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Julie Adair King

Author of Digital Photography
For Dummies®



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Introduction

Nikon. The name has been associated with top-flight photography equipment for generations. And the introduction of the D3300 has only enriched Nikon's well-deserved reputation, offering all the control that a die-hard photography enthusiast could want while providing easy-to-use point-and-shoot features for the beginner.

In fact, the D3300 offers so *many* features that sorting them all out can be more than a little confusing, especially if you're new to digital photography, SLR photography, or both. For starters, you may not even be sure what SLR means or how it affects your picture-taking, let alone have a clue about all the other techie terms you encounter in your camera manual — *resolution*, *aperture*, *white balance*, and so on. And if you're like many people, you may be so overwhelmed by all the controls on your camera that you haven't yet ventured beyond fully automatic picture-taking mode.

Therein lies the point of *Nikon D3300 For Dummies*. Throughout this book, you can discover not just what each bell and whistle on your camera does but also when, where, why, and how to put it to best use. Unlike many photography books, this one doesn't require any previous knowledge of photography or digital imaging to make sense of things, either. In classic *For Dummies* style, everything is explained in easy-to-understand language, with lots of illustrations to help clear up any confusion.

In short, what you have in your hands is the paperback version of an in-depth photography workshop tailored specifically to your Nikon picture-taking powerhouse.

A Quick Look at What's Ahead

This book is organized into four parts, each devoted to a different aspect of using your camera. Although chapters flow in a sequence that's designed to take you from absolute beginner to experienced user, I've also made each chapter as self-standing as possible so that you can explore the topics that interest you in any order you please.

Here's a brief preview of what you can find in each part of the book:

- ✓ **Part I: Fast Track to Super Snaps:** Part I contains three chapters to help you get up and running. Chapter 1 guides you through initial camera setup and shows you how to view and adjust camera settings, and Chapter 2 introduces you to basic picture options such as Exposure mode, Flash mode, Shutter Release mode, Image Size (resolution), and Image Quality (JPEG or Raw). Chapter 3 walks you through the steps of taking your first pictures using the Auto and Auto Flash Off exposure modes, Scene modes, and the Easy Panorama feature, which automates the process of capturing a panoramic image.
- ✓ **Part II: Taking Creative Control:** Chapters in this part help you unleash the full creative power of your camera by detailing the advanced shooting modes (P, S, A, and M). Chapter 4 covers the critical topic of exposure; Chapter 5 explains how to manipulate focus; and Chapter 6 discusses color controls.
- ✓ **Part III: Scene Guides, Movie-Recording Tips, and More:** Chapter 7 kicks off this part by showing you how to combine techniques explored in earlier chapters to get the best results when shooting portraits, action shots, landscapes, and close-ups. Chapter 8 shifts gears, moving from still photography to movie recording. Following that, you can get help with after-the-shot tasks. Chapter 9 explains how to review your pictures on the camera monitor, create an in-camera slide show, and connect your camera to a TV for large-screen playback. Chapter 10 topics include rating, deleting, and protecting photos, processing Raw files, and preparing pictures for online sharing.
- ✓ **Part IV: The Part of Tens:** In keeping with *For Dummies* tradition, this book concludes with two top-ten lists containing additional bits of information and advice. Chapter 11 covers the photo-editing and effects tools found on the camera's Retouch menu and also shows you how to use the Effects exposure mode to add special effects to movies and photos as you record them. Chapter 12 wraps up the book by detailing some features that, although not found on most "Top Ten Reasons I Bought My D3300" lists, are nonetheless interesting, useful on occasion, or a bit of both.

Icons and Other Stuff to Note

If this isn't your first *For Dummies* book, you may be familiar with the large, round icons that decorate its margins. If not, here's your very own icon-decoder ring:



The Tip icon flags information that will save you time, effort, money, or some other valuable resource, including your sanity. Tips also point out techniques that help you get the best results from specific camera features.



