#### LEARNING MADE EASY



# Canon<sup>®</sup> EOS<sup>®</sup> Rebel T8i/850D

INFO



Get the best results from your camera

Shoot breathtaking portraits and action photos

Take control of color, focus, and exposure

**Julie Adair King** 



# Canon<sup>®</sup> EOS<sup>®</sup> Rebel T8i/850D

by Julie Adair King



#### Canon<sup>®</sup> EOS<sup>®</sup> Rebel T8i/850D For Dummies<sup>®</sup>

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# Introduction

n 2003, Canon revolutionized the photography world by introducing the first digital SLR camera (dSLR) to sell for less than \$1,000, the EOS Digital Rebel/300D. The camera delivered exceptional performance and picture quality, earning it rave reviews and multiple industry awards. No wonder it quickly became a best seller.

That tradition of excellence and value lives on in the EOS Rebel T8i/850D. Like its ancestors, this baby offers advanced controls for experienced photographers as well as features to help beginners be successful from the get-go. Adding to the fun, the camera also offers high-definition video recording and built-in Wi-Fi and Bluetooth that enable wireless connection to your computer, smartphone, or tablet.

In fact, the T8i/850D is so feature-packed that sorting out everything can be a challenge. For starters, you may not even know what SLR means, let alone have a clue about all the other terms you encounter in your camera manual — resolution, aperture, and ISO, for example. If you're like many people, you may be so over-whelmed by all the camera controls that you haven't yet ventured beyond fully automatic picture-taking mode. That's a shame because it's sort of like buying a Porsche Turbo and never pushing it past 35 miles per hour.

Therein lies the point of *Canon EOS Rebel T8i/850D For Dummies*. In this book, you can discover not only what each bell and whistle on your camera does but also when, where, why, and how to put it to best use. Unlike many photography books, this one doesn't require any previous knowledge of photography or digital imaging, either. Everything is explained in easy-to-understand language, with lots of illustrations to help clear up any confusion.

In short, what you have in your hands is the paperback version of a photography workshop tailored specifically to your camera. Whether your interests lie in taking family photos, exploring nature and travel photography, or snapping product shots for your business, you'll get the help you need to capture the images you envision.

# A Quick Look at What's Ahead

This book is organized into four parts, each devoted to a different aspect of using your camera. Although chapters flow in a sequence that takes you from absolute beginner to experienced user, each chapter is designed to be as self-standing as possible so that you can explore topics that interest you in any order.

Here's an overview of each part:

- Part 1: Fast Track to Super Snaps: This part contains three chapters that help you get up and running. Chapter 1 offers a brief overview of camera controls and walks you through initial setup and customization steps. Chapter 2 explains basic picture-taking settings, such as image-quality and flash options, and Chapter 3 shows you how to use the camera's simplest exposure modes, Scene Intelligent Auto and SCN (Scene).
- Part 2: Taking Creative Control: Chapters in this part help you unleash the full creative power of your camera by moving into advanced shooting modes. Chapter 4 covers the all-important topic of exposure; Chapter 5 offers tips for manipulating focus; Chapter 6 explains color features; and Chapter 7 provides a summary of shooting strategies for specific types of pictures: portraits, action shots, landscape scenes, and close-ups. Wrapping up this part, Chapter 8 covers movie recording and playback.
- Part 3: Working with Picture Files: As its title implies, this part discusses after-the-shot topics. Chapter 9 explains picture playback features, and Chapter 10 covers topics including rating, deleting, and protecting files; transferring pictures from your camera to your computer; processing Raw files; and preparing pictures for online sharing.
- Part 4: The Part of Tens: In famous For Dummies tradition, the book concludes with two top-ten lists containing additional bits of information. Chapter 11 takes a look at ten camera-customization options not covered elsewhere. Chapter 12 introduces features that may not be on the top of your "Why I bought this camera" list, but are nonetheless interesting, useful on occasion, or a bit of both.
- Appendix: Exploring Wireless Connections: Head here for information about establishing a wireless connection between your camera and a computer, smartphone, or tablet. You can then transfer files wirelessly and use your computer or smart device as a camera remote control, among other things.
- Cheat sheet: When you have a minute or two, visit www.dummies.com and enter the name of this book in the search box. You'll find a link to a cheat sheet, which provides a handy reference to your camera's buttons, controls, and exposure modes.

