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Julie Adair King

Author of Digital Photography For Dummies



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***Canon® EOS
Rebel T4i/650D***

FOR

DUMMIES®

**Canon[®] EOS
Rebel T4i/650D**
FOR
DUMMIES[®]

by Julie Adair King



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Julie Adair King is the author of many books about digital photography and imaging, including the best-selling *Digital Photography For Dummies*. Her most recent titles include a series of *For Dummies* guides to popular Nikon, Canon, and Olympus cameras. Other works include *Digital Photography Before & After Makeovers*, *Digital Photo Projects For Dummies*, *Julie King's Everyday Photoshop For Photographers*, *Julie King's Everyday Photoshop Elements*, and *Shoot Like a Pro!: Digital Photography Techniques*. When not writing, King teaches digital photography at such locations as the Palm Beach Photographic Centre.

An Ohio native and graduate of Purdue University, she now resides in West Palm Beach, Florida, and does not miss Midwestern winters even a little bit (although she very much misses friends who have not yet made the journey south).

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Introduction

In 2003, Canon revolutionized the photography world by introducing the first digital SLR camera to sell for less than \$1,000, the EOS Digital Rebel/300D. And even at that then-unheard-of price, 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 T4i/650D. Like its ancestors, this baby offers the range of advanced controls that experienced photographers demand plus an assortment of tools designed to help beginners be successful as well. Adding to the fun, this Rebel also offers the option to record full high-definition video, plus an articulating, touchscreen monitor that's not only useful but also just plain cool.

The T4i/650D is so feature-packed, in fact, that sorting out everything can be a challenge, especially if you're new to digital photography or SLR photography, or both. For starters, you may not even be sure what SLR means, let alone have a clue about all the other techie terms you encounter in your camera manual — resolution, aperture, white balance, and ISO, for example. And if you're like many people, you may be so overwhelmed by all the controls on your camera 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 50 miles per hour.

Therein lies the point of *Canon EOS Rebel T4i/650D 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 to make sense of concepts, either. In classic *For Dummies* style, 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 an in-depth photography workshop tailored specifically to your Canon picture-taking powerhouse. Whether your interests lie in taking family photos, exploring nature and travel photography, or snapping product shots for your business, you'll get the information 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's designed to

take you from absolute beginner to experienced user, I also tried to make each chapter as self-standing as possible so you can explore the topics that interest you in any order you please.

Here's a quick look at what you can find in each part:

Part I: Fast Track to Super Snaps

This part contains four 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, including how to use the nifty touchscreen monitor. Chapter 2 explains basic picture-taking options, such as shutter-release mode and image quality settings, and Chapter 3 shows you how to use the camera's simplest exposure modes, including Scene Intelligent Auto and Creative Auto. Chapter 4 explains the ins and outs of using Live View, the feature that lets you compose pictures on the monitor, and also covers movie recording.

Part II: Working with Picture Files

As its title implies, this part discusses after-the-shot topics. Chapter 5 explains picture playback features, and Chapter 6 guides you through the process of transferring pictures from your camera to your computer and then getting pictures ready for print and online sharing. You can also get help with converting pictures shot in the Canon Raw file format (CR2) to a standard format in Chapter 6.

Part III: Taking Creative Control

Chapters in this part help you unleash the full creative power of your camera by moving into semi-automatic or manual photography modes. Chapter 7 covers the all-important topic of exposure; Chapter 8 offers tips for manipulating focus and color; and Chapter 9 provides a quick-reference guide to shooting strategies for specific types of pictures: portraits, action shots, landscape scenes, close-ups, and more.

Part IV: The Part of Tens

In famous *For Dummies* tradition, the book concludes with two top-ten lists containing additional bits of information and advice. Chapter 10 takes a look at ten more ways to customize your camera, and Chapter 11 offers a review of features that, though not found on most "Top Ten Reasons I Bought My Rebel T4i/650D" lists, are nonetheless interesting, useful on occasion, or a bit of both. Closing things out is a glossary that serves as a quick reference to the terminology you encounter as you explore digital photography and your camera.