When you see this icon, look alive. It indicates a potential danger zone that can result in much wailing and teeth-gnashing if ignored. In other words, this is stuff that you really don't want to learn the hard way.



Lots of information in this book is of a technical nature — digital photography is a technical animal, after all. But if I present a detail that is useful mainly for impressing your tech-geek friends, I mark it with this icon.



I apply this icon either to introduce information that is especially worth storing in your brain's long-term memory or to remind you of a fact that may have been displaced from that memory by another pressing fact.

Additionally, the following extra details can help you use this book effectively:

- ✓ **Other margin art:** Replicas of some of your camera's buttons and onscreen symbols also appear in the margins of some paragraphs. I include these to provide a quick reminder of the appearance of the button or feature being discussed.
- ✓ **Software menu commands:** In sections that cover software, a series of words connected by an arrow indicates commands that you choose from the program menus. For example, if a step tells you to “choose File→Convert Files,” click the File menu to unfurl it and then click the Convert Files command on the menu.

eCheat Sheet

For a little bonus, you can find an electronic version of the helpful *For Dummies* eCheat Sheet at www.dummies.com/cheatsheet/nikond3300. The eCheat Sheet contains a quick-reference guide to all the buttons, dials, switches, and exposure modes on your camera. You can print it out and tuck it in your camera bag for times when you don't want to carry this book with you.

Practice, Be Patient, and Have Fun!

To wrap up this preamble, I want to stress that if you initially think that digital photography is too confusing or too technical for you, you're in very good company. *Everyone* finds this stuff mind-boggling at first. So take it slowly, experimenting with just one or two new camera settings or techniques at first. Then, every time you go on a photo outing, make it a point to add one or two more shooting skills to your repertoire.

I know that it's hard to believe when you're just starting out, but it really won't be long before everything starts to come together. With some time, patience, and practice, you'll soon wield your camera like a pro, dialing in the necessary settings to capture your creative vision almost instinctively.

So without further ado, I invite you to grab your camera, a cup of whatever it is you prefer to sip while you read, and start exploring the rest of this book. Your D3300 is the perfect partner for your photographic journey, and I'm happy to act as your tour guide.



