Getting the Lay of the Land

In This Chapter

▶ Attaching and using an SLR lens

▶ Working with camera memory cards

▶ Getting acquainted with external camera controls

▶ Adjusting viewfinder focus

▶ Decoding viewfinder and monitor information

▶ Selecting options from menus

▶ Using the Shooting Settings and Quick Control displays

▶ Customizing basic camera operations

For many people, getting your first *serious* camera means moving from a point and shoot (and some point and shoots are very capable) to an SLR (single lens reflex). As with any growth spurt, the excitement of the move is often tempered with a bit of anxiety. Sure, you'll be able to do lots of new things with your dSLR (digital SLR), but along with that newfound capability comes a barrage of new buttons, knobs, LCD menus, and mechanical knickknacks. Heck, this may be the first time you've even changed lenses on a camera: a big step in itself. Sure, you have the camera manual by your side, but it can be written in a cold or complicated way, making the learn-to-use-your-new-camera experience even more challenging.

If the 60D is your first SLR *and* your first digital camera, you're getting something of a double-whammy in the New Stuff department. Fear not, though, because your new camera isn't nearly as complicated as your first inspection may suggest. With some practice and the help of this chapter (which introduces you to each external control), you'll find yourself nestling in comfortably with your new camera, making your photography more exciting and natural than ever.

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. You've probably already done this, but if not and you need help, the front part of the camera manual provides details.

Working with the Movable Monitor

The EOS 60D is the first Canon digital SLR that sports an *articulated monitor:* You can adjust the position of the LCD monitor on the back of the camera (see Figure 1-1), moving it around to find the best position for you. The monitor, which is mounted on a sturdy hinge, can move in and out and even swivel. To protect it (or if you decide you don't need it), you can even turn the monitor over so the screen faces into the camera body.

WARNING!

The important thing to remember is to treat the LCD monitor with respect. You don't have to baby it, but don't force it, either. If it resists or feels like it won't turn how you want, stop what you're doing or you may break it. It's easy to forget which way it's supposed to twist; when that happens, rely on the feeling of resistance to tell you to turn it the other way.

Figure 1-1: That's one nice articulated monitor.

These steps show you how to manipulate your LCD monitor:

1. **Flip out the monitor, as shown in the left image of Figure 1-2.**

   Put a finger in the indentation on the back of the camera and leverage the monitor out of its housing.

2. **Position the monitor, as shown in the right image of Figure 1-2.**

   You can pull it out all the way so the monitor extends to the side of the camera, and even rotate it toward or away from you. If you're holding the camera low, position the monitor so it faces up (and vice versa).

TIP

If you position the monitor so it points away from you, you can turn the camera around and take your own portrait.

Pry the monitor up.   Rotate gently.
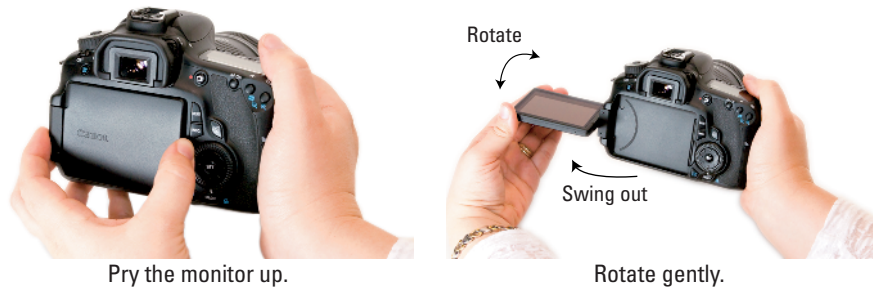
Figure 1-2: Extract and position the movable LCD monitor.

3. **To use the monitor so it acts like a more conventional LCD, flip it out of the camera, rotate it away from you (the face will rotate upward and then away), and flip it back into the camera. See Figure 1-3.**

4. **Position the monitor for storage by extending it from the camera, rotating the screen so it faces you, and then flipping the monitor back into the camera.**

   The back of the monitor should face you. This is the most secure and protected position.

Figure 1-3: Position the monitor traditionally.

Keep these points in mind as you manipulate your LCD monitor, and you will keep it in tip-top shape:

- ✔ **Easy does it.** Don't force the monitor when flipping or rotating.

- ✔ **Protect the monitor.** Face the monitor inward when not using the camera. This protects the LCD from scratches and bumps. This is a great tip even when you pack your camera in a camera bag because even padded bags can be dropped, crushed, or banged.

- ✔ **Watch the crunch factor.** When positioning the monitor back into the camera (whether face in or face out), take care that nothing gets in the way. Use a lens brush or blower to clean the monitor housing on the camera back so there's nothing in the way that could damage the monitor.

✔ **Protect your fingers.** Like other obstructions, fingers can get caught between the monitor and the camera body. Fingers can get hurt, so make sure they're out of the way when snapping the monitor back into the camera.

✔ **Be aware.** You can easily lose track of what you're doing when you have a nice LCD monitor to look at. Conversely, most of us don't walk or otherwise move around when we look through the viewfinder. When using the monitor, watch where you're going.

✔ **Read the manual.** Pages 12 and 13 of the camera manual list several safety tips for your camera and monitor, which we recommend reviewing. Take special care to protect your camera from water, heat, bumps, drops, magnetic fields, moisture, and corrosive chemicals.

✔ **Clean smart.** Wipe off your LCD monitor regularly. We recommend cleaning it after every use and as required when you are using it:

- *Don't let smudges or fingerprints accumulate.* Wipe them away every chance you get.

- *Use only approved cleaning techniques and materials, such as a damp microfiber cloth.* For routine touch-ups, a back and forth motion works well to clean the monitor. For tougher smudges, use a gentle circular motion.

  Do not use paper products like paper towels because they can contain wood fibers that can scratch the surface of the LCD.

- *Use a solution such as diluted isopropyl alcohol to clean the monitor.* LCDs don't like products with ammonia.

- *Take your monitor to a Canon dealer or service center for a professional cleaning if it becomes greasy or really dirty.*

Getting Comfortable with Your Lens

One of the biggest differences between a point-and-shoot camera and an SLR camera is the lens. With an SLR, you can swap 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 allows you to focus manually instead of relying on the camera's autofocus mechanism. Even this basic difference extends your picture-making opportunities in big ways.

