1

Exploring the Canon EOS 7D

In This Chapter

- Getting familiar with camera controls
- Understanding the LCD panel
- Decoding and adjusting the viewfinder
- Attaching and removing lenses
- Using zoom and image stabilization lenses
- Changing basic camera settings
- Using CF cards
- Charging your battery

The Canon EOS 7D has all the latest bells and whistles Canon has to offer. It's a technological marvel that enables you to take great pictures and capture high-definition (HD) video. The camera has a new processor that gives you the ability to capture great images in low light and at a blindingly fast speed of up to 8 images per second, which is ideal for action photography. The camera has an improved, highly customizable autofocus system that gives you more control over autofocus than in the past. And Canon finally offers a camera with a viewfinder that shows you 100 percent of what the lens captures: What you see is what you get. A *dual-axis level* (the equivalent of a spirit level in a tripod) you can display in the viewfinder lets you capture pictures with horizon lines that are level. The camera also has a built-in flash system that can be used to control external Canon Speedlites. Woohoo!!! Smart flash technology.

Getting familiar with all this new technology can seem daunting even to a seasoned photographer. I was impressed, albeit a tad flummoxed, when I saw the first reviews. Even though I'm a seasoned Canon digital single-lens reflex (SLR) user — my first digital SLR was the EOS 10D — I still had a bit of a learning curve when I first had the camera in hand, chomping at the bit

to take some pictures. But it's my job to get down to brass tacks with new technology and show you how to master it. The fact that you're reading this probably means that you want to know how to use all the bells and whistles Canon has built into the camera. In this chapter, I familiarize you with the controls, the camera lens, the battery, and the memory cards you use to capture images with the camera.

Getting to Know the Controls

If you're a longtime Canon user, you know that you can do an awful lot with the camera by using external controls, which saves you from poking around inside pesky menus. The camera controls are easy to reach and give you access to many powerful features. Although you may think it seems like a daunting task to know which button does what, after you use the camera for a while, you'll automatically know which control gives you your desired result and then reach for it instinctively, without taking your eye from the viewfinder. But first, you need to know what each control does. I explain the controls you find on the outside of the camera in the upcoming sections.

Exploring the top of your camera

The top of the camera (as shown in Figure 1-1) is where you find the controls you use most when taking pictures. The top of the camera is where you change settings like ISO (International Organization for Standards) and shutter speed, choose a shooting mode, and press the shutter button to take a picture. You can do lots of other things from the top of the camera, which in my humble opinion, is the most important real estate on it, with the possible exception of the lens. I suggest you get to know the controls on the top of your camera intimately, like the back of your hand. Many photographers, including me, make it a point to memorize where the controls are and access them without taking an eye off the viewfinder. Here's what you find on the top of the camera:

- **Shutter button:** This button prefocuses the camera and takes a picture. I discuss this button in greater detail in Chapter 2.
- **Multi-function button:** This button changes the function of a multi-purpose button, and is used extensively when specifying which autofocus point or zone is used to achieve focus. I show you how and when to use this button when related to a specific task.
- **Main dial:** This dial changes a setting after you press a button. For example, after you press the ISO speed button, you move this dial to change the ISO speed setting. I show you how to use this button as it relates to a specific task.
- **LCD Panel Illumination button:** Press this button when you're in dim or dark conditions and you need to shed a little light on the LCD panel.

Figure 1-1: Get to know these controls like the back of your hand.

- **ISO speed setting/Flash Exposure Compensation:** This button sets the ISO speed setting or the flash exposure compensation (see Chapter 7 for more on the ISO speed setting and flash exposure compensation).
- **AF mode/Drive mode button:** This button sets the autofocus mode. You can choose from three autofocus modes. (I give you the skinny on autofocus modes in Chapter 7.)
- **Metering Mode/White Balance button:** This button changes the metering mode or the white balance (see Chapter 7 for more on the metering mode and white balance).
- **LCD panel:** This panel shows you all the current settings. I show you how to read the information in this panel in the section, "Deciphering the LCD Panel," later in this chapter.

- **Hot shoe:** Slide a compatible flash unit (a Canon flash unit is dubbed a *Speedlite*) that's compatible with this camera into this slot. The contacts in the hot shoe communicate between the camera and the flash unit. (I discuss flash photography in Chapter 7.)
- **Mode dial:** This button determines which shooting mode the camera uses to take the picture. (I show you how to use this dial to choose specific shooting modes in Chapter 6, and in Chapter 8, I show you how to choose optimal settings for specific picture-taking situations.)