# Icons and Other Stuff to Note

If this isn't your first For Dummies book, you may be familiar with the large round icons that decorate its margins. If not, here's your very own icon-decoder ring:



A Tip icon flags information that saves you time, effort, money, or another valuable resource, including your sanity.



When you see this icon, look alive. It indicates a potential danger zone that can result in much wailing and teeth-gnashing if it's ignored.



Lots of information in this book is of a technical nature — digital photography is a technical animal, after all. But if we present a detail that's useful mainly for impressing your geeky friends, we mark it with this icon.



This icon highlights information that's especially worth storing in your brain's long-term memory or to remind you of a fact that may have been displaced from that memory by another pressing fact.

Additionally, replicas of some of your camera's buttons and onscreen graphics appear throughout the book to help you locate the button or setting being discussed.

## Practice, Be Patient, and Have Fun!

To wrap up this preamble, I want to stress that if you initially think that digital photography is too confusing or too technical for you, you're in good company. *Everyone* finds this stuff mind-boggling at first. Take it slowly, trying just one or two new camera settings or techniques each time you pick up your camera. With time, patience, and practice, you'll soon wield your camera like a pro, dialing in the necessary settings to capture your creative vision almost instinctively.

So without further ado, I invite you to grab your camera and a cup of whatever you prefer to sip while you read and then start exploring the rest of this book. Your T8i/850D is the perfect partner for your photographic journey, and I thank you for allowing me, through this book, to serve as your tour guide.

# Fast Track to Super Snaps

#### IN THIS PART . . .

Familiarize yourself with the basics of using your camera, from attaching lenses to navigating menus.

Select the right exposure mode, shutter-release mode, picture aspect ratio, and image quality.

Discover options available for flash photography.

Take your first pictures in the easy-to-use Scene Intelligent Auto and SCN (scene) modes.

- » Preparing the camera for its first outing
- » Getting acquainted with camera features
- » Viewing and adjusting camera settings
- » Setting a few basic preferences

# Chapter **1** Getting Up and Running

hooting for the first time with an SLR (single-lens reflex) camera can produce a blend of excitement and anxiety. On one hand, you can't wait to start using your new equipment, but on the other, you're a little intimidated by all its buttons, dials, and menu options.

Well, fear not: This chapter provides the information you need to start getting comfortable with your Rebel T8i/850D. The first section walks you through initial camera setup; following that, you can get an overview of camera controls, discover how to view and adjust camera settings, work with lenses and memory cards, and get advice on some basic setup options.

## **Preparing the Camera for Initial Use**

After unpacking your camera, you have to assemble a few parts. In addition to the camera body and the supplied battery (charge it before the first use), you need two other items:

>> Lens: Your camera accepts Canon EF and EF-S model lenses; the 18–55mm kit lens sold as a bundle with the camera body falls into the EF-S category. If you want to buy a non-Canon lens, check the lens manufacturer's website to find out which lenses work with your camera. Flip to the later section "Familiarizing Yourself with the Lens" for details on this critical component of your camera.

SD (Secure Digital) memory card: Like all digital cameras, the T8i/850D stores picture and movie files on a memory card. The camera accepts SD cards only. For information about buying SD cards, skip to the section "Working with Memory Cards."

With camera, lens, battery, and card within reach, take these steps:

#### **1.** Make sure the camera is turned off.

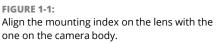
2. Attach a lens.

First, remove the caps that cover the front of the camera and the back of the lens. Then locate the proper *mounting index*, which is a mark on the camera's lens mount that indicates how to align the lens with the camera body. Your camera has two of these markers, one red and one white, as shown in Figure 1-1. Which marker you use depends on the lens type:

- Canon EF-S lens: The white square is the mounting index.
- *Canon EF lens:* The red dot is the mounting index.

Your lens also has a mounting index; align that mark with the matching one on the camera body, as shown in Figure 1-1. Place the lens on the camera mount and rotate the lens toward the side of the camera that sports the red





*Rebel* logo. You should feel a solid click as the lens locks into place.

