1

Getting the Lay of the Land

In This Chapter

- Attaching and using an SLR lens
- Adjusting the viewfinder to your eyesight
- Selecting from menus
- Figuring out the displays
- Working with memory cards
- Getting acquainted with your camera
- Getting help
- Customizing basic operations

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

You may be feeling similarly insecure if your Nikon D7000 is your first SLR, although some of the buttons on the camera back may look familiar if you've previously used a digital point-and-shoot camera. If your D7000 is both your first SLR and first digital camera, you may be doubly intimidated.

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

car's dashboard. This chapter also guides you through the process of mounting and using an SLR lens, working with digital memory cards, navigating your camera's menus, and customizing basic camera operations.

Looking at Lenses

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

Digital SLR lenses are incredibly complex pieces of optical equipment. I don't have room in this book to go into a lot of detail about the science of lenses, nor do I think that an in-depth knowledge of the subject is terribly important to your photographic success. But the next few sections share a couple of tidbits that may be of help when you're first getting acquainted with your lens, shopping for lenses, or trying to figure out whether the bag of old lenses you inherited from your Uncle Ted or found on eBay will work with your D7000.

Checking lens compatibility

You can mount a wide range of lenses on your D7000. But some lenses aren't fully compatible with all camera features. For example, with some lenses, you can't take advantage of the autofocusing system and must focus manually instead.

Your camera manual has a complete listing of all the lens types that can be mounted on the D7000 and explains what features are supported with each type. But for maximum compatibility, look for these types: Type D or G AF Nikkor, AF-S Nikkor, or AF-I Nikkor. (The latter is an older, expensive professional lens that is no longer sold but might be available on the resale market.)

All the aforementioned lens types (as well as some others) offer CPU (central processing unit) technology, which allows the lens to talk to the camera. This feature is critical to getting maximum performance from the autofocusing system, exposure metering system, and so on. That's not to say that you can't use a non-CPU lens; you just lose access to some camera features. The Non-CPU Lens Data option on the Setup menu helps you get the most functionality possible with a non-CPU lens; check out the section "Cruising the Setup menu," toward the end of this chapter, for details.

The information in this book assumes that you're using a CPU lens that supports all the camera's functions. If your lens doesn't meet that criteria, check the camera manual for specifics on what features are unavailable or need to be implemented differently.

Factoring in the crop factor

Every lens can be characterized by its *focal length,* which is measured in millimeters. Focal length determines the camera's angle of view, the apparent size and distance of objects in the scene, and *depth of field* (how much of the scene can be rendered in sharp focus).

According to photography tradition, a focal length of 50mm is described as a "normal" lens. Most point-and-shoot cameras feature this focal length, which is a medium-range lens that works well for the type of snapshots that users of those kinds of cameras are likely to shoot. A lens with a focal length under 35mm is characterized as a *wide-angle* lens because at that focal length, the camera has a wide angle of view and produces a large depth of field, making it good for landscape photography. A short focal length also has the effect of making objects seem smaller and farther away. At the other end of the spectrum, a lens with a focal length longer than 80mm is considered a *telephoto* lens and often referred to as a *long lens.* With a long lens, angle of view narrows, depth of field decreases, and faraway subjects appear closer and larger, which is ideal for wildlife and sports photographers.

It's important to know, however, that when you mount a lens on the D7000, the angle of view is different than the lens's stated focal length. This variation, which holds true for most digital cameras, occurs because of the difference in size between a 35mm film negative — the standard around which lens focal lengths are measured — and the size of an *image sensor,* which is the light-sensitive component of a digital camera.

With a D7000, the effective angle of view is equivalent to that produced by a focal length about 1.5 times the actual focal length. For example, a 50mm lens on the D7000 produces the same angle of view as a 75mm lens on a 35mm film camera. ($50 \times 1.5 = 75$.)

The end result is the same as if you shot a photo with your film camera and then cropped away some of the perimeter. For this reason, the value used to calculate the effective angle of view is sometimes called a camera's *crop factor.* In Figure 1-1, the red outline indicates the image area that results from the 1.5 crop factor. (You may also see this value referred to as the *lens multiplier.*)

Although the area the lens can capture changes when you move a lens from a 35mm film camera to a digital body, depth of field isn't affected, nor is the spatial relationship between objects in the frame. So when lens shopping, gauge those two characteristics by looking at the stated lens focal length — no film-to-digital conversion math is required.

Figure 1-1: A lens mounted on a 35mm film camera captured this entire scene; when mounted on the D7000, it captured the smaller area indicated by the red frame.

Getting shake-free shots with Vibration Reduction (VR) lenses

Some Nikon lenses, including the 18–105mm lens sold as part of the D7000 kit, offer *Vibration Reduction*. This feature, indicated by the initials VR in the lens name, attempts to compensate for small amounts of camera shake that are common when photographers handhold their cameras and use a slow shutter speed, a lens with a long focal length, or both. That camera movement during the exposure can produce blurry images. Although Vibration Reduction can't work miracles, it enables most people to capture sharper handheld shots in many situations than they otherwise could.

You enable and disable Vibration Reduction via the VR switch on the lens, labeled in Figure 1-2. Here's what you need to know about taking best advantage of this feature:

Figure 1-2: Turn on Vibration Reduction for sharper handheld shots, but turn off the feature when you use a tripod.

- **For handheld shooting, set the VR switch to the On position.** Vibration Reduction will engage whenever you press the shutter button halfway as well as just after you press the button all the way to take the picture. If you pay close attention, the image in the viewfinder may appear to be a little blurry immediately after you take the picture. That's a normal result of the Vibration Reduction operation and doesn't indicate a problem with your camera or focus.

- **With the kit lens, turn off Vibration Reduction when you mount the camera on a tripod.** When you use a tripod, Vibration Reduction can have detrimental effects because the system may try to adjust for movement that isn't actually occurring. This recommendation assumes that the tripod is "locked down" so that the camera is immovable.

  You don't need to disable Vibration Reduction when you want to create motion effects by panning the camera, however. (*Panning* means to move the camera horizontally or vertically as you take the shot, a technique that blurs the background while keeping the subject sharply focused, creating a heightened sense of motion.) The Vibration Reduction system is smart enough to ignore panning movement and compensate only for movement in other directions.

- **For other lenses, check the lens manual to find out whether your lens offers a similar feature.** On non-Nikon lenses, Vibration Reduction may go by another name: *image stabilization, optical stabilization, 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 or pan the camera.

Additionally, some lenses enable you to engage different types of stabilization (the settings may be called Active/Normal or something similar); again, refer to the lens manual for specifics.

Chapter 8 offers more tips on achieving blur-free photos, and it also explains focal length and its impact on your pictures. See Chapter 7 for an explanation of shutter speed.

Attaching and removing lenses

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

1. **Turn off the camera.**
2. **Remove the cap that covers the lens mount on the front of the camera.**
3. **Remove the cap that covers the back of the lens.**
4. **Hold the lens in front of the camera so that the little white dot on the lens aligns with the matching dot on the camera body.**

   Official photography lingo uses the term *mounting index* instead of *little white dot.* Either way, you can see the markings in question in Figure 1-3.

The figure (and others in this book) shows you the 18–105mm AF-S lens that's sold as part of the D7000 kit. If you buy a lens from a manufacturer other than Nikon, your dot may be red or some other color, so check the lens instruction manual.

The AF in the lens name stands for *autofocus,* as you may have guessed. The S stands for *silent wave,* a Nikon autofocus technology.

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

6. **Turn the lens in a counterclockwise direction until the lens clicks into place.**

   To put it another way, turn the lens toward the side of the camera that sports the shutter button, as indicated by the red arrow in the figure.

Figure 1-3: When attaching the lens, align the index markers as shown here.

7. **On a CPU lens that has an aperture ring, set and lock the ring so the aperture is set at the highest f-stop number.**

   Check your lens manual to find out whether your lens sports an aperture ring and how to adjust it. To find out more about apertures and f-stops, see Chapter 7.

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

1. **Turn off the camera and locate the lens-release button, labeled in Figure 1-3.**

2. **Press the lens-release button while turning the lens clockwise (away from the shutter button) until the mounting index on the lens is aligned with the index on the camera body.**

   Again, the mounting indexes are the little guide dots labeled in Figure 1-3. When the dots line up, the lens detaches from the mount.

3. **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.

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

Changing the focusing method (auto or manual)

In addition to the lens-related features covered in the preceding sections, make note of the following controls, which you use to set the focusing method to manual or autofocusing:

- **Lens focus-mode switch:** Assuming that your lens offers autofocusing as well as manual focusing, it likely has a switch that you use to choose between the two options. The switch might be labeled A/M (for auto/manual), as shown in Figure 1-4, or AF/MF. Some lenses offer a setting called AF/M (or something similar), which enables you to set initial focus using autofocusing and then refine focus manually. Check your lens manual for specifics, and check the Nikon manual to confirm that your lens can autofocus with the D7000.
- **Focus-mode selector:** Also shown in Figure 1-4, this switch sets the camera's internal focusing mechanism to manual focusing (M) or autofocusing (AF).

