1

Getting the Lay of the Land

1 still remember the day that I bought my first SLR film camera. I was excited to finally move up from my point-and-shoot camera, but I was a little anxious, too. My new pride and joy sported several unfamiliar buttons and dials, and the explanations in the camera manual clearly were written for someone with an engineering degree. And there was the whole business of attaching the lens to the camera, an entirely new task for me. I saved my pennies a long time for that camera — what if my inexperience caused me to damage the thing before I even shot my first pictures?

You may be feeling similarly insecure if your Rebel T1i/500D is your first SLR, although some of the buttons on the camera back may look familiar if you've previously used a digital point-and-shoot camera. If your Rebel is both your first SLR and first digital camera, you may be doubly intimidated.

Trust me, though, that your camera isn't nearly as complicated as its exterior makes it appear. With a little practice and the help of this chapter, which introduces you to each external control, you'll quickly become as comfortable with your camera's buttons and dials as you are with the ones on your car's dashboard.

This chapter also guides you through the process of mounting and using an SLR lens, working with digital memory cards, and navigating your camera's internal menus. Finally, the end of the chapter walks you through options that enable you to customize many aspects of your camera's basic operation.

REMEMBER

Before you start exploring this chapter, be sure that you fully charge your camera battery and then install it into the battery chamber on the bottom of the camera. I'm guessing that you already took this step, but if not and you need help, the front part of the camera manual provides details.

Getting Comfortable with Your Lens

One of the biggest differences between a point-and-shoot camera and an SLR *(single-lens reflex)* camera is the lens. With an SLR, you can swap out 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 gives you the option of focusing manually instead of relying on the camera's autofocus mechanism.

Of course, those added capabilities mean that you need a little background information to take full advantage of your lens. To that end, the next three sections explain the process of attaching, removing, and using this critical part of your camera.

Attaching a lens

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

TECHNICAL STUFF

The EF stands for *electro focus;* the S, for *short back focus.* 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 the one sold with the camera, it carries either the EF or EF-S specification. (The letters are part of the lens name; for example, the kit lens name is EF-S 18-55mm IS, with the IS standing for *image stabilization,* a feature explained later in this chapter.) If you want to buy a non-Canon lens, check the lens manufacturer's Web site to find out which lenses work with the Rebel T1i/500D.

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

1. **Remove the cap at 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 1-2 shows the one that appears on the so-called "kit lens" — the EF-S 18–55mm IS (image stabilizer) zoom lens that Canon sells as a unit with the Rebel T1i/500D. If you buy a different lens, the index marker may be red or some other color, so again, check the lens instruction manual.

EF-S mounting index

EF mounting index   Lens-release button

Figure 1-1: Which index marker you should use depends on the lens type.

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

   When you do so, grip the lens by its back collar as shown in the figure.

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 (see Figure 1-1), as indicated by the red arrow in Figure 1-2.

WARNING! 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. Changing lenses on a sandy beach, for example, isn't a good idea. For added safety, point the camera body slightly down when performing this maneuver, as shown in the figure. Doing so helps prevent any flotsam in the air from being drawn into the camera by gravity.

EF-S mounting indexes

Figure 1-2: Place the lens in the lens mount with the mounting indexes aligned.

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.**

   I labeled the button in Figure 1-1.

2. **Grip the rear collar of the lens.**

   In other words, hold onto the stationary part of the lens that's closest to the camera body.

3. **Press the lens-release button while turning the lens away from the lens-release button.**

   You should 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.

Using an IS (image stabilizer) lens

The 18–55mm lens sold with the Rebel T1i/500D camera offers *image stabilization*. On Canon lenses, this feature is 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 is a problem because it can result in blurry images, even when your focus is dead-on. Although image stabilization can't work miracles, it does enable most people to capture sharper handheld shots in many situations than they otherwise could.

WARNING!

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 1-3) to Off. You also can save battery power by turning off image stabilization when you use a tripod.

Focusing ring

Focal length marker

Auto/Manual Focus switch

Zoom barrel

Image Stabilizer switch

Figure 1-3: Set the focusing switch to MF before turning the manual focus ring.

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

REMEMBER

Whatever type of lens you use, note that 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 5. Chapter 6 offers more tips for blur-free shots and explains focal length and its effect on your pictures.

Shifting from autofocus to manual focus

Like any modern camera, yours offers autofocusing capabilities. Your Rebel T1i/500D offers an excellent autofocusing system, which you can find out how to exploit to its best advantage in Chapter 6. With some subjects, however, autofocusing can be slow or impossible, which is why your camera also offers manual focusing.

You make the shift from auto to manual focus as follows:

1. **Locate the AF/MF switch on the side of the lens.**

   This switch sets the focus operation to either auto (AF) or manual (MF). Figure 1-3 shows you the switch as it appears on the Rebel T1i/500D kit lens. The switch should be in a similar location on other Canon lenses. If you use a lens from another manufacturer, check the lens instruction manual.

2. **Set the switch to the MF position, as shown in the figure.**

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

   On the kit lens, the focusing ring is at the far end of the lens barrel, as indicated in Figure 1-3. 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. (For the kit lens, the minimum close-focus range is about 10 inches; for other lenses, check the specifications in the lens manual.) You also may need to adjust the viewfinder to accommodate your eyesight; see the next section for details.

TIP

Some lenses enable you to use autofocusing to set the initial focusing point and then fine-tune focus manually. Check your lens manual for information on how to use this option, if available. (It's not offered on the kit lens.)

Zooming in and out

If you bought a zoom lens, it sports a movable zoom barrel. On the kit lens, the barrel is just behind the focusing ring, as shown in Figure 1-3, but again, the relative positioning of the two components depends on your lens. Whatever the lens model, though, you rotate the lens barrel to zoom.

The numbers around the edge of the zoom barrel, by the way, represent *focal lengths.* I explain focal lengths in Chapter 6. In the meantime, just note that when the lens is mounted on the camera, the number that's aligned with the white focal-length indicator, labeled in Figure 1-3, represents the current focal length. In Figure 1-3, for example, the focal length is 55mm.

