

Canon 5D Mark III Experience

The Still Photography Guide to
Operation and Image Creation with the
Canon EOS 5D Mark III

an e-book by:
Douglas J. Klostermann



PREVIEW of:

Canon 5D Mark III Experience

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and Image Creation
With the Canon EOS 5D Mark III*

by
Douglas J. Klostermann

Full Stop. *good writing for better photography*

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Canon 5D Mark III Experience - *PREVIEW*

The Still Photography Guide to Operation and Image Creation with the Canon EOS 5D Mark III

by: Douglas J. Klostermann

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CONTENTS

1. INTRODUCTION	5
1.1 Take Control of Your Camera	6
1.2 Using This Guide	7
1.3 Quick Start for 5D and 5D Mark II Users.....	9
1.4 Getting Started.....	11
2. MENUS and CUSTOM FUNCTIONS	13
2.1 Shooting Menu.....	14
2.2 Autofocus (AF) Menu.....	27
2.3 Playback Menu	44
2.4 Set-up Menu	51
2.5 Custom Functions Menu.....	60
2.6 My Menu	69
2.7 Movie Shooting Mode Menu.....	70
3. CAMERA CONTROLS and IMAGE FILE FORMATS	73
3.1 Camera Controls	73
3.2 Image Playback	82
3.3 Image File Formats - JPEG vs. RAW.....	84
4 AUTOFOCUSING	88
4.1 Using Autofocus	88
4.2 Autofocus - AF Modes	89
4.3 Autofocus - AF Area Selection Modes	93
4.3a Single-Point AF (Manual Selection).....	96
4.3b Spot AF (Manual Selection).....	97
4.3c AF Point Expansion (Manual Selection) - 4 Adjacent.....	97
4.3d AF Point Expansion Surround (Manual Selection) - 8 Adjacent.....	98
4.3e Zone AF (Manual Selection).....	99
4.3f Auto Selection - 61-Point AF	100
4.4 Autofocus - AF Configuration Tool and Autofocus Cases.....	105
4.5 Back Button Focusing.....	108
4.6 Live View and Movie Focusing.....	110
5. DRIVE MODES	113
6. EXPOSURE Part 1	114
6.1 Aperture, Shutter Speed and ISO	114
6.2 Aperture-Priority AE Mode (Av) and Shutter-Priority AE Mode (Tv)	119
6.3 Full Stops.....	122
6.4 Manual Exposure Mode (M)	123
7. METERING MODES	126
7.1 Evaluative Metering	126
7.2 Partial Metering.....	126
7.3 Spot Metering	128
7.4 Center-Weighted Average Metering.....	129
7.5 Manual Metering	131
7.6 Metering Modes and Exposure	132

8. EXPOSURE Part 2	135
8.1 Exposure Lock	135
8.2 Histograms.....	136
8.3 Exposure Compensation	138
8.4 Auto Exposure Bracketing.....	139
8.5 HDR Shooting and Multiple Exposure.....	142
9. ADDITIONAL CAMERA FUNCTIONS	149
9.1 Highlight Tone Priority and Auto Lighting Optimizer	149
9.2 White Balance.....	150
9.3 Picture Styles.....	153
9.4 Flash	156
9.5 Sensor Cleaning	158
9.6 Putting it all into Practice	159
10. THE IMAGE TAKING PROCESS.....	161
10.1 Still Subjects	161
10.2 Moving Subjects	162
11. LENSES	164
11.1 Lens Notations.....	164
11.2 Fixed Maximum Aperture vs. Variable Maximum Aperture Lenses.....	166
11.3 Which Lens to Buy Next	168
11.3a Zoom Lenses	169
11.3b Prime Lenses	172
12. COMPOSITION.....	174
13. VIDEO - AN INTRODUCTION	182
14. PHOTOGRAPHY ACCESSORIES.....	188
14.1 Digital SLR Photography Accessories	188
14.2 Canon 5D Mk III Accessories	191
14.3 Digital Photography Books	192
15. CONCLUSION	194
Future Updates to the Text.....	194
About the Author.....	195

1. INTRODUCTION

With the introduction of the long awaited and highly anticipated EOS 5D Mark III, Canon has improved upon the revolutionary and highly popular 5D Mark II, itself a versatile and rugged digital SLR admired and relied upon by photographers ranging from enthusiasts to professionals. Now with a 22.3 megapixel full-frame sensor, new highly customizable 61 point autofocus system, faster 6 frames per second continuous shooting speed, improved 63-zone dual-layer exposure metering system, more powerful DIGIC 5+ processor, and extremely high ISO capabilities in low light situations, the 5D Mark III enables photographers to consistently capture images that previously might have been unobtainable. Borrowing the best features of the EOS 7D and some of the exceptional capabilities of the flagship EOS 1D X, the Canon 5D Mk III is a powerful, advanced tool for digital photography and has the potential to meet nearly any dedicated or professional photographer's performance and image quality needs.