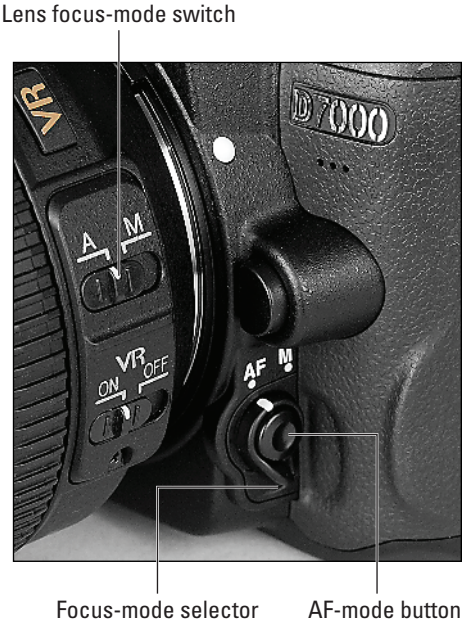

Figure 1-4: Set the focus mode both on the camera body and the lens.

When you use autofocusing, pressing the AF-mode button at the center of the Focus-mode selector enables you to access two settings that tweak autofocus performance, the Autofocus mode and AF-area mode settings. Chapter 8 explains each. This button is your *only* way to access those settings — they're not available via menus as they are on other Nikon dSLRs.

Chapter 8 details how to take best advantage of the D7000's autofocusing system, including ways to select a specific focus point and choose when focus is locked on your subject. Manual focusing is fairly simple: Just twist the focus ring on the lens to bring your subject into focus. The placement and appearance of the focus ring depend on the lens; Figure 1-5 shows you the one on the

kit lens. By the way, even when you focus manually, the camera provides some feedback to help you determine whether focus is set correctly. Look in the Chapter 8 section that's devoted to manual focusing for details.

Figure 1-5: On the 18–105mm kit lens, the manual-focusing ring is set near the back of the lens, as shown here.

If you have trouble focusing, you may be too close to your subject; every lens has a minimum focusing distance. You may also need to adjust the viewfinder to accommodate your eyesight; you can get help with the process a few paragraphs from here.

Zooming in and out

If you bought a zoom lens, it has a movable zoom ring. The location of the zoom ring on the D7000 kit lens is shown in Figure 1-5. To zoom in or out, just rotate that ring.

The numbers at the edge of the zoom ring, by the way, represent focal lengths. The number that's aligned with the white dot at the edge of the focus ring represents the current focal length. In Figure 1-5, for example, the focal length is 50mm.

Adjusting the Viewfinder Focus

Tucked behind the right side of the rubber eyepiece that surrounds the viewfinder is a tiny dial that enables you to adjust the focus of your viewfinder to accommodate your eyesight. Figure 1-6 offers a close-up look at the dial, which is officially known as the *diopter adjustment control*.

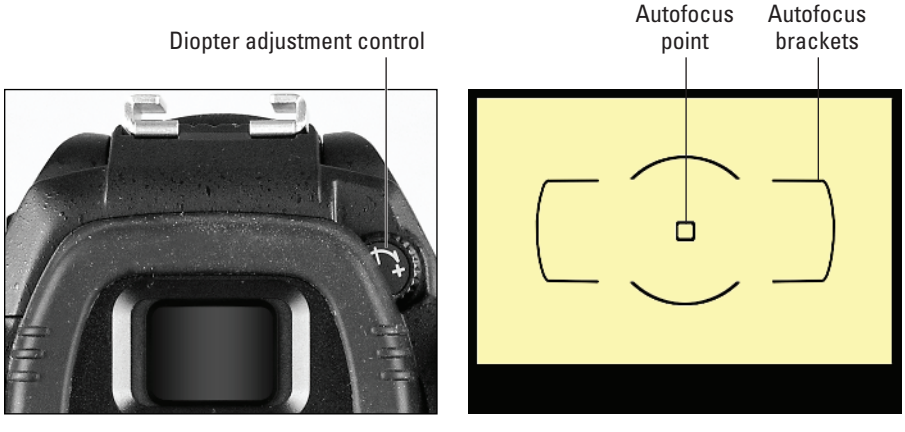

Figure 1-6: Rotate this little dial to adjust the viewfinder focus to your eyesight.

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

1. **Remove the lens cap from the front of the lens.**
2. **Look through the viewfinder and concentrate on the autofocus point and brackets, labeled on the right side of Figure 1-6.**

   These markings relate to autofocusing, which you can read more about in Chapters 3 and 8. Depending on your selected focus options, you may see only the brackets and not the autofocus point.

3. **Rotate the diopter adjustment dial until the viewfinder markings appear to be in focus.**

The Nikon manual warns you not to poke yourself in the eye as you perform this maneuver. This warning seems so obvious that I laugh every time I read it — which makes me feel doubly stupid the next time I poke myself in the eye as I perform this maneuver.

Ordering from Camera Menus

You access many of your camera's features via internal menus, which, conveniently enough, appear when you press the Menu button. Features are grouped into six main menus, described briefly in Table 1-1.

Table 1-1 D7000 Menus

Symbol	*Open This Menu . . .*	*To Access These Functions*
	Playback	Viewing, deleting, and protecting pictures
	Shooting	Basic photography settings
	Custom Setting	Advanced photography options and some basic camera options
	Setup	Additional basic camera options
	Retouch	Built-in photo retouching options
	My Menu/Recent Settings	Your custom menu or 20 most recently used menu options

After you press the Menu button, you see on the camera monitor a screen similar to the one shown in Figure 1-7. Along the left side of the screen, you see the icons shown in Table 1-1, each representing one of the available menus. The icon that's highlighted or appears in color is the active menu; options on that menu automatically appear to the right of the column of icons. In the figure, the Shooting menu is active, for example.

I explain all the menu options elsewhere in the book; for now, just familiarize yourself with the process of navigating menus and selecting options therein. The Multi Selector, shown on the right in Figure 1-7, is the key to the game.

Press the edges of the Multi Selector to navigate up, down, left, and right through the menus.

Figure 1-7: Use the Multi Selector to navigate menus.

In this book, the instruction "Press the Multi Selector left" means to press the left edge of the control. "Press the Multi Selector right" means to press the right edge, and so on.

Here's a bit more detail about navigating menus:

- **Select a menu.** Press the Multi Selector left to jump to the column containing the menu icons. Then press up or down to highlight the menu you want to display. Finally, press right to jump over to the options on the menu.
- **Select and adjust a function on the current menu.** Again, use the Multi Selector to scroll up or down the list of options to highlight the feature you want to adjust and then press OK (the button at the center of the Multi Selector). Settings available for the selected item then appear. For example, if you select the Image Quality item from the Shooting menu, as shown on the left in Figure 1-8, and press OK, the available Image Quality options appear, as shown on the right in the figure. Repeat the old up-and-down scroll routine until the choice you prefer is highlighted. Then press OK to return to the previous screen.

  In some cases, you may see a right-pointing arrowhead instead of OK next to an option. That's your cue to press the Multi Selector right to display a submenu or other list of options (although pressing OK usually works just as well).

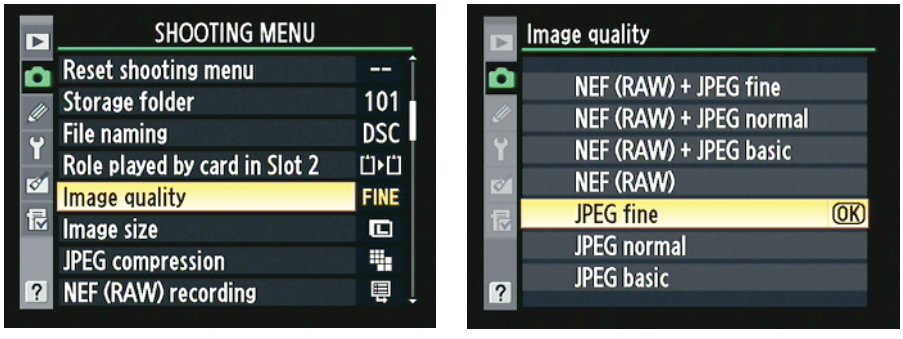

Figure 1-8: Select the option you prefer and press OK to return to the active menu.

Create a custom menu or view your 20 most recently adjusted menu items. The sixth menu is actually two menus bundled into one: My Menu and Recent Settings, both shown in Figure 1-9. The menu icon changes depending on which of these two functions is active; Table 1-1 shows both icons. Each menu contains a Choose Tab option; select this option and press OK to shift between the two menus.