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 *that* simply means the rear element of the lens is closer to the sensor than with an EF lens. And no, you don't need to remember what the abbreviation stands for. Just make sure that if you buy a Canon lens other than 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 18–135mm IS, and IS stands for image stabilization, a feature we explain later in this chapter.)

REMEMBER If you want to buy a non-Canon lens, check the lens manufacturer's Web site to find out which lenses work with the EOS 60D. Remember to buy the version of the lens with the Canon mount because most lens manufacturers make several versions of the same lens, each designed to fit on a different camera. For example, if you were looking to buy a Sigma 10–20mm F4–5.6 EX DC HSM, make sure you're getting the Canon mount and not something for Nikon, Sony, or another camera.

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

1. **Remove the cap that covers the lens mount on the front of the camera. (Twist counterclockwise, just like you're removing a bottle cap.)**

   This step assumes the camera doesn't already have a lens mounted. If it does, you have to remove the existing lens first. Those instructions are next.

2. **Remove the cap that covers the back of the lens (counterclockwise again).**

   Put this (and any other) cap in a safe, dust-free place, like a pocket in your camera bag.

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 1-4.

   Which marker you use to align your lens depends on the lens type:

   - *Canon EF-S lens:* The white square is the mounting index. The 18–135mm kit lens that ships with the 60D is an EF-S lens.
   - *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.

EF mounting index

EF-S mounting index

Lens-release button

Figure 1-4: Which index marker you should use depends on the lens type.

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

   The lens also has a mounting index. Figure 1-5 shows the one that appears on the so-called *kit lens*: the EF-S 18–135mm IS zoom lens that Canon sells as a unit with the EOS 60D. If you buy a different lens, the index marker may be red or some other color, so again, check the lens instruction manual.

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

   When you do so, grip the lens by its rearmost collar, as shown in Figure 1-5.

   Don't touch the back of the lens with your finger, or you risk leaving a smudge. You may not realize it when taking pictures, but when you get back to your computer, the photos might be blurry and ruined. You should also resist the urge to stick your finger in the camera when the

lens is off. You could scratch or smudge the mirror and possibly damage other parts of the camera interior with your finger.

EF-S mounting indexes

Turn to attach

Figure 1-5: Place the lens in the lens mount with the mounting indexes aligned.

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 1-4), as indicated by the red arrow in Figure 1-5.

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 the beach on a windy day, 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.

Removing a lens

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

1. **Make sure the lens cap is on the front of the lens and have the rear lens cap (and possibly the camera body cap) handy.**

2. **Locate the lens-release button on the front of the camera, labeled in Figure 1-4.**

3. **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.

4. **Press the lens-release button while turning the lens away from the lens-release button (counterclockwise).**

   You can feel the lens release from the mount at this point. Lift the lens off the mount to remove it.

5. **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. These steps help keep your lens and camera interior dust-free.

Using an IS (Image Stabilizer) lens

The 18–135mm lens sold with the EOS 60D 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 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 that they otherwise couldn't.

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 Image Stabilizer switch (shown in Figure 1-6) to Off. You also can save battery power by turning off image stabilization when you use a tripod.

If using a non-Canon lens, the IS 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.

Whatever type of lens you use, IS isn't meant to eliminate the blur that can occur when your subject moves during the exposure. That problem is related to shutter speed, a topic you can explore in Chapter 7. Chapter 8 offers more tips for blur-free shots and explains focal length and its effect on your pictures.

Focal length indicator

Shutter release button   Auto/Manual Focus switch

Focus ring   Zoom ring   Image stabilizer switch

Figure 1-6: The MF and IS controls are generally close together on the lens (which makes them easy to operate).

Manually focusing

Like any modern camera, the EOS 60D offers autofocusing capabilities. In fact, the EOS 60D offers an excellent autofocusing system, which you can find out how to exploit to its best advantage in Chapter 8. When shooting some subjects, however, using autofocus can be slow or impossible, which is why your camera also offers manual focusing.

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 1-6 shows you the switch as it appears on the EOS 60D 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 Figure 1-6.**

   Set the camera to manual focus before trying to focus manually because that keeps the autofocus machinery from trying to autofocus when you press the shutter halfway.

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 1-6. In this case, it's far smaller than the zoom ring. Back in the days of manual focus cameras, this arrangement was reversed because manual focusing was of primary importance. If you use another lens, the focusing ring may be located elsewhere, so check your lens manual.

Half-press the shutter release while focusing, and you'll hear a beep and see your focus area(s) illuminate when sharp focus is achieved. (You can read more about this in Chapter 8.)

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 18 inches; for other lenses, check the specifications in the lens manual.) You also may need to adjust the viewfinder to accommodate your eyesight; read more about this later in this chapter.

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. (This option isn't offered on the kit lens.)

Zooming in and out

If you're using a zoom lens, it sports a movable zoom barrel (sometimes referred to as a *zoom ring*). On the kit lens, the barrel is just behind the focusing ring and is much larger, as shown in Figure 1-6, but again, the relative positioning of the two components depends on your lens. With the kit lens, you rotate the lens barrel to zoom. A few zoom lenses use a push-pull motion to zoom instead.

The numbers around the edge of the zoom barrel, by the way, represent *focal lengths.* Chapter 8 explains focal lengths in detail. 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 (always on top of the lens when mounted to the camera), labeled in Figure 1-6, represents the current focal length.

Some lenses, such as the Canon EF-S 18–200mm f/3.5–5.6 IS, have a feature that locks the zoom ring in place and keeps the lens from moving around. You can lock it only at the widest angle, which in this case is 18mm. The reason is so you can carry or pack the camera with the lens at its shortest length and not have to worry about the lens accidentally extending. To lock the lens, set the focal length to 18mm and slide the locking lever toward Lock. To release the lock, slide it in the opposite direction.

Working with Memory Cards

Traditional cameras record images on film, but digital cameras store pictures on *memory cards.* Your EOS 60D uses a specific type of memory card: an SD (Secure Digital) card, shown in Figures 1-7 and 1-8. You can also use high-capacity SD cards (which carry the SDHC label) and the newest SDXC cards that promise up to — ready for this? — 2TB (terabytes) of storage. (The *high-capacity* part just means that you can store more files on these cards than on regular SD cards.)