Exploring the back of the camera

The back of the camera is also an important place. Here you find controls to power up your camera, access the camera menu, and much more. The following is what you find on the back of your EOS 7D (see Figure 1-2):

- **AF Point Selection/Magnify button:** This button changes from multiple autofocus points to a single autofocus point (see Chapter 7). You also use this button to zoom in on images when reviewing them (see Chapter 4).
- **AE Lock/Index/Reduce button:** This button locks exposure to a specific part of the frame (see Chapter 6). When reviewing images, use this button to view multiple thumbnails or to zoom out when viewing a single image (see Chapter 4).
- **AF-On button:** This button, in certain shooting modes, establishes focus (see Chapter 6).
- **Live View/Movie Shooting switch:** This switch shoots in Live View mode or shoots movies, which I explain in detail in Chapter 5.
- **Start/Stop button:** When you switch to movie shooting mode, this button starts and stops recording (see Chapter 5).
- **Multi-controller button:** Use this button for a myriad of tasks, such as changing the autofocus point, selecting an option when using the Quick Control menu instead of the camera menu, or switching from one camera menu to the next. (I explain this button in detail when it's associated with a specific task throughout this book.)
- **Light sensor:** Used when shooting in Auto mode to determine metering. Be careful not to block this sensor when shooting in Auto mode.
- **Quick Control dial:** This button selects a setting or highlights a menu item. This dial is used when performing various tasks, and I discuss it throughout this book as needed.
- **Set:** Press this button to confirm a task, such as erasing an image from your card or setting a menu option. I show you how to use this button to perform a specific task throughout this book.
- **Access lamp:** Flashes when the camera writes data to the inserted memory card.

Figure 1-2: Buttons, buttons, and more buttons on the back of the camera.

- **Power switch:** Okay, so this is a no-brainer. This switch powers the camera on and off.
- **Quick Control switch:** This switch enables the Quick Control dial. Move the switch left to enable the Quick Control dial, right to lock the dial. Locking the Quick Control dial prevents you from accidentally changing a setting.

- **Dioptric adjustment knob:** This control fine-tunes the viewfinder to your eyesight.
- **Viewfinder/eyepiece:** Use the viewfinder to compose your pictures. Shooting information, battery status, and the amount of shots that can be stored on the memory card is displayed in the viewfinder. The eyepiece cushions your eye when you press it against the viewfinder and creates a seal that prevents ambient light from having an adverse effect on the exposure.
- **LCD monitor:** Used to display images, movies, camera menus, and the Quick Control menu. (I tell you everything you ever wanted to know about the monitor in Chapter 4, and in Chapter 5, I show you how to use the monitor to compose pictures and movies while shooting in Live View mode.)
- **Speaker:** Plays audio when you play back movies.
- **Quick Control button:** Press this button to display the Quick Control menu on the LCD monitor. (I show you how to use the Quick Control menu in Chapter 4.)
- **Menu button:** Press this button to display the last used camera menu on the LCD monitor. (I introduce you to the camera menu in Chapter 2 and refer to the menu throughout this book.)
- **Picture Style Selection button:** This button selects a picture style. (I show you how to select a picture style in Chapter 2.)
- **Info button:** Press this button to display shooting information on the LCD monitor. You can choose from many different information screens. (I inform you about the different screens in Chapter 4.)
- **Erase button:** This button deletes an image. (I show you how to delete images in Chapter 4.)

Exploring the front of the camera

The front of your camera (see Figure 1-3) has a couple controls you can use and other gizmos that the camera uses. Here you'll find a couple buttons that you use every day and some features you rarely use. The following is on the front of your camera:

- **Remote control sensor:** Senses the light from an RC-1 or RC-5 remote (sold separately) to actuate the shutter.
- **DC coupler cord hole:** Plug the cord from the ACK-E6 power adapter (sold separately) into this hole to use the camera without a battery.
- **Body cap:** Use the body cap to protect the interior of the camera when the lens isn't attached.
- **EF index mount:** Align an EF lens with this mark when attaching it to the camera (see the section, "Attaching a Lens," later in this chapter).

Figure 1-3: The front of your camera is an ergonomic wonder.

- **EF-S index mount:** Align an EF-S lens with this mark when attaching it to the camera (see the section, "Attaching a Lens," later in this chapter). EF-S lenses can be used only by a camera with an APS-C (Advanced Photo System Type-C) sensor like the one on your EOS 7D.
- **Flash button:** Press this button to pop up the camera flash unit. (I show you how to use flash on your subjects in Chapter 7.)
- **Lens-release button:** Press this button when releasing a lens from the camera. I show you how to attach and remove lenses in the sections "Attaching a Lens" and "Removing a Lens," later in this chapter.
- **Depth-of-Field Preview button:** Press this button to preview the *depth of field* (the amount of the image in front of and behind your subject that's in apparent focus) at the current f-stop.