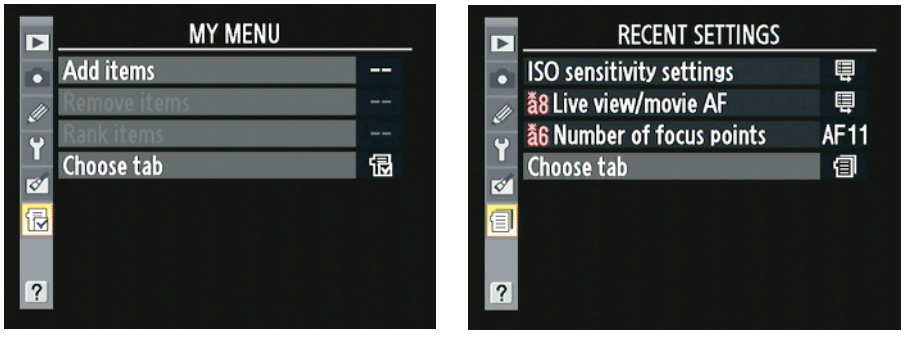

Figure 1-9: The My Menu screen lets you design a custom menu; the Recent Settings menu offers quick access to the last 20 menu options you selected.

Here's what the two menus offer:

- *My Menu:* Through this screen, you can create a custom menu that contains your favorite options. Chapter 11 details the steps.
- *Recent Settings:* This screen lists the 20 menu items you ordered most recently. So to adjust those settings, you don't have to wade through all the other menus looking for them — just head to the Recent Settings menu instead.

To remove an item from the Recent Settings menu, highlight the item and press the Delete button. Press again to confirm your decision and go forward with trashing the item.

In addition to creating a custom menu, you can store two collections of menu settings as custom exposure modes, which you then select via the U1 and U2 settings on the Mode dial. Chapter 11 shows you how.

Decoding the Displays

Your D7000 gives you three ways to monitor the most critical picture-taking settings:

- **Control panel:** The LCD panel on top of the camera offers an array of shooting data, as shown on the left in Figure 1-10. The data that appears depends on what camera features you're currently using.

  You can illuminate the panel temporarily by rotating the On/Off switch past the On position to the little light bulb marker, shown on the right in the figure, and then releasing the switch.

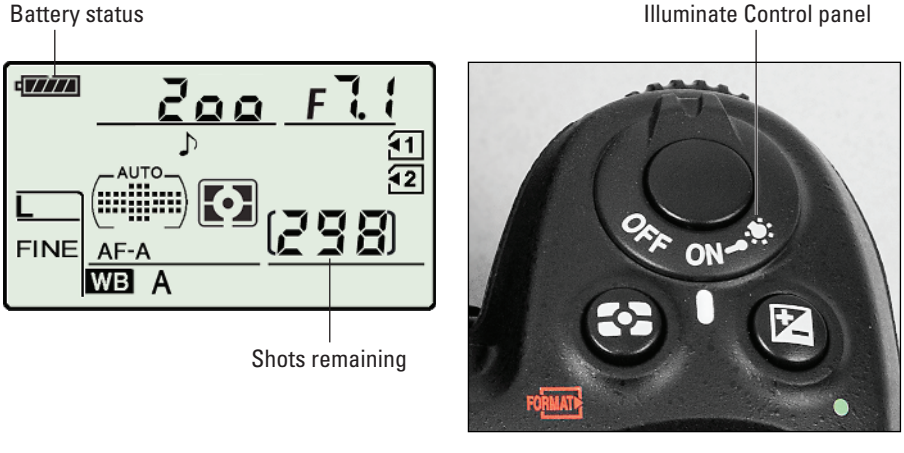

Figure 1-10: Rotate the On/Off switch to the light bulb position to illuminate the Control panel.

- **Information display:** If your eyesight is like mine, making out the tiny type on the Control panel can be difficult. Fortunately, you can press the Info button to display the Information screen on the monitor. As shown in Figure 1-11, this screen displays the current shooting settings at a size

that's a little easier on the eyes. See the section "Customizing shooting and display options" for information on how to adjust the display colors. Like the Control panel, the Information screen data varies depending on what shooting settings are currently in force.

Figure 1-11: Press the Info button to view picture-taking settings on the monitor.

The Information screen has a hidden power, too: After the screen is displayed, you can press Info again to activate the control strip at the bottom, as shown on the left in Figure 1-12. You then can quickly adjust any of the settings on the two rows of the strip. Use the Multi Selector to highlight a setting — a little *tooltip* (text label) appears to identify it — and then press OK. The camera then zips you directly to the menu containing the available settings, as shown on the right in the figure. Make your choice and press OK again to exit the menu. You can then adjust another setting or press Info one more time to turn off the display.

Figure 1-12: Press the Info button while the Information screen is displayed to gain quick access to the settings at the bottom of the screen.

Viewfinder: You can view some camera settings in the viewfinder as well, as shown in Figure 1-13. As with the other displays, the viewfinder information that appears depends on what action you're currently undertaking.

If what you see in Figures 1-10 through 1-13 looks like a confusing mess, don't worry. Much of the display information relates to options that won't mean anything to you until you make your way through later chapters. But do make note of the following two key points of data that are helpful from the get-go:

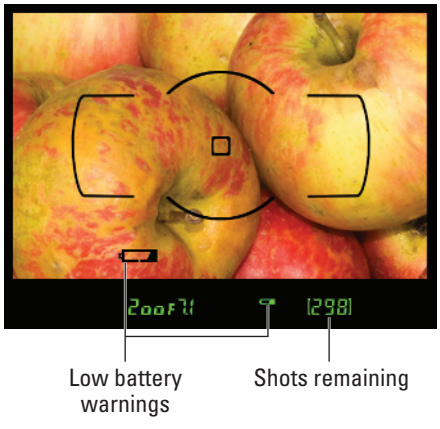

Figure 1-13: You also can view some camera information at the bottom of the viewfinder.

- **Battery status indicator:** A full battery icon like the one in Figures 1-10 and 1-11 shows that the battery is fully charged; if the icon appears empty, go look for your battery charger.

  When the battery gets seriously low, the viewfinder displays not one, but two warning symbols, as shown in Figure 1-13. You can disable the larger warning symbol; see the section "Customizing shooting and display options" later in this chapter for details.

- **Shots remaining:** Labeled in Figures 1-10, 1-11, and 1-13, this value indicates how many additional pictures you can store on the current memory card (or cards, if you put one in each of the camera's two card slots).

  The value is presented a little differently if the card can hold more than 999 pictures. The initial K appears next to the value to indicate that the first value represents the picture count in thousands. For example, 1.0K means that you can store 1,000 more pictures (*K* being a universally accepted symbol indicating 1,000 units). The number is then rounded down to the nearest hundred. So if the number of shots remaining is, say, 1,230 more pictures, the value reads as 1.2K.

Working with Memory Cards

Instead of recording images on film, digital cameras store pictures on *memory cards*. Your D7000 uses a specific type of memory card — an *SD card* (for *Secure Digital*).

Most SD cards sold today carry the designation SDHC (for *High Capacity*) or SDXC (for *eXtended Capacity*), depending on how many gigabytes (GB) of data they hold. SDHC cards hold from 4GB to 32GB of data; the SDXC moniker is assigned to cards with capacities greater than 32GB. You also can use an Eye-Fi SD card, which enables you to send pictures to your computer over a

wireless network. (Because of space limitations, I don't cover Eye-Fi connectivity in this book; if you want more information about these cards, you can find it online at www.eye.fi.)

To enable you to shoot oodles of pictures without having to swap out memory cards, the D7000 has two memory-card slots. Flip back the cover on the right side of the camera, as shown in Figure 1-14, to reveal the slots. The next section explains some details you need to know when you use two cards at a time, but first, here are some general guidelines for using SD cards:

Figure 1-14: Insert cards with the labels facing the back of the camera.

- **Inserting a card:** Always turn off the camera before inserting or removing memory cards to avoid potential damage to the card and the camera. Place the card in the slot with the label facing the back of the camera, as shown in Figure 1-14. Push the card into the slot until it clicks into place; the memory card access light (labeled in the figure) blinks for a second to let you know the card is inserted properly.
- **Formatting a card:** The first time you use a new memory card or insert a card that's been used in other devices (such as an MP3 player),

you should *format* it. To find out why, see the cleverly named section "Formatting cards," a little later in this chapter.

- **Removing a card:** After making sure that the memory card access light is off, indicating that the camera has finished recording your most recent photo, turn off the camera. Open the memory card door, depress 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 by the tail and remove it.

When both memory card slots are empty, the symbol [-E-] blinks in the shots remaining area of the viewfinder, Control panel, and Information screen. A little card symbol also blinks in the image area of the viewfinder; see "Customizing shooting and display options" later in this chapter to find out how to disable this alert (although I'm not sure why you would). If you do have a card in the camera and you get these messages, try taking it out and reinserting it.

- **Handling cards:** Don't touch the gold contacts on the back of the card. (See the left card in Figure 1-15.) 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.

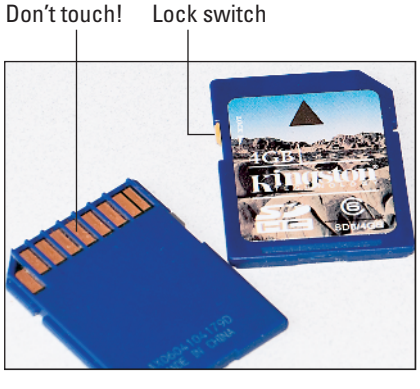

Figure 1-15: Avoid touching the gold contacts on the card.

