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**Julie Adair King**



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**by Julie Adair King**

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# Introduction

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**I**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. 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 70D. 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 70D 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 terms you encounter in your camera manual — resolution, aperture, 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 70D 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 that you can explore 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. 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, Creative Auto, and SCN (Scene) modes. 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, and close-ups.
- ✓ **Part IV: The Part of Tens:** In famous *For Dummies* tradition, the book concludes with two top-ten lists containing additional bits of information. Chapter 10 takes a look at ten features that although not found on most "Top Ten Reasons I Bought My 70D" lists, are nonetheless interesting, useful on occasion, or a bit of both. Chapter 11 closes things out with ten ways to customize your camera not covered in earlier chapters.

## 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.

## eCheat Sheet

As an added bonus, you can find an electronic version of the *For Dummies* Cheat Sheet at [www.dummies.com/cheatsheet/canoneos70d](http://www.dummies.com/cheatsheet/canoneos70d). 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 then start exploring the rest of this book. Your EOS 70D 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

getting started  
with

**Canon EOS 70D**



Visit [www.dummies.com](http://www.dummies.com) for more great *For Dummies* content online.



## *In this part . . .*

- ✓ Get familiar with your camera's buttons, displays, and menus.
- ✓ Read about basic photo-taking settings and when to use each.
- ✓ Take great pictures easily by using the fully automatic shooting modes.
- ✓ Investigate Live View and movie recording.



# 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

**I**f you're like me, shooting for the first time with a camera as sophisticated as the Canon EOS 70D 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 start getting comfortable with your 70D. Along with an introduction to the camera's external controls, I offer details about working with lenses and memory cards, viewing and adjusting camera settings, and choosing basic setup options.

## *Looking at Lenses*

One of the biggest differences between a point-and-shoot camera and a dSLR (*digital single lens reflex*) camera is the lens. With a dSLR, you can change lenses to suit different photographic needs, going from an extreme close-up lens to a super-long telephoto, for example. In addition, a dSLR lens has a focusing ring that gives you the option of focusing manually instead of relying on the camera's autofocus mechanism.



I don't have room in this book to go into detail about the science of lenses, nor do I think that an in-depth knowledge of the subject is terribly important to your photographic success. But the next few sections offer advice that may help when you're shopping for lenses, figuring out whether the lenses you inherited from Uncle Ted or found on eBay will work with your 70D, and taking the steps involved in actually mounting and using a lens.

## Choosing a lens

To decide which lens is the best partner for your camera, start by considering these factors:



- ✓ **Lens compatibility:** 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 stands 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 if you buy a Canon lens other than one of the two sold as a bundle with the camera, that 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 70D kit are *IS* lenses, which means that they offer *image stabilization*, a feature you can explore a few sections from here. Second, they also carry 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.



Finally, be aware that some lenses can't take full advantage of the Dual Pixel CMOS (*see-moss*) autofocus system that's used during Live View and Movie recording. Don't worry about what the name means — the important point is that it produces faster, more accurate autofocus. If you're interested in learning more, go to the 70D product page at the Canon USA website ([www.usa.canon.com](http://www.usa.canon.com)), which has a link to a section that explains the technology and lists lenses that support it.

- ✓ **Focal length and the crop factor:** The focal length of a lens, stated in millimeters, determines the angle of view that the camera can capture and the spatial relationship of objects in the frame. Focal length also affects *depth of field*, or the distance over which focus appears acceptably sharp.

You can loosely categorize lenses by focal length as follows:

- **Wide-angle:** Lenses with short focal lengths — generally, anything under 35mm — are known as *wide-angle lenses*. A wide-angle lens has the visual effect of pushing the subject away from you and

making it appear smaller. As a result, you can fit more of the scene into the frame without moving back. Additionally, a wide-angle lens has a large depth of field, which means that both the subject and background objects appear sharp. These characteristics make wide-angle lenses ideal for landscape photography.