Finding the perfect camera bag

Your EOS 7D is a marvelous camera. Canon has more lenses than the law allows, and then there are other options such as Speedlites, the stuff you use to clean your camera, camera bags, and so on. Speaking of camera bags, here are some tips for finding the perfect one:

- **Get a bag that's big enough for the gear you now own and any additional equipment you anticipate buying in the near future.**
- **Purchase a bag that's comfortable.** Make sure you try the bag on for size in the camera store. Place your camera in the bag and put it over your shoulder. If the bag isn't comfortable, ask the salesperson to show you a different bag. Nothing is worse than a chafed neck after a daylong photography adventure.
- **Make sure the bag has enough pockets for your stuff.** The bag should have a place where you can pack extra memory cards, spare batteries, and other accessories.
- **Make sure the bag is sturdy enough to protect your gear.**
- **Make sure the bag is made so that you can get to your gear quickly.** Nothing is worse than fumbling for a piece of equipment when your digital Kodak moment disappears.
- **If you have a lot of gear, consider purchasing a hard-shell case that's big enough for all your equipment and a soft bag for day trips.**
- **Consider purchasing a customizable camera bag.** These bags come with removable partitions that are held in place with Velcro.
- **If it rains a lot where you live, purchase a water-resistant camera bag or one with built-in rain cover.**
- **Consider purchasing more than one bag.** I have one bag that has gobs of space for when I go on a hike in search of wildlife to photograph. The bag has outside pockets for water bottles. I also have a bag that's big enough for two small lenses. I use this bag when I go on a photo walkabout in search of interesting things to photograph.

Deciphering the LCD Panel

The LCD panel on the top of the camera displays a lot of information, such as the shutter speed, aperture, ISO speed setting, and more. Figure 1-4 shows all the possible options that can appear on the LCD panel. However, you'll never see this much information when you photograph a picture. I show you the type of information you can expect to see on the LCD panel during specific picture-taking scenarios I discuss throughout this book. With the LCD panel, you can see the current settings for white balance, ISO, metering mode, and much more. Here's a road map for the information you'll find on the LCD panel:

- **White balance setting:** Displays the current white balance setting. You view the panel when choosing a white balance option. The icon for auto white balance is shown in Figure 1-4. (I discuss how to set white balance in Chapter 7.)

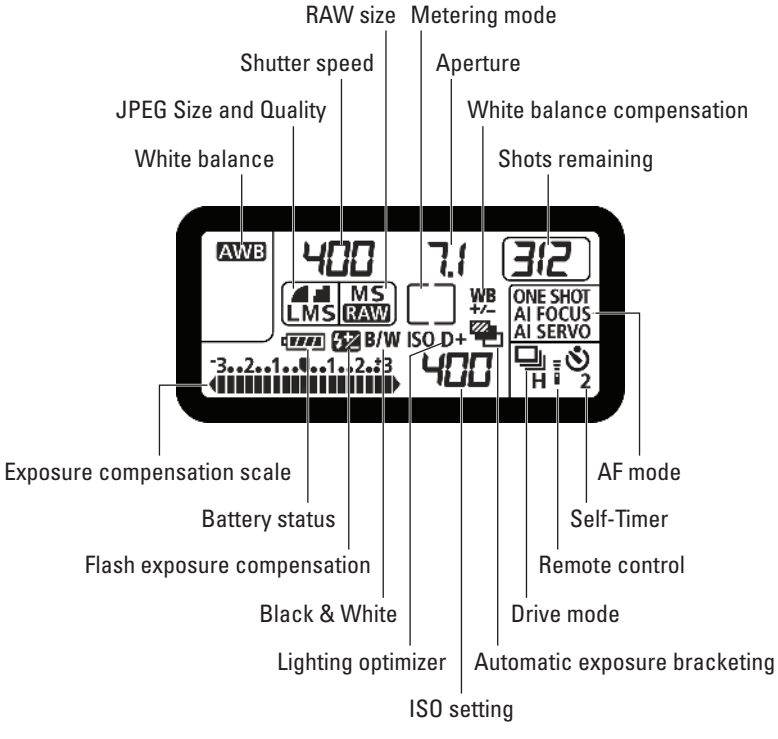


Figure 1-4: You find lots of useful information on the LCD panel.

- **JPEG image size and quality:** If you choose the JPEG image format from the camera menu, the size and quality display here. (I show you how to choose image format, size, and quality in Chapter 3.)
- **Shutter speed:** Displays the shutter speed, as metered by the camera or set by you, that will be used to shoot the next picture. If you're taking pictures with Shutter Priority mode or Manual mode (see Chapter 6), you can use the LCD panel to set the shutter speed.
- **RAW format:** If you choose the RAW image format, the icon indicates whether the image is full-resolution RAW, Medium RAW (MRAW), or Small RAW (SRAW). (For more information on the RAW image options, see Chapter 3.)
- **Aperture:** Displays the f-stop that will be used to take the next picture. You can use this information to change the aperture when shooting in Manual mode or Aperture Priority mode (see Chapter 6).
- **White balance adjustment:** This icon is displayed when you're fine-tuning the white balance (see Chapter 6).