- **Locking cards:** The tiny switch on the side of the card, labeled *Lock switch* in Figure 1-15, 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 also can protect individual images on a card from accidental erasure by using the camera's Protect feature, which I cover in Chapter 5.

Using two cards at the same time

When you install two memory cards, you specify how you want the camera to feed picture files to each card. By default, the camera fills up the card in Slot 1 first and then puts additional files on the card in Slot 2. But you have other options; to explore them, open the Shooting menu and select Role Played by Card in Slot 2, as shown on the left in Figure 1-16. Press OK to access your choices, which work as follows:

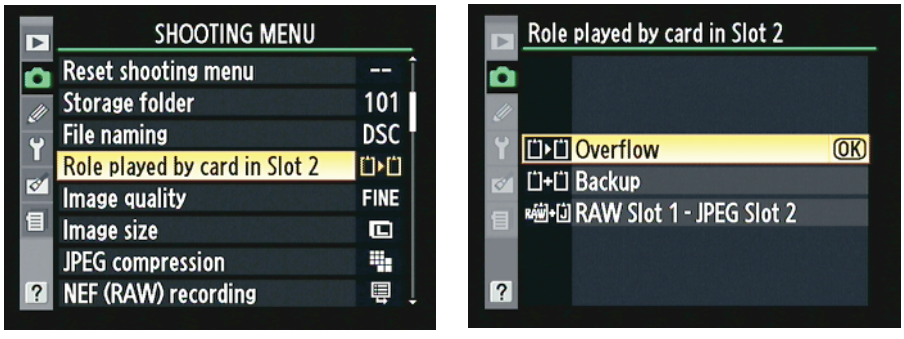

Figure 1-16: This option tells the camera how to make use of the card in Slot 2.

- **Overflow:** This setting is the default; again, the camera fills up the card in Slot 1 (the top slot) and then automatically switches to the other card.
- **Backup:** The camera records each picture to both cards. This option gives you some extra security — should one card fail, you have a backup on the other card.
- **Raw Slot 1 - JPEG Slot 2:** This setting relates to the Image Quality option, which Chapter 2 explains. If you select an Image Quality setting that records the photo both in the Raw (NEF) format and the JPEG format, the camera stores the Raw files on the card in Slot 1 and the JPEG files on the card in Slot 2. If you change to an Image Quality setting that captures only a single file type, the camera sends a copy of the JPEG file to each card.

A couple other critical points about using two cards:

- **Monitoring card use in the Information display:** You can tell which secondary slot function is in force by looking at the Image Quality readout of the Information screen, highlighted on the left in Figure 1-17. The little card symbols tell you what's going where. In the figure, the symbols show that the camera is set up to send Raw files to the card in Slot 1 and the JPEG versions to the card in Slot 2. (*Fine* represents one of three available settings for JPEG files, as covered in Chapter 2.) If you see the same file data for each card — for example, the word Raw appears in both cards — the Backup option is selected. And if the file type label appears in only one card, with the other card appearing empty, the Overflow option is selected.
- **Monitoring card use in the Control panel:** Symbols representing each card also appear in the Control panel, as shown on the right in Figure 1-17. Otherwise, only the symbol for the single installed card appears. A blinking card symbol indicates that the card is full. You can't glean anything about the primary and secondary card functions from this display, however.

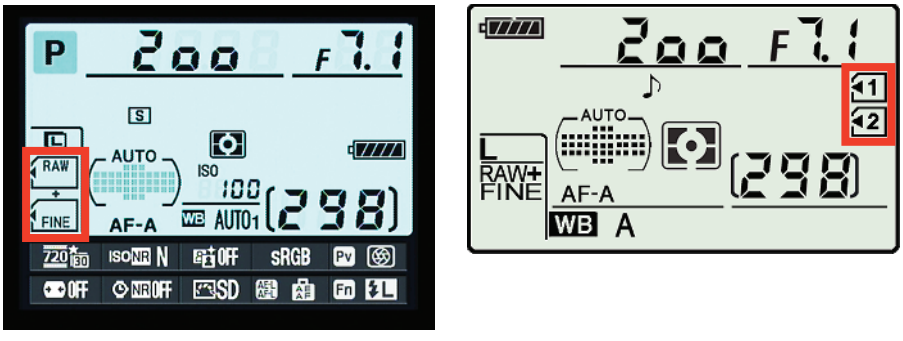

Figure 1-17: These symbols represent your memory cards.

- **Determining how many more shots you can take:** When you set the second card to the Backup or Raw/JPEG option, the shots remaining value (298, in Figure 1-17) is based on whichever card contains the least amount of free space. When either card is out of space, you can't take any more pictures. For the Overflow option, the value tells you the shots remaining for the card in Slot 1 until you fill that card and then indicates the amount of free space on the second card.

- **Selecting a card to store movie files:** Movie recording throws a small wrench in the card configuration system. No matter what setting you chose for the Role Played by Card in Slot 2 menu option, movie files always go on the card in Slot 1 by default. But if Card 2 has more empty space, you may want to send your movie files to it so that you can record a longer movie — the longer the movie, the bigger the movie file. Simply choosing Overflow doesn't work because the camera can't put part of the file on one card and the rest on the other.

  To change the movie-storage setup, select Movie Settings on the Shooting menu and press OK. Then set the Destination option to Card 2. See Chapter 4 for complete details about movie recording.

- **Copying pictures from one card to another:** You can take this step by choosing the Copy Image(s) option on the Playback menu. For details, see Chapter 6.

Formatting cards

The first time you use a new memory card or insert a card that's been used in other devices, such as MP3 players or phones, you should *format* it. Formatting ensures that the card is properly prepared to record your pictures. Formatting after you download pictures to your computer is also a good idea. However, don't use your computer's file-management tools to format the card; the camera is better equipped to do the job.

Formatting erases *everything* on your memory card. So before formatting, be sure that you have copied any pictures or other data to your computer.

You can format a card in two ways:

- **Choose the Format Memory Card command from the Setup menu, as shown in Figure 1-18.** When you select the command, you're asked to select which card you want to format. After taking that step, you see a screen where you need to confirm your decision to format the card. Highlight Yes and press OK to go forward.

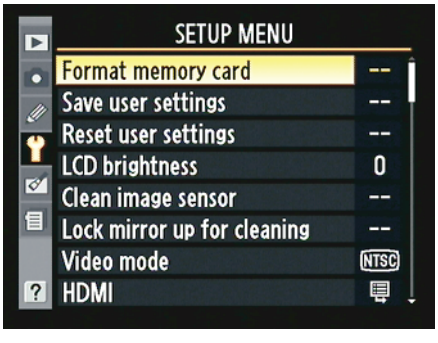

Figure 1-18: Formatting removes all data from the memory card.

- **Simultaneously press and hold the Metering Mode and Delete buttons.** See the little red Format labels next to the buttons? They're reminders that you use these buttons to quickly format a memory card. Hold the buttons down for about two seconds, until you see the letters *For* blink in the Control panel on top of the camera.

  After you press the buttons, the Control panel also displays the icon for the card that will be formatted if you go forward. If you have two cards installed in the camera, you can switch to the other card by rotating the Main command dial. You also see the shots remaining value, which indicates how many pictures you can fit on the memory card at the current Image Quality and Image Size settings. (If the card contains any pictures, the number will grow after you complete formatting because those images will be erased.)

  While the display is blinking, press and release both buttons again. When formatting is complete, the *For* message disappears, and the Control panel display returns to normal.

If you insert a memory card and see the letters *For* blink in the Control panel or viewfinder, you must format the card before you can do anything else.

Exploring External Camera Controls

Scattered across your camera's exterior are a number of buttons, dials, and switches that you use to change picture-taking settings, review and edit your photos, and perform various other operations. In later chapters, I discuss all your camera's functions in detail and provide the exact steps to follow to access them. This section provides just a basic road map to the external controls plus a quick introduction to each.

One note before you move on: Many of the buttons perform multiple functions and so have multiple "official" names. I think that's a little confusing, so I always refer to each button by the first moniker you see in the lists here.

Topside controls

Your virtual tour begins with the bird's-eye view shown in Figure 1-19. There are a number of controls of note here:

Figure 1-19: Press and hold the Release mode dial unlock button before rotating the dial.

- **Control panel:** You can view many picture-taking settings on this LCD panel. See the earlier section "Decoding the Displays," in this chapter, for more info.
- **On/Off switch and shutter button:** Okay, I'm pretty sure you already figured this combo button out. But remember that you can illuminate the Control panel by rotating the On/Off switch past the On position to the little light bulb icon. Moving the switch to that position also activates the exposure meters. After you release the switch, the panel backlight and meters remain active for about six seconds or until you take a picture. You can also turn off the panel light by rotating the switch to the light bulb position again.

  Through options on the Custom Setting menu, you can change the delay time for the meter shutoff and also choose to display the Information screen along with lighting up the Control panel when you move the switch to the light bulb position. See the section "Reviewing Basic Setup Options," toward the end of this chapter, for details.

