Klostermann



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Full Stop. *good writing for better photography*

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CONTENTS

1. INTRODUCTION	4
2. MENUS and CUSTOM FUNCTIONS	9
2.1 Menu Settings.....	9
2.2 My Menu.....	19
2.3 Movie Shooting Mode Menus.....	19
2.4 Custom Functions Menus.....	22
3. CAMERA OPERATION	27
3.1 JPEG vs. RAW.....	27
3.2 Focusing.....	29
3.2a Using Auto Focus.....	29
3.2b Focus Modes.....	31
3.2c Autofocus Points and Composition.....	34
3.2d Live View and Movie Autofocus Modes.....	36
3.2e Back Button Focusing.....	37
3.3 Drive Modes.....	38
3.4 Exposure.....	38
3.4a Aperture, Shutter Speed and ISO.....	38
3.4b Aperture Priority Mode (Av) and Shutter Priority Mode (Tv).....	41
3.4c Full Stops.....	44
3.4d Manual Exposure Mode (M).....	45
3.5 Metering Modes.....	46
3.5a Evaluative Metering.....	46
3.5b Partial Metering.....	47
3.5c Spot Metering.....	48
3.5d Center-Weighted Average Metering.....	49
3.5e Manual Metering.....	51
3.5f Metering Modes and Exposure.....	52
3.5g Exposure Lock.....	54
3.6 Histograms.....	55
3.7 Exposure Compensation.....	56
3.8 Auto Exposure Bracketing.....	57
3.9 Highlight Tone Priority and Auto Lighting Optimizer.....	59
3.10 White Balance.....	59
3.11 Picture Styles and Ambience.....	61
3.12 Flash.....	62
3.13 Sensor Cleaning.....	63
4. THE IMAGE TAKING PROCESS	64
5. COMPOSITION	66
6. LENSES	73
6.1 Lens Notations.....	73
6.2 Which Lens to Buy Next.....	76
7. VIDEO - AN INTRODUCTION	78
8. PHOTOGRAPHY ACCESSORIES	79
9. CONCLUSION	84

1. 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. While the camera's manual can tell you about the settings and controls and how they function, this guide will build upon that and tell you when and why you want to use them. Every button, menu item, and Custom Function setting 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 of photographers and shooting situations and you don't need to learn and use them all immediately, but this guide should help to give you the knowledge to confidently use the ones that turn your Canon EOS 60D into an image capturing tool that works best for you.



Figure 1 - Detail of the Canon EOS 60D

Take Control of Your Camera

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 2*). You have to tell the camera to do all of this, through the various controls and settings, such as the autofocus AF Mode (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 2 - 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 anymore!

Learning to use and get the most out of a versatile dSLR camera like the 60D takes time, practice, patience, mistakes, and experimentation. If you are not yet familiar with all the controls of a dSLR and the exposure concepts of digital photography, don't expect to just pick it all up at once, in one or two readings of a single book. (In fact, you wouldn't want to, as the never ending task of learning and mastering photography is a big part of what it's all about!) Try not to become frustrated when you don't quite understand something or aren't yet getting the results you desire. Instead learn the controls, functions, settings, and concepts bit by bit, try them out in real life shooting situations, and return to this guide, the manual, and other photography books to address questions and problems you encounter. Continue to learn and to photograph often and it should all begin to come together, sometimes slowly and sometimes in rapid spurts of discovery and understanding.

If you have upgraded from an entry level or an older dSLR to the 60D, you should find that many of the basic controls and features are similar. And its additional controls, features and capabilities will more easily help you to capture images and photographs that you may have been limited in consistently attaining before. If you are new to dSLR photography, this book will help guide you through its features, controls, and capabilities. Be sure to take it slowly and patiently and start with the basic features and concepts that I will explain. With practice and experience you will soon be shooting with confidence and can begin to take advantage of the camera's more advanced functions.

Using This Guide

There are many different ways to use a digital SLR camera and its controls to capture images, and many diverse situations in which photographers work. I'm going to concentrate on the techniques that I believe are the most practical, useful, and effective for the majority of intermediate and dedicated photographers. The settings and controls I discuss can apply to various types of photography including everyday general photography, action, and travel photography. Once you have a firm grasp of the controls, settings, and basic techniques you will have the tools and knowledge to address different issues and challenging situations, and I encourage you to experiment and continue to learn.