You have to purchase memory cards separately unless you're buying the camera as part of a bundle. Bundles are put together by vendors (not Canon) and include things like an inexpensive tripod, camera bag, one or more memory cards, and other gear. If you want a specific size, make, or model of card, you are better off buying them individually.

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:

✔ **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 1-7. Push the card into the slot until it clicks into place.

REMEMBER

✔ **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.

Memory card access light   Card slot cover (open)

Memory card

Figure 1-7: Insert the card with the label facing you as you hold the camera.

✔ **Removing a card:** First, check the status of the memory card access light, labeled in Figure 1-7. After making sure that the light is off, indicating that the camera has finished recording your most recent photo, turn off the camera. Open the memory card door, as shown in Figure 1-7. Press in the memory card slightly until you hear a little click and then let go. The card pops halfway out of the slot, enabling you to grab it and remove it.

✔ **Handling cards:** Don't touch the gold contacts on the back of the card! (See the left card in Figure 1-8.) 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.

Don't touch!   Lock switch

✔ **Locking cards:** The tiny switch on the left side of the card, labeled *lock switch* in Figure 1-8, 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. You *don't* want to lock the card when shooting because the camera can't write your images to a locked card.
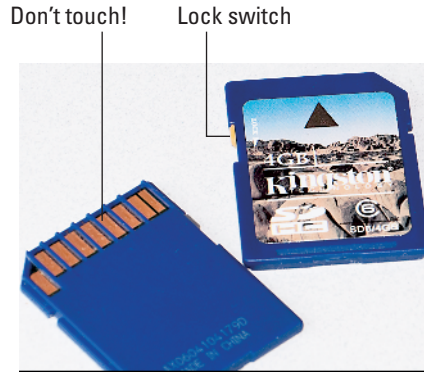
Figure 1-8: Avoid touching the gold contacts on the card.

Exploring External Camera Features

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 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-left side of the camera as if you were holding it, as shown in Figure 1-9.

The items of note here are

✔ **Power switch:** Okay, you probably 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, Info, or Playback button. You can adjust the auto shutdown timing via Setup Menu 1, covered later in this chapter.

Figure 1-9: The tiny pictures on the Mode dial represent special automatic shooting modes.

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

Canon categorizes the various modes into zones:

- *Image Zone:* The camera offers five Image Zone settings designed to make it easy to automatically capture specific types of scenes: Portrait mode for people photos, Sports mode for action shots, and so on. (Chapter 3 explains all five.)

- *Basic Zone:* The Basic Zone category includes the five Image Zone settings plus Full Auto, Flash Off, and Creative Auto modes, also covered in Chapter 3.

- *Creative Zone:* The Creative Zone category includes the advanced exposure modes, (P, Tv, Av, M, B, and C), which we introduce in Chapter 7. Movie mode is outside the zoning limits, as it stands on its own, with no zone moniker.

✔ **Built-in flash:** This hood houses the built-in flash, also called the *pop-up flash.* When stowed, the flash is tidily protected. Figure 1-10 shows the flash extended. *Note:* You can't use the hot shoe (see next point) with the flash up. The flash also doubles as an autofocus assist beam when the camera has trouble autofocusing in low light conditions.

✔ **Hot shoe:** The *hot shoe* is a metal bracket on which you can affix an external flash (or other hot shoe accessory) securely on top of your camera. (It's called a hot shoe because it's wired to communicate back and forth from the camera using electrical signals.)

Built-in flash

Figure 1-10: The built-in flash extends above the camera when popped up.

Don't go poking around the hot shoe. The flash-sync contacts (the little round metal posts) need to be clean and free of debris to work properly.

The next four buttons are used predominately with the top LCD panel. They provide a tactile way to change their corresponding settings as opposed to using the Quick Control screen and back LCD monitor. Only the first three buttons are active when using Live View (viewing the scene on the back of the camera instead of through the viewfinder), and just the first two work when in Movie mode. For more information on Live View and Movie modes, please turn to Chapter 4.

- ✔ **AF mode selection button:** This handy button is an alternate way to select AF mode via the top LCD panel. See Chapter 8 for more information on AF modes.

- ✔ **Drive mode button:** This button switches between the various available drive modes, such as single or high-speed continuous. See Chapter 2 for more information.

- ✔ **ISO speed button:** This button provides one way to access the camera's ISO speed setting, which determines how sensitive the camera is to light. Chapter 7 details this critical exposure setting.

- ✔ **Metering mode button:** Finally, this button gives you a quick way to select from among the camera's different metering modes. See Chapter 7 for more information on metering.

Now, back to our regularly scheduled programming. These controls and displays complete the top of the camera:

- ✔ **Main dial:** Just behind the shutter button is a prominent 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, this dial plays such an important role that you'd think it might have a more auspicious name, like The Really Useful Dial, but Main dial it is.

- ✔ **Shutter release button:** You probably already understand the function of this button, too, but see Chapter 3 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.

- ✔ **LCD panel illumination button:** This tiny little button illuminates the top LCD panel with an amber backlight, making it easy to see in low light conditions. It's much handier than it sounds.

Back-of-the-body controls

Traveling over the top of the camera to its back, you encounter a smorgasbord of buttons — 11, in fact, not including the knob you use to adjust the viewfinder to your eyesight, as discussed later in this chapter, and a few other dials. Figure 1-11 gives you a look at the layout of the backside controls.

TIP

Don't let the abundance of buttons intimidate you. Having all 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. On the 60D, you can access almost every critical shooting setting on your camera via external buttons, which is much more convenient.

Quick Control button

Info button

AF-ON button

Live View/Movie button

AE Lock/FE lock/
Index/Reduce
button

Erase button

Menu button

Dioptric adjustment knob

AF Point
Selection/
Magnify
button

Set button

Playback button

Multicontroller

Unlock/Direct Print button

Figure 1-11: 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 we provide the official control names in the following list, don't worry about getting all those straight right now. The list is just to get you acquainted with the *possibility* of what you can accomplish with all 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, recording a movie, or performing some other function. In this book, we refer to these buttons by the first label you see in the following list to simplify things. For example, we 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 is being described.

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, it's time to explore the camera back, starting at the top-right corner and working westward (well, assuming that your lens is pointing north, anyway):

✔ **Erase button:** Sporting a trash can icon (the universal symbol for delete), use this button to 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.

✔ **Dioptric adjustment knob:** Use this knob to tune the viewfinder to correct for vision problems, if necessary. See the upcoming section, "Adjusting the Viewfinder Focus" for more information.