### **3.** Install the battery.

The battery compartment is on the bottom of the camera. When inserting the battery, hold it with the contacts down and the Canon imprint facing the right side of the camera grip (where the memory-card cover, shown in Figure 1-2, is located). Gently push the battery in until the gray lock clicks into place and then close the battery-cover door.

#### **4.** Insert a memory card.

Open the memory-card door and orient the card so that the label faces the back of the camera, as shown in Figure 1-2. (If you look closely at the silver panel on the inside of the card door, you see a diagram that indicates the proper card orientation.) Push the card gently into the slot and close the card door.

The memory-card access lamp, labeled in Figure 1-2, blinks for few seconds to let you know that the camera recognizes the card. (The light appears even when the camera is turned off.)

# 5. Rotate the monitor to the desired viewing position.

When you first take the camera out of its box, the monitor is positioned

Memory-card access lamp



FIGURE 1-2: Insert the memory card with the label facing the back of the camera.

with the screen facing inward, protecting the screen from scratches and smudges. Gently lift the right side of the monitor up and away from the camera back. You can then rotate the monitor to move it into the traditional position on the camera back, as shown on the left in Figure 1-3, or swing the monitor out to get a different viewing angle, as shown on the right.



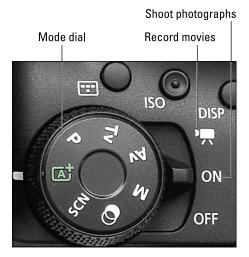


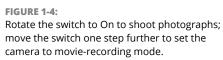
FIGURE 1-3: Here are two possible monitor positions.



#### 6. Move the On/Off switch to the On position.

Okay, that's an odd way to say "turn on the camera," right? Agreed, but there's good reason for it: This particular On/Off switch, shown in Figure 1-4, has three positions. When you rotate the switch to On, the camera comes to life and is ready to take still photos. If you move the switch one step further, to the movie-camera symbol, the camera turns on and sets itself to Movie mode. You can't take a still photograph in Movie mode; it's good for recording video only.





7. Set the language, time zone, and date.

When you power up the camera for the first time, the monitor displays a screen asking you to set the date, time, and time zone. The easiest way to adjust these settings is to use the touchscreen, which is enabled by default. Just tap an option to select it. Small triangles appear above and below the option to let you know that it's active, but you don't tap those triangles the change the value. Instead, look for the up and down triangles in the lower-left corner of the screen, and tap those arrows to set the value. Lather, rinse, and repeat until you complete all the adjustments you want to make. Finally, tap OK to exit the screen.

If you prefer not to use the touchscreen, you can adjust settings by using the Quick Control dial, which is the combination dial/toggle switch that surrounds the Set button. Rotate the dial or press the left or right edges of the dial to highlight the option you want to adjust; press the Set button to activate it. Again, triangles appear above and below the active option. Rotate the dial or press up or down on the top or bottom of the dial to change the value. Press Set again to lock in the new value. (I provide more information about using the Quick Control dial later in the chapter.)



The date/time information is included as *metadata* (hidden data) in the picture file. You can view metadata in some playback display modes (see Chapter 9) and in certain photo programs, including Canon Digital Photo Professional 4. (Refer to Chapter 10.) Also note the sun symbol to the left of the Time Zone option. That symbol represents the option that automatically adjusts the camera's clock when Daylight Saving Time begins and ends, if that's a thing in your part of the globe. The option is turned on by default.

#### 8. Select an exposure mode by rotating the Mode dial, labeled in Figure 1-4.

The exposure mode determines how much control you have over camera settings as well as whether any special effects are applied. Chapter 2 explains the various exposure modes. For easiest operation, set the dial to Scene Intelligent Auto, represented by the green A+, as shown in Figure 1-4. Be aware, though, that some features are available only in the advanced modes: P, Tv, Av, and M.

#### 9. Adjust the viewfinder to your eyesight.

This step is critical; if you don't set the viewfinder to your eyesight, subjects that appear out of focus in the viewfinder might actually be in focus, and vice versa. If you wear glasses while shooting, adjust the viewfinder with your glasses on.



You control viewfinder focus through the dial labeled in Figure 1-5. (In official lingo, it's called the *diopter adjustment dial*.) After taking off the lens cap, follow these steps:

- Look through the viewfinder, press the shutter button halfway and then release it.
- Concentrate on the lines that appear in the center of the frame and the row of data displayed at the bottom of the frame.
- 3. Rotate the adjustment dial until the viewfinder markings and data appear sharpest.