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. The Canon 60D is a sophisticated tool that deserves to be used to its full potential, and that involves taking control of the camera and its functions, which means taking it off Auto, off Program, off automatically selected auto-focus points, off Auto ISO. While this may be more challenging at first, these are the techniques that are necessary to take full advantage of the capabilities of any dSLR including the 60D, and will lead you to having more control and consistency over your image making. Hopefully this will inevitably lead to better images!

This guide is intended to be used with the camera in your hands. That is the best way to directly follow and understand the controls, functions, and settings as they are being explained. It is also intended to be used in conjunction with and in addition to the camera's manual, not to completely replace it, so every bit of information in the *Canon*

Shooting 4 menu - note these all apply only when using Live View

Live View

The articulating LCD Monitor screen of the 60D makes Live View more useful than ever for doing close-up macro work, composing a landscape when using a tripod, and for shooting from an unusual point of view such as low to the ground or over your head. And it eliminates the need for an expensive angle finder accessory.

Enable, unless you never plan to use this.

AF Mode (Live View)

This is the autofocus mode that will be used when shooting with Live View. User preference. They each operate a little differently. With *Live Mode* the camera uses the sensor to focus on the area under the large AF Point, and it is sometimes slow and difficult. With *Quick Mode* you use the multiple focus points as displayed on the LCD Monitor, so it is accurate but the camera momentarily interrupts the Live View on the LCD Monitor to flip down the mirror and access the AF sensor. *Face Live Mode* works like *Live Mode* but locates and focuses on faces, kind of like turning your expensive camera into a point and shoot. Generally you should be viewing and focusing through your Viewfinder and not using Live View, so choose the AF Mode that works best in the situations that you might be using Live View, such as macro photography or landscape photography using a tripod. This is discussed further in the **Live View and Movie Focusing** section.

Grid Display (Live View)

Set this for *Grid 1* for the “rule of thirds” grid to help keep your framing straight and your compositions interesting when working in Live View. Turn it off if you find it distracting.

Aspect Ratio (Live View)

Leave this at 3:2 unless you want to experiment with 4:3 size or 16:9 widescreen size or 1:1 square frames. However, it is typically best to take your images using the full sensor and crop to a different size in post-production if desired.

Exposure Simulation (Live View)

Enable in order to see the actual (approximate) brightness of the final image on your LCD Monitor.

Silent Shooting (Live View)

Set to *Mode 1* typically. *Disable* for certain situations as specified in the manual (using a tilt-shift lens or extension tube). If you wish to be super-sneaky, set to *Mode 2* where you press and hold the Shutter Button to take a single shot then hide your camera under your coat and release the shutter to muffle the second sound of the shutter. Note that you can do continuous shooting in *Mode 1* but not in *Mode 2*.

60D produces acceptable noise at 1600 and possibly even at 3200. You may prefer to use noise reduction in Photoshop, so I suggest experimenting to see if it is worth using in camera. In the mean time, set it for 0. Note that setting it for Strong will decrease your maximum burst capability.

recommend: 0

C.Fn II-3 - Highlight Tone Priority

This setting improves the details seen in highlights and helps prevent them from being overexposed or blown-out. It shifts the dynamic range to the brighter end, so you sacrifice some detail in the shadows. It is worth using in certain situations, such as photographing a wedding dress or something very bright or high key where you don't wish to lose the subtle details. However, you probably don't want it on all the time. I would put it in **My Menu** so you remember it is there to use when you need it. Note that when you enable this, the camera will disable **Auto Lighting Optimizer** and will limit your ISO range to 200-6400. More on **Highlight Tone Priority** later.

recommend: 0 - but put in My Menu

C.Fn III: Autofocus/ Drive

C.Fn III-1 - Lens Drive when AF Impossible

This setting tells the camera what to do when it is unable to find focus. It either keeps trying, 0; or it stops trying, 1. I suggest you have it stop trying and either manually focus to help the camera find the right range to work in, manually select your focus point and aim it where you want it, find something with more contrast to focus on, or realize that you are too close to your subject to focus.