Figure 1 - Detail of the Canon 5D Mk III.

But the 5D Mk III 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, how to change them, and their intended functions, this guide will build upon that and tell you when and why you want to use them. Every button, feature, menu item, and Custom Function setting of the 5D Mk III 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 necessarily need to learn and use them all immediately, but this guide will help to give you the knowledge

to confidently use the ones that turn your Canon 5D Mk III into an image capturing tool that works best for you and the photographic situations you work in.

1.1 Take Control of Your Camera

Since the camera is a tool to take the images *you* want to take, you obviously 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 precisely where you want, setting the aperture or shutter speed that you want, and obtaining the exposure you want. While the 5D Mk III 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 and AF Area Selection 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 modes, 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.

Taking control of all of these functions will enable you to consistently create the dramatic and compelling images you envision.

Learning to use and get the most out of a highly advanced digital SLR (dSLR) camera like the 5D Mk III takes time, practice, patience, mistakes, and experimentation. If you have upgraded from an older dSLR such as a the original 5D or 5D Mk II, an EOS 60D, 7D or one of their predecessors, or from a Rebel to the 5D Mk III, you are in for a treat. Its additional features and capabilities will more easily help you to capture images and photographs that you may have been limited in consistently attaining before. Its versatile and accurate autofocus system coupled with its rapid continuous shooting speed, plus its exposure metering system and high ISO capabilities will help you capture sharp images of subjects and moments that previously you may have missed, especially in lower light situations.

If you are relatively new to dSLR photography and are still in the process of learning all the controls of a dSLR and the exposure concepts of digital photography, you have perhaps jumped right into the proverbial deep end of the pool by choosing the advanced 5D Mk III! But don't worry, this book will help guide you through its features, controls, and capabilities. Be sure to take it slowly and patiently as you learn the 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. Even if you are an intermediate photographer, don't expect to just pick up all the new information at once, in one or two readings of a single book. (In fact, you wouldn't want to, as the never ending journey of learning and mastering photography is a big part of what it's all about!) Try not to become frustrated if you don't quite understand something or aren't always 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.

1.2 Using This Guide

There are many different ways to use a dSLR 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 photographers using the 5D Mk III. The settings and techniques I discuss can apply to various types of photography including general photography, action, portrait, 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, specialized situations, and challenging scenes, and I encourage you to experiment and continue to learn.

Since this guide is intended to help you get the most out of your 5D Mk III, it will not go into detail about the automatic features. The Canon 5D Mk III is a highly sophisticated tool that deserves to be used to its full potential, and that involves taking control of the

2. MENUS and CUSTOM FUNCTIONS

Setting up the 5D Mk III

The Menu and Custom Functions of the Canon EOS dSLR cameras allow you to have greater, more precise control over how your camera functions. They are an important part of what makes the 5D Mk III a more powerful tool than a camera such as the Canon 60D, and they allow you to customize the camera to work *for* you, to work how *you* work. I highly recommend that you dig into these menus and change the settings to the options that allow you to use the camera in the manner that works best for you and your way of photographing.

Perhaps the most exciting and useful change to the 5D Mk III menu is the addition of the **Autofocus (AF) Menu**. All of the autofocus related settings and Custom Functions are now collected into one menu tab with sub-sections (*AF1*, *AF2*, etc.) for easier access and use, and are described with more easily comprehensible wording. If you are coming from the EOS 7D, you will appreciate this more user-friendly set-up of familiar options. The AF Menu also includes autofocus presets where the various AF parameters (called “Cases”) are already configured for specific action situations, such as if the subject is accelerating quickly, moving erratically, new subjects are entering the frame, or various combinations of these conditions.

Some of the Menu items are only used when shooting, reviewing, or processing images, but many of them should be set up in advance. Below are explanations and some recommended settings for the Menu and Custom Functions of the Canon 5D Mk III. Please note that this guide will go into further detail about most of these settings and functions later in the detailed sections about autofocusing, exposure, white balance, etc. Some of the menu settings may not make sense until after reading the entire guide and working with the camera a bit, so don't become overwhelmed if you don't yet understand the settings or terminology used to describe the Menu and Custom Function settings and their options. And if you don't yet understand some of the settings or why you might wish to change them, leave those on the default or recommended settings for now. Although I have attempted to explain many of these items in a more understandable and unified way than the manual, you still may need to first read through the entire chapter to learn about related Menu and Custom Function settings, plus read the applicable sections of this text, before you will completely understand a specific item and how you may wish to set it. You will want to return to them later after you have completed the guide, worked with your camera, begun to better understand its controls and functions, and started to determine exactly how you want to work. This is particularly true regarding the camera's buttons and controls as well as the highly customizable autofocus system.

Place your Mode Dial on Av (and the Live View/ Movie Shooting Switch to *Live View*) before you go through these settings because all the options don't appear in the Menu if your camera is in Auto+ or Program mode. You may wish to first review the **Camera Controls** section of Chapter 3 if you are not yet familiar with the 5D Mk III controls.