- *Telephoto*: Lenses with focal lengths longer than about 70mm are *telephoto* lenses. These lenses create the illusion of bringing the subject closer to you, increase the subject's size in the frame, and produce a short depth of field so that the subject is sharply focused but distant objects are blurry. Telephoto lenses are great for capturing wildlife and other subjects that don't permit up-close shooting.
- *Normal*: A focal length in the neighborhood of 35mm to 70mm is considered "normal" — that is, somewhere between a wide-angle and telephoto. This focal length produces the angle of view and depth of field that are appropriate for the kinds of snapshots that most people take.

Figure 1-1 offers an illustration of the difference that focal length makes, showing the same scene captured at 42mm (left image) and 112mm (right image). Of course, the illustration shows just two of countless possibilities, and the question of which focal length best captures a scene depends on your creative goals.

42mm



112mm

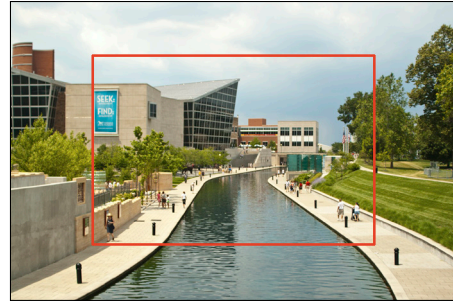


**Figure 1-1:** I used a focal length of 42mm to capture the first image and then zoomed to a focal length of 112mm to capture the second one.



Note, however, that the focal lengths stated in this book are so-called *35mm equivalent* focal lengths. Here's the deal: When you put a standard lens on most DSLR cameras, including your 70D, the available frame area is reduced, as if you took a picture on a camera that uses 35mm film negatives and then cropped it.

This so-called *crop factor* varies depending on the camera, which is why the photo industry adopted the 35mm-equivalent measuring stick as a standard. With the 70D, the crop factor is roughly 1.6. So the 18–135mm kit lens, for example, captures the approximate area you would get from a 29–216mm lens on a 35mm film camera. (Multiply the crop factor by the lens focal length to get the actual angle of view.) In Figure 1-2, the red line indicates the image area that results from the 1.6 crop factor.



**Figure 1-2:** The 1.6 crop factor produces the angle of view indicated by the red outline.

When shopping for a lens, remember this crop factor to make sure that you get the focal length designed for the type of pictures you want to take.

- ✓ **Prime versus zoom lenses:** A *prime* lens is a single focal-length lens. With a zoom lens, you get a range of focal lengths in one unit. For example, the kit lens I feature in this book has a focal-length range of 18–135mm.

Why select a lens that offers a single focal length when a zoom lens offers a range of focal lengths? In a word, quality. Because of some lens science I won't bore you with, you typically see some reduction in picture quality at certain points in the range of a zoom lens. On the flip side, a zoom lens is more convenient than carting around a bag of prime lenses, and many zoom lenses today offer very good image quality.

- ✓ **Aperture range:** The *aperture* is an adjustable diaphragm in a lens. By adjusting the aperture size, you can control the amount of light that enters through the lens and strikes the image sensor, thereby controlling exposure. The aperture setting also affects depth of field: A wide-open aperture produces a short depth of field, so the subject is sharply focused but distant objects appear blurry; a narrow aperture produces a long depth of field so that both the subject and distant objects appear sharp.

Chapters 7 and 8 cover these issues in detail. For the purposes of lens shopping, you need to know just a few things.

- *Every lens has a specific range of aperture settings.* Obviously, the larger that range, the more control you have over exposure and depth of field.
- *The larger the maximum aperture, the “faster” the lens.* Aperture settings are stated in *f-stops*, with a lower number meaning a larger

aperture. For example, a setting of  $f/2$  results in a more open aperture than  $f/4$ . And if you have one lens with a maximum aperture of  $f/2$  and another with a maximum aperture of  $f/4$ , the  $f/2$  lens is said to be *faster* because you can open the aperture wider, thereby allowing more light into the camera and permitting the image to be captured in less time. This not only benefits you in low-light situations but also when photographing action, which requires a fast shutter speed (short exposure time). So, all other things being equal, a faster lens is better.

- *With some zoom lenses, the maximum and minimum aperture change as you zoom the lens.* For example, when you zoom to a telephoto focal length, you usually can't open the aperture as much as you can at a wide-angle setting. You can buy lenses that maintain the same maximum and minimum aperture throughout the whole zoom lens, but you pay more for this feature.