- **Exposure Compensation button:** When working in the camera's three semi-automatic exposure modes (P, S, and A), you can apply an exposure-adjustment feature called Exposure Compensation by pressing this button while rotating the Main command dial (the one on the back of the camera; refer to Figure 1-20). Chapter 7 explains. You also press this button along with the Qual button to reset the main picture-taking settings to their default options; see the end of this chapter for details. (The green dot by each button reminds you of their shared function.)

- **Metering Mode button:** Press this button while rotating the Main command dial to select an exposure *metering mode,* which determines what part of the frame the camera considers when calculating exposure. Chapter 7 has details.

  The little red Format label above the button reminds you that you can press this button together with the Delete button — which also sports the label — to quickly format a memory card. See the earlier section "Formatting cards," for details.

- **Mode dial:** With this dial, labeled in Figure 1-19, you set the camera to a fully automatic, semi-automatic, or manual exposure mode. You also can set up and select two of your own modes, U1 and U2 (*U* for *user.*) Chapter 3 details the fully automatic modes; Chapter 7 explains the semi-automatic and manual modes (P, S, A, and M); and Chapter 11 shows you how to create your custom modes.
- **Release mode dial:** You use this dial, set directly under the Mode dial, to switch from normal shooting, where you take one picture with each press of the shutter button, to one of the camera's other Release modes, including Self-Timer mode. A letter representing the selected mode appears at the bottom of the dial. For example, in Figure 1-19, the S (Single Frame) mode is selected. See Chapter 2 for a look at all your options.

  To rotate the dial, you must press and hold the little lock-release button labeled in Figure 1-19.

- **Flash hot shoe:** A *hot shoe* is a connection for attaching an external flash head. The contacts on the shoe are covered by a little black insert when the camera ships from the factory; to attach your flash, remove the cover, as shown in Figure 1-19.

Should you ever need to know the exact distance between your subject and the camera, the *focal plane indicator* labeled in Figure 1-19 is key. This mark indicates the plane at which light coming through the lens is focused onto the negative in a film camera or the image sensor in a digital camera. Basing your measurement on this mark produces a more accurate camera-to-subject distance than using the end of the lens or some other external point on the camera body as your reference point.

Back-of-the-body controls

Traveling over the top of the camera to its back side, shown in Figure 1-20, you encounter the following controls:

Figure 1-20: Rotate the Live View switch to the right and release it to switch between viewfinder and Live View shooting.

- **Main command dial:** After you activate certain camera features, you rotate this dial, labeled in Figure 1-20, to select a specific setting. For example, to choose a White Balance setting, you press the WB button as you rotate the Main command dial. (Chapter 8 explains white balancing.)

- **AE-L/AF-L button:** When you're taking pictures in some automatic modes, you can lock focus and exposure settings by holding down this button. Chapter 7 explains why you may want to do so.

  If you don't use the button's normal function often, you can assign another job to it. Instructions in this book assume that you stick with the default button function, but if you want to explore your options, see Chapter 11.

- **Live View switch:** Rotate the switch to the right and release it to turn the Live View feature on and off. As soon as you turn Live View on, the scene in front of the lens appears on the monitor, and you no longer can see anything through the viewfinder. You then can compose a still photo using the monitor or begin recording a movie. Chapter 4 details Live View photography and movie recording.

- **Movie-record button:** After shifting to Live View mode, press this button to start recording a movie using the default recording settings. (See Chapter 4 to find out how to adjust the settings.) Press again to stop recording.

- **Multi Selector/OK button:** This dual-natured control, labeled in Figure 1-20, plays a role in many camera functions. You press the outer edges of the Multi Selector left, right, up, or down to navigate camera menus and access certain other options. At the center of the control is the OK button, which you press to finalize a menu selection or other camera adjustment.

- **Focus Selector Lock switch:** Just beneath the Multi Selector, this switch relates to the camera's autofocusing system. When the switch is set to the position shown in Figure 1-20, you can use the Multi Selector to tell the camera to base focus on a specific focusing point. Setting the switch to the L position locks in the selected point. See Chapter 8 for details on all this focusing stuff.

- **Info button:** Press this button to display the Information screen on the camera monitor. See the earlier section "Decoding the Displays" for details.

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

- **Delete button:** Sporting a trash can icon, the universal symbol for delete, this button enables you to erase pictures. Chapter 5 has specifics.

- **Menu button:** Press this button to access menus of camera options. See the earlier section "Ordering from Camera Menus," in this chapter, for help using menus.

- **WB/Help/Protect button:** This button serves several purposes:
  - *White balance control:* For picture-taking purposes, the button's main function is to access white balance options, a topic you can explore in Chapter 8.
  - *Help:* You also can press this button to display helpful information about certain menu options. See "Asking Your Camera for Help," later in this chapter, for details.
  - *Protect:* In playback mode, pressing the button locks the picture file — hence the little key symbol that appears on the button face — so that it isn't erased if you use the picture-delete functions. (The picture *is* erased if you format the memory card, however.) See Chapter 5 for details.

- **ISO/Playback Zoom Out/Thumbnail button:** In picture-taking mode, pressing this button accesses the ISO setting, which controls the camera's sensitivity to light. Chapter 7 has details.

  In playback mode, pressing the button enables you display multiple image thumbnails on the screen and to reduce the magnification of the currently displayed photo. See Chapter 5 for a complete rundown of picture playback options.

- **Qual (Quality)/Playback Zoom In button:** In playback mode, pressing this button magnifies the currently displayed image and also reduces the number of thumbnails displayed at a time. Note the plus sign in the middle of the magnifying glass — plus for zoom in.

  In picture-taking mode, pressing the button gives you fast access to the Image Quality and Image Size options, both of which you can explore in Chapter 2. And the green dot just below the button reminds you that you can press the button along with the similarly marked Exposure Compensation button to restore some camera options to their default settings, as outlined at the end of this chapter.

As for the monitor, I show it in this book without its protective plastic cover. But when the camera isn't in use, it's a good idea to keep the cover on to protect the screen from scratches and other damage.

Also note two more backside features: When you play movies that contain sound, the audio comes wafting from the cluster of tiny holes labeled Speaker in Figure 1-20. And if you use the optional wireless remote control, the rear infrared sensor picks up the signal from the remote's transmitter. (See Figure 1-21 for a look at the front infrared sensor.)

Front-left controls

On the front-left side of the camera body, as shown in Figure 1-21, you find the following:

- **Flash/Flash Compensation:** Pressing this button pops up the camera's built-in flash (except in automatic shooting modes, in which the camera decides whether the flash is needed). By holding the button down and rotating the Main command dial, you can adjust the Flash mode (normal, red-eye reduction, and so on). In advanced exposure modes (P, S, A, and M), you also can adjust the flash power by pressing the button and rotating the Sub-command dial. (That's the dial on the front of the camera, just below the shutter button.) See Chapter 7 for all things flash related.
- **BKT (Bracket) button:** This button is key to enabling automatic *bracketing,* a feature that simplifies the job of recording the same subject at various exposure, flash, and white balance settings. Chapter 7 details flash and exposure bracketing; Chapter 8 discusses white balancing.
- **Lens-release button:** You press this button before removing the lens from your camera. See the first part of this chapter for help with mounting and removing lenses.
- **Focus-mode selector:** This switch sets the camera to manual or autofocusing. See the earlier section "Changing the focusing method (auto or manual)" for the short story; see Chapter 8 for complete focusing details.

Figure 1-21: Press the Flash button to pop up the built-in flash.

- **Microphone:** See the three little holes right below the D7000 label? They lead to the camera's internal microphone, included for capturing sound when you record movies. You also can attach an external microphone to the camera for better sound; see the upcoming Figure 1-23 for a look at the microphone jack and head to Chapter 4 for a primer in the art of movie making.
- **Front infrared receiver:** Here's the second of two receivers that can pull in the signal from the optional wireless remote control unit. Figure 1-20 shows you where to aim the remote transmitter if you're standing behind the camera.

Front-right controls

Figure 1-22 offers a look at the front-right side of the camera, shown with the lens detached to make the following controls a little easier to spot:

Figure 1-22: You can set the Fn (Function) and Depth-of-Field Preview buttons to perform a variety of operations.

- **Sub-command dial:** This dial is the counterpart to the Main command dial on the back of the camera. As with the Main dial, you rotate this one to select certain settings, usually in conjunction with pressing another button.
- **AF-assist lamp:** In dim lighting, a beam of light sometimes shoots out from this little lamp to help the camera's autofocus system find its target. In general, leaving the AF-assist option enabled is a good idea, but if you're shooting at an event where the light from the lamp may be distracting, you can disable it through the Built-In AF-Assist Illuminator option on the Custom Setting menu. Chapter 8 explains autofocus features.