Adjusting the Viewfinder Focus

Perched on the top-right edge of the viewfinder is a tiny black knob, labeled in Figure 1-4. Officially known as a *dioptric adjustment control,* this knob enables you to adjust the magnification of the viewfinder to mesh with your eyesight.
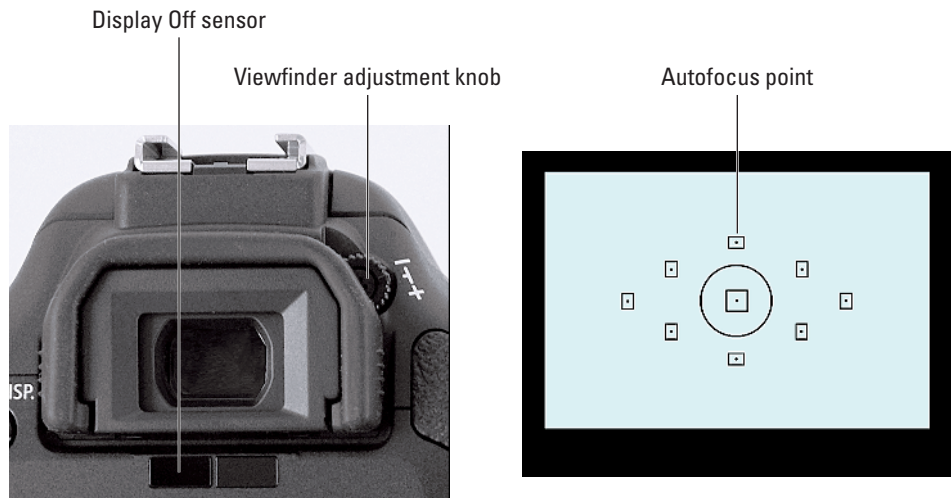
Display Off sensor

Viewfinder adjustment knob

Autofocus point

Figure 1-4: Use the little knob to set the viewfinder focus for your eyesight.

WARNING!

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 from the front of the lens.**

2. **Look through the viewfinder and concentrate on the focusing screen shown on the right side of Figure 1-4.**

   The *focusing screen* is the collective name assigned to the group of nine autofocus points that appears in the viewfinder — the little squares with the dots inside. I labeled one of the little guys in Figure 1-4. (The circle that surrounds the center autofocus point is related to exposure metering, a subject you can explore in Chapter 5.)

3. **Rotate the viewfinder adjustment knob until the autofocus points appear to be in focus.**

   Don't worry about focusing the actual picture now; just pay attention to the sharpness of the autofocus points.

TIP

If your eyesight is such that you can't get the autofocus points to appear sharp by using the dioptric adjustment control, you can buy an additional eyepiece adapter. This accessory, which you pop onto the eyepiece, enables further adjustment of the viewfinder display. Prices range from about $15–$30 depending on the magnification you need. Look for an adapter called an *E-series dioptric adjustment lens.*

One other note about the viewfinder: See that little black window underneath the viewfinder — the one labeled Display Off sensor in Figure 1-4? When you put your eye up to the viewfinder, the sensor tells the camera to turn off the monitor display, saving you the trouble of doing the job yourself. If the monitor doesn't turn off automatically, the upcoming section "Setup Menu 1" tells you how to fix things; see the information related to the LCD Auto Off feature.

REMEMBER

Keep in mind, too, that with the T1i/500D, you can opt to use the monitor instead of the viewfinder to frame and preview your shots. This feature is called *Live View* shooting. Because many of the functions connected with Live View shooting are similar to those you use during picture playback, I cover both uses of your monitor together in Chapter 4. Chapters 5 and 6 spell out some additional details of setting exposure and focus in Live View mode.

Working with Memory Cards

Instead of recording images on film, digital cameras store pictures on *memory cards.* Your Rebel T1i/500D uses a specific type of memory card called an *SD card* (for *Secure Digital*), shown in Figures 1-5 and 1-6. You can also use high-capacity SD cards, which carry the label SDHC. (The high-capacity part just means that you can store more files on these cards than on regular SD cards.)

TIP

For movie recording, Canon recommends that you purchase a high-capacity card that carries an SD *speed class* rating of 6 or higher. This number refers to how quickly data can be written to and read from the card. A higher-speed card helps ensure the smoothest movie recording and playback.

Whatever the speed or capacity, safeguarding your memory cards — and the images on them — requires a few precautions:

REMEMBER

✔ **Inserting a card:** Turn the camera off and then put the card in the card slot with the label facing the back of the camera, as shown in Figure 1-5. Push the card into the slot until it clicks into place.

✔ **Formatting a card:** The first time you use a new memory card, take a few seconds to *format* it by choosing the Format option on Setup Menu 1. This step ensures that the card is properly prepared to record your pictures. See the upcoming section "Setup Menu 1" for details.

✔ **Removing a card:** First, check the status of the memory card access light, labeled in Figure 1-5. After making sure that the light is off, indicating that the camera has finished recording

Memory card access light

Figure 1-5: Insert the card with the label facing the camera back.

your most recent photo, turn the camera off. Open the memory card door, as shown in Figure 1-5. Depress the memory card slightly until you hear a little click and then let go. The card should pop halfway out of the slot, enabling you to grab it by the tail and remove it.

✔ **Handling cards:** Don't touch the gold contacts on the back of the card. (See the left card in Figure 1-6.) When cards aren't in use, store them in the protective cases they came in or in a memory card wallet. Keep cards away from extreme heat and cold as well.

✔ **Locking cards:** The tiny switch on the left side of the card, labeled *lock switch* in Figure 1-6, enables you to lock your card, which prevents any data from being erased or recorded to the card. Press the switch toward the bottom of the card to lock the card contents; press it toward the top of the card to unlock the data.

Paws off!   Lock switch
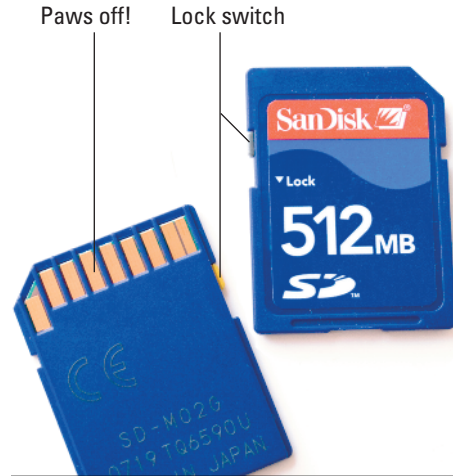
Figure 1-6: Avoid touching the gold contacts on the card.

Exploring External Camera Controls

Scattered across your camera's exterior are a number of buttons, dials, and switches that you use to change picture-taking settings, review and edit your photos, and perform various other operations.

Later chapters discuss all of your camera's functions in detail and provide the exact steps to follow to access those functions. The next three sections provide a basic road map to the external controls plus a quick introduction to each.

Topside controls

Your virtual tour begins on the top-right side of the camera, shown in Figure 1-7.

The items of note here are

✔ **On/Off switch:** Okay, I'm pretty sure you already figured this one out, but just move the switch to On to fire up the camera and then back to Off to shut it down.

TIP

By default, the camera automatically shuts itself off after 30 seconds of inactivity to save battery power. To wake up the camera, press the shutter button halfway or press the Menu, DISP, or Play-back buttons. You can adjust the auto shutdown timing via Setup Menu 1, covered later in this chapter.