Rotate to adjust viewfinder focus



**FIGURE 1-5:** Use this dial to adjust the viewfinder focus to your eyesight.

Ignore the scene you see

through the lens; that won't change because you're not actually focusing the camera. If the markings turn off before you finish making your adjustment, give the shutter button another quick half-press and release to redisplay them.

Can't get the display sharp enough? You may need an adapter that enables further adjustment of the viewfinder. Look for an E-series dioptric adjustment lens adapter.

That's all there is to it — the camera is now ready to go. The rest of this chapter familiarizes you with other major camera features and explains such basics as how to navigate menus, use the touchscreen, and view and adjust camera settings.

## **Exploring External Camera Features**

Scattered across your camera's exterior are features that you use to change picture-taking settings, review your photos, and perform other operations. Later chapters explain how and when to use these tools; the following sections provide a basic "what's this thing do?" introduction to them. (Don't worry about memo-rizing the button names; throughout the book, figures and margin symbols tell you exactly which button or switch to use.)



If you're moving to the T8i/850D from an earlier version of this camera (such as the T7i/800D) or even other Rebel dSLR models, you probably noticed that certain buttons found on those models are nowhere to be found on this one — such as the button that's been used for years to raise the built-in flash and the one that accessed the setting known as Exposure Compensation. The good news is that the *functions* that the now-gone buttons accessed are still there; you just get to them in a different way.

### **Topside controls**

Your virtual tour begins on the top of the camera, shown in Figure 1-6. Here are the items of note:

On/Off/Movie mode switch: As outlined in the preceding section, setting the switch to the movie-camera icon turns on the camera and sets it to movie-recording mode. Move the switch to On for still photography.

Even when the switch is in the On position, the camera automatically goes to sleep after a period of inactivity to save battery power. To wake the camera up, press the shutter button halfway and release it. See the information related to the Auto Power Off setting, found in the section "Setup Menu 2," later in this chapter, for help adjusting the timing of the automatic shutoff.

- >> Mode dial: Rotate this dial to select an *exposure mode*, which determines whether the camera operates in fully automatic, semi-automatic, or manual exposure mode when you take still pictures. Chapter 2 introduces you to the various exposure modes.
- Viewfinder adjustment dial: Use this dial to adjust the viewfinder focus to your eyesight, as outlined in the preceding section.
- Main dial: As its name implies, this dial is central to many camera functions, from scrolling through menus to changing certain shooting and playback settings.

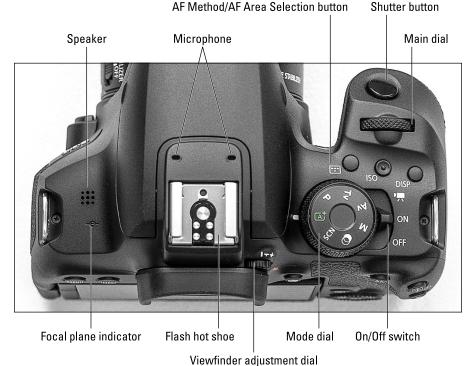


FIGURE 1-6: Here's a guide to controls found on top of the camera.



On some menu screens, you see a symbol that resembles the top half of a dial with notches around the edge, as shown in Figure 1-7. That symbol indicates that you use the Main dial to adjust the setting. On some screens curved arrows appear near the Main dial symbol. In Figure 1-7, you see one arrow under the Main dial symbol and another on the left side of the screen. When using the touchscreen, you can tap those arrows to adjust the setting instead of using the Main dial.



#### FIGURE 1-7:

The notched half-circle symbol tells you to use the Main dial to adjust the setting.



AF Method/AF Area Selection button: Press this button to access

the AF Method and AF Area Selection settings, both related to autofocusing. Chapter 5 explains.