- **Shots remaining/Self-Timer countdown:** This spot on the panel does double duty. When you're using the Self-Timer, the time remaining until the picture is taken displays here. Otherwise, the display shows the number of shots remaining that you can fit on the CF (CompactFlash) card you insert in the camera to capture your images. (A *CF card* is the digital equivalent of reusable film. But you probably already know that, don't you?)
- **Autofocus mode:** Displays the currently selected autofocus mode (see Chapter 7).
- **Drive mode:** Displays the icon for the currently selected Drive mode (see Chapter 6).
- **Automatic exposure bracketing:** This icon displays when you enable automatic exposure bracketing (see Chapter 6).
- **Highlight tone priority:** This icon displays when you enable the Highlight Tone Priority custom function setting (see Chapter 6).
- **ISO speed setting:** The currently selected ISO speed setting displays here. You can also use this information when setting the ISO speed (see Chapter 7).
- **Black & White:** The B/W icon displays when you choose the Black and White picture style.
- **Flash exposure compensation:** This icon signifies that you've enabled flash exposure compensation (see Chapter 7).
- **Battery status:** This icon displays the amount of charge remaining in the battery.
- **Exposure compensation:** This icon indicates whether exposure compensation or autoexposure bracketing has been enabled; it's also used to set flash compensation. (See Chapter 6 for more on autoexposure bracketing and see Chapter 7 for flash compensation.)

You see examples of different scenarios on the LCD panel throughout this book as I discuss various picture-taking situations.

Decoding Viewfinder Information

The viewfinder, or *information central* as I like to call it, is another place you find a plethora of information. In the viewfinder, you see the image as it will be captured by your camera (see Figure 1-5). Your EOS 7D has a very smart viewfinder that enables you to see 100 percent of what you'll capture — a first for Canon digital SLRs. Use the viewfinder to compose your picture and view camera settings while you change them. Figure 1-5 shows all the possible icons that can be displayed while taking a picture and displays all the autofocus points. You never see this much information displayed while taking a picture. (I show you different viewfinder scenarios when I discuss different picture-taking

scenarios throughout the book.) When you peer into the viewfinder, you find the current shooting settings, icons for battery status, shots remaining, and much more. Here's the info displayed in your viewfinder:

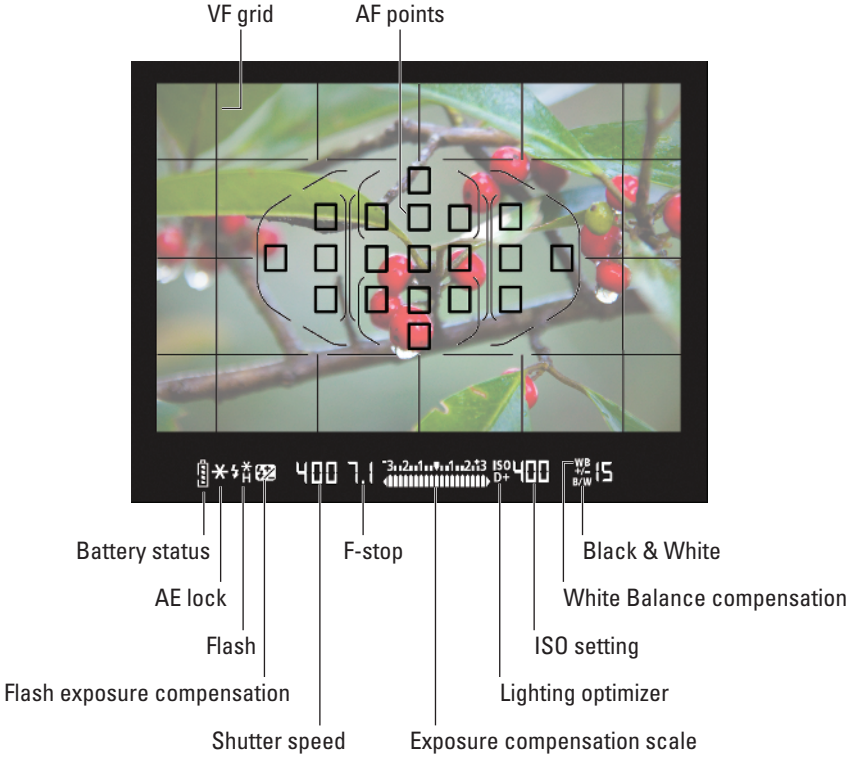


Figure 1-5: Lots of useful information is in the viewfinder.

- **Battery status:** This icon shows you the amount of charge left in your battery.
- **AE lock/AEB in progress:** This icon indicates that you've locked the autoexposure to a specific point in the frame or that autoexposure bracketing is being performed (see Chapter 6).
- **Flash ready:** This icon indicates that the flash has recycled to full power and is ready for use (see Chapter 7).
- **Flash exposure lock/FEB in progress:** This icon indicates that you've locked the flash exposure to a specific point in the frame or that flash exposure bracketing is being performed (see Chapter 6).
- **High-speed sync:** This icon indicates that you've changed the Flash mode to highspeed sync (see Chapter 7).