Release - This option will prioritize shutter release, or immediately capturing the shot at the possible expense of exact focus.

AF Priority - This option will prioritize focus for the shot, ensuring that the subject is in focus before the picture is taken. This may cause a brief, perhaps micro-seconds delay while the camera confirms focus before releasing the shutter.

AF4

Lens Drive When AF Impossible

This setting tells the camera what to do when it is unable to find focus using autofocus. It either keeps trying if set to *Continue focus search*, or it stops trying if set to *Stop focus search*. I suggest you have it stop trying, especially when using a long telephoto lens, 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 or a detail to focus on, or realize that you are too close to your subject for the lens to focus.

Selectable AF Point

This setting determines how many of the 61 autofocus points are available for you to select from when using one of the Manual Selection Autofocus Area Modes. Note that the actual visibility of the points in the viewfinder will be determined by the setting in the AF5 menu, *AF Point Display During Focus*. Also note that all of the other points may still be used by the camera to assist with focus and focus tracking, based on the AF Mode and AF Area Selection Mode you are using. See the **Autofocus - AF Area Selection Modes** section of this text for more information on using the AF Points.

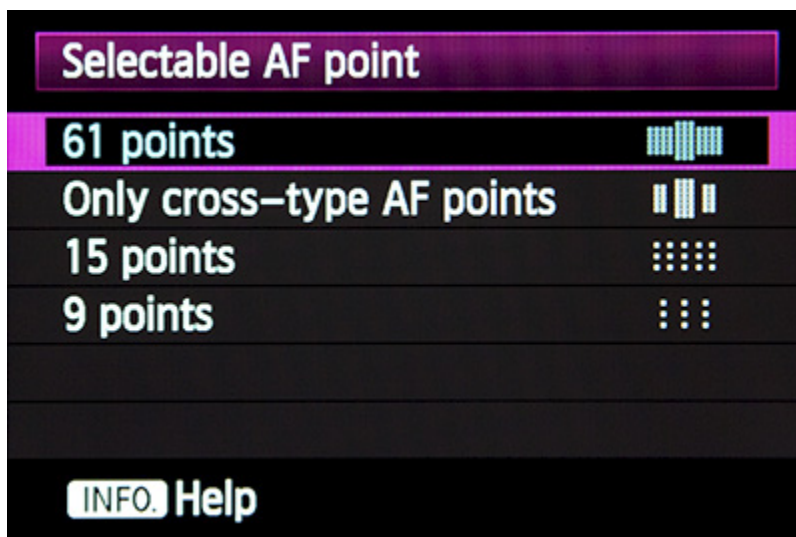


Figure 19 - Selectable AF Point menu to determine how many AF Points you will be able to choose from when shooting.

61 Points - All 61 AF points are available to manually select. This is obviously a lot of AF Points to click across to reach your desired AF Point, but it can be relatively quickly done and will potentially allow you to find a point at or near your subject, thus minimizing any required recomposing of the frame before taking the shot. The *61 Points* setting should be taken advantage of for shooting action situations and tracking moving subjects. Use it in conjunction with the AF Area mode that best fits the subject and situation (**AF Area Selection Modes** will be fully explained in the **Autofocusing** chapter). When working in AI Servo Focus Mode, setting for all *61 Points* will also allow you to accurately locate your subject and initiate focus tracking while retaining the framing and composition you desire.

Only Cross-Type Points - Obviously, just the more accurate cross-type AF Points will be available to choose from - up to 41 points depending on which lens and/ or aperture setting you are using. This may help you to work faster than choosing among all 61 points, and will helpfully limit your selection to the most accurate AF Points. If you find 61 points too many to deal with for your shooting style or a specific situation, step down to this setting.

15 Points - 15 AF points will be available for manual selection (see *Figure 20*). Limiting the selectable AF Points to 15 may enable you to work faster to select your desired AF Point, but may also result in you having lock focus and recompose more often, or alter your composition in order to locate your subject at an AF Point. But if your situation requires you to quickly choose and commit to an AF Point, or even allows you to work slowly and carefully with still subjects, 15 Points may work very well.

9 Points - Similar to the 5D Mk II, only 9 AF points will be available for manual selection, however not in the traditional diamond pattern (see *Figure 20*). This offers the same speed and ease advantages of *15 Points*, while increasing the disadvantage of not always having an AF Point at or near where your subject is located, causing you to recompose or alter your composition.



Figure 20 - Simulated view of viewfinder, showing Selectable AF Points limited to 15 Points (left) and 9 Points (right).