Main dial symbol

- ISO button: True to its name, this button displays a screen where you can adjust the ISO setting, which determines how sensitive the camera is to light. Chapter 4 details this critical setting.
- >> **DISP button:** This button affects the Quick Control screen, which displays shooting information when you're taking still pictures. (Check out "Displaying the Quick Control screen," later in this chapter, for a look.) Normally, the screen appears automatically when you turn the camera on or press the shutter button halfway and release it; the screen then turns off after a period of inactivity. But you can press the DISP button at any time to toggle the screen on and off.
- Shutter button: You no doubt already understand the function of this button, but you may not realize that when you use autofocus and autoexposure, you need to use a two-stage process when taking a picture: Press the shutter button halfway, pause to let the camera set focus and exposure, and then press down the rest of the way to capture the image. You'd be surprised how many people mess up their pictures because they press that button with one quick jab, denying the camera the time it needs to set focus and exposure.
- Flash hot shoe: Labeled in Figure 1-6, this is the connection for attaching an external flash and other accessories such as flash adapters and the Canon GP-E2 GPS Receiver.



- Focal plane indicator: Should you need to know the exact distance between your subject and the camera, the *focal plane indicator*, labeled in Figure 1-6, is key. This mark indicates the plane at which light coming through the lens is focused onto the camera's image sensor. Basing your measurement on this mark produces a more accurate camera-to-subject distance than using the end of the lens or some other point on the camera body as your reference point. You might take advantage of this feature when taking pictures for a legal or scientific purpose that requires you to submit the camera-to-subject distance along with the photos.
- Speaker: When you play a movie that contains audio, the sound comes wafting through these holes.
- Microphone: You can record movie audio via the built-in microphone, which picks up sound from the two holes labeled "Microphone" in Figure 1-6.

## Back-of-the-body controls

Traveling over the top of the camera to its back, you encounter the smorgasbord of controls shown in Figure 1-8.



FIGURE 1-8: Having lots of external buttons makes accessing the camera's functions easier.



Some buttons have multiple "official" names because they serve multiple purposes depending on whether you're taking pictures, reviewing images, recording a movie, or performing some other function. In most cases, this book refers to these buttons by the first label you see in the following list (and in Figure 1–8) to simplify things. Again, though, the margin icons and figures show you exactly which button to press to accomplish the task being discussed. Here's an introduction to the controls on this side of the camera:



AF Point Selection/Magnify button: In certain shooting modes, you press this button to specify which autofocus points or zones you want the camera to use when establishing focus. You can also press and hold the button during Live View or Movie shooting to magnify the display to check focus. (Chapter 5 tells you about focusing features.) In Playback mode, covered in Chapter 9, you press the button to magnify the image display (thus the plus sign in the button's magnifying glass icon).



➤ AE Lock/FE Lock/Index/Reduce button: During shooting, you can press this button to lock autoexposure (AE) settings, as covered in Chapter 4, or to lock flash exposure (FE), a feature detailed in Chapter 2.

This button also serves two playback functions: It switches the display to Index mode, enabling you to see multiple image thumbnails at once. And if you magnify a photo, pressing the button reduces the magnification level.



➤ AF ON button: In the camera instruction manual, Canon uses the name AF Start button for this control, which no doubt will stymie many users' efforts to search the manual for information on the AF ON button. But AF Start actually is applicable in that pressing the button initiates autofocusing, giving you an alternative to pressing the shutter button halfway to get that job done. Experienced photographers refer to this as back-button autofocus because the button usually is located on the back of the camera, as it is on the T8i/850D. There are several situations in which using the AF ON button makes good sense; the autofocus sections of Chapter 5 provide more insight.

Two additional points about the AF ON button:

- The AF ON function works only when the Mode dial is set to P, Tv, Av, or M. In Canon lingo, those four shooting modes are called Creative Zone modes.
- You can assign a different function to the button if you don't want to use it for autofocusing. Chapter 11 explains how to modify the function of this and other buttons on your camera.

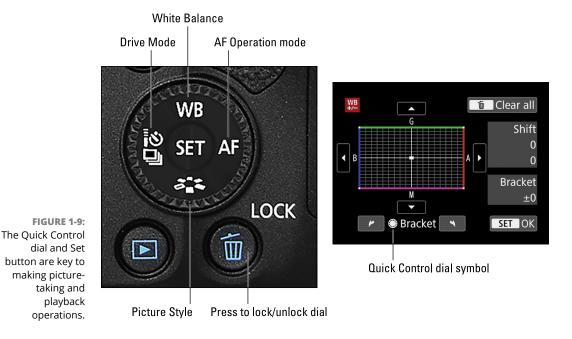


Live View/Movie-record button: Press this button to shift to Live View mode, which enables you to compose your pictures using the monitor instead of the viewfinder. When shooting movies, press the button to start and stop recording. (You must first set the On/Off/Movie switch to the Movie position.)