✔ **Mode dial:** Rotate this dial to select an *exposure mode,* which determines whether the camera oper-ates in fully automatic, semi-automatic, or manual exposure mode when you take still pictures. To shoot a movie, you set the dial to Movie mode.

Mode dial   Red-eye reduction/ self-timer lamp

Shutter button

Main dial

ISO button

Figure 1-7: The tiny pictures on the Mode dial represent special automatic shooting modes.

Canon categorizes the various modes into *zones:*

- *Image Zone:* The camera offers six Image Zone settings designed to make it easy to automatically capture specific types of scenes — Portrait mode for people pics, Sports mode for action shots, and so on. (Chapter 2 explains all six.)

- *Basic Zone:* The Basic Zone category includes the six Image Zone settings plus Full Auto mode and Creative Auto mode, also covered in Chapter 2.

- *Creative Zone:* The Creative Zone category includes the advanced exposure modes, (P, Tv, Av, M, and A-DEP), which I introduce in Chapter 5.

Movie mode is apparently outside the zoning limits, as it stands on its own, with no zone moniker.

REMEMBER

If you ask me, keeping track of all these zones is a little confusing, especially because the modes in the Image Zone category are often referred to generically in photography discussions as *creative scene modes* or *creative modes.* So, to keep things a little simpler, I use the generic terms *fully automatic exposure modes* to refer to all the Basic Zone modes and *advanced exposure modes* to refer to the Creative

Zone modes. For Creative Auto mode, which straddles the line between fully automatic and advanced, I use its full name to avoid inserting my own bit of confusion into the mix.

✔ **Main dial:** Just forward of the Mode dial, you see a black dial that has the official name *Main dial.* You use this dial when selecting many camera settings (specifics are provided throughout the book). In fact, it plays such an important role that you'd think it might have a more auspicious name, but Main dial it is.

✔ **ISO button:** During normal, still photography, this button provides one way to access the camera's ISO speed setting, which determines how sensitive the camera is to light. Chapter 5 details this critical exposure setting. When you're shooting movies, pressing the button instead initiates AE Lock, a feature that locks autoexposure at its current setting. Check out Chapter 4 for details.

✔ **Shutter button:** You probably already understand the function of this button, too. But see Chapter 2 to discover the proper shutter-button-pressing technique — you'd be surprised how many people mess up their pictures because they press that button incorrectly.

✔ **Red-Eye Reduction/Self-Timer Lamp:** When you set your flash to Red-Eye Reduction mode, this little lamp emits a brief burst of light prior to the real flash — the idea being that your subjects' pupils will constrict in response to the light, thus lessening the chances of red-eye. If you use the camera's self-timer feature, the lamp blinks to provide you with a visual countdown to the moment at which the picture will be recorded. See Chapter 2 for more details about Red-Eye Reduction flash mode and the self-timer function.

Back-of-the-body controls

Traveling over the top of the camera to its back, you encounter a smorgasbord of buttons — 13, in fact, not including the viewfinder adjustment knob, discussed earlier in this chapter. Figure 1-8 gives you a look at the layout of backside controls.

TIP

Don't let the abundance of buttons intimidate you. Having all of those external controls actually makes operating your camera easier. On cameras that have only a few buttons, you have to dig through menus to access the camera features, which is a pain. But you can access almost every critical shooting setting on your camera via external buttons, which is much more convenient.

Set button and
cross keys

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

Throughout this book, pictures of some of these buttons appear in the margins to help you locate the button being discussed. So even though I provide the official control names in the following list, don't worry about getting all of those straight right now. The list I provide here is just to get you acquainted with the *possibility* of what you can accomplish with all of these features.

REMEMBER

Do note, however, that many of the buttons have multiple names because they serve multiple purposes depending on whether you're taking pictures, reviewing images, or performing some other function. In this book, I refer to these buttons by the first label you see in the following list to simplify things. For example, I refer to the AF Point Selection/Magnify button as the AF Point Selection button. Again, though, the margin icons help you know exactly which button I'm describing.

And here's another tip: If the label or icon for a button is blue, it indicates a function related to viewing, printing, or downloading images. Labels that indicate a shooting-related function are white, and the sole red label indicates a button purpose related to Live View and movie shooting.

With that preamble out of the way, journey with me now over the camera back, starting at the top-right corner and working westward (well, assuming that your lens is pointing north, anyway):

✔ **AF Point Selection/Magnify button:** When you use certain advanced shooting modes, you press this button to specify which of the nine auto-focus points you want the camera to use when establishing focus. Chapter 6 tells you more. In Playback, Live View, and Movie mode, you use the button to magnify the image display (thus the plus sign in the button's magnifying glass icon). See Chapter 4 for help with that function.

✔ **AE Lock/FE Lock/Index/Reduce button:** As you can guess from the official name of this button, it serves many purposes. The first two are related to still-image capture functions: You use the button to lock in the autoexposure (AE) settings and to lock flash exposure (FE). Chapter 5 details both issues. When using Live View and Movie modes, the button serves as the autofocus and autoexposure trigger.

The button also serves two image-viewing functions: It switches the display to Index mode, enabling you to see multiple image thumbnails at once, and it reduces the magnification of images when displayed one at a time. Chapter 4 explains Playback, Live View, and Movie modes.

✔ **Exposure Compensation/Aperture button:** When you work in M (manual) exposure mode, you press this button and rotate the Main dial to choose the aperture setting, better known as the *f-stop.* In the other advanced exposure modes, you instead use the button and dial to apply *Exposure Compensation,* a feature that enables you to adjust the exposure selected by the camera's autoexposure mechanism. Chapter 5 discusses both issues.

✔ **Live View/Movie/Print/Share button:** You press this button to shift the camera into Live View mode and, when shooting movies, to start and stop recording. (For the latter, you must first set the Mode dial to Movie mode.) Chapter 4 offers the pertinent details. This button is also involved when you transfer images to your computer or print pictures directly from the camera; check out Chapters 8 and 9 for information about those topics.

✔ **Set button and cross keys:** Figure 1-8 points out the Set button and the four surrounding buttons, known as *cross keys.* These buttons team up to perform several functions, including choosing options from the camera menus. You use the cross keys to navigate through menus and then press the Set button to select a specific menu setting. You can find out more about ordering from menus later in this chapter.

In this book, the instruction "Press the left cross key" means to press the one that sports the left-pointing arrowhead. "Press the up cross key" means to press the one with the up-pointing arrowhead, and so on.

The cross keys and the Set button also have non-menu responsibilities, as follows:

- *After displaying the Shooting Settings screen, press the Set button to shift to the Quick Control screen.* The Quick Control screen is just one option for adjusting picture-taking settings; get the full story in the upcoming section "Taking Advantage of the Quick Control screen."