With certain lenses (listed in the Canon manual as groups F to H on pages 83-84) the number of available AF points from which to manually select will be fewer. Also note that with the settings that limit the number of points to less than 61 Points, the *AF Point Expansion* and *Zone AF* Autofocus Area Modes will still function and take advantage of all 61 points. You may find that a combination of fewer AF Points (41 or 15) combined with an *AF Point Expansion* Autofocus Area Selection Mode will allow you to work more quickly, easily, and/ or accurately.

Select AF Area Selection Mode

This setting is to enable or disable the different autofocus AF Area Selection Modes so that you will be able to choose from them all, or so that you can limit the number of modes available for selection. When setting this menu item, turn the Quick Control Dial to select the desired modes, then the SET Button to activate or de-activate (see *Figure 21*). You may wish to enable all of them at first and experiment with the different modes, and then later disable the ones you find that you do not wish to use. That way when you are later quickly selecting between the different AF Area modes, you won't have to "click" through all the options to get to the mode you desire. More about the **Autofocus - AF Area Selection Modes**, the differences between them, and their uses later in the **Autofocusing** chapter of this text.

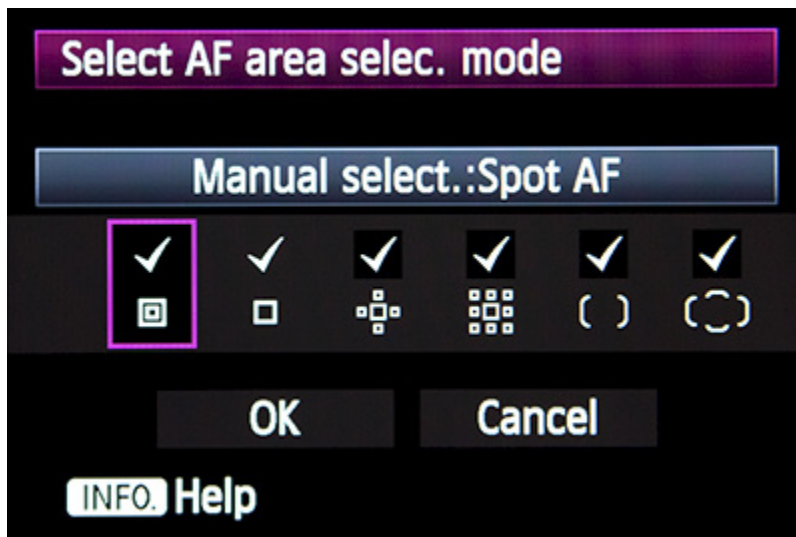


Figure 21 - Select AF Area Selection Mode menu to choose which AF Area Selection Modes will be available for you to select.

2.5 Custom Functions Menu

C.Fn I: Exposure

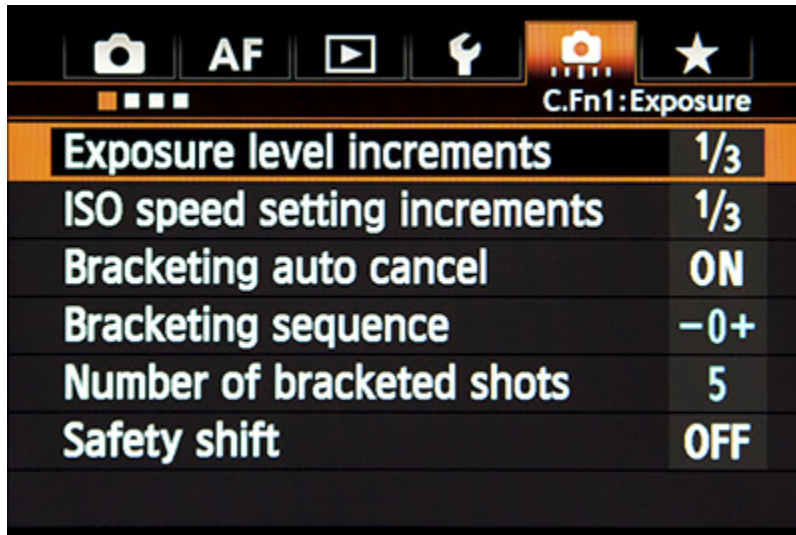


Figure 43 - Custom Function 1: Exposure menu.

Exposure Level Increments

This is to change the increments of shutter speed, aperture, and exposure compensation - 1/2 stop increments or 1/3 stop. This setting will also apply to Auto Exposure Bracketing (AEB) and Flash Exposure Compensation. Set this depending on your personal preference and what you are used to using for these increments. Many photographers prefer the greater precision of 1/3 stops, which is generally the traditional and standard setting, but you may prefer the simplicity and ease of 1/2 stops. Shutter speed and aperture will be covered in the **Exposure** section, and **Exposure Compensation** in its own section of the text.

recommend: 1/3-stop

ISO Speed Setting Increments

This sets the increments for ISO, either 1/3 stop or full stop. Again, the setting depends on your personal preference and what you are used to. Many photographers prefer the greater precision of 1/3 stops, which is generally the standard setting, but you may prefer the simplicity and ease of full stops. ISO is discussed in the **Exposure** section.