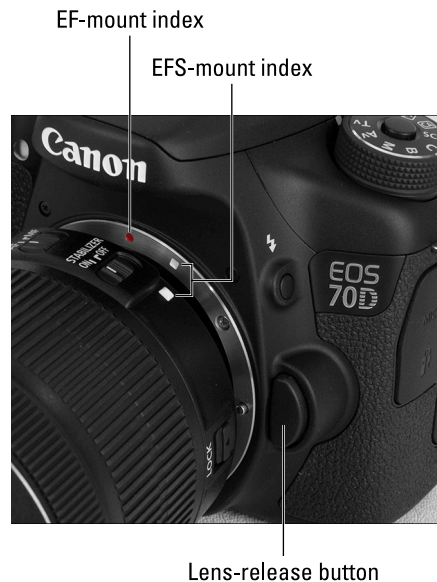
After studying these issues and narrowing down your choices, finding the right lens in the category you want is just a matter of doing some homework. Study lens reviews in photography magazines and online photography sites to find the best performing lens in your price range.

## Attaching and removing a lens

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

1. **Turn the camera off and 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 a mark that tells you where to align the lens with the camera body when connecting the two. Your camera has two of these marks, one red and one white, as shown in Figure 1-3.



**Figure 1-3:** Place the lens in the lens mount with the mounting indexes aligned.

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.

With a non-Canon lens, check the lens manual for help with this step.

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

The lens also has a mounting index. Figure 1-3 shows the one that appears on the 18–135mm EF-S kit lens.

**5. Keeping the mounting indexes aligned, position the lens on the camera's lens mount.**

**6. Turn the lens clockwise until it clicks into place.**

In other words, turn the lens toward the lens-release button, labeled in Figure 1-3.

To remove a lens, turn the camera off, press the lens-release button, grip the rear collar of the lens, and turn the lens toward the shutter button side of the camera. When you feel the lens release from the mount, lift the lens off the camera. Place the rear protective cap onto the back of the lens, and if you aren't putting another lens on the camera, cover the lens mount with its protective cap, too.



Always switch lenses in a clean environment to reduce the risk of getting dust and dirt inside the camera or lens. For added safety, point the camera slightly down when performing this maneuver to help prevent flotsam in the air from being drawn into the camera by gravity.

## *Zooming in and out*

If you bought a zoom lens, it sports a *zoom ring*. Figure 1-4 shows you the location of the zoom ring on the 18–135mm kit lens; for other lenses, see your lens user guide. With the kit lens, rotate the zoom ring to zoom in and out. A few zoom lenses use a push-pull motion to zoom instead.

The numbers around the edge of the zoom ring, by the way, represent focal lengths. The number that's aligned with the white focal-length indicator, labeled in Figure 1-4, represents the current focal length.

Some lenses, including the 18–135mm kit lens, also have a Lens lock switch, which is located in the position indicated in the figure. When the lens is set to the 18mm position, you can use the switch to lock the lens at that focal length. That way, when the camera is pointing downward, gravity can't cause the lens to extend to a longer focal length (a problem known as *lens creep*).





**Figure 1-4:** Here's a look at the 18–135mm kit lens.

## Using an IS (image stabilizer) lens

Both kit lenses sold with the 70D 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 autofocus or manual focusing, and it works for both still photography and movie shooting.



However, when you use a tripod, 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 Image Stabilizer (IS) switch (shown in Figure 1-4) 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. If you shoot in the B (Bulb) mode, Canon recommends that you disable stabilization.

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.

## Getting acquainted with focusing

Your camera offers an excellent autofocus system. With some subjects, however, autofocus can be slow or impossible, which is why your camera also offers manual focusing. Chapter 8 fully explains automatic and manual focusing for viewfinder photography, and Chapter 4 explains how things work when you're using the monitor to compose images (Live View mode) or are shooting movies. But here's a primer to get you started:



- ✓ **Choosing the focusing method:** You set the focusing method via the AF/MF (autofocus/manual focus) switch on the lens. But be careful: If you're in Live View or Movie mode, exit the live preview and return to viewfinder shooting before moving the lens switch from the AF to MF position. This step is needed to avoid damage that can occur if you switch to manual focusing while the continuous autofocus system that's available for Movie and Live View modes engaged. (Chapter 4 explains this system and everything else about Live View and movie shooting.)
- ✓ **Setting focus in MF mode:** Just rotate the lens focusing ring. Figure 1-4 shows you where to find it on the 18–135mm kit lens.
- ✓ **Setting focus in AF mode:** Press the shutter button halfway to initiate autofocus. After the scene comes into focus, press the button the rest of the way to take the picture. A couple pointers to remember:
  - How the camera finds its focusing target and when it locks focus depend on autofocus settings that I detail in Chapters 4 and 8.
  - If you're using the kit lens (or any STM lens from Canon), turning the focus ring when in autofocus mode has no effect on the lens — it won't turn and it will never hit a physical stop.





- ✓ **Waking up a sleeping lens:** With both kit lenses (as well as some other STM lenses), 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 halfway.

Two final Focusing 101 tips:

- ✓ If you have trouble focusing, you may be too close to your subject; every lens has a minimum focusing distance.
- ✓ In order to properly assess focus, you need to adjust the viewfinder to accommodate your eyesight, as outlined next.

## Adjusting the Viewfinder

Near the upper right of the rubber eyepiece that surrounds the viewfinder is a dial (see Figure 1-5) that enables you to adjust the viewfinder focus to match your eyesight. The dial is officially known as the *diopter adjustment control*.



If you don't take this step, scenes that appear out of focus through the viewfinder may actually be sharply focused through the lens, and vice versa. Here's how to make the necessary adjustment:

1. **Remove the lens cap, look through the viewfinder, and press the shutter button halfway to display picture data at the bottom of the viewfinder.**

In Scene Intelligent Auto mode (represented by the green A+ on the camera's Mode dial), as well as in some of the SCN (Scene) modes, the built-in flash may pop up; ignore it for now and close the unit after you finish adjusting the viewfinder.

2. **Rotate the diopter adjustment dial until the data appears sharpest.**



**Figure 1-5:** Rotate this dial to adjust the viewfinder focus to your eyesight.



If your eyesight is such that you can't get the display to appear sharp by using the dioptic adjustment knob, you can buy an additional eyepiece adapter. Prices range from about \$15–\$30 depending on the magnification you need. Look for an E-series dioptic adjustment lens adapter.

## *Adjusting the Monitor Position*

One of the many cool features of the 70D is its articulating monitor. When you first take the camera out of its box, the monitor is positioned with the screen facing the back of the body, as shown on the left in Figure 1-6, protecting the screen from scratches and smudges. (It's a good idea to place the monitor in this position when you're not using the camera.) When you're ready to start shooting or reviewing your photos, you can place the monitor in the traditional position on the camera back, as shown on the right in Figure 1-6. Or for more flexibility, you can swing the monitor out and away from the camera body and then rotate it to find the best viewing angle, as shown in Figure 1-7.



**Figure 1-6:** Here you see two possible monitor positions.



**Figure 1-7:** You also can unlock the monitor from the body and then rotate the screen to get the best view of things.

Because playing with the monitor is no doubt one of the first things you did after unpacking your camera, I won't waste space walking you through the process of adjusting the screen. (If you need help, the camera manual shows you what to do.) But I want to offer a few monitor-related tips:

- ✓ **Don't force things.** The monitor twists only in certain directions, and it's easy to forget which way it's supposed to move. So if you feel resistance, don't force things; instead, rely on that feeling of resistance to remind you to turn the screen the other way.
- ✓ **Watch the crunch factor.** Before positioning the monitor back into the camera, use a lens brush or soft cloth to clean the monitor housing so there's nothing in the way that could damage the screen.
- ✓ **Clean smart.** To clean the screen, use only the special cloths and cleaning solutions made for this purpose. *Do not* use paper products such as paper towels because they can contain wood fibers that can scratch the monitor. And never use a can of compressed air to blow dust off the camera — the air is cold and can crack the monitor.