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 I present a detail that's useful mainly for impressing your geeky friends, I 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, I need to point out a few other details that will help you use this book:

- ✓ **Other margin art:** Replicas of some of your camera's buttons and onscreen graphics also appear in the margins of some paragraphs and in some tables. I include these images to provide quick reminders of the appearance of the button or option being discussed.
- ✓ **Software menu commands:** In sections that cover software, a series of words connected by an arrow indicates commands you choose from the program menus. For example, if a step tells you, "Choose File→Export," click the File menu to unfurl it and then click the Export command on the menu.
- ✓ **Choosing camera menu and screen options:** In many cases, you can select a camera setting by tapping its name or symbol on the touchscreen or by using the *cross keys* — those four keys that surround the Set button — to highlight the name or icon and then pressing the Set button. To avoid having to spell all that out every time I describe a camera function that can be accessed either way, I use some verbal shorthand and simply tell you to choose the setting in question.
- ✓ **Book updates:** Occasionally, I need to make updates to technology books. If this book does have technical updates, they will be posted at www.dummies.com/go/canoneosrebel4i650updates.

eCheat Sheet

As an added bonus, you can find an electronic version of the *For Dummies* Cheat Sheet at www.dummies.com/cheatsheet/canoneosrebel4i650d. The Cheat Sheet contains a quick-reference guide to all the buttons, dials, switches, and exposure modes on your camera. Log on, print it out, and tuck it in your camera bag for times when you don't want to carry this book with you.

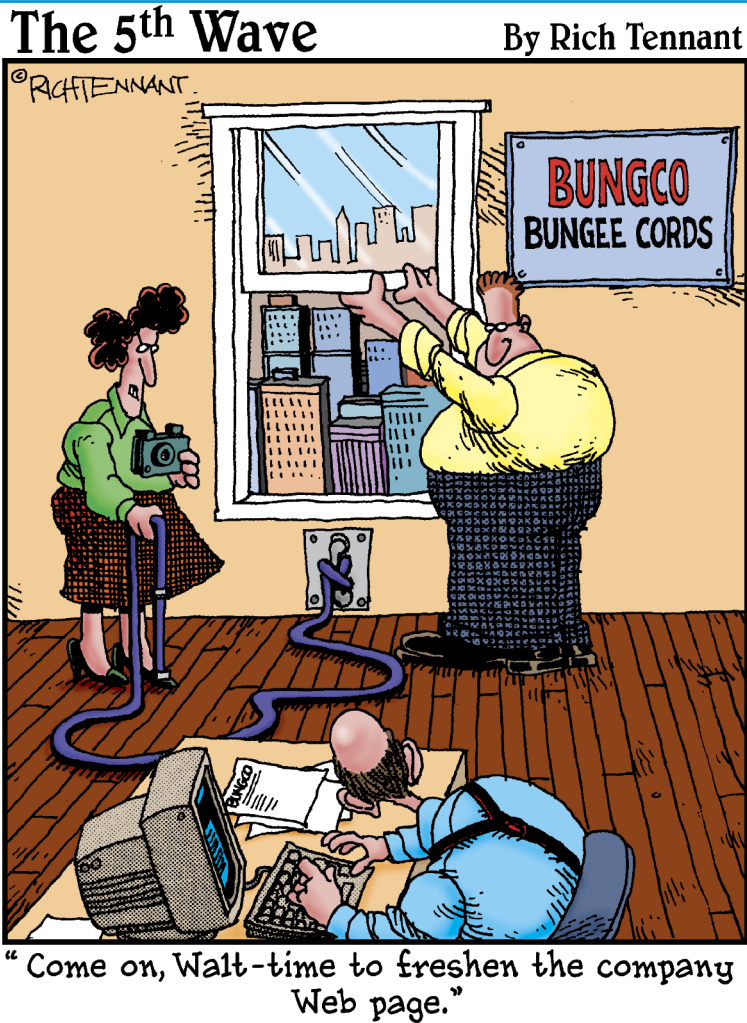
Practice, Be Patient, and Have Fun!

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 very good company. *Everyone* finds this stuff a little mind-boggling at first. Take it slowly, experimenting with just one or two new camera settings or techniques at first. Then, every time you go on a photo outing, make it a point to add one or two more shooting skills to your repertoire. With some 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 it is you prefer to sip while you read, and start exploring the rest of this book. Your Rebel T4i/650D is the perfect partner for your photographic journey, and I thank you for allowing me, in this book, to serve as your tour guide.

Part I

Fast Track to Super Snaps



In this part . . .

Making sense of all the controls on your camera isn't a task you can complete in an afternoon — or, heck, in a week or maybe even a month. But there's no reason not to take great-looking pictures today. By using the point-and-shoot exposure modes, you can capture terrific images with very little effort. All you do is compose the scene, and the camera takes care of almost everything else.