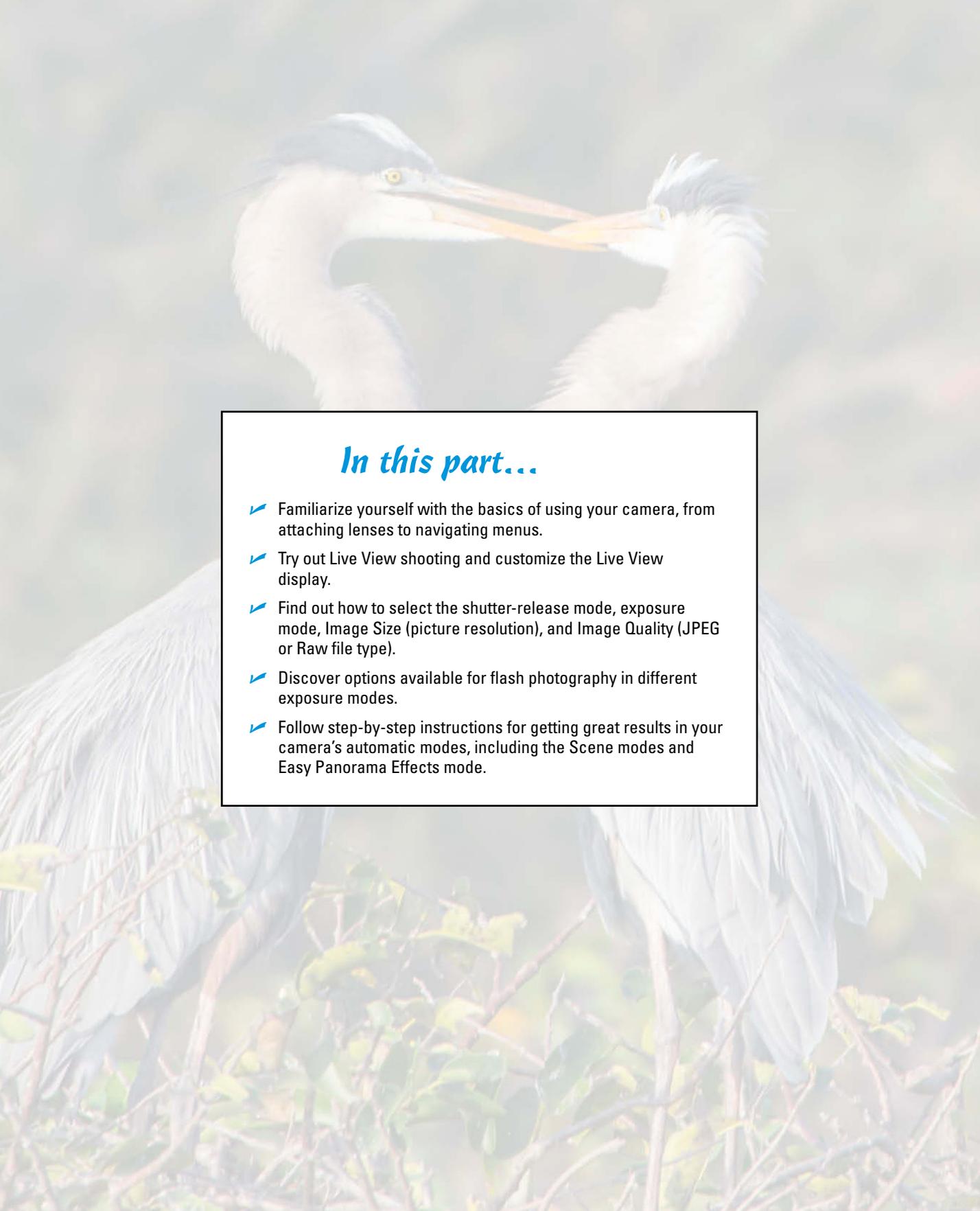
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Part I

Fast Track to Super Snaps



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A photograph of two Great Egrets standing in a nest made of sticks and leaves. They are facing each other with their long, yellow beaks touching. The background is a soft, out-of-focus green and brown. A white box with a black border is overlaid on the lower half of the image, containing text.

In this part...

- ✔ Familiarize yourself with the basics of using your camera, from attaching lenses to navigating menus.
- ✔ Try out Live View shooting and customize the Live View display.
- ✔ Find out how to select the shutter-release mode, exposure mode, Image Size (picture resolution), and Image Quality (JPEG or Raw file type).
- ✔ Discover options available for flash photography in different exposure modes.
- ✔ Follow step-by-step instructions for getting great results in your camera's automatic modes, including the Scene modes and Easy Panorama Effects mode.

Getting Up and Running

In This Chapter

- ▶ Preparing the camera for its first outing
- ▶ Getting acquainted with camera features
- ▶ Viewing and adjusting camera settings
- ▶ Setting a few basic preferences
- ▶ Restoring original camera settings

Shooting for the first time with a camera as sophisticated as the Nikon D3300 can produce a blend of excitement and anxiety. On one hand, you can't wait to start using your new equipment, but on the other, you're a little intimidated by all its buttons, dials, and menu options.

Well, fear not: This chapter provides the information you need to start getting comfortable with your D3300. The first section walks you through initial camera setup; following that, you can get an overview of camera controls, discover how to view and adjust camera settings, and get my take on some basic setup options.

Preparing the Camera for Initial Use

After unpacking your camera, you have to assemble a few parts. In addition to the camera body and the supplied battery (be sure to charge it before the first use), you need a lens and a memory card. Later sections in this chapter provide details about working with lenses and memory cards, but here's what you need to know up front:

- ✔ **Lens:** You can mount a wide range of lenses on your D3300, but some aren't compatible with all camera features. For example, to enjoy auto-focusing, you need an AF-S or AF-I lens. (The 18–55mm lens sold in a kit with the D3300 body is an AF-S lens.) Your camera manual offers details about lens compatibility.