## Using the Touchscreen

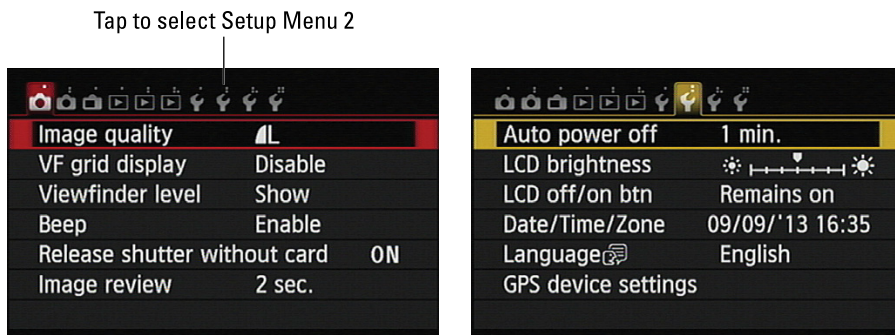
Just as cool as the monitor's flexibility is its touchscreen interface. You can choose menu options, change picture settings, and scroll through your pictures by touching one or two fingers to the screen, just as you can with a tablet, smartphone, or other touchscreen device.

Throughout the book, I tell you exactly where and how to touch the screen to accomplish specific actions. For now, get acquainted with the terminology used to indicate these touchscreen moves, called *gestures* by those who feel the need to assign names to things such as this.

- ✓ **Tap:** Tap your finger on a screen item to select it. Give it a try: First, press the Menu button to display the menu screen on the monitor, as shown on the left in Figure 1-8. Along the top of the screen, you see one highlighted icon, representing the current menu, and a row of dimmed icons representing other menus. On the left side of Figure 1-8, Shooting Menu 1 is the current menu. To switch to another menu, tap its icon. For example, tap the icon for Setup Menu 2, labeled on the left in the figure, and that menu appears, as shown on the right.

Tap *gently* — you don't have to use force. To avoid damaging the screen, use the fleshy part of your fingertip, not the nail or any other sharp object, and be sure that your fingers are dry because the screen may not respond if it gets wet. Canon also advises against putting a protective cover over the monitor; doing so can reduce the monitor's responsiveness to your touch.

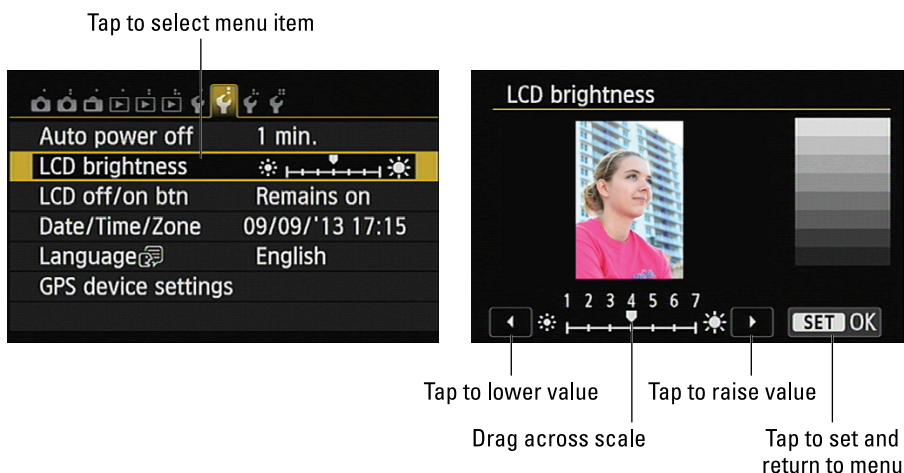




**Figure 1-8:** Tap a menu icon to display its menu.

✓ **Drag:** Drag your finger up, down, right, or left across the screen, according to my instruction. To try this gesture, first display Setup Menu 2 and tap LCD Brightness, shown on the left in Figure 1-9, to display the screen shown on the right. Now drag your finger across the scale at the bottom of the screen to adjust the screen brightness. Reset the marker to the middle of the bar after you're done playing around — that setting gives you the most accurate indication of picture brightness.

On this particular screen, you also see triangles at either end of the scale. You can tap those triangles to raise or lower the value represented on the scale. Either way, tap the Set icon to implement the setting and return to the menu.



**Figure 1-9:** Tap the LCD Brightness item (left) and then drag left or right across a scale to adjust the setting (right).