- Q (Quick Control) button: Press this button to shift to Quick Control mode, which enables you to adjust major shooting settings quickly. See "Using Quick Control Mode," later in this chapter, for help.
- Memory-card access lamp: Labeled in Figure 1-8, this lamp blinks while the camera is accessing the memory card. Don't power off the camera while the lamp is blinking, or you may damage the card or camera as well as corrupt files on the card.

- Quick Control dial/Set button: Figure 1-8 points out this multifaceted control, shown in close-up view in Figure 1-9. Here are a few basics to know about using it:
  - You can rotate the outer ring of the Quick Control dial to select and adjust some settings. If nothing happens when you rotate the ring or the word *Locked* appears on the screen, you may have inadvertently locked the dial, preventing it from having any effect. See the upcoming bullet point "Erase/Lock button" to find out more.
  - Pressing the top, right, bottom, or left edge of the dial provides quick access to the four settings labeled in Figure 1-9. White Balance and Picture Style settings are discussed in Chapter 6; AF Operation, in Chapter 5; and Drive mode, in Chapter 2. You also may need to press the dial right/left or up/down when adjusting certain other settings. If I tell you to "press the right edge of the Quick Control dial," for example, press near where the AF label appears. (On previous editions of this camera, there were four arrow keys, called *cross keys*, surrounding the Set button. No more; now you just have to deduce that you can press the edges of the dial to get something done. Farewell, cross keys, we'll miss your easily understood nomenclature.) The camera's instruction manual, however, still refers to these edges as *arrow keys*, even though there aren't any arrow markings on the dial.



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- The Set button is key to activating an option when you're scrolling through menus or settings screens. For example, you might need to rotate the Quick Control dial or press one of its sides to highlight an option and then press the Set button to unlock the option. Once the option is unlocked, you use the Quick Control dial to adjust the setting and then lock in your choice by pressing the Set button again.
- The symbol labeled in the menu screen on the right in Figure 1-9 represents the Quick Control dial and is your reminder that you can use the dial to adjust the setting marked by the symbol. This particular screen is related to an advanced White Balance function that I cover in Chapter 6.



- Playback button: Press this button to switch the camera into picture-review mode.
- Erase/Lock button: Sporting a trash can icon, the universal symbol for delete, this button lets you erase pictures from your memory card during playback. Chapter 9 has specifics.

But wait, what's with the word *Lock* above the button? (Refer to Figure 1-8.) Well, it's related to something Canon calls *Multi-Function Lock*. By default, pressing the Erase/Lock button once locks the outer edge of the Quick Control dial. The outer edge still rotates; it just doesn't adjust any settings that it normally would affect. The idea is to prevent you from accidentally adjusting a setting with an errant spin of the dial. You can still press up/down/right/left on the dial and use the Set button to adjust settings, though. To unlock the dial, press the Erase/Lock button again.

Two other critical bits of information about the Lock feature:

- *Customizing the lock feature*: You can disable the Quick Control dial lock feature as well as add the lock capability to the Main dial and to all touchscreen functions. (Ah, now you get why it's called *Multi Function Lock*.) Open Setup Menu 4 and choose Multi Function Lock, as shown on the left in Figure 1-10, to display the screen shown on the right in the figure. Place a check mark in the boxes of the functions you want the Erase/Lock button to control. (If you need help understanding how to work the menus, see "Ordering from Camera Menus," later in this chapter.)
- When selected controls are locked, a reminder appears on the shooting display, as shown on the left in Figure 1-11. Immediately after you initiate the lock, the message includes the symbol that represents the locked controls. In Figure 1-11, the message indicates that the Quick Control dial is locked, for example. The word *Lock* also appears near the bottom of the screen, as labeled in the figure. After a few seconds, the banner at the top of the screen disappears but the word *Lock* remains. When you press the Erase/ Unlock button again, the camera briefly displays the message "Controls unlocked."