- *Press the right cross key to adjust the AF mode.* This option controls the camera's autofocus behavior, as outlined in Chapter 6.

- *Press the left cross key to change the Drive mode.* The Drive mode settings enable you to switch the camera from single-frame shooting to continuous capture or self-timer/remote-control shooting. See Chapter 2 for details.

- *Press the down cross key to change the Picture Style.* Chapter 6 explains Picture Styles, which you can use to adjust color, contrast, and sharpness of your pictures.

- *Press the up cross key to change the White Balance setting.* The White Balance control, explained near the end of Chapter 6, enables you to ensure that your photo colors are accurate and not biased by the color of the light source.

REMEMBER

You can customize the function of the Set button; Chapter 11 explains how. But while you're working with this book, stick with the default setup, just described. Otherwise, the instructions I give won't work.

- **Playback button:** Press this button to switch the camera into picture-review mode. Chapter 4 details playback features.

- **Erase button:** Sporting a trash can icon, the universal symbol for delete, this button lets you erase pictures from your memory card. Chapter 4 has specifics. In Live View and Movie mode, also covered in Chapter 4, this button is involved in the focusing process.

- **Menu button:** Press this button to access the camera menus. See the next section for details on navigating menus.

- **DISP button:** The Shooting Settings display, covered later in this chapter, appears automatically on the monitor when you turn on the camera. The screen shuts off after a period of inactivity, after which you can bring it back to life by either pressing the DISP button or pressing the shutter button halfway and then releasing it.

But that's just the start of the DISP button's tricks. If the camera menus are displayed, pressing the button takes you to the Camera Settings display, explained in the upcoming section "Viewing and Adjusting Camera Settings." In Playback, Live View, and Movie modes, pressing the button changes the picture-display style, as outlined in Chapter 4.

Front-left buttons

On the front-left side of the camera body, you find three more buttons, all labeled in Figure 1-9. This trio works as follows:

Flash button

Lens-release button

✔ **Flash button:** Press this button to bring the camera's built-in flash out of hiding when you use the advanced exposure modes (P, Tv, Av, M, or A-DEP). See Chapter 2 for help with using flash in the other exposure modes and flip to Chapters 5 and 7 for more tips on flash photography.

✔ **Lens-release button:** Press this button to disengage the lens from the lens mount so that you can remove it from the camera. See the first part of this chapter for details on mounting and removing lenses.

✔ **Depth-of-Field Preview button:** When you press this button, the image in the viewfinder offers an approximation of the depth of field that will result from your selected aperture setting, or f-stop. *Depth of field* refers to how much of the scene will be in sharp focus. Chapter 6 provides details on depth of field, which is an important aspect of your picture composition. Chapter 5 explains aperture and other exposure settings.

Depth-of-Field Preview button
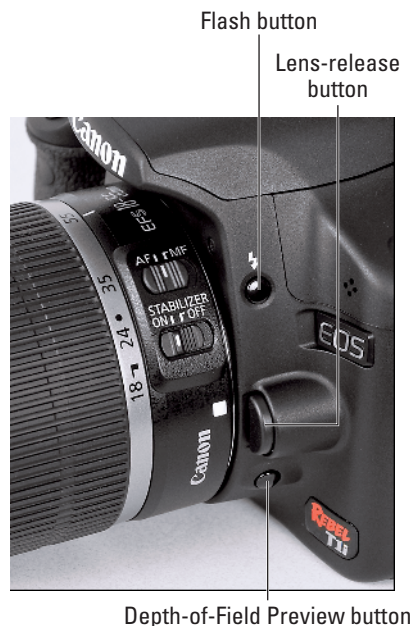
Figure 1-9: Press the Flash button to bring the built-in flash out of hiding.

Viewing and Adjusting Camera Settings

You've no doubt already deduced that your Rebel T1i/500D is loaded with options. It also gives you several ways to monitor the current settings and to adjust them if needed. The next sections provide just a quick introduction to viewing and changing settings; in later chapters, I explain and illustrate exactly how and where to access individual options. (Note, too, that the information here relates to regular shooting modes — if you switch to Live View or Movie mode, things work differently. You can get the scoop on those two modes in Chapter 4.)

Ordering from menus

You access many of your camera's features via internal menus, which, conveniently enough, appear on the monitor when you press the Menu button, located atop the upper-left corner of the camera back. Features are grouped into nine menus, described briefly in Table 1-1.

TIP

In case you didn't notice, the icons that represent the menus are color coded. Shooting Menus 1 and 2 have red icons, as does the Movie menu; Setup Menus 1, 2, and 3 sport yellow icons; the Playback menus have a blue symbol; and the My Menu icon is green. (Chapter 11 explains the My Menu feature, through which you can create your own, custom menu.)

Table 1-1	Rebel T1i/500D Menus	
Symbol	**Open This Menu . . .**	**to Access These Functions**
	Shooting Menu 1	Picture Quality settings, Red-Eye Reduction flash mode, and a few other basic camera settings.
	Shooting Menu 2	Advanced photography options including Exposure Compensation, Metering mode, and custom White Balance. Appears only in P, Tv, Av, M, and A-DEP modes.
	Playback Menu 1	Rotate, protect, and erase pictures as well as functions related to transferring and printing directly from the camera.
	Playback Menu 2	Additional playback features, including histogram display and image jump.
	Setup Menu 1	Memory card formatting plus basic customization options, such as the file-numbering system and auto shutdown timing.
	Setup Menu 2	More customization options, Live View options, and maintenance functions, such as sensor cleaning. Some options available only in advanced exposure modes.
	Setup Menu 3	Custom Functions, firmware information, and options for resetting camera functions to factory defaults; menu appears only in P, Tv, Av, M, and A-DEP modes.
	My Menu	User-customized menu setup; also available only in advanced exposure modes.
	Movie Menu	Settings related to shooting movies, including whether sound is recorded. Appears only when Mode dial is set to Movie mode.

After you press the Menu button, a screen similar to the one shown on the left in Figure 1-10 appears. Along the top of the screen, you see the icons shown in Table 1-1, each representing a menu. (Remember that which icons appear depends on the setting of the Mode dial.)