- ✓ **Swipe:** Drag a finger quickly across the screen. You use this gesture, known in some circles as a *flick*, to scroll through your pictures in Playback mode, a topic you can explore in Chapter 5.
- ✓ **Pinch in/pinch out:** To pinch in, place your thumb at one edge of the screen and your pointer finger at the other. Then drag both toward the center of the screen. To pinch out, start in the center of the screen and swipe both fingers outward. Pinching is how you zoom in and out on pictures during playback; again, Chapter 5 provides details.



You can control two aspects of touchscreen behavior:

- ✓ **Touchscreen response:** You can choose from three settings, accessed via the Touch Control option, found on Setup Menu 3 and shown in Figure 1-10.

- *Standard:* This setting is the default. The touchscreen is enabled and is set to respond to a “normal” amount of pressure. (Don’t ask me how the Powers That Be decided what that pressure level is — I don’t get invited to those conferences.)
- *Sensitive:* This setting makes the touchscreen more, er, touchy. That is, it responds to lighter pressure. Oddly, though, Canon says that the camera may be slower to respond to a very quick tap at this setting. Your mileage may vary.
- *Disable:* Select this setting to disable the touchscreen function.

To restore the touch function, press the Menu button to bring up the menu screens and then rotate the Main dial — that’s the one just behind the shutter button — to select Setup Menu 3. Then rotate the Quick Control dial (the big wheel on the back of the camera) to highlight Touch Control. Press the Set button, rotate the Quick Control dial to highlight Standard or Sensitive, and press the Set button again.

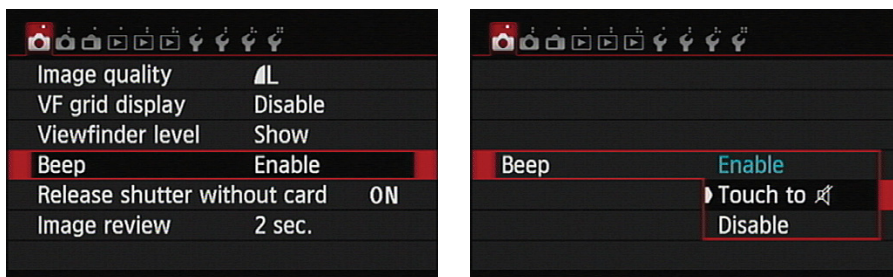


**Figure 1-10:** Control the touchscreen response through this menu item.



- ✓ **Touchscreen sound effects:** By default, the camera emits a little “boop” sound every time you tap a touch-controlled setting. If you’re sick of hearing it, visit Shooting Menu 1 and look for the Beep setting, shown

in Figure 1-11. The option that disables the boop is Touch to Silence — *silence* being indicated by a little speaker with a slash through it. The Disable setting turns off both the touchscreen sound and the normal beep tone that occurs when the camera finds its focus point.



**Figure 1-11:** Set the Beep option to Touch to Silence to prevent the camera from making a sound when you tap a touch-controlled item.

One final point about the touchscreen: If you connect the camera to a TV or monitor, the touchscreen no longer is available, regardless of the Touch Control option. Don't fret, you just have to use the old-fashioned button-push method of selecting menu options. See "Ordering from Camera Menus," later in this chapter, if you need help.

## Working with Memory Cards

Instead of recording images on film, digital cameras store pictures on *memory cards*. Your camera uses a specific type of memory card — an *SD card* (for *Secure Digital*), shown in Figures 1-12 and 1-13.



Most SD cards carry the designation SDHC (for *High Capacity*) or SDXC (for *eXtended Capacity*), depending on how many gigabytes (GB) of data they hold. SDHC cards hold from 4GB to 32GB of data; the SDXC moniker indicates a capacity greater than 32GB. Cards are also assigned a speed rating from 2 to 10, with a higher number indicating a faster data-transfer rate. The memory-card industry recently added a new category of speed rating — Ultra High Speed (UHS). UHS cards also carry a number designation; at present, there is only one class of UHS card, UHS 1. These cards currently are the fastest the planet has to offer. Of course, a faster card means a more expensive card. But to maximize your camera's performance, I recommend that you make the investment in Class 10 or UHS 1 cards. Especially for video recording, a faster