- **Shutter speed:** Displays the shutter speed that will be used to take the next picture. You can also use this information to manually set the shutter speed when shooting in Shutter Priority mode or Manual mode (see Chapter 6).
- **Aperture:** Displays the f-stop that will be used to take the next picture. You can use this information to manually set the aperture when shooting in Aperture Priority mode or Manual mode (see Chapter 6).
- **Exposure compensation:** This icon indicates whether exposure compensation or autoexposure bracketing has been enabled; it is also used to set flash compensation. (See Chapter 6 for more on autoexposure bracketing and see Chapter 7 for flash compensation.)
- **Highlight tone priority:** This icon displays when you enable Highlight Tone Priority (see Chapter 6).
- **ISO speed setting:** This icon shows the currently selected ISO speed setting. You can also use this information when setting the ISO speed (see Chapter 7).
- **White balance adjustment:** This icon displays when you've enabled white balance correction (see Chapter 7).
- **Black & White:** This B/W icon displays when you've selected the Black and White picture style (see Chapter 7).
- **Max burst:** Shows the maximum number of shots you can take when shooting in Continuous mode. If fewer shots are remaining on the card than the maximum burst, the shots remaining display.
- **Focus confirmation light:** Lights when you achieve focus.

Attaching a Lens

The beauty of a digital SLR is that you can attach lenses with different focal lengths to achieve different effects. Your EOS 7D accepts a wide range of lens from super wide-angle lenses that capture a wide view angle, to long telephoto lenses that capture a narrow view angle and let you fill the frame with objects that are far away. Your camera can use EF lenses and EF-S lenses. The latter are specially made for cameras, such as the EOS 7D, that have a sensor smaller than the size of a frame of 35mm film. To attach a lens to your camera:

1. **Remove the body cap from the camera.**

   Twist the cap counterclockwise to remove it. Alternatively, you'll remove the lens currently on the camera with the steps I outline in the upcoming "Removing a Lens" section.

2. **Remove the rear cap from the lens you're attaching to the camera.**

   Twist the cap clockwise to remove it.

3. **Align the dot on the lens with the mounting dot on the camera body (see Figure 1-6).**

Figure 1-6: Aligning the lens.

If you're using an EF lens, the dot on the lens is red and you align it with the red dot on the camera body. If you're using an EF-S lens, the dot on the lens is white and you align it with the white dot on the camera body.

4. **Twist the lens clockwise until it locks into place.**

   Don't force the lens. If the lens doesn't lock into place with a gentle twist, you may not have aligned it properly.

Removing a Lens

When you want to use a different lens or store the camera body, remove the lens. Removing a lens and attaching another lens can be a bit of a juggling act. To remove a lens from your camera:

1. **Press the lens-release button.**

   This button unlocks the lens from the camera.

2. **Twist the lens counterclockwise until it stops and then gently pull the lens out of the body (see Figure 1-7).**

To minimize the chance of dust getting on your sensor, always turn off the camera when changing lenses. If you leave the power on, the sensor has a slight charge that can attract dust floating in the air. Do not change lenses in a dusty environment because dust may inadvertently blow into your camera. I also find it's a good idea to point the camera body down when changing lenses. Dust on the sensor shows up as little black specks on your images, which is not a good thing.

Figure 1-7: Removing a lens from the camera.

Never store the camera without the lens or body cap attached because pollutants may accidentally get into the camera, harming the delicate mechanical parts, and possibly fouling the sensor.

Using Image Stabilization Lenses

Many Canon and third-party lenses that fit your camera feature image stabilization. *Image stabilization* is a feature that enables you to shoot at a slower shutter speed than you'd normally be able to use and still get a blur-free image. The actual number of stops you can gain depends on how steady you are when handling the camera. To enable image stabilization:

1. **Locate the image stabilization switch on the side of your lens.**

   On Canon lenses, you'll find the switch on the left side of the lens when the camera is pointed toward your subject (see Figure 1-8). If you're using a third-party lens, look for a switch that reads IS, or refer to the lens manual.