recommend: 1

C.Fn III-2 - AF Point Selection Method

This setting is for telling your camera how you wish to choose your autofocus (AF) point - whether you have to press the AF Button first and then select the point with the Multi-Controller, or whether you select the point directly with the Multi-controller. First, I recommend that you always manually select your focus points so that the camera focuses on what you want it to focus on, not on the closest object or what it thinks you wish to focus on. So that being said, it is much easier to just use the Multi-Controller directly, as setting 1 allows. If you wish to switch to automatic AF point selection, then just press the AF Button and the camera will again select the focus points. More on all this in the **Focusing** section later.

recommend: 1

C.Fn III-3 - Superimposed Display

This sets whether the active AF point lights up or not when focus is achieved. You definitely want the point to light up so that you know which point is the active one, and that focus has been achieved, so turn this on, 0.

recommend: 0

to set the aperture. Focus and take the picture. The Exposure Level Mark in the viewfinder will indicate if the scene will be properly exposed (if the line is aligned with 0), underexposed (if the line is on the negative side), or overexposed (if the line is on the positive side). You can adjust the aperture or shutter speed to bring this line to 0, or to your desired level. When the indicator is at 0, the camera believes that is the optimum exposure. However, this may not be the exposure you desire based on how and where you metered the subject or scene, or your creative intentions. This is explained in detail in the **Metering Modes and Exposure** section and should be understood before attempting to use M mode.

When using M mode, the goal is not necessarily to align the Exposure Level Mark with the 0 position, as the camera does not know how you wish to expose the image. You may wish to purposefully over-expose or under-expose the image, or you may be metering off of a certain tone and know you need to compensate a few stops to properly expose it. If you are simply going to use Manual Mode in this method by letting the camera determine the optimum exposure and then manually adjusting the settings to align the line with 0, you can more easily use Av or Tv mode and let the camera automatically do this for you.

3.5 Metering Modes

As with most Canon dSLR cameras, the Canon 60D provides you with four different metering modes to choose from, Evaluative, Partial, Spot, and Center-Weighted Average. If you plan to take advantage of them it is important to understand how they differ and when and how to use them in real-life photo situations. The 63-zone metering system of the 60D is an excellent improvement over the metering systems of just a few years ago, and the default 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.

3.5a 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.

3.5b 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 in Spot Metering mode, but not large enough to reach the top and bottom focus points (see *Figure 11*).



Figure 11 - Harbor, Gloucester, Mass. - Partial and Spot Metering Areas of the 60D - Partial Metering Mode evaluates only the area under the superimposed grey circle to determine the exposure settings. Spot Metering Mode evaluates only the area inside the black circle seen in the viewfinder to determine the exposure setting. Shutter speed 1/400, aperture f/4.0, ISO 100

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 Metering 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. 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 12*). 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 using **Exposure Lock** (explained below), then focus, recompose and take the shot.



Figure 12 - 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

3.5c Spot Metering

This mode meters a smaller center area, approximately 2.8% of the viewfinder area. This area is indicated by the small circle in the center of the viewfinder (see *Figure 11*). So when do you want to use Spot metering? This, again, is useful for scenes with great variation in light and shadow, or in very critical situations. One of the most common ways to use it is when metering for proper exposure on a dramatically lit face or subject, where the proper exposure of that part of the image is critical (see *Figure 13*).

Or for advanced users, Spot Metering is used to determine the exposure values of several important parts of the scene, and then the desired exposure is determined and manually set using Manual Exposure Mode. If you have ever read about a photographer metering different elements of a scene in order to determine their relationships and place them in exposure “zones,” that is related to this technique. In

What Readers are saying about Doug's Previous Guide, Canon 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 instructions and brief explanations are easy to follow and well organized. 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.

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 ebook is helping me actually understand the camera at my own pace, and best of all is that the book isn't hard to understand. It's a great book that I carry on my iPad wherever I take my camera.

-IME

I found the (camera's) manual good for understanding how to set things up but not much on the why - this book really focuses on the "why." The guide helped me understand why to use specific settings for specific needs. The Custom Settings sections helps to make firm decisions on how to apply settings by understanding the usage of each in addition to knowing how to set them up. I would like to thank you for saving me time - now I'm confident that my camera is well tuned!

-Benoit A.

Purchase Your World 60D at:

http://www.dojoklo.com/Full_Stop/your_world_60d.htm