The highlighted icon marks the active menu; options on that menu automatically appear on the main part of the screen. In the figure, Shooting Menu 1 is active, for example.
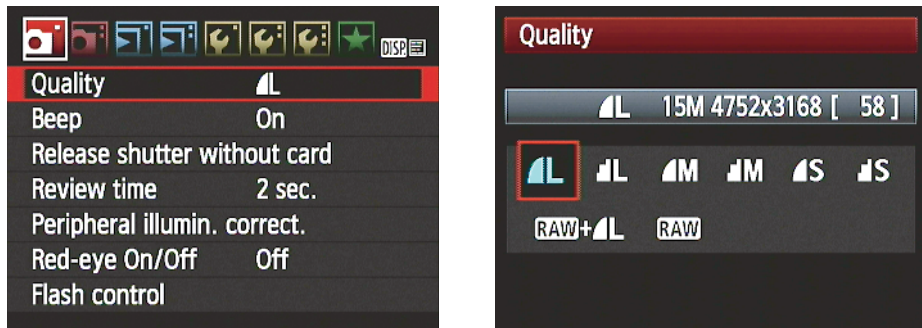

Figure 1-10: Use the cross keys to navigate menus; press Set to access available settings.

Shooting Menu 2, Setup Menu 3, and My Menu appear in the menu display only when you set the Mode dial to one of the advanced exposure modes (P, Tv, Av, M, and A-DEP). Some menu items on Setup Menu 2 are hidden as well in the fully automatic exposure modes. The Movie menu appears only when you set the Mode dial to the Movie setting.

I explain all the important menu options elsewhere in the book; for now, just familiarize yourself with the process of navigating menus and selecting options. After pressing the Menu button to display the menus, use these techniques:

- ✔ **To select a different menu:** Press the right or left cross keys or rotate the Main dial to cycle through the available menus.

- ✔ **To select and adjust a function on the current menu:** Press the up or down cross key to highlight the feature you want to adjust. On the left side of Figure 1-10, the Quality option is highlighted, for example. Next, press the Set button. Settings available for the selected item then appear either right next to the menu item or on a separate screen, as shown on the right side of the figure. Either way, use the cross keys to highlight your preferred setting and then press Set again to lock in your choice.

Using the Shooting Settings display

Shown in Figure 1-11, the Shooting Settings display contains the most important critical photography settings — aperture, shutter speed, ISO, and the like. Note that the display is relevant only to regular still-photography shooting, though. When you switch to Live View mode or Movie mode, you can choose to see some settings superimposed over your image in the monitor, but the process of adjusting settings and customizing the display is different. (See Chapter 4 for details.)

The types of data shown in the Shooting Settings display depend on the exposure mode you select. The figure shows data that's included when you work in one of the advanced modes, such as Tv (shutter-priority autoexposure). In the fully automatic modes as well as in Creative Auto mode, you see far fewer settings because you can control fewer settings in those modes. The figure does label two key points of data that are helpful in any mode, though: how many more pictures can fit on your memory card at the current settings and the status of the battery. A "full" battery icon like the one in the figure shows that the battery is fully charged. If the icon appears empty, go look for your battery charger.
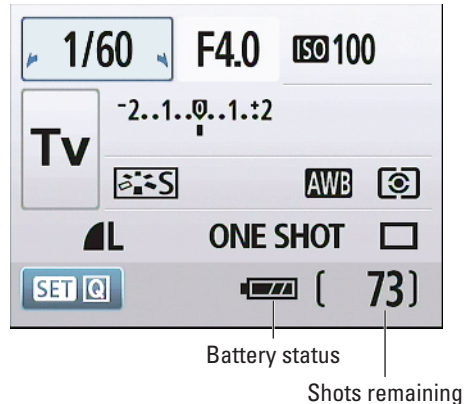

Battery status

Shots remaining

Figure 1-11: The Shooting Settings display gives you an easy way to monitor current picture settings.

You can use the Shooting Settings display to both view and adjust certain picture-taking settings. Here's what you need to know:

- **Turning on the Shooting Settings display:** The display appears briefly when you turn on the camera. After the display shuts off, you can turn it on again by pressing the DISP button or by pressing the shutter button halfway and then releasing it. Or, if menus are on the screen, you can use only the shutter-button technique to go back to the Shooting Settings display. (Pressing the DISP button in that scenario has a different result.)

- **Turning off the Shooting Settings display:** As soon as you put your eye to the viewfinder, the display turns off automatically, and the viewfinder display becomes active. You can also press DISP to turn the display off if needed. If you use the button to turn off the display, press the button again to bring the display back to life; pressing the shutter button halfway doesn't do the trick.

✔ **Adjusting settings:** While the Shooting Settings display is active, you can change some shooting settings by rotating the Main dial alone or by using the dial in combination with one of the camera buttons.

For example, in the shutter-priority autoexposure mode (Tv, on the Mode dial), rotating the Main dial changes the shutter speed. And if you press and hold the Exposure Compensation button, the Exposure Compensation meter becomes highlighted, as shown on the left in Figure 1-12, and you can rotate the Main dial to adjust the setting. Release the button to continue shooting.

TIP

Notice the tinted background and tiny curved arrows that surround the shutter speed value in Figure 1-11 and the Exposure Compensation meter in Figure 1-12? The tint indicates the active option; the curved arrows remind you to use the Main dial to adjust the setting.

In some cases, the camera displays a screen full of options instead of the curved arrows when you press a control button. Pressing the ISO button in the advanced exposure modes, for example, takes you to the screen you see on the right in Figure 1-12. You can then release the button and either rotate the Main dial or use the cross keys to select the setting you want to use. Press the Set button to lock in your choice and bring back the full Shooting Settings display.
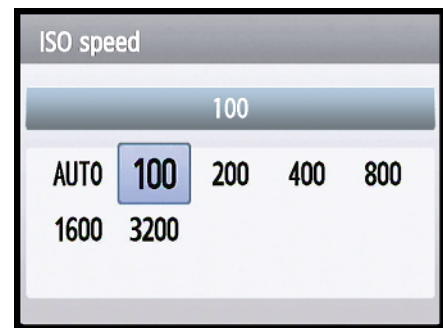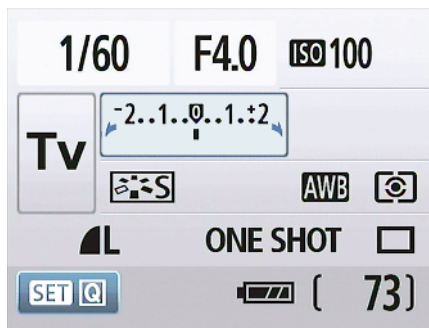
Figure 1-12: Pressing a control button either activates the highlighted setting (left) or takes you to a screen of available settings (right).

Taking advantage of the Quick Control screen

New to the Rebel T1i/500D is a feature called the Quick Control screen, which was previously offered only on Canon's higher-end pro cameras. This feature enables you to change certain shooting settings without using the control buttons (ISO button, the Exposure Compensation button, and so on) or menus.

You can use this technique to adjust settings in any exposure mode, but the settings that are accessible depend on the mode you select. To try it out, set the Mode dial to Tv so that what you see on your screen will look like what you see in the upcoming figures. Then follow these steps:

1. **Display the Shooting Settings screen.**

   Either press the shutter button halfway and then release it or press the DISP button.