recommend: 1/3-stop

Bracketing Auto Cancel

This determines whether or not Auto Exposure Bracketing or White Balance Bracketing is canceled when you turn off your camera. I recommend that you have this cancellation set for *On: Enable*, because if you have a shooting 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 most of your shots are going to be improperly exposed. More on **Auto Exposure Bracketing** later in this text. *recommend: On: Enable*

Bracketing Sequence

This setting determines the sequence of exposures when using **Auto Exposure Bracketing (AEB)** or White Balance Bracketing. (Remember that the 5D Mk III can bracket either 2, 3, 5, or 7 shots, not just the traditional 3 shots - number to be set with the next menu item). The bracketing sequence setting depends how you like to order your bracketing, and 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(s) (under exposed), then the lighter exposure(s) (over exposed), with “correct” meaning what the camera thinks is the proper exposure. Setting “- 0 +” means the order is darker, normal, lighter. Setting “+ 0 -” means the order is over exposed (lighter), normal, under exposed (darker). I prefer setting “0 - +” but an HDR shooter and their software may prefer setting “- 0 +”. 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: the first setting for general use, the second setting for HDR shooters.*

Number of Bracketed Shots

This is to set the number of shots that are taken in an Auto Exposure Bracketing (AEB) sequence or a White Balance (WB) bracketing sequence. The number you choose is obviously the number of shots that will be taken: 3, 2, 5, or 7. General bracketing is typically 3 shots, but those shooting for HDR work will want to take advantage of 5 or 7 shots. *recommend: varies by user*

Safety Shift

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, Av, or P Shooting Modes, based on the following options:

Tv/Av: Shutter Speed/ Aperture will automatically change the mode’s setting in order to obtain the proper exposure, meaning that in Shutter Priority (Tv) mode it will change the shutter speed setting, and in Aperture Priority (Av) mode it will change the aperture setting. So consider which variable you would want changed, and which one you wish to “hold” when deciding on a shooting mode. You may wish to work in the other shooting mode than you usually do so that you can hold your desired (aperture or shutter speed) setting.

ISO: ISO Speed will work in Av, Tv, and P modes. In order to obtain the proper exposure, the camera will change the ISO speed. This may be the more desirable setting, since the low light capability of the 5D Mk III is exceptional even at very high ISO settings, and that way you can allow the camera to adjust

Power Switch - Located at the Mode Dial and is used to turn the camera on and off.



Figure 55 - View of the rear controls of the Canon EOS 5D Mk III.

On the rear of the camera (see *Figure 55*) you will find, starting at the upper right:

AF Point Selection Button - This is pressed before pressing the M-Fn Button to change the Autofocus (AF) Area Mode. It can also be pressed to display the autofocus points in the viewfinder before manually selecting your autofocus point using the Multi-Controller, as will be discussed in the **Autofocusing** chapter of this text. The camera can be set so that the Multi-Controller can be used directly without pressing this AF Point Selection Button first, under the *Custom Controls* item of the *C.Fn 2 menu*. Note that this AF Point Selection Button no longer controls image zoom (magnify) during image review on the rear LCD Monitor as it did with previous Canon models.

AE Lock Button [*] - This is used to lock the exposure settings determined by the camera after half-pressing the Shutter Button, as will be explained in the **Exposure** chapter of this text. Note that this button no longer controls image zoom (magnify) during image review on the rear LCD Monitor as it did with previous Canon models.

AF Start Button (AF-ON) - This button can be configured for a variety of functions, typically autofocus related. Most commonly it can be used in the same manner as the

Shutter Button in P, Tv, Av, M, or B Shooting Mode, or else for “back button focusing” where it can be used to start, stop, or lock focus. This is discussed in the **Back Button Focusing** section of this text. It is also pressed to autofocus while in Live View or when shooting video.

Live View / Movie Shooting Switch - This switch is used in conjunction with the **Start/ Stop (START/ STOP) Button** located inside it, to begin Live View shooting or Movie shooting. Turn the switch to the movie icon for video, and to the camera icon for Live View. When set for Live View, press the Start/ Stop Button to initiate Live View on the rear LCD Monitor while in any of the shooting modes. When set to Movie Shooting, press the button to start movie recording.

Multi-Controller - This is the thumb joystick that is used to select an autofocus AF Point or zone as you look through the viewfinder. It can be configured to work in conjunction with the AF Point Selection Button or simply by itself. It is also used to scroll around a magnified image while viewing it on the rear LCD Monitor.

Quick Control Button [Q] - The [Q] Button brings up the Quick Control Screen on the LCD Monitor, where various camera settings (shooting functions) can be adjusted and viewed. This is one of the easiest ways to change many of the camera’s settings and view the options available for each selected setting. I will go into more detail on using the **Quick Control Screen** a bit later in this section. During image or video playback, pressing the [Q] Button will allow you to quickly access several additional functions including Protect, Rotate, Rating, RAW image processing, Resize JPEG, Highlight Alert, AF Point Display, and Image Jump (not all options available for video). (See *Figure 56*.)