This part shows you how to take best advantage of your camera's most-automatic photography modes and also addresses some basic setup steps, such as adjusting the viewfinder to your eyesight and getting familiar with the camera menus, buttons, and dials. In addition, chapters in this part explain a few picture-taking settings that come into play in any exposure mode — and show you how to use your camera's Live View and movie-making features.



Getting the Lay of the Land

In This Chapter

- ▶ Using an SLR lens
- ▶ Adjusting the viewfinder and monitor
- ▶ Practicing touchscreen gestures
- ▶ Working with camera memory cards
- ▶ Getting acquainted with external camera controls
- ▶ Checking and changing camera settings
- ▶ Customizing basic camera operations

If you're like many people, shooting for the first time with an SLR (single-lens reflex) camera produces 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 get comfortable with your T4i/650D. Among other things, I show you how to attach and remove lenses, use the touchscreen monitor, and view and adjust camera settings. You'll also get an introduction to the camera's external controls as well as my advice about certain camera setup options.



Getting Comfortable with Your Lens

One of the biggest differences between a point-and-shoot camera and an SLR camera is the lens. With an SLR, you can swap lenses to suit different photographic needs, going from an extreme close-up lens to a super-long telephoto, for example. Additionally, an SLR lens has a movable focusing ring that lets you focus manually instead of relying on the camera's autofocus mechanism.

Of course, those added capabilities mean that you may need some help to take full advantage of your lens. To that end, the next several sections explain the process of attaching, removing, and using this critical part of your camera.

Attaching a lens

Your camera accepts two categories of Canon lenses: those with an EF-S design and those with a plain-old EF design.



The EF stands for *electro focus*; the S, for *short back focus*. And *that* simply means the rear element of the lens is closer to the sensor than with an EF lens. And no, you don't need to remember what the abbreviation stands for — just make sure that if you buy a Canon lens other than one of the two sold as a bundle with the camera, it carries either the EF or EF-S specification. If you want to buy a non-Canon lens, check the lens manufacturer's website to find out which lenses work with your camera.

Two other lens acronyms to note: First, the 18–55mm and 18–135mm lenses that you can buy as part of a Rebel T4i/650D kit are *IS* lenses, which means that they offer *image stabilization*, a feature you can explore a few sections from here. Second, the 18–135mm kit lens also carries the designation *STM*. That abbreviation refers to the fact that the autofocus system uses *stepping motor technology*, which is designed to provide smoother, quieter autofocus.

Whatever lens you choose, follow these steps to attach it to the camera body:

- 1. Remove the cap that covers the lens mount on the front of the camera.**
- 2. Remove the cap that covers the back of the lens.**
- 3. Locate the proper lens mounting index on the camera body.**

A *mounting index* is simply a marker that tells you where to align the lens with the camera body when connecting the two. Your camera has two of these markers, one red and one white, as shown in Figure 1-1.

Which marker you use to align your lens 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.

If you buy a non-Canon lens, check the lens manual for help with this step.

- 4. Align the mounting index on the lens with the correct one on the camera body.**

The lens also has a mounting index. Figure 1-1 shows the one that appears on the 18–55mm kit lens. On the 18–135 STM kit lens, the index marker looks the same, but if you buy a different lens, check the lens instruction manual.

5. **Keeping the mounting indexes aligned, position the lens on the camera's lens mount.**
6. **Turn the lens in a clockwise direction until the lens clicks into place.**

In other words, turn the lens toward the lens-release button, as indicated by the arrow in Figure 1-1.



Always attach (or switch) lenses in a clean environment to reduce the risk of getting dust, dirt, and other contaminants inside the camera or lens. For added safety, point the camera slightly down when performing this maneuver; doing so helps prevent any flotsam in the air from being drawn into the camera by gravity.



Removing a lens

To detach a lens from the camera body, take these steps:

1. **Locate the lens-release button on the front of the camera, labeled in Figure 1-1.**
2. **Grip the rear collar of the lens.**
In other words, hold on to the stationary part of the lens that's closest to the camera body.
3. **Press the lens-release button while turning the lens toward the shutter-button side of the camera.**
You can feel the lens release from the mount at this point. Lift the lens off the mount to remove it.
4. **Place the rear protective cap onto the back of the lens.**

If you aren't putting another lens on the camera, cover the lens mount with the protective cap that came with your camera, too.

Figure 1-1: Place the lens in the lens mount with the mounting indexes aligned.