2. **Press the Set button.**

   The screen now shifts into Quick Control mode, and one of the options on the screen becomes highlighted. The option name also appears at the bottom of the screen, as shown on the left in Figure 1-13. In the figure, the Flash Exposure Compensation setting is selected. (This particular option doesn't appear on the screen until after you enter Quick Control mode *unless* you've previously enabled the function. See Chapter 5 for the full scoop.)
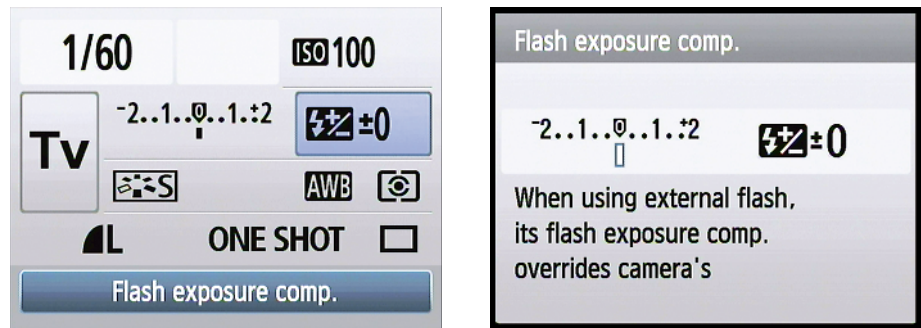

Figure 1-13: Press Set to shift to Quick Control mode; the active option appears highlighted.

3. **Press the cross keys to move the highlight over the setting you want to adjust.**

   Again, the available options depend on the exposure mode, and the figure shows options presented in the Tv (shutter-priority autoexposure) mode.

4. **Adjust the setting.**

   In general, you can use either of these two techniques:

   - Rotate the Main dial to scroll through the possible settings.

- Press Set to display a screen that contains all the possible settings. In some cases, the screen contains a brief explanation or note about the option, as shown on the right in Figure 1-13. You then can choose between rotating the Main dial or pressing the cross keys to highlight the setting you want to use. Then press Set again to return to the Quick Control screen.

A few controls require a slightly different approach, but don't worry — I spell out all the needed steps throughout the book.

5. **To exit Quick Control mode, press the shutter button halfway and release it.**

You're returned to the normal Shooting Settings display.

Decoding viewfinder data

When the camera is turned on, you can view critical exposure settings and a few other pieces of information in the viewfinder. Just put your eye to the viewfinder and press the shutter button halfway to activate the display. (I'm assuming that Live View mode, in which you use the monitor as viewfinder, is disabled, as it is by default. Ditto for Movie mode. See Chapter 4 for details about both.)

The viewfinder data changes depending on what action you're undertaking and what exposure mode you're using. For example, if you set the Mode dial to P (for programmed autoexposure), you see the basic set of data shown in Figure 1-14: shutter speed, f-stop (aperture setting), Exposure Compensation setting, and ISO setting. Additional data is displayed when you enable certain features, such as Flash Exposure Compensation.

Again, I detail each viewfinder readout as I explain your camera options throughout the book. But I want to point out now one often-confused value you may see: The value at the far right end of the viewfinder (9, in the figure) shows you the number of *maximum burst frames.* This number relates to shooting in the Continuous capture mode, where the camera fires off multiple shots in rapid succession as long as you hold down the shutter button. (Chapter 2 has details on this mode.) Note that although the highest number that the viewfinder can display is 9, the actual number of maximum burst frames may be higher. At any rate, you don't really need to pay attention to the number until it starts dropping toward 0, which indicates that the camera's *memory buffer* (its temporary internal data-storage tank) is filling up. If that happens, just give the camera a moment to catch up with your shutter-button finger.

While you're looking through the viewfinder, you can adjust some shooting settings by using the Main dial alone or in conjunction with the function buttons, as you do with the Shooting Settings screen. For example, if you're

working in one of the advanced exposure modes (P, Tv, Av, M, or A-DEP) and press the ISO button, all data but the current ISO setting dims, and you can then rotate the Main dial to change the setting. Press the shutter button half-way to return to the normal viewfinder display after changing the setting.
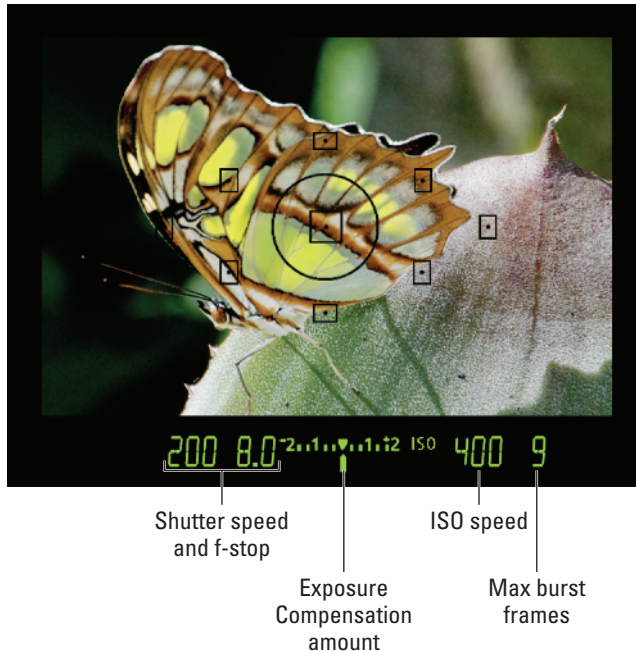

Shutter speed
and f-stop

ISO speed

Exposure
Compensation
amount

Max burst
frames

Figure 1-14: You also can view some camera information at the bottom of the viewfinder.

Checking the Camera Settings display

In addition to the Shooting Settings display, you can view a collection of additional settings data via the Camera Settings display, shown in Figure 1-15. This screen is purely an informational tool, however; you can't actually adjust any of the reported settings from this screen.

To display the Camera Settings screen, first display the camera menus by pressing the Menu button. Then press the DISP button.

Figure 1-15 shows the settings that you can monitor when shooting in the advanced exposure modes. Again, that's P, Tv, Av, M, and A-DEP. Here are the details you can glean from the display, with settings listed in the order they appear on the screen.

✔ **Freespace:** This value indicates how much storage space is left on your camera memory card. How many pictures you can fit into that space depends on the Quality setting you select. Chapter 3 explains this issue.

✔ **Color Space:** This value tells you whether the camera is capturing images in the sRGB or Adobe RGB color space, an advanced option that you can investigate in Chapter 6.