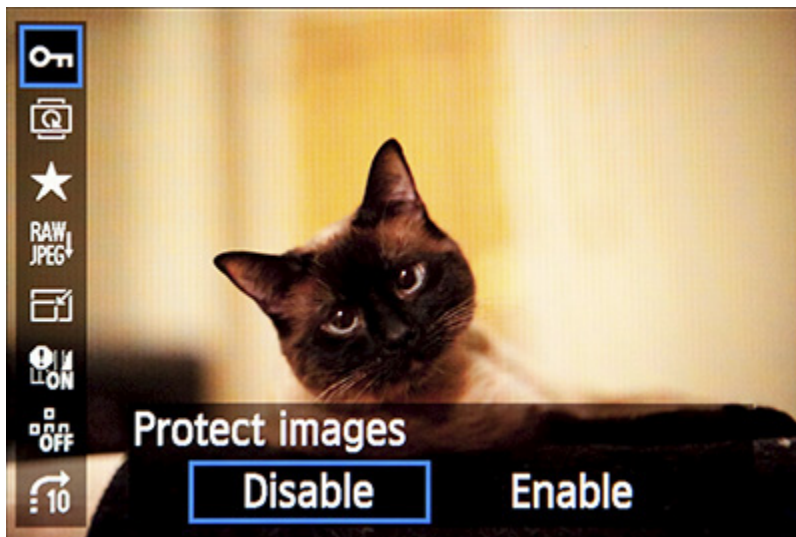


Figure 56 - Quick Control Screen during image playback, allowing immediate access to various functions.

Quick Control Dial - This is the large dial on the back of the camera, which serves a variety of functions. It is used in conjunction with the row of buttons along the top LCD Panel. Those buttons’ first setting will always be changed with top Main Dial (after pressing the button) and the second setting will be changed with the rear Quick Control



Figures 67 - Llama Figurines - Combine precise autofocusing with shallow depth of field to call attention to the desired subject - above (Figure 66) the front figurine, and here the middle figurine. Both images: Shutter speed 1/50, aperture f/2.8, ISO 2000.

Remember that you activated all the available AF Area Selection Modes using the *AF4 menu > Select AF area selection mode*. To select a specific AF Area Selection Mode while shooting, turn the shooting Mode Dial to a non-Auto+ mode such as Av or Tv and make sure the switch on your lens is set to AF. Then use the [Q] Button and Quick Control Screen to select the desired area mode or:

1. Press the AF Point Selection Button on the rear-top-right of the camera body.
2. Then while looking in the Viewfinder press the M-Fn (Multi-Function) Button (on the top of the camera near the Shutter Button) repeatedly. You will see the camera cycle through the various options as the AF Points illuminate in various different ways.

You should practice this action of selecting the AF Area Selection Mode so that you can change it without taking your camera from your eye. Remember that you can also set *AF4 > AF area selection method* to change this procedure to using the AF Point Selection Button plus the top Main Dial to select your desired AF Area mode.

Based on the lens you are using, the number of available AF Points and their individual accuracy will vary. See pages 78-84 of the Canon manual to see a description of the different types of AF Points and full lists of lenses indicating which points are able to be

used and selected and whether or not they will act as cross-type AF Points. Also, the AF Points that you see blinking in the viewfinder indicate the non-cross-type, less accurate AF Points that are sensitive only to horizontal lines.

4.3a Single-Point AF (Manual Selection)

Although *Spot AF* is listed first in the camera's menu, I am starting with *Single-Point AF* in order to best explain them. *Single-Point AF* Autofocus Area Mode allows you to select a single point of your choosing from among the 61 available AF Points. This can be one of the most accurate AF Area Selection Modes, allowing you to tell the camera precisely where to autofocus. Remember that the camera needs to see contrast or texture in order to best focus, so avoid placing the AF Point over an area of solid color, and remember to generally focus on an eye when photographing people. The area that the camera looks at is larger than the actual AF Point square you see in the Viewfinder. You can use this with One Shot AF Mode to accurately focus on still subjects and to lock focus (with a half-press of the Shutter Button) at a specific distance and recompose before taking the shot. Or even to perform these actions and capture moving subjects if you work quickly and if the camera-to-subject distance does not dramatically change between the time you lock focus and take the image. *Single-Point AF* is indicated in the Viewfinder by the single larger square among the smaller squares (see *Figure 68*).

Remember that you can set the Selectable AF Points setting in the AF4 menu to limit the number of selectable points. And you can always press straight in on the Multi-Controller to quickly choose the center point in order to use it or to help jump, for example, from the extreme left points over to the right side quicker.