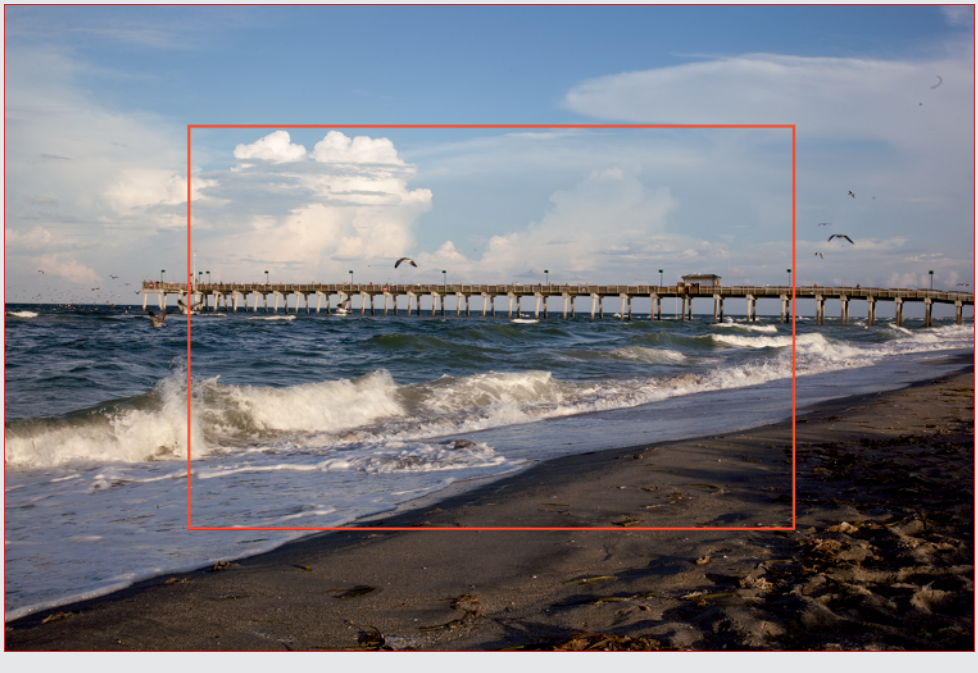
Figure 1-8: Slide this switch to enable image stabilization.

2. **Push the switch to On to enable image stabilization.**

   Image stabilization uses the camera battery to compensate for operator movement. Therefore, a good idea is to shut off this feature when you need to conserve battery power and don't need image stabilization. Note that some lenses have two image stabilization switches: one that stabilizes the lens in a horizontal and vertical plane, and another switch that stabilizes the lens when you pan to follow a moving object.

What's my focal length multiplier?

The sensor on your EOS 7D is smaller than the frame size of 35mm film. Therefore the resulting image incorporates a smaller area than you'd capture with a 35mm film camera or a digital SLR with a sensor that's the same size as a frame of 35mm film — also known as a *full-frame sensor.* When you use a camera that has a sensor smaller than the 35mm film frame size, you can zoom in closer with a telephoto than would be possible with a camera with a full-frame sensor. Imagine looking through a window that's 4 feet × 6 feet. You see a large field of view including the sky. If the window is shrunk to 2 feet × 3 feet, you see less of the scene and sky, which is the same thing that happens when you use a camera with a sensor smaller than the 35mm film frame. Photographers who have previously shot film with 35mm cameras like to know how their lenses will behave on a camera without a full-frame sensor. They find out by multiplying their camera's focal length multiplier by the focal length of the lens. The focal length multiplier for your EOD 7D is 1.6. Therefore a 50mm lens captures the same field of view as an 80mm (50mm × 1.6) lens does on a 35mm film camera or full-frame digital SLR. When I suggest a focal length, I refer to it as the *35mm equivalent.* For example, if I specify a telephoto focal length that is the 35mm equivalent of 80mm, this is a 50mm lens on the EOS 7D.



Using a Zoom Lens

The kit lens that comes with the EOS 7D has a focal length range from 28mm (wide angle) to 135mm (telephoto). You can purchase additional Canon or third-party zoom lenses from your favorite camera supplier. Zoom lenses come in two flavors: twist to zoom, or push/pull to zoom in or out, respectively.

To use a zoom lens with a barrel that twists to change focal length:

1. **Grasp the lens barrel with your fingers.**
2. **Twist the barrel to zoom in or out.**

To use a push/pull zoom lens:

1. **Grasp the lens barrel with your fingers.**
2. **Push the barrel away from the camera to zoom in; pull the barrel toward the camera to zoom out.**

Adjusting Viewfinder Clarity

If you wear glasses, or your vision's not perfect, you can adjust the viewfinder clarity, which makes it easier to compose your images and focus manually. After all, if what you see in the viewfinder isn't what you get, you won't be a happy camper. To adjust viewfinder clarity:

1. **Attach a lens to the camera.**
2. **Look into the viewfinder and turn the dioptric adjuster knob (see Figure 1-9) left or right until the autofocus points look sharp and clear.**

   If the knob is hard to turn, remove the eyepiece cup.

Figure 1-9: A clear viewfinder. The better to see you with, my dear.

Modifying Basic Camera Settings

Your camera ships with default settings for the country in which the camera was purchased. You also have default settings for the amount of time it takes the camera to power off when no picture taking or menu activity has

occurred. You can modify these settings to suit your taste, as I show you in the upcoming sections.

Changing the date and time

Chances are your camera isn't set up for the right date and time when you get it. You can easily change this to the proper date and time by using a camera menu. Yes, consider this your baptism by fire if you've never worked with your camera menus before. To change the date and time:

1. **Press the Menu button.**

   The previously used menu appears on the LCD monitor.