Freespace	392 MB
Color space	sRGB
WB SHIFT/BKT	0,0/±0
Live View shoot.	Enable
🔲 Enable	👁 Off
🔋 1 min.	📷 On 📷 🖥
■))) On	📷 Enable
	04/29/2009 15:05:35

Figure 1-15: Press the DISP button when the menus are active to view this screen.

✔ **White Balance Shift/Bracketing:** Add this to the list of advanced color options covered in Chapter 6.

✔ **Live View Shooting:** Chapter 4 details this feature, which enables you to use your monitor instead of the viewfinder to compose your shots.

✔ **Auto Sensor Cleaning and Red-Eye Reduction flash mode:** (These two functions share a line in the screen.) See "Setup Menu 2," later in this chapter, for more about automatic sensor cleaning; check out Chapter 2 for information about Red-Eye Reduction flash mode.

✔ **Auto Power Off and Auto Rotate:** For information on these two settings, which also live together on the display, see the upcoming section, "Setup Menu 1."

✔ **Beep and LCD Auto Off:** The first setting determines whether the camera beeps after certain operations; you can adjust the setting via Shooting Menu 1, as explained later in this chapter. The second setting, covered in the section "Setup Menu 1," controls whether the Shooting Settings display turns off automatically when you put your eye to the viewfinder.

✔ **Date/Time:** The section "Setup Menu 2" also explains how to adjust the date and time.

REMEMBER

In the fully automatic and Creative Auto exposure modes, the Color Space, White Balance Shift/Bracketing, and Live View Shooting status information doesn't appear in the Camera Settings display because you can't use those features in those exposure modes.

Of course, with the exception of the free card space value, you also can simply go to the menu that contains the option in question to check its status. The Camera Settings display just gives you a quick way to monitor some of the critical functions without hunting through menus.

Reviewing Basic Setup Options

One of the many advantages of investing in the Rebel T1i/500D is that you can customize its performance to suit the way *you* like to shoot. Later chapters explain options related to actual picture taking, such as those that affect flash behavior and autofocusing. The rest of this chapter details options related to initial camera setup, explaining how to accomplish such things as setting the date and time, setting up the camera's file-numbering system, and adjusting monitor brightness.

Setup Menu 1

At the risk of being labeled conventional, I suggest that you start your camera customization by opening Setup Menu 1, shown in Figure 1-16.

Here's a quick rundown of each menu item:

✔ **Auto Power Off:** To help save battery power, your camera automatically powers down after a certain period of inactivity. By default, the shutdown happens after 30 seconds, but you can change the shutdown delay to 1, 2, 4, 8, or 15 minutes. Or you can disable auto shutdown altogether by selecting the Off setting.

✔ **File Numbering:** This option controls how the camera names your picture files.

• *Continuous:* This is the default; the camera numbers your files sequentially, from 0001 to 9999, and places all images in the same folder. The initial folder name is 100Canon; when you reach image 9999, the camera creates a new folder, named 101Canon, for your next 9,999 photos. This numbering sequence is retained even if you change memory cards, which helps to ensure that you don't wind up with multiple images that have the same filename.

• *Auto Reset:* If you switch to this option, the camera restarts file numbering at 0001 each time you put in a different memory card. I discourage the use of this option, for the reason already stated.

Whichever option you choose, beware one gotcha: If you swap out memory cards and the new card already contains images, the camera may pick up numbering from the last image on the new card, which throws a monkey wrench into things. To avoid this problem, format the new card before putting it into the camera. (See the upcoming Format bullet point for details.)

• *Manual Reset:* Select this setting if you want the camera to begin a new numbering sequence, starting at 0001, for your next shot. The camera then returns to whichever mode you previously used (Continuous or Auto Reset).

✔ **Auto Rotate:** If you enable this feature, your picture files include a piece of data that indicates whether the camera was oriented in the vertical or horizontal position when you shot the frame. Then, when you view the picture on the camera monitor or on your computer, the image is automatically rotated to the correct orientation.

Figure 1-16: Options on Setup Menu 1 deal mainly with basic camera behavior.

To automatically rotate images both in the camera monitor and on your computer monitor, stick with the default setting. In the menu, this setting is represented by On followed by a camera icon and a monitor icon, as shown in Figure 1-16. If you want the rotation to occur just on your computer and not on the camera, select the second On setting, which is marked with the computer monitor symbol but not the camera symbol. To disable rotation for both devices, choose the Off setting.

Note, though, that the camera may record the wrong orientation data for pictures that you take with the camera pointing directly up or down. Also, whether your computer can read the rotation data in the picture file depends on the software you use; the programs bundled with the camera can perform the auto rotation.

✔ **Format:** The first time you insert a new memory card, use this option to *format* the card, a maintenance function that wipes out any existing data on the card and prepares it for use by the camera.

If you previously used your card in another device, such as a digital music player, be sure to copy those files to your computer before you format the card. You lose *all* data on the card when you format it, not just picture files.

When you choose the Format option from the menu, you can opt to perform a normal card formatting process or a *low-level* formatting. The latter gives your memory card a deeper level of cleansing than ordinary formatting and thus takes longer to perform. Normally, a regular formatting will do.

✔ **LCD Auto Off:** When the Enable setting is selected, as it is by default, the camera automatically turns off the camera monitor if the Shooting Settings screen is displayed and you put your eye up to the camera viewfinder. (The little sensor underneath the viewfinder notes the presence of your eye and signals the camera to turn off the monitor.) You can
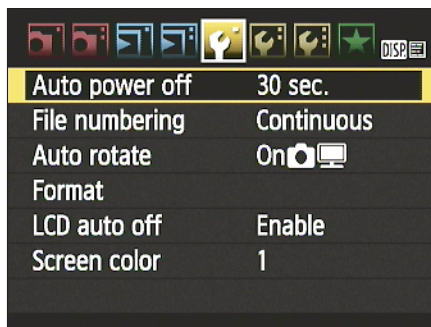
deactivate this feature by choosing the Disable setting if you prefer. The monitor is one of the biggest battery drains on the camera, however, so in my opinion, the auto shutoff feature is a good thing.

REMEMBER

The eye-detection thing only works when the Shooting Settings screen is active. So if the monitor is displaying menus or the Quick Control screen, press the shutter button halfway and release it to return to the Shooting Settings display. You then can either press DISP or put your eye to the viewfinder to turn off the monitor.

✔ **Screen Color:** If you don't like the default color scheme of the Shooting Settings display, which is the one used for the screens shown in this book, you can choose from three other schemes via this menu option.

Setup Menu 2

Setup Menu 2, shown in Figure 1-17, offers an additional batch of customization options:

✔ **LCD Brightness:** This option enables you to make the camera monitor brighter or darker. After highlighting the option on the menu, as shown in Figure 1-17, press Set to display a screen similar to what you see in Figure 1-18. The camera displays a picture from your memory card; if the card is empty, you see a black box instead. Press the right and left cross keys to adjust the brightness setting. Press Set to finish the job and return to the menu.