✔ **Live View/Movie 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.

✔ **AF-ON button:** Just like pressing the shutter button halfway, pressing this button initiates autofocus. If you don't want to accidentally take a photo when autofocusing (especially when you want to lock focus), use this instead of the shutter button. See Chapter 8 for more information on focus.

✔ **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 8 details both issues. When using Live View and Movie modes, this button serves only as an exposure lock (unless you've customized the button's function, which we discuss in Chapter 11).

This 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 5 explains Playback, and Chapter 4 covers Live View and Movie modes.

✔ **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 8 tells you more. In Playback, Live View, and Movie mode, you use this button to magnify the image display (thus the plus sign in the button's magnifying glass icon). See Chapters 4 and 5 for help with that function.

✔ **Menu button:** Press this button to access the camera menus. We discuss navigating menus later in this chapter.

✔ **Info button:** The Shooting Settings display, also 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 Info button or pressing the shutter button halfway and then releasing it.

But that's just the start of the Info 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 this button changes the picture-display style, as outlined in Chapters 4 and 5.

✔ **Quick Control, or Q, button:** You press this button to enter Quick Control mode. The Quick Control screen varies according to which exposure mode is in use.

✔ **Quick Control dial:** The Quick Control dial surrounds the Set button and the multicontroller (explained in the next bullet). The Quick Control dial offers a handy way to quickly scroll through options and settings. It's a time-saver.

✔ **Set button and multicontroller:** Figure 1-11 points out the Set button and surrounding circular controller, known as the multicontroller. These buttons team up to perform several functions, including choosing options from the camera menus. You use the multicontroller 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.

You can customize the function of the Set button; Chapter 11 explains how. While you're working with this book, though, stick with the default setup. Otherwise, the instructions we give won't work.

✔ **Unlock/Direct Print button:** This button has two purposes. The first is to unlock the Quick Control dial after you've locked it in the menu system. As the Direct Print button, it's used to print directly from the camera to a compatible printer. For more information on PictBridge, see Chapter 6.

✔ **Playback button:** Press this button to switch the camera into picture-review mode. Chapter 5 details playback features.

Front odds and ends

On the front-left side of the camera body are a few more things of note, labeled in Figure 1-12.

⮕ **Flash button:** Press this button to bring the camera's built-in flash out of hiding (refer to Figure 1-10) when you use the Creative Zone modes (P, Tv, Av, M, B, or C). See Chapters 2 and 3 for help with using flash in the other exposure modes, and flip to Chapters 7 and 9 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.

Figure 1-12: Press the Flash button to bring the built-in flash out of hiding.

⮕ **Microphone/speaker:** Behind these holes (noted in Figure 1-12) is the mono microphone that picks up sound when you're in Movie mode. We labeled the speaker in this figure as well, which plays audio from recorded movies when you're viewing them from the camera.

A couple of sensors and a button are on the right side of the camera, as shown in Figure 1-13:

✔ **Remote control sensor:** Most of the time, you'll unintentionally cover this sensor with your right hand as you grip the camera. When using the Remote Controller RC-6 (or RC-1 or RC-5) wireless remote (these accessories must be bought separately), the sensor detects the signal and controls the camera.

Remote control sensor   Red-Eye Reduction/self-timer lamp

Depth-of-field preview buttom

Figure 1-13: The front right has two sensors and one button.

✔ **Depth-of-field preview button:** When you press this button (hidden near the bottom of the lens), 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 8 provides details on depth of field, which is an important aspect of your picture composition. Chapter 7 explains aperture and other exposure settings.

✔ **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.

Adjusting the Viewfinder Focus

Perched on the top-right edge of the viewfinder is a tiny black knob, labeled in Figure 1-14. Officially known as a *dioptric adjustment control,* use this knob to adjust the magnification of the viewfinder to accommodate your eyesight.

Viewfinder adjustment knob

Viewfinder

Autofocus point
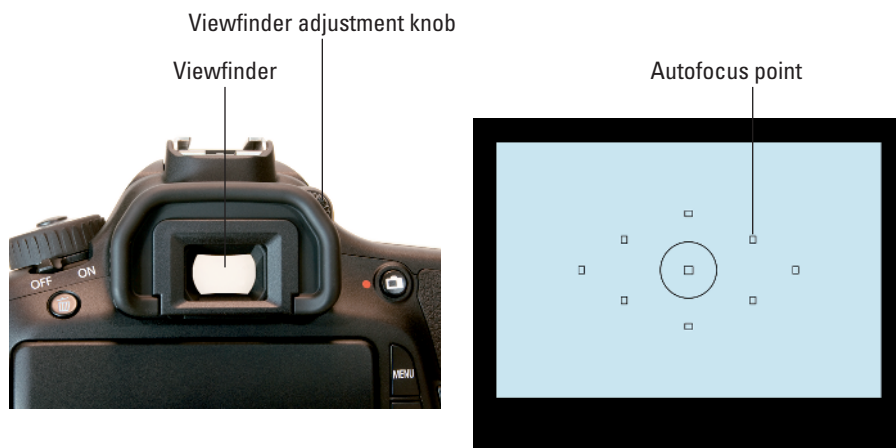
Figure 1-14: Roll the little wheel (knob) to set the viewfinder focus for your eyesight.

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. **Look through the viewfinder and concentrate on the focusing screen shown on the right side of Figure 1-14.**

   Make sure the lens cap is off.

   The *focusing screen* is the collective name assigned to the group of nine autofocus points that appears in the viewfinder: the little rectangles. One of the little guys is labeled in Figure 1-14. (The circle that surrounds the center autofocus point is related to exposure metering, a subject you can explore in Chapter 7.)

2. **Rotate the dioptric 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.

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

Keep in mind, too, that with the 60D, you can opt to use the LCD monitor instead of the viewfinder to frame and preview your shots. This feature is called *Live View* shooting, which is covered in Chapter 4.

Unfortunately, you can't adjust the focus of the Live View image.

Ordering from Camera 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.

In case you didn't notice, the icons that represent the menus are color coded. Shooting Menus 1 through 4 have red icons, as do the Movie menus; Playback Menus 1 and 2 have a blue symbol; Setup Menus 1, 2, and 3 sport yellow icons; Custom Functions has an orange symbol; and the My Menu icon is green. (Chapter 10 explains the My Menu feature, through which you can create your own, custom menu.)