Zooming in and out

If you bought a zoom lens, it sports a *zoom ring*. Figure 1-2 shows you the location of the zoom ring on the two kit lenses; for other lenses, see your lens user guide. With the kit lenses, just rotate the zoom ring to zoom in and out. A few zoom lenses use a push-pull motion to zoom instead.



Figure 1-2: Here's a look at the two kit lenses.

The numbers around the edge of the zoom ring, by the way, represent *focal lengths*. Chapter 8 explains focal lengths in detail. In the meantime, just note that the number that's aligned with the white focal-length indicator, labeled in Figure 1-2, represents the current focal length.

Shifting from autofocus to manual focus (and back)

Your Rebel T4i/650D offers an excellent autofocus system. With some subjects, however, autofocus can be slow or impossible, which is why your camera also offers manual focusing. When using the viewfinder to compose photos, make the shift from auto to manual focus as follows:

- 1. Set the AF/MF switch on the side of the lens to the MF position.**

This switch sets the focus operation to either auto (AF) or manual (MF).

- 2. Look through the viewfinder and twist the focusing ring until your subject comes into focus.**

I labeled the focusing ring as it appears on the kit lenses in Figure 1-2. If you use another lens, the focusing ring may be located elsewhere, so check your lens manual.

If you have trouble focusing, you may be too close to your subject; every lens has a minimum focusing distance. You also may need to adjust the viewfinder to accommodate your eyesight; the section “Adjusting the Viewfinder Focus” shows you how to take this step.



To return to autofocus, just set the lens switch back to the AF position. In Movie mode (power switch set to the movie-camera icon) or Live View mode (when you use the monitor to compose images), turn the camera off before setting the lens switch to the MF position. This step is necessary to interrupt the continuous autofocus system that’s available for movie and Live View shooting. (Chapter 4 details Movie and Live View modes.)



Chapter 8 provides more details about focusing. In the meantime, note this important bit of business about the 18–135mm STM kit lens: The focusing motor doesn’t operate if the camera has gone to sleep because of the Auto Power Off feature, which I explain in the section “Setup Menu 2,” later in this chapter. The lens itself goes to sleep if you don’t perform any lens operations for a while. Either way, manual focus adjustments aren’t possible when the lens is in this state, and automatic focusing during zooming may be delayed. You can wake the camera and lens up by pressing the shutter button half-way; give the lens a brief moment to wake up fully before you take a picture. (Please look in your camera manual for complete information about using this lens, which I don’t have room to provide in this book.)

Using an IS (image stabilizer) lens

Both the kit lenses sold with the Rebel T4i/650D camera offer *image stabilization*, indicated by the initials *IS* in the lens name.

Image stabilization attempts to compensate for small amounts of camera shake that are common when photographers handhold their cameras and use a slow shutter speed, a lens with a long focal length, or both. Camera shake can result in blurry images, even when your focus is dead-on. Although image stabilization can't work miracles, it enables most people to capture sharp handheld shots in many situations that they otherwise couldn't. The feature works regardless of whether you use autofocusing or manual focusing, and it works for both still photography and movie shooting.



However, when you use a tripod, image stabilization can have detrimental effects because the system may try to adjust for movement that isn't actually occurring. Although this problem shouldn't be an issue with most Canon IS lenses, if you do see blurry images while using a tripod, try setting the Stabilizer switch (shown in Figure 1-2) to Off. You also can save battery power by turning off image stabilization when you use a tripod. If you use a monopod, leave image stabilization turned on so it can help compensate for any accidental movement of the monopod.

On non-Canon lenses, image stabilization may go by another name: *anti-shake*, *vibration compensation*, and so on. In some cases, the manufacturers recommend that you leave the system turned on or select a special setting when you use a tripod, so check the lens manual for information.



Whatever lens you use, image stabilization isn't meant to eliminate the blur that can occur when your subject moves during the exposure. That problem is related to shutter speed, a topic you can explore in Chapter 7. Chapter 8 offers more tips for blur-free shots and provides an explanation of focal length.

Getting Familiar with the Monitor

Perched on the top-right edge of the viewfinder is a tiny black knob, officially known as a *dioptric adjustment control*, that enables you to adjust the magnification of the viewfinder to your eyesight. I highlighted the knob on the left in Figure 1-3.



Adjusting the viewfinder to your eyesight is critical: If you don't, scenes that appear out-of-focus through the viewfinder may actually be sharply focused through the lens, and vice versa. Follow these steps to adjust your viewfinder:

1. **Remove the lens cap.**
2. **Look through the viewfinder and aim the lens at a plain surface.**