  The lamp also lights before the shutter is released in Self-Timer mode and before the flash fires in red-eye reduction flash mode. Chapter 2 offers more information about both of these features.
- **Depth-of-Field Preview button:** By pressing this button, you can see how different aperture settings affect *depth of field,* or the zone of sharp

focus in your image. Chapter 7 explains aperture settings, and Chapter 8 delves into depth of field. Chapter 11 shows you how to assign a different function to the button if you don't care to preview depth of field.

- **Function (Fn) button:** By default, pressing this button locks the flash exposure value, an option Nikon calls *FV Lock*. Chapter 7 explains.

  As with the Depth-of-Field Preview button, you can change the operation that's accomplished by pressing the button. Again, see Chapter 11 for the scoop.

Hidden connections

Hidden under little covers on the left side of the camera, you find the following inputs for connecting the camera to various devices, as shown in Figure 1-23.

- **A/V and HDMI jacks:** Use these to connect your camera to a television through a regular audio/video cable or high-def (HDMI) cable. The camera comes with the standard A/V cable; the HDMI cable is sold separately. Chapter 5 offers more details.
- **USB port:** One way to download images to your computer is to connect the camera and computer via the USB cable provided in the camera box. The tiny end of the cable goes into this port. Chapter 6 explains the downloading process.
- **Stereo mini-pin microphone jack:** If you're not happy with the audio quality provided by the internal microphone, you can plug in an external microphone here. The jack accepts a 3.5mm microphone plug. See Chapter 4 for all things movie related.

Figure 1-23: You can plug in an external flash cord, remote control, or GPS unit here.

- **Accessory terminal:** Here's where you attach the optional Nikon GP-1 GPS (Global Positioning System) unit and the MC-DC2 wired remote control. I don't cover these optional devices, so refer to the manuals that ship with them or the Nikon Web site to find out more.

If you turn the camera over, you find a tripod socket, which enables you to mount the camera on a tripod that uses a ¼-inch screw, plus the battery chamber. The other little rubber cover is related to the optional MB-D11 battery pack; you remove the cover when attaching the battery pack. Connections for attaching an optional AC power adapter live inside the regular-battery chamber; the camera manual provides specifics on running the camera on AC power.

Asking Your Camera for Help

Programmed into your camera's internal software is a handy information help line — a great tool for times when you forget the purpose of a particular feature or want a little picture-taking guidance.

If you see a small question mark in the lower-left corner of a menu, press and hold the WB button to display information about the current shooting mode or selected menu option. (The little question mark symbol on the button reminds you of this function.) For example, Figure 1-24 shows the help screen associated with the Active D-Lighting setting. If you need to scroll the screen to view all the help text, keep the button depressed and scroll by using the Multi Selector. Release the button to close the help screen.

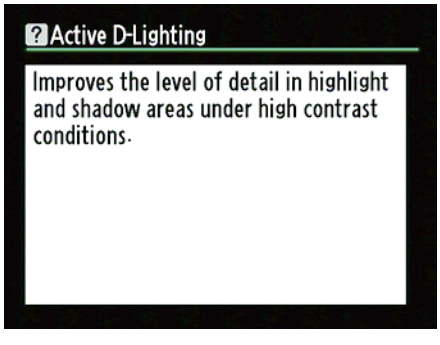

Figure 1-24: Press and hold the WB button to display onscreen help.

Reviewing Basic Setup Options

Your camera offers scads of options for customizing its performance. Later chapters explain settings 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, such as setting the date and time, adjusting monitor brightness, and the like.

Cruising the Setup menu

Start your camera customization by opening the Setup menu, which offers the following options:

- **Format Memory Card:** Page 1 of the Setup menu, as shown in Figure 1-25, starts with this command, which wipes all data off the card and ensures that it's properly set up to record pictures. For quicker results,

you can use the two-button formatting process outlined in the earlier section "Formatting cards."

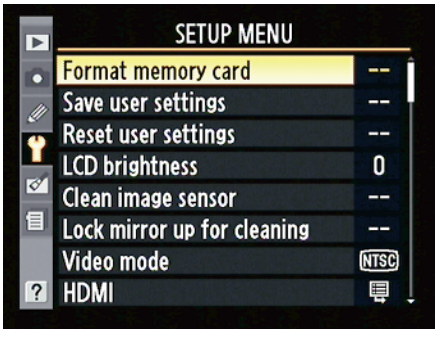

Figure 1-25: Visit the Setup menu to start customizing your camera.

- **Save User Settings:** Use this option to set up custom exposure modes (U1 and U2 on the Mode dial). Chapter 11 shows you how to take advantage of this feature.
- **Reset User Settings:** To wipe out your custom exposure modes, select this option.

- **LCD Brightness:** This option enables you to make the camera monitor brighter or darker. But if you take this step, what you see on the display may not be an accurate rendition of your image. Crank up the monitor brightness, for example, and an underexposed photo may look just fine. So I recommend sticking with the default setting (0).
- **Clean Image Sensor:** Your D7000 has an internal cleaning system designed to keep a filter that's fitted onto the *image sensor* — that's the part of the camera that actually captures the image — free of dust and dirt. By choosing the Clean Image Sensor command, you can perform a cleaning at any time. Just choose the command, press OK, select Clean Now, and press OK again. You also can tell the camera to perform automatic cleaning every time you turn the camera on or off, only at startup, only at shutdown, or never; to do so, select Clean at Startup/Shutdown instead of Clean Now. Then press the Multi Selector right, highlight the cleaning option you prefer, and press OK.
- **Lock Mirror Up for Cleaning:** This feature is necessary when cleaning the camera image sensor (or technically, the aforementioned filter) — an operation that I don't recommend that you tackle yourself because you can easily damage the camera if you don't know what you're doing. If you *are* comfortable with the process, be sure that the camera battery is charged before you start; the menu option disappears when the battery is low.

When you shoot long-exposure images, mirror lockup helps avoid camera shake that can blur the photo. But to use that technique, set the Release mode dial to the Mirror Up setting and follow the shooting steps provided in Chapter 2. Use the Setup menu's mirror-up option for camera cleaning only.

- **Video Mode and HDMI:** These options relate to viewing your images and movies on a television, a topic I cover in Chapter 5. The Video Mode setting also affects movie-recording options, covered in Chapter 4.
- **Flicker Reduction:** The second page of the Setup menu leads off with this option, as shown in Figure 1-26. Changing the setting may reduce flickering or banding of the Live View display when you're working in an

area lit by fluorescent or mercury-vapor lamps. You're supposed to choose the setting that matches the electrical current in the room — but there are only two settings, so just experiment to see which one produces the best display.

Figure 1-26: Changing the Flicker Reduction settings may improve the quality of the Live View display in areas lit by fluorescent or mercury-vapor lamps.

- **Time Zone and Date:** When you turn on your camera for the first time, it displays this option and asks you to set the current 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.

On a related note: If you see the message "Clock" blinking in the Control panel and you've already set the date and time, the internal battery that keeps the clock running is depleted. Simply charging the main camera battery and then putting that battery back in the camera sets the clock ticking again, but you need to reset the camera time and date.

- **Language:** This option determines the language of text on the camera monitor.
- **Image Comment:** See Chapter 11 to find out about this feature, which enables you to add text comments into a picture file.
- **Auto Image Rotation:** This option is one of two that determines whether pictures are rotated to the correct orientation (horizontal or vertical) in playback mode. Chapter 5 has details.
- **Image Dust Off Ref Photo:** This feature enables you to record an image that serves as a point of reference for the automatic dust-removal filter available in Nikon Capture NX 2. I don't cover this accessory software, which must be purchased separately, in this book.
- **Battery Info:** Select this option to view detailed information about your battery, as shown in Figure 1-27. The Bat Meter data shows you the current power remaining as a percentage value, and the Pic Meter value tells you how many times you've pressed and released the shutter button since the last time you charged the battery. The final readout, Battery Age, lets you know how much more life you can expect out of the battery before it can no longer be recharged. When the display moves toward the right end of the little meter, it's time to buy a new battery.

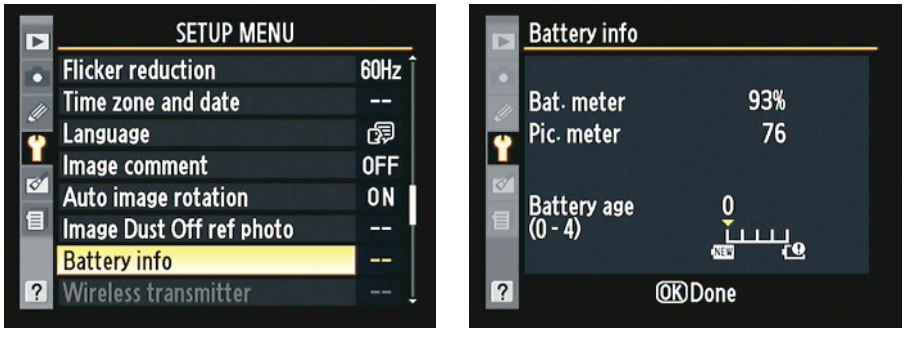

Figure 1-27: You can check the health of your battery via the Battery Info menu item.

The screen in Figure 1-27 shows the display as it appears when you use the regular camera battery. If you attach the optional battery pack, see its manual and the camera manual to find out how to interpret the data that's reported.