The *AF* in AF-S stands for *autofocus*, and the *S* stands for *silent wave*, a Nikon autofocus technology. AF-I lenses are older, professional-grade (expensive) lenses that are no longer made but may be available on the secondhand market.

- ✓ **SD (Secure Digital) memory card:** Your camera accepts only this type of card. Most SD cards carry the designation SDHC (for *High Capacity*) or SDXC (for *eXtended Capacity*), depending on how many gigabytes (GB) of data they hold. SDHC cards hold from 4GB to 32GB of data; the SDXC moniker is assigned to cards with capacities greater than 32GB.

With camera, lens, battery, and card within reach, take these steps:

1. **Turn off the camera.**
2. **Install the battery into the compartment on the bottom of the camera.**
3. **Attach a lens.**

First, remove the caps that cover the front of the camera and the back of the lens. Then align the *mounting index* (white dot) on the lens with the one on the camera body, as shown in Figure 1-1. After placing the lens on the camera mount, rotate the lens toward the shutter-button side of the camera. You should feel a solid click as the lens locks into place.



Mounting index dots

4. **Insert a memory card.**

Open the card-slot cover on the right side of the camera and orient the card, as shown in Figure 1-2. (The label faces the back of the camera.) Push the card gently into the slot and close the cover. The memory-card access light, labeled in the figure, illuminates briefly to let you know that the camera recognizes the card.

Figure 1-1: Align the white dot on the lens with the one on the camera body.

5. **Turn on the camera.**
6. **Set the camera language, time zone, date, and time.**

When you power up the camera for the first time, the monitor displays a message asking you to select the menu language and set the time zone, date, and time. Navigate the screens and adjust the settings by using the Multi Selector and the OK button (refer to Figure 1-2):

- Press the edge of the Multi Selector up and down to move the highlight cursor vertically; press right/left to travel horizontally.

Press OK or press the Multi Selector right to reveal options related to the highlighted setting.

- When a value box is highlighted, press the Multi Selector up/down to change the value. Press left/right to jump to the next value box.
- After making your selections on a screen, press OK.

(The later section “Ordering from camera menus” provides more help with using menus.)



Memory-card access light

Multi Selector/OK button

Figure 1-2: Insert the memory card with the label facing the back of the camera.

The date/time information is included as *metadata* (hidden data) in the picture file. You can view metadata in some playback display modes (see Chapter 9) and in certain photo programs, including Nikon ViewNX 2. (Refer to Chapter 10.)

7. If using the 18–55mm kit lens, unlock and extend the lens.

The kit lens sold with the D3300 is a *pancake* lens, which means that when you’re not shooting, you can retract the lens barrel so that the camera takes up less space in your camera bag. Before you can take

a picture, you must unlock and extend the lens. (This applies to any retractable lens, not just the kit lens.) Figure 1-3 shows the lens in its retracted (left image) and extended (right image) positions.



To extend the lens, press the lens lock button, highlighted in Figure 1-3, while rotating the lens barrel toward the shutter button side of the camera. To retract the lens, press the button while rotating the lens in the other direction.

Lens lock button



Figure 1-3: Press the lens lock button while rotating the lens barrel to extend and retract the lens.

8. Adjust the viewfinder to your eyesight.

Tucked behind the right side of the rubber eyepiece that surrounds the viewfinder is a dial that enables you to adjust the viewfinder focus to accommodate your eyesight. I highlighted the dial in Figure 1-4.

This step is critical: If you don't adjust the viewfinder to your eyesight, subjects may appear sharp in the viewfinder when they aren't actually in focus, and vice versa.

To set the viewfinder focus, remove the lens cap, look through the viewfinder, and then press the shutter button halfway to display data at the bottom of the viewfinder. (In dim lighting, the flash may pop up; ignore it for now and close the unit after you adjust

Rotate to adjust viewfinder



Figure 1-4: Rotate this dial to set the viewfinder focus for your eyesight.



the viewfinder.) Now rotate the dial until the data appears sharpest. The markings in the center of the viewfinder, which relate to autofocusing, also become more or less sharp.