2. **Press the multi-controller button to navigate to the Camera Settings 2 tab.**

   The menu with the date and time options is displayed on your LCD monitor (see the top image of Figure 1-10).

3. **Rotate the Quick Control dial to highlight Date/Time and then press the Set button.**

   The month is highlighted.

4. **Press Set to highlight the number.**

   Arrows appear on the top and bottom of the number.

5. **Rotate the Quick Control dial to change the number and then press Set.**

   The change is applied.

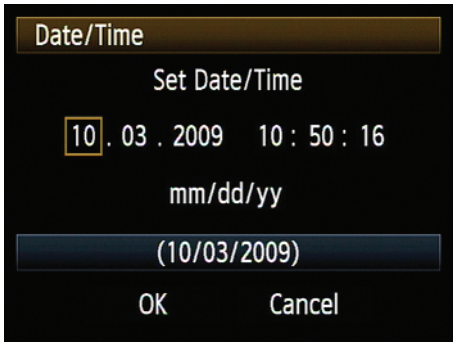


Figure 1-10: Changing the date and time.

6. **Rotate the Quick Control dial to highlight the date.**
7. **Repeat Steps 4 and 5 to set the date.**
8. **Continue in this manner to change the year, hour, minute, and seconds to the current time.**
9. **Rotate the Quick Control dial to highlight OK and then press Set.**

   Your changes are applied.

Changing the auto power-off time

Your camera powers off automatically after a certain period of nonoperation. You can specify a period of time from 1 minute to 30 minutes, or you can disable power-off. However, your camera will automatically power off after 30 minutes of nonactivity, even if you choose Off. If you choose a power-off time that's of a short duration, you'll conserve your battery. After your camera powers off, press the shutter button and the camera powers on again. To change the power-off time:

1. **Press the Menu button.**

   The previously used menu appears on the LCD monitor.

2. **Press the multi-controller button to navigate to the Camera Settings 1 tab (chosen in Figure 1-11).**

3. **Rotate the Quick Control dial to highlight Auto Power Off (see the top image of Figure 1-11) and then press the Set button.**

   The Auto Power Off options display (see the bottom image of Figure 1-11).

4. **Rotate the Quick Control dial to select the desired setting and then press Set.**

   The change is applied.

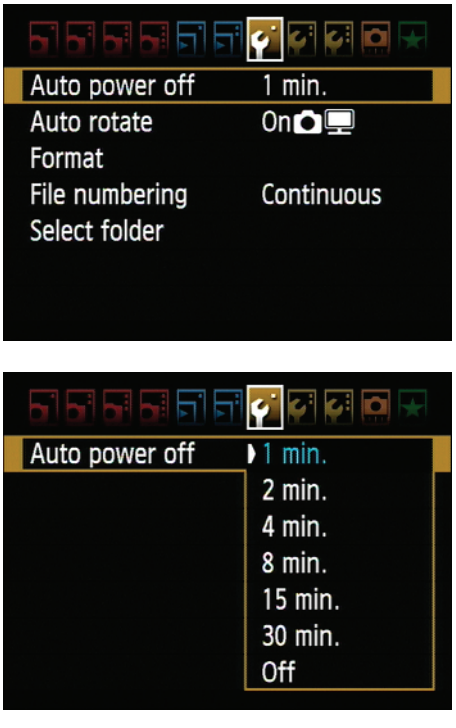


Figure 1-11: Changing the power-off time.

I recommend that you choose the shortest duration for auto power-off that you're comfortable with. This helps conserve battery power. As long as the power button is in the On position, your camera wakes almost instantaneously when you press the shutter button halfway.

To restore the camera to its default settings, press the Menu button, and then use the multi-controller button to navigate to the Camera Settings 3 tab, choose Clear All Settings, and press Set.

Working with CF Cards

Your camera uses CF (CompactFlash) cards to store the pictures you take. A *CF card* is a mechanical device similar to a hard drive. You insert a new CF card when you begin shooting and remove the card when it's full.

To insert a CF card:

1. **Open the CF card cover on the right side of the camera as you look from the back.**

   To open the cover, slide it away from the camera until it stops and then rotate it away from the camera.

2. **Insert the card in the slot.**

   As shown in Figure 1-12, the card label is facing you and the end with the small holes is facing the camera slot.

3. **Gently push the card into the slot.**

   Never force a card because you may damage the pins in the camera and the card. The card slides easily into the camera when aligned properly.

4. **Close the CF card cover.**

   You're ready to shoot up a storm.

Figure 1-12: Inserting a CF card.

When a CF card is full, remove it from the camera and insert a new one. To remove a CF Card:

1. **Open the CF card cover.**

   To open the cover, slide it away from the camera until it stops and then rotate it away from the camera.

2. **Push the white button toward the rear of the CF card cover.**

   The CF card pops loose from the pins.

3. **Gently pull the CF card from the slot.**

   You're now ready to insert a new CF card and start shooting.