- **Wireless Transmitter:** If you purchase the optional WT-4 wireless transmitter to connect your camera to a wireless network, you can set up the connection through this menu option. As with other optional accessories, I must refer you to the product manuals for details, as the publisher absolutely refuses to let me turn this book into a 10-inch-thick tome.
- **Copyright Information:** Scroll to the final page of the Setup menu, shown in Figure 1-28, to access this option, which enables you to add a hidden copyright notice to your photo files. The copyright data can then be read in some photo software, including the free browser software that ships with your camera (Nikon ViewNX 2). Chapter 11 has details.

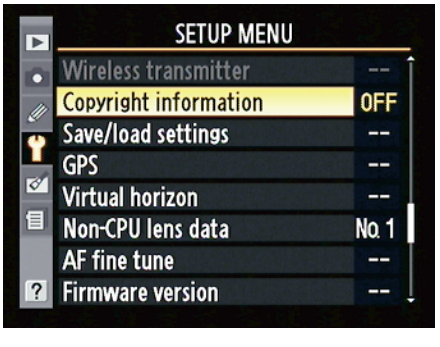

Figure 1-28: The final page of the Setup menu offers these options.

- **Save/Load Settings:** This option is a variation of the Save User Settings feature. With Save User Settings, you store settings that you can recall by setting the Mode dial to U1 or U2. The Save/Load Settings feature creates a data file that records the major menu settings and stores the file on your memory card. (The camera manual contains a list of the settings that are preserved.) If you later want to use those settings again, just choose the Save/Load Settings menu option again.

This option is especially useful in a work situation where several photographers share the same camera — if you don't like your co-worker's settings, you can quickly load your own onto the camera.

Be aware of two important details:

- *The settings file is always stored on the memory card in Slot 1.* If that card is full, the camera displays an error message when you try to save your settings. (See the earlier section "Using two cards at the same time," in this chapter, for information about memory cards.)
- *The settings filename is NCSETUP7.* Don't change the filename, or you can't reload the settings later.

GPS: If you purchase the optional Nikon GPS tracking unit for your camera, this menu item holds settings related to its operation. This book doesn't cover this accessory, but the camera manual provides some help to get you started.

Virtual Horizon: Here's a cool aid for shooting pictures that require your camera to be level with the horizon. When you select this option, as shown on the left in Figure 1-29, and then press OK, you see a screen with a built-in level, as shown on the right. When the camera is level to the horizon, the arrow at the top of the display turns green, as shown in the figure. (If the entire display is gray, without the little degree markers, the camera is tilted too far forward or backward for the system to do its thing.) Unfortunately, the display shows only on the monitor and not in the viewfinder, so it's mostly of use setting up your camera on a tripod. However, you can display an alignment grid in the viewfinder, an option covered a little later in this chapter. You also can set the Fn or Depth-of-Field Preview button to display a level indicator in the viewfinder; Chapter 11 offers details. During Live View shooting, you can enable a display option that superimposes the Virtual Horizon tool over the live image on the monitor. Chapter 4 had details on that feature.

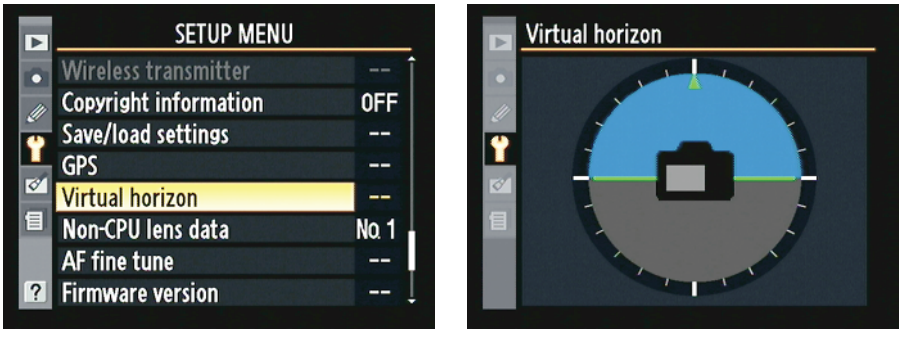

Figure 1-29: The Virtual Horizon display helps you make sure the camera is level.

Non-CPU Lens Data: A CPU lens is equipped with technology that enables it to transmit certain data about the lens to the camera. That data helps the camera's autofocusing and exposure systems work correctly. When you use a non-CPU lens, you lose access to certain D7000 features. (Your

manual spells them out.) But you can gain back a little of the lost functionality by "registering" your lens through this Setup menu option. You simply assign the lens a number — you can register up to nine non-CPU lenses — and then enter the maximum aperture and focal length of each lens.

The rest of this book assumes that you're instead working with a CPU lens that supports all the camera's features. Again, though, your camera manual offers additional help if you want to go the non-CPU route.

- **AF Fine Tune:** If your focus always seems slightly off when you use autofocusing, you may be able to improve the situation through this feature. It enables you to create a custom focusing adjustment for up to 12 lens types, telling the camera to set the focus point just a tad in front of or behind where it normally would. Nikon recommends *not* using this feature unless it's absolutely necessary, and even then, you may want to get some expert assistance.
- **Eye-Fi Upload:** Your camera can work with some Eye-Fi memory cards, which enable you to send your pictures over a wireless network to your computer. If you do put one of the cards in the camera, this option appears on the Setup menu and contains settings for making the transfer. When no Eye-Fi card is installed, the option doesn't appear, as in Figure 1-28.

  Unfortunately, Eye-Fi cards are more expensive than regular cards. But if you do use the cards and you find yourself in a situation where wireless devices are not allowed, choose Disable from the Eye-Fi Upload menu to shut off the signal. For the whole story on Eye-Fi, including help with setting up your wireless transfers, visit the company's Web site at www.eye.fi.
- **Firmware Version:** Select this option and press OK to view what version of the camera firmware, or internal software, your camera is running. You see three separate firmware items, A, B, and L. (Don't worry what the letters mean — they simply refer to different operational aspects of the camera.) At the time this book was written, both A and B were in version 1.00, and L was version 1.002.

  Keeping your camera firmware up to date is important, so visit the Nikon Web site (www.nikon.com) regularly to find out whether your camera sports the latest version. You can find detailed instructions on how to download and install any firmware updates on the site.

Browsing the Custom Setting menu

Displaying the Custom Setting menu, whose icon is a little pencil, takes you to the left screen shown in Figure 1-30. Here you can access six submenus that carry the labels A through F. Each of the submenus holds clusters of options related to a specific aspect of the camera's operation. Highlight a submenu and press OK to get to those actions, as shown on the right.

Figure 1-30: Select one of the six submenus and press OK to access the available options.

A few important points about this menu:

- After you jump to the first submenu, you can simply scroll up and down the list to view options from other submenus. You don't have to keep going back to the first screen in Figure 1-30, selecting the submenu, pressing OK, and so on.
- An asterisk above a letter, as in the highlighted option on the right in Figure 1-30, indicates that you selected a setting other than the default setting. See the last section of this chapter to find out how to restore the camera defaults.
- In the Nikon manual, instructions sometimes reference these settings by a menu letter and number. For example, "Custom Setting a1" refers to the first option on the Autofocus submenu. I try to be more specific in this book, however, so I use the actual setting names. (Really, everyone has enough numbers to remember, don't you think?)
- Notice that those option letter/number labels are assigned colors to indicate their submenu categories: Autofocus options are red, metering/exposure options are yellow, and so forth.

With those clarifications out of the way, the following sections describe only the customization options related to basic camera operations. Turn to the index for help locating information about other Custom Setting options.

Adjusting automatic monitor-shutdown timing

To help save battery power, your camera automatically shuts off the monitor after a period of inactivity. You can specify how long you want the camera to wait before taking that step through the Monitor Off Delay option, found on the Timers/AE Lock portion of the Custom Setting menu and shown in Figure 1-31. You can specify the auto-off timing for picture playback, menu displays, the Information display, and the Live View display. Additionally, you can adjust the length of time the camera displays a picture immediately after you

press the shutter button, known as the Image Review period. Chapter 5 talks more about viewing your photos.

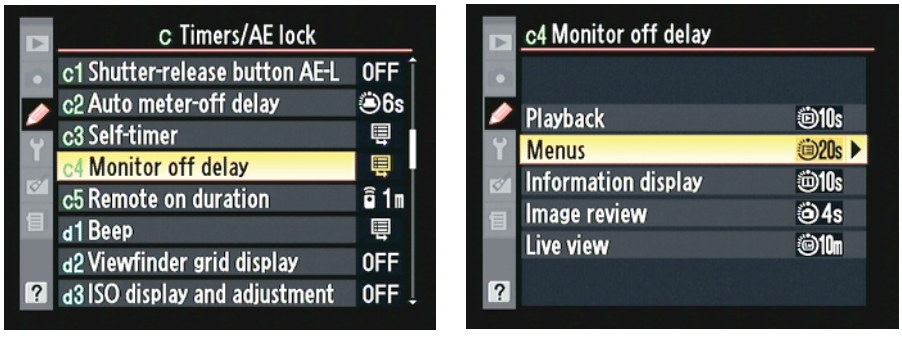

Figure 1-31: Visit the Timers/AE Lock submenu to adjust the timing of automatic monitor shut-off.