That's all there is to it — the camera is now ready to go. From here, my recommendation is that you keep reading the rest of this chapter to familiarize yourself with the main camera features. But if you're anxious to take a picture right away, I won't think any less of you if you skip to Chapter 3, which guides you through the process of using the camera's automatic shooting modes. Just promise that at some point, you'll read the pages in between, because they actually do contain important information.

Exploring Basic Camera Features

If you're new to dSLR photography, some aspects of using your camera, such as working with the lens, may be unfamiliar to you. But even if you're a seasoned pro — it pays to take some time before your first shoot with a new camera to get familiar with its controls. To that end, the upcoming pages provide an overview of the D3300's main features and also offer a primer on working with lenses and memory cards.

Checking out external controls

Scattered across your camera's exterior are numerous controls that you use to change picture-taking settings, review your photos, and perform various other operations. In later chapters, I discuss all camera functions in detail and provide the exact steps to follow to access them. This section provides just a basic “what's this thing do?” guide to each control. (Don't worry about memorizing the button names; throughout the book, I show pictures of buttons in the page margins to help you know exactly which one to press.)

Topside controls

Your virtual tour begins with the bird's-eye view shown in Figure 1-5. There are a number of features of note here:

- ✓ **On/Off switch and shutter button:** Okay, I'm pretty sure you've already figured out this combo button. But you may not be aware that you need to press the shutter button in two stages: Press and hold the button half-way and wait for the camera to initiate exposure metering and, if you're using autofocusing, to set the focusing distance. Then press the button the rest of the way to take the picture.
- ✓ **Exposure Compensation button:** This button activates Exposure Compensation, a feature that enables you to tweak exposure when working in the P (programmed autoexposure), A (aperture-priority autoexposure), or S (shutter-priority autoexposure) modes. (I cover this feature in Chapter 4.) To set the amount of Exposure Compensation, press the button while rotating the Command dial (the black dial on the upper-right



corner of the camera back). In M (manual exposure) mode, press this button while rotating the Command dial to adjust the aperture setting.



➤ **Info button:** This button performs two functions depending on whether you're using the viewfinder to frame shots or taking advantage of Live View, the feature that enables you to see the live scene on the monitor.

- *Viewfinder photography:* Press the Info button to display the Information screen, which displays the most critical picture-taking settings. To turn off the screen, press the Info button again.