You may be tempted to pick up an 8GB or 16GB card, thinking you can store a gazillion images on one card and not worry about running out of room. But memory cards are mechanical devices that are subject to failure and will fail when you least expect it. If a large card fails, you lose lots of images. I carry a

couple 4GB CF cards in my camera bag. Although I hate to lose any images, I'd rather lose 4GB worth of images than 8 or 16GB. I advise you to purchase smaller memory cards.

Formatting a CF Card

After you download images to your computer and back them up (see Chapter 9), you format the card so you can use it again. A good idea is to format your cards before using them again, even if you didn't fill them. Doing this ensures you'll have a full card to work with and won't download duplicate images. To format a CF card:

1. **Insert the card in the camera, as I outline in the preceding section.**

2. **Press the Menu button.**

   The last used camera menu displays on the LCD monitor.

3. **Press the multi-controller button to navigate to the Camera Settings 1 tab.**

4. **Turn the Quick Control dial to select Format.**

   The Format option is selected (see the top image of Figure 1-13).

5. **Press the Set button.**

   The menu changes to show the amount of data on the card and displays a warning that all data will be lost (see the bottom image of Figure 1-13).

6. **Rotate the Quick Control dial to highlight OK and press Set.**

   The card is formatted. After formatting, you have a blank card that's ready to capture images from the camera.

   You can't undo formatting a card. Make sure you've downloaded all images to your computer before you format a card.

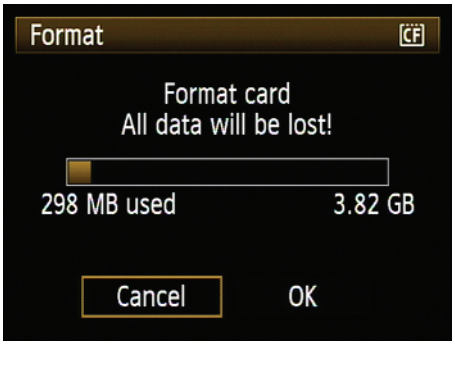


Figure 1-13: Formatting a card.

7. **Press the shutter button halfway to exit the menu and resume taking pictures.**

Charging Your Camera Battery

When you notice the battery status icon is blinking, it's time to charge the battery. Charge the battery using the charger supplied with the camera. To recharge the battery, follow these steps:

1. **Plug the battery charger into a wall outlet.**

   If you live in North America, your charger works in a 110 volt outlet. If you travel overseas with your camera, make sure you bring a converter. If you insert the charger into an outlet with the wrong voltage, you'll ruin it.

2. **Insert the battery (see Figure 1-14).**

   After you insert the battery, three lights may flash. This indicates the battery has less than 25 percent of a full charge.

3. **Continue charging the battery until the light is green.**

   The battery has a 100 percent charge.

4. **Leave the battery in the charger for another hour to top it off.**

   An extra hour seems to give you a bit more life. I learned this a long time ago. However, do *not* leave the camera in the charger and connected to a power outlet for more than two hours after the battery achieves a full charge because you may damage the battery.

5. **Replace the protective cover over the battery (see Figure 1-15).**

Figure 1-14: Charging the battery.

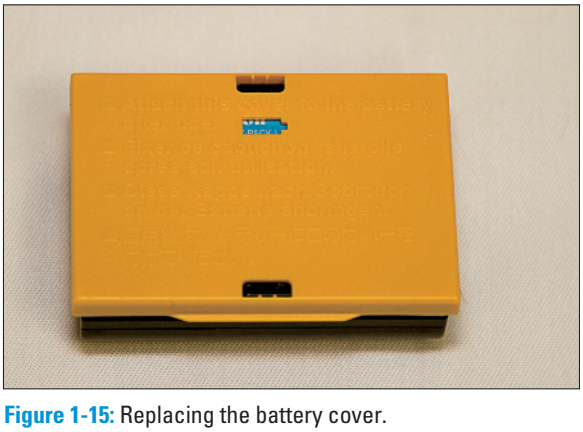


Figure 1-15: Replacing the battery cover.

Here are a few recommendations for camera batteries:

- **After you charge a battery, replace the cover so you can see blue through the battery icon.** This signifies that you have a fully charged battery under the cover, useful information if you own more than one battery.
- **Remove the battery from the camera after you've finished shooting for the day.** The battery loses a bit of its charge if you store it in the camera.
- **When replacing the cover over a partially used or fully discharged battery, place the cover so that the blue does not show through the battery icon.** This is your indication that the battery is partially discharged.
- **In cold conditions, place the spare battery in your coat pocket.** This keeps it warm and extends the life of the battery charge.
- **Beware of third-party batteries that fit your EOS 7D.** They may not be compatible with your camera's battery information system, which means you won't know how much charge remains in the battery. If the battery runs out of charge while the camera is writing data to the memory card, you may damage the memory card, the battery, or both. Batteries that don't work with your camera typically come with their own charging units.