Customizing shooting and display options

Head for the Shooting/Display section of the Custom Setting menu, shown in Figure 1-32, to tweak various aspects of how the camera communicates with you, as well as to control a couple of basic shooting functions. Later chapters discuss options related to picture-taking; the following affect the basic camera interface:

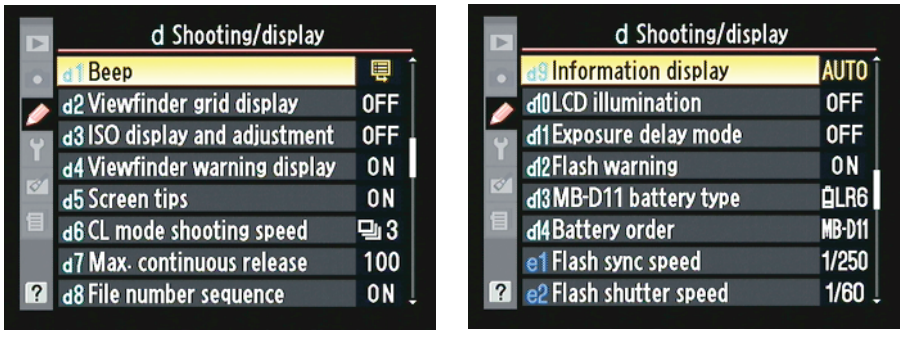

Figure 1-32: Sick of hearing your camera? Turn it off with the Beep option.

Beep: By default, your camera beeps at you after certain operations, such as after it sets focus when you use certain autofocusing settings. If you're doing top-secret surveillance work and need the camera to hush up, set this option to Off. You also can vary the volume and pitch of the beep. (Sorry, no fancy ring tones available.) On the Information and Control panel displays, a little musical note icon appears when the beep is enabled.

Also check out Chapter 2 for information about the Quiet Shutter mode, which tamps down camera noise even further.

- **Viewfinder Grid Display:** You can display tiny gridlines in the viewfinder, as shown in Figure 1-33, by setting this option to On. The gridlines are a great help when you need to ensure the alignment of objects in your photo — for example, to make sure that the horizon is level in a landscape. The Virtual Horizon feature discussed earlier in the chapter is an alternative.

Figure 1-33: The viewfinder grid is another aid for ensuring that the horizon is level in the frame.

- **Viewfinder Warning Display:** By default, you see two low-battery warnings in the viewfinder when your battery is about to give out. (Refer to Figure 1-13, earlier in this chapter.) If you don't want to see the larger of the two warnings — it can be annoying if you know your battery's low but you have to keep shooting as long as possible anyway — turn off this option. The tiny battery-recharge nag remains in the lower part of the viewfinder regardless. When this option is enabled, a tiny memory-card symbol flashes in the viewfinder when no card is inserted in the camera. And if you set the Picture Control option to Monochrome, a small B/W (for black and white) symbol appears. Chapter 8 explains Picture Controls.
- **Screen Tips:** If you don't want to see the little help labels that appear when you adjust settings via the Information display, turn this option to Off. For a look at what I'm talking about, revisit Figure 1-24.
- **File Number Sequence:** This option controls how the camera names your picture files. If you set this option to Off, the camera restarts file numbering at 0001 every time you format your memory card or insert a new memory card. Numbering is also restarted if you create custom folders (an advanced option covered in Chapter 11). Needless to say, this setup can cause problems over time, creating a scenario where you wind up with multiple images that have the same filename — not on the current memory card, but when you download images to your computer. So I strongly encourage you to stick with the default setting, On. Note that when you get to picture number 9999, file numbering is still reset to 0001, however. The camera automatically creates a new folder to hold for your next 9999 images.

  As for the Reset option, it tells the camera to look at the largest file number on the current card (or in the selected folder) and then assign the next highest number to your next picture. If the card or selected

folder is empty, numbering starts at 0001. Then the camera behaves as if you selected the On setting.

Should you snap enough pictures to reach folder 999, and that folder contains either 999 pictures or a photo that has the file number 9999, the camera will refuse to take another photo until you choose that Reset option and either format the memory card or insert a brand new one.

- **Information Display:** Normally, the camera tries to make the data on the display easier to read by automatically shifting from black text on a light background to light text on a black background, depending on the ambient light. If you prefer one display style over the other, visit this menu item and change the setting from Auto to Manual. You can then select either Dark on Light (for dark lettering on a light background) or Light on Dark (for light lettering on a dark background).

  In this book, I show the Information screen using the Dark on Light display because it reproduces better in print.

- **LCD Illumination:** This setting affects a backlight that can be turned on to illuminate the Control panel. When the option is set to Off, as it is by default, you can illuminate the panel briefly by rotating the On/Off switch past the On setting, to the little light bulb marking. The backlight turns off automatically a few seconds after you release the switch.

  If you instead set the LCD Illumination option to On, the backlight comes on automatically anytime the exposure meters are activated (which happens when you press the shutter button halfway). Obviously, this option consumes more battery power than simply using the On/Off switch to light up the panel when you really need it.

- **MB-D11 Battery Type and Battery Order:** You don't need to worry about these options unless you buy the optional MB-D11 battery adapter that enables you to power your camera with AA batteries. If you go that route, select the MB-D80 Battery Type option to specify which type of AAs you're using. (Be sure to read the manual for a list of which AA batteries are acceptable, as well as some other details about using them.) Then use the Battery Order option to tell the camera whether you want it to draw power from the battery pack or the regular camera battery when you have both installed. The Control panel displays the letters BP when the battery pack is the current power source.

Customizing controls

On the Controls section of the Custom Setting menu, you find options that enable you to change the function or behavior of some of the camera's buttons and dials. Chapter 11 talks about most of these options — I purposely put this information at the back of the book in hopes that you'd leave things at their default settings until you've fully explored all the other chapters. If you change the settings, instructions you find along the way won't work.

There are a few Controls options, though, that I suggest you check out now:

- **On/Off Light Switch:** Normally, rotating the On/Off switch past the On position to the light bulb symbol illuminates the Control panel. But if you set the option highlighted on the left in Figure 1-34 to the setting shown on the right, rotating the switch activates the Information screen as well as the Control panel. (The menu and manual use the light bulb symbol instead of the text name I've given it here.) You may find this maneuver easier than pressing the Info button to light up the Information display. The downside is that you use power to light up the Control panel when what you really want to see is the Info display. I leave it up to you to make the call.

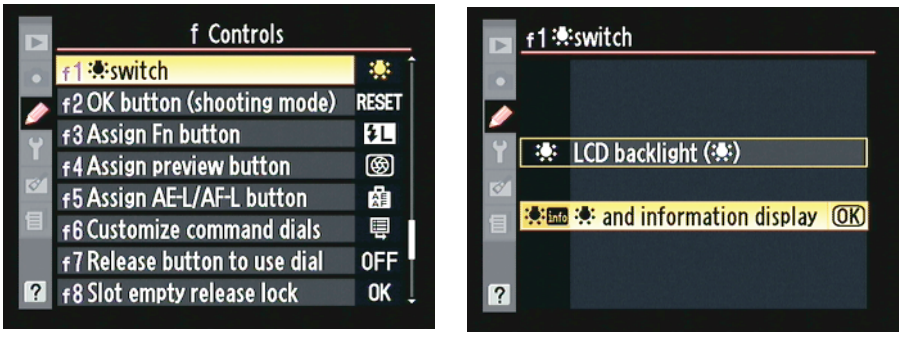

Figure 1-34: Select this setting if you want to use the On/Off switch to activate the Information screen as well as the Control panel light.

- **Slot Empty Release Lock:** This setting determines whether the shutter release is disabled when no memory card is in the camera. At the default setting, OK, you can take a temporary picture, which appears in the monitor with the word Demo but isn't recorded anywhere. (The feature is provided mainly for use in camera stores, enabling salespeople to demonstrate the camera without having to keep a memory card installed.) I suggest that you change the setting to Release Locked unless you're starting a little camera shop in your garage and want to demonstrate the camera to your neighbors.

Restoring default settings

Should you ever want to return your camera to its original, out-of-the-box state, the camera manual contains a complete list of all the default settings.

You can also partially restore default settings by taking these steps:

- **Reset all Shooting Menu options:** Open the Shooting menu, choose Reset Shooting Menu, and press OK.
- **Reset all Custom Setting Menu options:** Choose the Reset Custom Settings option at the top of the Custom Setting menu.
- **Restore critical picture-taking settings *without* affecting options on the Custom Setting menu:** Use the *two-button reset* method: Press and hold the Exposure Compensation button and the Qual button simultaneously for longer than two seconds. (The little green dots near the buttons are a reminder of this function.) See the camera manual for a list of exactly what settings are restored.