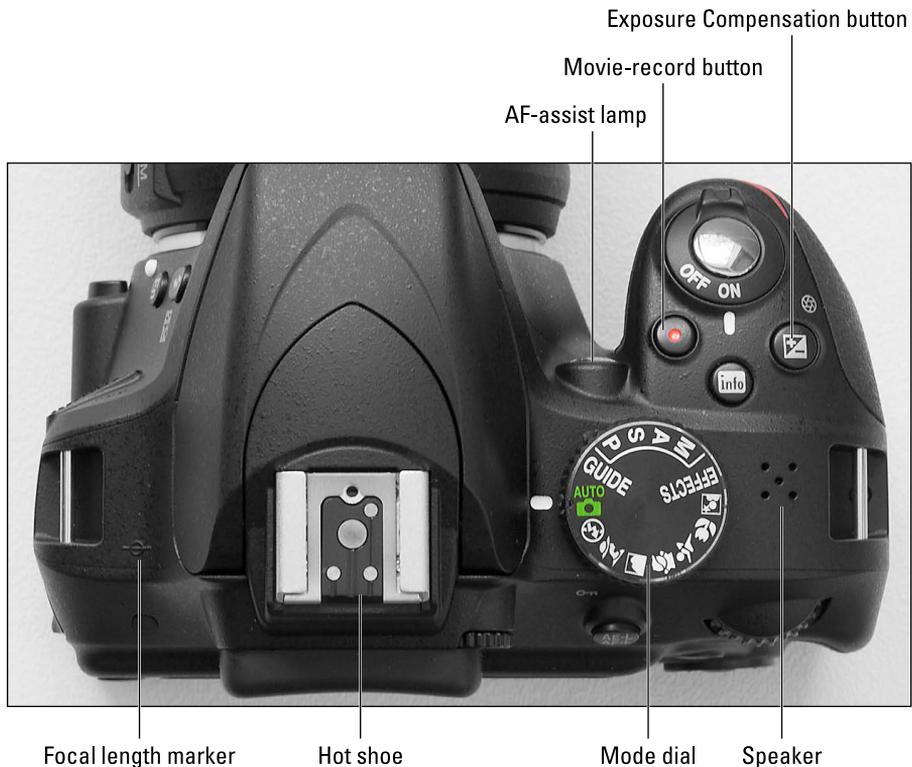


Figure 1-5: Rotate the Mode dial to choose an exposure mode.



You also can display the screen by pressing the shutter button halfway and releasing it.

- *Live View photography:* After you press the LV (Live View) button on the back of the camera, the viewfinder goes dark, and the live scene appears on the monitor. During Live View photography, press the Info button to change the amount and type of data displayed along with the live scene. You can turn the monitor off only by exiting Live View mode (press the LV button again).



- ✓ **Movie-Record button:** After shifting to Live View mode, press this button to start recording a movie. Press again to stop recording. (You can't use the viewfinder when recording movies.)
- ✓ **Mode dial:** With this dial, you choose the *exposure mode*, which determines how much control you have over camera settings. For normal shooting, you can choose from fully automatic, semiautomatic, or manual exposure control; I introduce you to the auto modes in Chapter 3 and cover the semi-automatic and manual modes (P, S, A, and M) in Chapter 4.

By turning the dial to Effects, you can apply special effects as the image or movie is captured, a feature you can explore in Chapter 11. Select the Guide setting to access guided menus, covered later in this chapter.

- ✓ **AF-assist lamp:** When you use autofocus, the camera may emit a beam of light from this lamp in dim lighting; the light helps the camera find its focus target. The lamp also lights when you use Red-Eye Reduction flash and the Self-Timer shutter-release mode, both covered in Chapter 2.

- ✓ **Flash hot shoe:** A *hot shoe* is a connection for attaching an external flash head. See Chapter 2 for an introduction to flash photography.

- ✓ **Speaker:** When you play a movie, the sound comes wafting out of these holes.



- ✓ **Focal plane indicator:** When you need to know the exact distance between your subject and the camera, the focal plane mark is the key. The mark indicates the plane at which light coming through the lens is focused onto the camera's image sensor. Basing your measurement on this mark produces a more accurate camera-to-subject distance than using the end of the lens or another external point on the camera body as your reference point.

Back-of-the-body controls

On the back of the camera, shown in Figure 1-6, you find these features:

- ✓ **Infrared receiver:** Labeled in Figure 1-6, this is one of two receivers that picks up the infrared signal from the optional ML-L3 wireless remote control. The other receiver is on the front-right side of the camera, near the middle of the hand grip.

- ✓ **Viewfinder adjustment dial:** Rotate this dial to adjust the viewfinder focus to your eyesight; see the first section of this chapter for details.



- ✓ **AE-L/AF-L button:** Pressing this button initiates autoexposure lock (AE-L) and autofocus lock (AF-L). Chapter 4 explains autoexposure lock; Chapter 5 talks about autofocus lock.

In playback mode, pressing the button activates the Protect feature, which locks the picture file — hence the little key symbol that appears above the button — so that it isn't erased if you use the picture-delete functions. See Chapter 10 for details. (The picture *is* erased if you format the memory card, however.)



Figure 1-6: Use the Multi Selector to navigate menus and access certain other camera options.



- ✓ **Command dial:** After you activate certain camera features, you rotate this dial to select a setting. For example, to choose a shutter speed when shooting in shutter-priority (S) mode, you rotate the Command dial.