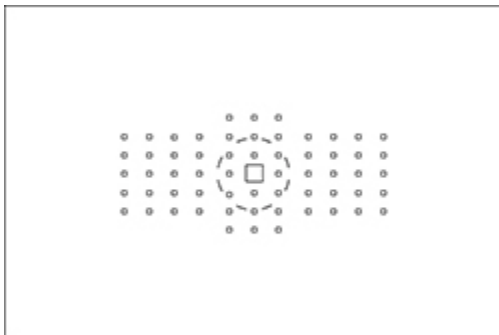


Figure 68 - Simulated view of viewfinder, using Single-Point AF Autofocus Area Selection Mode.

When working in AI Servo mode for moving subjects, you tell the camera what subject to begin tracking by selecting your desired AF Point, placing it over the subject, and half-pressing the Shutter Button. The camera will now track the focus distance of a moving subject as it remains under the selected AF Point, but will not pass focus tracking over to the adjacent AF Points if the subject moves away from the initial AF Point or you are unable to keep your subject located at that point. For that you will need to use one of the AF Area Selection Modes other than *Single-Point AF* or *Spot AF*.

4.3b Spot AF (Manual Selection)

If you need to focus on a precise area that is smaller than the *Single-Point AF* area, you can make use of *Spot AF*. This will not necessarily make your focusing more accurate in general situations just because it is smaller, but rather it is used to address specific autofocusing challenges. For example if you wish to focus between the parts of a fence or cage to a subject beyond, you may find that *Single-Point AF* searches back and forth between the near fence and the further subject, because the area it is looking at to find the subject encompasses both potential subjects. *Spot AF* will allow you to target in on a more precise area. Although *Spot AF* is indicated in the Viewfinder by the tiny square within the larger selected AF Point square (see *Figure 69*), *Spot AF* will actually pinpoint the focus to an area about the size of the larger square.

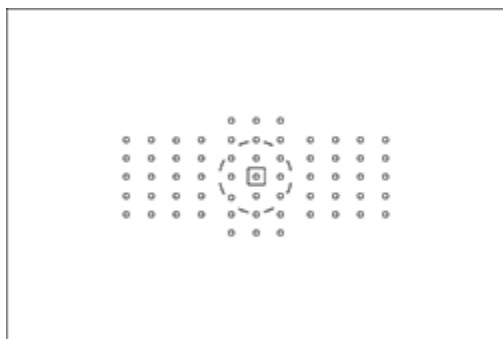


Figure 69 - Simulated view of viewfinder, using Spot AF Autofocus Area Selection Mode.

Spot AF is ideal for situations such as focusing on a bird in a tree. *Single-Point AF* will likely look at an area that may include surrounding or overlapping leaves, or closer branches and thus might focus there, but with *Spot AF* you have a better chance of focusing precisely on the intended bird. While *Spot AF* will be more accurate in certain situations as described, it should not be used for general use. Because it is so precise, the area it looks at to find contrast or a detail on which to focus may be an area of solid color. For example if you used *Spot AF* to quickly focus on the general cheek and eye area of a face, it may be aimed at an area of skin without contrast, whereas the *Single-Point AF* area might encompass the cheek and the eye and thus find enough contrast to be able to properly and quickly focus. Again, the camera will track the focus distance of a moving subject that remains under the selected AF Point, but will not pass focus tracking over to the adjacent AF Points if the subject moves away from the initial AF Point or you are unable to keep your subject located at that point. For that you will need to use one of the AF Area Selection Modes other than *Single-Point AF* or *Spot AF*.

4.3c AF Point Expansion (Manual Selection) - 4 Adjacent

If it is too difficult to place a single AF point on a subject because you need to work quickly or the subject is moving too quickly or erratically and may stray from the selected AF Point, you can focus on your subject using *AF Point Expansion*, which will also make use of some or all of the immediate surrounding AF Points to find or retain focus on your subject. *AF Point Expansion - 4 Adjacent* will make use of the 4 points

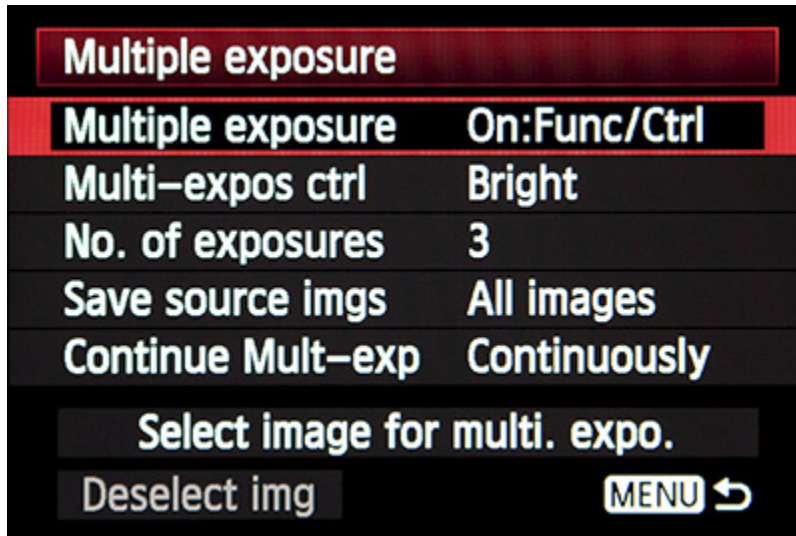


Figure 102 - Multiple Exposure Mode menu to set up the parameters and processing options of in-camera Multiple Exposure shooting and image results.