WARNING!

If you take this step, keep in mind that what you see on the display may not be an accurate rendition of the actual exposure of your image. Crank up the monitor brightness, for example, and an underexposed photo may look just fine. So I recommend that you keep the brightness at the default setting, which places the brightness marker at dead

Figure 1-17: Setup Menu 2 offers more ways to customize basic operations.
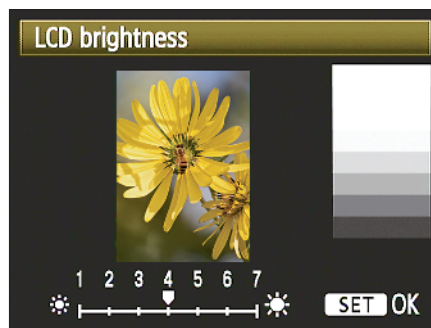

Figure 1-18: You can adjust the brightness of the camera monitor.

center on the little brightness scale, as shown in Figure 1-18. As an alternative, you can gauge exposure by displaying a tool called the *histogram,* explained in Chapter 4, when reviewing your images.

✏ **Date/Time:** When you turn on your camera for the very first time, it automatically displays this option and asks you to set the date and time.

TIP

Keeping the date/time accurate is important because that information is recorded as part of the image file. In your photo browser, you can then see when you shot an image and, equally handy, search for images by the date they were taken. Chapter 8 shows you where to locate the date/time data when browsing your picture files.

✏ **Language:** This option determines the language of any text displayed on the camera monitor. Screens in this book display the English language, but I find it entertaining on occasion to hand my camera to a friend after changing the language to, say, Swedish. I'm a real yokester, yah?

✏ **Video System:** This option is related to viewing your images and movies on a television, a topic I cover in Chapter 9. Select NTSC if you live in North America or other countries that adhere to the NTSC video standard; select PAL for playback in areas that follow that code of video conduct.

✏ **Sensor Cleaning:** Highlight this option and press Set to access some options related to the camera's internal sensor-cleaning mechanism. These work like so:

- *Auto Cleaning:* By default, the camera's sensor-cleaning mechanism activates each time you turn the camera on and off. This process helps keep the image sensor — which is the part of the camera that captures the image — free of dust and other particles that can mar your photos. You can disable this option, but I can't imagine why you would choose to do so.

- *Clean Now:* Select this option and press Set to initiate a cleaning cycle.

- *Clean Manually:* In the advanced exposure modes (P, Tv, Av, M, and A-DEP), you can access this third option, which prepares the camera for manual cleaning of the sensor. I don't recommend this practice; sensors are delicate, and you're really better off taking the camera to a good service center for cleaning.

✏ **Live View Functions:** This part of the menu also is available only in the advanced exposure modes. As the name implies, options here relate to Live View shooting, in which you can preview your shots in the monitor. Chapter 4 explains your options.

Setup Menu 3

Setup Menu 3, shown in Figure 1-19, contains the following offerings, which you can access only in the advanced exposure modes. Again, those modes are P, Tv, Av, M, and A-DEP. Chapter 5 introduces you to each mode.

> ✔ **Custom Functions:** Selecting this option opens the door to customizing 13 camera functions, known as *Custom Functions* in Canon lingo. These functions either relate to advanced exposure options or are otherwise designed for people with some photography experience. Check the index to find out where to locate details about the various functions.

Figure 1-19: To display Setup Menu 3, you must set the Mode dial to an advanced exposure mode.

> ✔ **Clear Settings:** Via this menu option, you can restore the default shooting settings. You also can reset all the Custom Functions settings to their defaults through this option. Additionally, if you use the provided EOS Utility software to automatically add copyright information to all your picture files — a topic you can explore in Chapter 11 — you can clear the copyright notice.

> ✔ **Firmware Ver.:** This screen tells you the version number of the camera firmware (internal operating software). At the time of publication, the current firmware version was 1.0.9.

> Keeping your camera firmware up-to-date is important, so visit the Canon Web site (www.canon.com) regularly to find out whether your camera sports the latest version. Follow the instructions given on the Web site to download and install updated firmware if needed.

Three more customization options

Shooting Menu 1, shown in Figure 1-20, offers two more basic setup options — at least, these options fall into that category if you share my logic, which some may consider a frightening prospect.

At any rate, these two options work as follows:

✔ **Beep:** By default, your camera beeps after certain operations, such as after it sets focus when you use autofocusing. If you're doing top-secret surveillance and need the camera to hush up, set this option to Off.

✔ **Release Shutter without Card:** Setting this option to Disable prevents shutter-button release when no memory card is in the camera. If you turn the option on, you can take a picture and then review the results for a few seconds in the camera monitor.

Figure 1-20: You can silence the camera via Shooting Menu 1.

The image isn't stored anywhere, however; it's temporary.

If you're wondering about the point of this option, it's designed for use in camera stores, enabling salespeople to demonstrate cameras without having to keep a memory card in every model. Unless that feature some-how suits your purposes, keep this option set to Disable.
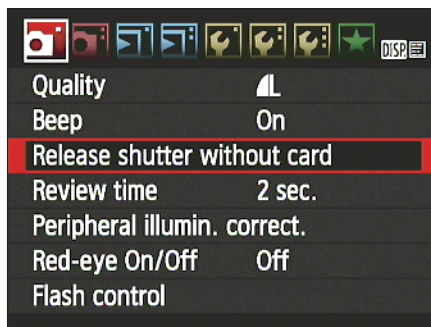
Adding a final level of customization choices, the My Menu feature does just what its name implies: You can create a personalized menu that contains up to six functions from the existing menus. Then, instead of hunting through all the other menus to find settings that you use frequently, you can access the settings quickly just by displaying My Menu. Chapter 11 shows you how to take advantage of this feature, which I happen to love a lot. Unfortunately, you can take advantage of My Menu only in the advanced exposure modes (P, Tv, Av, M, and A-DEP).

Why does this camera have two names?

You may notice that your camera manual, as well as this book, refers to your camera by two different names— EOS Rebel T1i and EOS 500D. What gives? The answer is that Canon assigns different names to a single camera model depending on the part of the world where it's sold.

The *EOS* part, by the way, stands for Electro Optical System, the core technology used in Canon's autofocus SLR (single-lens reflex) cameras. According to Canon, the proper pro-nunciation is *ee-ohs,* which is also how you pronounce the name *Eos,* the goddess of dawn in Greek mythology.

With apologies to the goddess, I save a little room in this book by shortening the camera name to simply Rebel T1i/500D, which is already long enough.