Table 1-1		Canon EOS 60D Menus
Symbol	*Open This Menu*	*To Access These Functions*
	Shooting Menu 1	Picture Quality settings, Image Review, Red-Eye Reduction flash mode, Flash mode, and a few other basic settings.
	Shooting Menu 2	Advanced photography options: Exposure Compensation, Picture Style, White Balance, and Color Space. Appears only in P, Tv, Av, M, B, and C modes. This menu is dynamic. When a Basic Zone is chosen, the advanced options disappear and are replaced with a few Live View features.
	Shooting Menu 3	Advanced photography options: Dust Delete Data and Auto ISO. Appears only in P, Tv, Av, M, B, and C modes. Doesn't appear when you select a Basic Zone mode.
	Shooting Menu 4	Live View shooting options: Live View, Live View AF mode, grid display, aspect ratio, and so forth. This menu is dynamic. When in a Basic Zone mode, some options appear in Shooting Menu 2.
	Playback Menu 1	Rotate, protect, resize, and erase pictures. functions related to processing and printing directly from the camera.
	Playback Menu 2	Additional playback features: highlight alert, histogram display, rating, image jump, slide shows, and HDMI control.
	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: LCD brightness, date/time, language, and sensor cleaning. Some options available only in Creative Zone modes.
	Setup Menu 3	Battery info, Info button options, user settings, copyright embedding, firmware info, and options for resetting camera functions to factory defaults (very useful if you mess up settings and want to get back to factory specs).
	Custom Functions Menu	Exposure, Image, Autofocus/Drive, and Operations/Others. Also has an option to clear all Custom Functions. This menu appears only when in a Creative Zone mode.

Symbol	Open This Menu	To Access These Functions
	My Menu	User-customized menu setup; also available only in Creative Zone modes.
	Movie Menu 1	Movie exposure. Auto Focus mode, choosing AF during movie recording, function of Shutter/ AE lock button during movie recording, ISO speed increments, and highlight tone priority when shooting movies. Appears only when Mode dial is set to Movie mode, and replaces Shooting Menus 1–4.
	Movie Menu 2	Movie resolution, sound recording, silent shooting, metering timer, and grid display. Like Movie Menu 1, menu appears only when the Mode dial is set to Movie mode, and replaces Shooting Menus 1–4.
	Movie Menu 3	Exposure compensation when shooting movies, Auto Lighting Optimizer, Picture Style, and White Balance. Menu available only when in Movie mode.

After you press the Menu button, a screen similar to the one shown on the left in Figure 1-15 appears. Along the top of the screen, you see the icons shown in Table 1-1, each representing a menu. (Remember: Which icons appear depends on the setting of the Mode dial.)

The highlighted icon marks the active menu; options on that menu appear automatically on the main part of the screen. In Figure 1-15, Shooting Menu 1 is active, for example.

Figure 1-15: Use the multicontroller to navigate menus; press Set to access available settings.

REMEMBER

The menu system is dynamic. Many menus don't appear when you shoot in a Basic Zone mode. Others appear only when you're in Movie Mode. Others appear but have different options.

We 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 right or left on the multicontroller or rotate the Main dial to cycle through the available menus.

- ✔ **To select and adjust a function on the current menu:** Press up or down on the multicontroller or quickly scroll with the Quick Control dial to highlight the feature you want to adjust. On the left side of Figure 1-15, 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 multicontroller to highlight your preferred setting and then press Set again to lock in your choice.

Using the Quick Control Screen

The Quick Control screen is a sort of one-stop shopping locale that displays your camera's shooting settings and enables you to modify them with a minimum of button presses and dial movements. Although it might look complicated, the Quick Control screen shows you what's practically necessary at the time.

And sometimes that's the bare minimum, as shown in the left image of Figure 1-16. In this case, the camera is set to a shooting mode in the Basic Zone. You have a lot less control over the camera in these modes, so the Quick Control screens shows less information.

On the other hand, when you're operating in a Creative Zone mode (right image of Figure 1-16), you see much more.

REMEMBER

The real power of the Quick Control screen is that it makes it easy for you to quickly control the camera. The next sections summarize how. The rest of the book goes into more detail for each exposure mode.

Don't confuse the Quick Control screen with the Shooting Settings screen. They are almost identical. The key difference is that you can change settings in Quick Control mode. The Shooting Settings screen is just for looking.

Basic Zone mode   Creative Zone mode
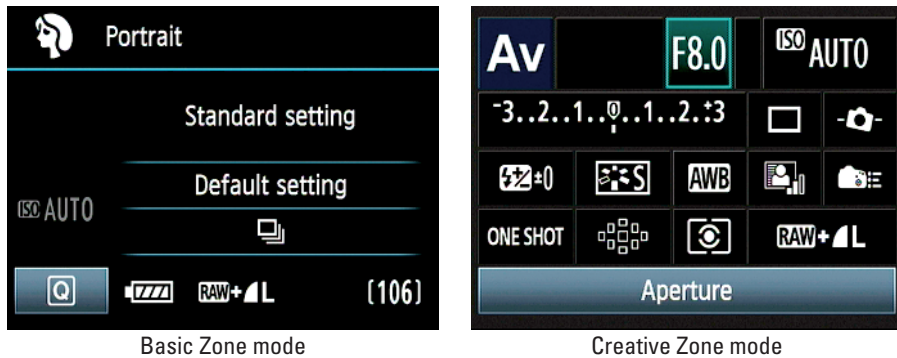
Figure 1-16: The Quick Control screen changes depending on the mode.

Using the Quick Control dial

The Quick Control dial (labeled in Figure 1-11) is a great way to make fast selections, whether you're working with the Quick Control Settings screen or the camera's menu system. It's a versatile tool, and we encourage you to use it whenever possible. Here are some of the things it does:

✔ **Basic Zone modes:** The Quick Control dial does nothing without first pressing Q (lower left; left side of Figure 1-16) and then using the multi-controller to select an option. At that point, you can scroll through the available settings with the Quick Control dial.

✔ **Creative Zone modes:** When in a Creative Zone mode and the Shooting Settings screen is shown, the Quick Control dial automatically changes exposure compensation in P, Tv, and Av modes. In M mode, using the Quick Control dial changes the f-stop.