The multiple exposures can be processed in several different ways to achieve the final single-image result, using *Multi-expos ctrl*.

Additive setting is most similar to shooting multiple exposures with film, where the total exposure is the cumulative exposure of each of the individual frames - in other words, they are all added together. This could result in a very dark image, so it is typically best to under expose each frame to a degree so that when they are combined, the cumulative result is a properly exposed image. Under expose 0.5 stop per exposure. For example with five exposures, under expose by 2.5 stops (-2.5 EV) for each individual exposure. Or vary the exposure of each shot to obtain your final desired result.

Average setting offers automatic exposure adjustment. Each individual frame will be underexposed the proper amount so that the final stacked image has the correct exposure. However, to determine the final exposure, the “total” exposures of all the frames will be averaged and individual frames will each be under exposed the same amount. If you would like to vary the exposure amount from frame to frame, you will need to use *Additive*. Basically, the camera is automatically applying the “-0.5 stops per image” underexposure formula of above.

Bright setting is used to photograph images of dark scenes containing bright objects, for example a bright moon in a dark sky. With this setting the bright objects will remain properly exposed and visible in the final stacked image, as they are “overlayed” over the dark areas (see *Figure 103*).

Dark setting is used to eliminate the bright areas of the images, as the dark areas will be “overlayed” over the bright areas.

Set the number of exposures that will be combined together with the *No. of exposures* menu item, between 2 and 9. Under the *Save source imgs* setting decide if you would like to save each of the source images that are stacked to create the final multiple exposure by selecting *All images*, or just the final combined multiple exposure image, *Result only*.



Figure 103 - Neon Restaurant Sign, Cambridge, Mass. - Multiple Exposure Mode used to take three frames that are automatically super-imposed as one image. Multi-expos ctrl. setting Bright used. Shutter speed 800, aperture f/4.0, ISO 12,800.

Continue Mult-exp is set for *1 shot only* or *Continuously* to determine if you are going to take just one Multiple Exposure sequence, or wish to continue to work in Multiple Exposure mode. Setting for *1 shot only* will capture only one Multiple Exposure sequence then return to regular shooting. *Continuously* will allow you to continue taking Multiple Exposure sequences until you disable the Multiple Exposure function.

If you set the earlier setting for *On: Func/Ctrl*, the merged image will be displayed during image playback, however you can delete the last individual shot after it is taken by pressing the Playback Button and selecting *Undo last image* before continuing onto the next shot. This way you can capture the first image you want, use it to start the sequence, and delete the subsequent images as you take them if you don't like the ongoing results. *On: Func/Ctrl* must also be set to shoot multiple exposures in Live View.

What Readers are Saying About Doug's dSLR Camera Guides:

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

-Max M.

A Pro Right There With You - *If you want to get the camera up and running with the feeling of a pro right there with you then I would strongly recommend it. He walks you through setting the camera up and gives you his reasoning for the settings. After the basic settings tour Doug then gets down to the heart of this great camera: the custom settings and focus system. His explanation is first class and he explains how various custom settings are related to each other. The focus system on this camera is top drawer and Doug does a fine job explaining what can be a very intimidating area of this camera. All in all a great read. Camera in one hand and reader in the other and dig in. Thanks Doug, just what I was looking for.*

-Tim S.

A Must-Have Accessory - *What a great addition to my bag. This is a well written, full body of work that explains, in plain English, how to get the most out my new camera. Doug provides the knowledge and experience to bring you to the next level. I look forward to learning more every time I open the book.*

-Steven

Brilliant - just what I was looking for! *A manual that was exciting, clear to follow, had examples and was used by a professional who gave just the right amount of technical info with explanations of why you use those settings, when to use those settings and so on...all properly explained. Doug's book is a joy to follow, well thought through and well written. The camera company should be employing Doug to write their cameras manuals!*

-Robert D.

It's clear, concise and gets to the heart of the camera's multiple and often confusing options. *Very highly recommended - for experienced user and beginner alike. The official manual is very good on what to do, but not so clear on why. Perhaps the camera company should just hire Doug to write their manuals - it would be so much simpler for all concerned!*

-G.S.A.

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.

Really Focuses on the "Why" - *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.*

-Benoit A.

Amazing! - *Great and easy to understand and very complete. Very highly recommended. The guy REALLY knows what he's talking about.*

-P.M.

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