Otherwise, the Quick Control dial makes setting changes when you press Q a second time to enter edit mode. Then, use the multicontroller to select a setting (for example, ISO), and use the Quick Control dial to scroll through options.

✔ **Playback:** When playing back photos, the Quick Control dial moves one photo forward or reverse, depending on the direction you turn the dial.

✔ **Menus:** When in the menu system, the Quick Control dial scrolls up and down individual menu items. The multicontroller (or Main dial) moves you from tab to tab.

When in doubt, remember that the Quick Control dial is a fast way to scroll through options or photos.

Locking and unlocking the Quick Control dial

It can be frustrating when you're working in a Creative Zone mode, and you accidentally nudge the Quick Control dial and make a change to a random shutter speed or aperture. That's the bad news. The good news is that you can lock the dial in place when you're in a Creative Zone mode. To lock the Quick Control dial, follow these simple steps:

1. **Set the Mode Dial to a Creative Zone mode.**

   This won't work in any modes in the Basic Zone.

2. **Press Menu and navigate to Setup Menu 2.**

3. **Scroll to Lock, as in the left image of Figure 1-17, and then press Set.**

4. **Choose Enable, as in the right image of Figure 1-17, and then press Set.**

5. **Press Menu to exit the menu.**

Figure 1-17: Enable Quick Control dial locking in Setup Menu 2.

Now when you're in a Creative Zone mode and you press Q to look at the Quick Control Settings screen, you can't change any settings with the Quick Control dial until you press Q a second time and enter edit mode.

Press Unlock (refer to Figure 1-11) to temporarily unlock the Quick Control dial and make changes. Depending on the mode you're in, rotating the dial (remember, this is before you press Q the second time) changes a different setting. In Av mode, it changes the exposure compensation.

Accessing Custom Functions from the Quick Control screen

From the Quick Control screen, you can 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 looks 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 Info button.

2. **Press the Quick Control button.**

   The screen 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 1-18, which has the Flash Exposure Compensation setting selected.

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

   Again, the available options depend on the exposure mode, and Figure 1-18 shows options presented in the Tv (shutter-priority auto-exposure) mode.
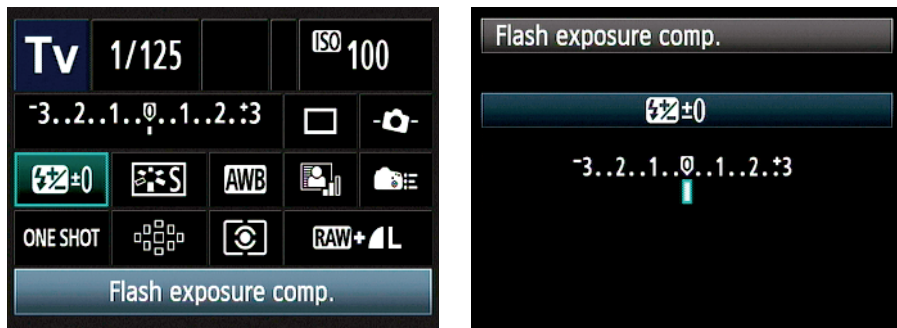
Figure 1-18: Press the Quick Control button to shift to Quick Control mode; the active option appears highlighted.

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 the Set button 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 1-18. You then can choose between rotating the Main dial or pressing the multicontroller 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; we spell out all the needed steps throughout the book.

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

   You return to the normal Shooting Settings display.

# Monitoring Critical Camera Settings

Even in the most basic shooting modes, it's important to monitor your 60D settings so that you can take the photos you want to take. Part of your journey as a photographer, whether as a professional or amateur, is learning to understand, monitor, and control all the elements that make a modern digital SLR work. To do that, you keep track of what's happening in your camera by monitoring the critical camera settings, such as shooting mode, mode options, exposure settings, drive, metering, autofocus modes, and so forth.

The 60D has a plethora of tools for you to use to monitor these settings. You can use the tools you want and ignore the rest, or you can learn to use them all. This section takes you through the most important tools and features you use to see how the camera is set up to shoot.

The Info button: Choosing what the screen shows

Press Info to cycle through different displays (as shown in Figure 1-19) to show on the back LCD monitor. To change what you see there, follow these steps:

1. **Navigate to Setup Menu 3 and select the Info button display options.**

2. **Select the items you want to enable with a check and disable the items you want to suppress by clearing the check mark.**
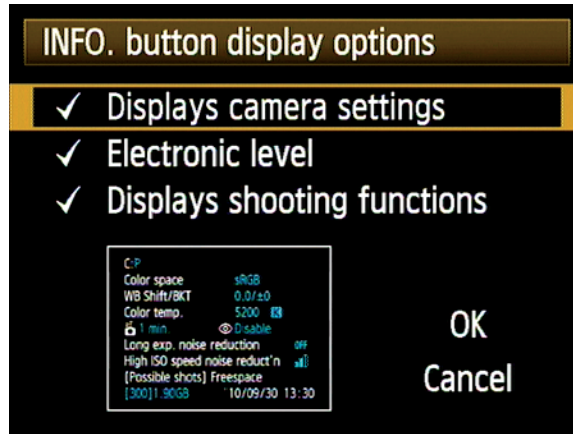
Figure 1-19: Customize the Info button.

Either way, scroll to the item in question and press Set to toggle the check on or off.

Your options are

- *Displays Camera Settings:* Shows camera settings, as discussed later in the chapter.

- *Electronic Level:* Displays the electronic level, which is a helpful tool when you want to make sure the camera is level with the earth. We talk more about the level in Chapter 10.

- *Displays Shooting Functions:* Shows you the current shooting functions. You can turn it off, and still access them by pressing Q and entering Quick Control mode.
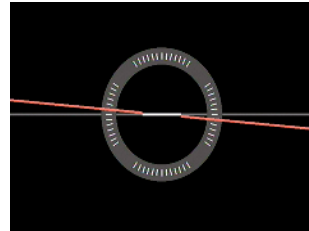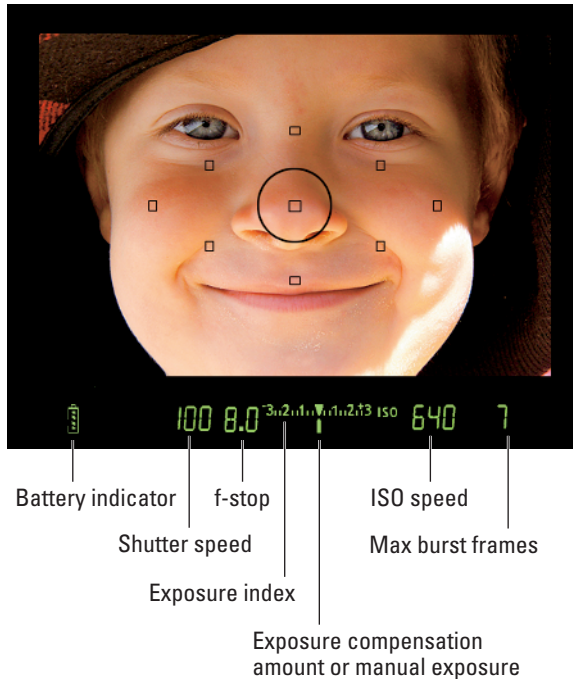
   3. Highlight OK and press Set to lock in your changes.

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. In Live View mode, you use the LCD monitor as viewfinder; the viewfinder is disabled (ditto for Movie mode), so you don't want to be in these modes if you want to get information from the viewfinder. (See Chapter 4 for details about Live View and Movie modes.)

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 1-20: shutter speed, f-stop (aperture setting), exposure compensation setting, and ISO setting. Additional data displays when you enable certain features, such as Flash Exposure Compensation.

Battery indicator   f-stop   ISO speed

Shutter speed   Max burst frames

Exposure index

Exposure compensation amount or manual exposure

Figure 1-20: Viewing camera information at the bottom of the viewfinder.

Again, we detail each viewfinder readout as we explain your camera options throughout the book. But we want to point out now one often-confused value you may see: The value at the far right end of the viewfinder (7, in Figure 1-20) 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 7, 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. For example, if you're working in Av mode, rotating the Main dial changes the f-stop.

Using the Shooting Settings display

As shown in Figure 1-21, 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. Figure 1-21 labels two key points of data that are helpful in any mode:

✔ **Shots remaining:** This number indicates how many more pictures can fit on your memory card at the current settings. For more information on how size and quality affect the number of photos you can fit onto a memory card, please turn to Chapter 2.

✔ **Battery status:** A "full" battery icon like the one in the figure shows that the battery is fully charged. If the icon appears empty, you better have your spare battery handy if you want to keep shooting.

Battery status   Shots remaining

Figure 1-21: Monitoring 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 won't always appear when you turn on the camera and the LCD monitor is visible. It depends what the display was on when you turned off the camera. If you left the Shooting Settings display on, it should reappear. If not, press the Info button until the Shooting Settings display appears (assuming you have it enabled, as discussed earlier). Or, if menus are on the screen, you can press Info or the shutter-button halfway to go back to the Shooting Settings display.

✔ **Adjusting settings:** While the Shooting Settings display is active, you can change some shooting settings by rotating the Main dial, the Quick Control dial, 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.

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, as shown in Figure 1-22. 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 Info button.

Figure 1-22 shows the settings that you can monitor when shooting in the Creative Zone modes. Again, that's P, Tv, Av, M, B, and C. Here are the details you can glean from the display, with settings listed in the order they appear onscreen.

Figure 1-22: Press the Info button when the menus are active to view this screen.

✔ **Camera User Setting mode:** The C: at the top of the screen doesn't refer to computer drive. It's what mode your Camera User Setting mode is based on. The default is P, which is short for Program AE. Both modes are covered in Chapter 7.

✔ **Color Space:** 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 8.

✔ **White Balance Shift/Bracketing:** Add this to the list of advanced color options covered in Chapter 8.

✔ **Color Temp:** Shows you the current manual color temperature, whether or not you have it selected as a white balance option. Chapter 8 has more information on the topic.

✔ **Auto Power Off and Red-Eye Reduction flash mode:** These two functions share a line onscreen. Notes the time you selected to power-off and whether Red-Eye Reduction flash is enabled.
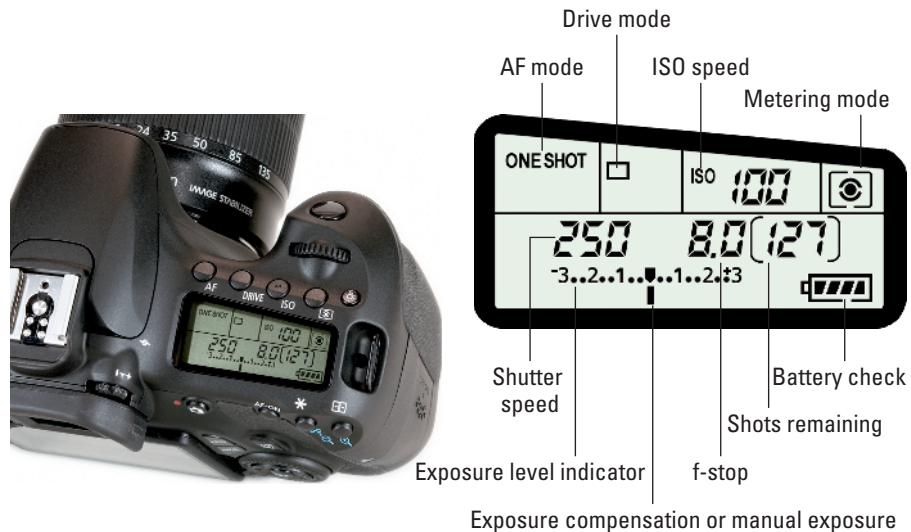
🖊 **Long exposure and High ISO speed noise reduction:** Tell you whether you have noise reduction enabled for these two conditions.

🖊 **Possible Shots/Freespace:** Indicates how much storage space remains on your camera memory card. How many pictures you can fit into that space depends on the Quality setting you select. Chapter 2 explains this issue.

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

In the Basic Zone modes, much of the information is grayed out, indicating that you can't change it. Of course, with the exception of the Freespace 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 having to hunt through menus.

Checking out the top LCD panel

Another way for you to keep track of shooting information on your 60D is through the LCD panel on the top side of the camera, as shown in Figure 1-23. This panel provides a lot of information although it's presented differently than the viewfinder or LCD monitor.

Drive mode
AF mode
ISO speed
Metering mode
ONE SHOT
ISO 100
250
8.0 (127)
-3..2..1..◼..1..2.±3
Shutter speed
Battery check
Shots remaining
Exposure level indicator
f-stop
Exposure compensation or manual exposure

Figure 1-23: The top LCD panel is another useful situational awareness tool.

As you can see from the figure, the panel is divided into five areas. Depending on how you have the camera set up, you'll see currently selected options or settings displayed in the various sections of the panel. For example, in the top-left corner devoted to the AF mode, you'll see One Shot, AI Focus, AI Servo, or M Focus, depending on what AF mode you're in. (See Chapter 8 for more information on setting AF modes.)

The top display line corresponds to the four buttons described in the earlier section, "Topside controls." Use the four buttons in front of the LCD panel (AF, Drive, ISO, and Metering; refer to Figure 1-9) to quickly make important focus, drive, exposure, and metering decisions while looking at the panel.

The bottom area of the LCD panel is devoted to displaying other information, with a heavy emphasis on the camera's current exposure settings, such as the shutter speed and f-stop.

Reviewing Basic Setup Options

One of the many advantages of investing in the Canon EOS 60D 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.
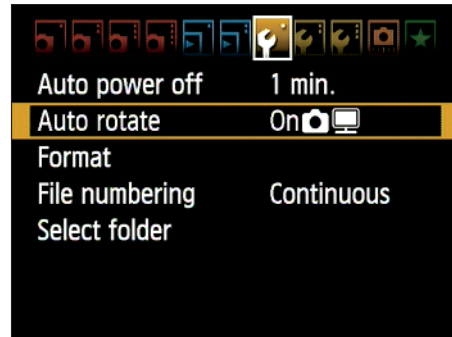
Setup Menu 1

At the risk of being conventional, start your camera customization by opening Setup Menu 1, shown in Figure 1-24.

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.

- **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.

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 1-24. 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.

Figure 1-24: Options on Setup Menu 1 deal mainly with basic camera behavior.

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 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.

✔ **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. This isn't a good idea, for the reason we just stated.

WARNING!

Whichever option you choose, beware of one gotcha: If you swap 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 earlier 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).

✔ **Select Folder:** Press this to select a new folder on your memory card.

Setup Menu 2

Setup Menu 2, as shown in Figure 1-25, offers an additional batch of customization options:

✔ **LCD Brightness:** Make the camera monitor brighter or darker. After highlighting the option on the menu, as shown in Figure 1-25, press the Set button to display a screen similar to what you see in Figure 1-26. The camera displays a picture from your memory card; if the card is empty, you see a black box instead. Use the Quick Control dial or press right or left on the multicontroller to adjust the brightness setting. Press Set to finish the job and return to the menu.

WARNING!

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. Keeping the brightness at its default center position, as shown in Figure 1-26, is a good idea unless you're shooting in

Figure 1-25: Setup Menu 2 offers more ways to customize basic operations.
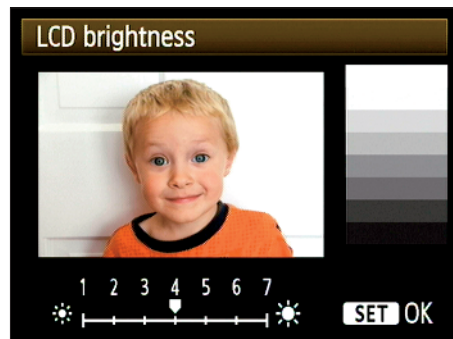
Figure 1-26: Adjust the brightness of the camera monitor.

very bright or dark conditions. As an alternative, you can gauge exposure by displaying a histogram tool, which we explain in Chapter 5, 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.

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 5 shows you where to locate the date/time data when browsing your picture files.

✔ **Language:** Set the language of text displayed on the camera monitor. Screens in this book display the English language, but we find it entertaining on occasion to hand our camera to a friend after changing the language to, say, Swedish. We're real yokesters, yah?

If you change your language (intentionally or by accident) to something freaky, you'll appreciate the little speech bubble icon next to the Language setting for those times when you can't read the word for *Language.*

✔ **Video System:** This option is related to viewing your images and movies on a television, a topic we 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 the Set button 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 it's hard to 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, B, and C), you can access this third option, which prepares the camera for manual cleaning of the sensor. We don't recommend this practice; sensors are delicate, and you're really better off taking the camera to a good service center for cleaning.

✔ **Lock:** As we mention earlier, this menu locks the Quick Control dial when in a Creative Zone mode.

Setup Menu 3

Setup Menu 3, shown in Figure 1-27, contains the following offerings (some of which are not available in all modes).

Figure 1-27: To display most options in Setup Menu 3, you must set the Mode dial to a Creative Zone mode.

- **Battery Info:** Press to see battery information. There's more here than you might think. You'll see what type of battery you have in the camera (or if you're connected to the power grid), how much power you have left (as a percentage), the number of photos you've taken on this battery, and the battery's recharge performance. Not bad!

- **Info Button Display Options:** As we mention earlier, control the screens you see after pressing Info.

- **Camera User Settings:** As we explain in Chapter 10, register and clear camera user settings.

- **Copyright Information:** Also explained in Chapter 10, embed copyright information in the image metadata.

- **Clear All Camera Settings:** Restore the default shooting settings.

- **Firmware Version:** This screen tells you the version number of the camera firmware (internal operating software). At the time of publication, the current firmware version was 1.0.5.

  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.

More customization options

Shooting Menu 1 (covered briefly earlier in the chapter), shown in Figure 1-28, offers two more basic setup options:

- **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 on the option, you can take a picture and then review the results for a few seconds in the camera monitor. The image isn't stored anywhere, however; it's only 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 somehow suits your purposes, keep this option set to Disable.
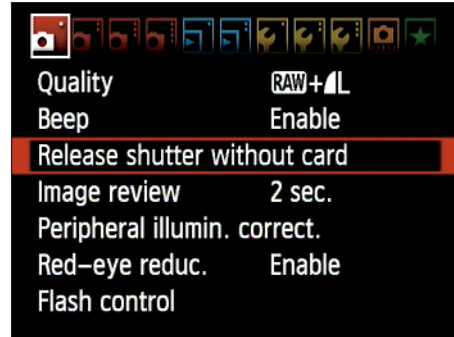
Figure 1-28: You can silence the camera via Shooting Menu 1.

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 10 shows you how to take advantage of this terrific feature that eliminates burrowing down through menus to find settings.