- ✓ **Playback button:** Press this button to switch the camera into picture review mode. Chapter 9 details playback features.

- ✓ **Menu button:** Press this button to access menus of camera options. See “Ordering from camera menus,” later in this chapter, for details.



- ✓ **Zoom In button:** In playback mode, pressing this button magnifies the currently displayed image. Note the plus sign in the middle of the magnifying glass — plus means enlarge.

- ✓ **Zoom Out button:** As you can probably deduce from the three symbols that mark this button, it has not one, but three primary functions:

- *Reduce image magnification during playback:* If you magnify an image during playback, pressing the button reduces the magnification amount. The magnifying glass with the minus sign tips you off to this function.
- *Display thumbnails during playback:* After you press the Playback button to shift to playback mode, pressing the Zoom Out button enables you to switch from single-image view, which shows one

photo or movie at a time, to thumbnails view, which displays multiple images on the screen. Press once to display four thumbnails; press again to display nine thumbnails; and press a third time to see 72 itty-bitty thumbnails. A fourth press shifts the display to Calendar playback, which makes it easy for you to locate pictures taken on a particular day.

To cycle back to thumbnails view, press the Zoom In button; keep pressing to reduce the number of thumbnails until you get to single-image view.

- *Display help screens:* The question mark symbol above the button is a reminder that you can press this button to display helpful information about certain menu options. See the section “Displaying Help screens,” later in this chapter, for details.



- ✓ **i button:** During shooting, pressing this button activates the control strip on the Information and Live View displays, enabling quick access to certain picture settings. See the upcoming section “Adjusting settings via the control strip” for details.



- ✓ **Live View button:** As its name implies, this button turns Live View on and off. In Live View mode, the scene in front of the lens appears on the monitor, and you can’t see anything through the viewfinder. You then can compose a still photo using the monitor or begin recording a movie. I provide additional guidelines about using Live View later in this chapter.



- ✓ **Multi Selector/OK button:** This dual-natured control 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 another camera adjustment.

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



- ✓ **Release Mode button:** Press this button to display a screen where you can select the shutter-release mode. By default, the option is set to Single Frame, which results in one picture each time you press the shutter button. You can explore other options in Chapter 2.



- ✓ **Delete button:** Sporting a trash can icon, the universal symbol for delete, this button enables you to erase pictures from your memory card. Chapter 10 explains the steps.

Front-left features

The front-left side of the camera, shown in Figure 1-7, sports these features:



- ✓ **Flash button:** In the advanced exposure modes (P, S, A, and M), pressing this button raises the built-in flash. In other modes, the camera controls whether flash is enabled.

By holding the Flash button down and rotating the Command dial, you can adjust the Flash mode (Fill Flash, Red-Eye Reduction, and so on). In advanced exposure modes, you also can adjust the flash power by pressing the button while simultaneously pressing the Exposure Compensation button and rotating the Command dial. The little plus/minus symbol that appears below the Flash button — the same symbol that’s on the Exposure Compensation button — is a reminder of the button’s role in flash-power adjustment.

Check out Chapter 2 for details on flash options.

Fn

✓ **Function (Fn) button:** By default, this button gives you quick access to the ISO setting, which controls the camera’s sensitivity to light. (Chapter 2 explains.) If you don’t adjust that setting often, you can use the button to perform a variety of other operations; Chapter 12 shows you how. Note that you can’t control ISO in the Auto and Auto Flash Off exposure modes or the Night Vision or Easy Panorama Effects modes, so pressing the Fn button has no result in those modes.

✓ **Microphone:** The three little holes just above the silver D3300 label lead to the camera’s internal microphone. See Chapter 8 to find out how to disable the microphone if you want to record silent movies.

✓ **Lens-release button:** Press this button to disengage the lens from the camera’s lens mount so that you can remove the lens. Don’t confuse this lock button with the one on the kit lens (and other retractable lenses) — you press the button on the lens to unlock it so that you can extend or retract it. (See the first section of this chapter for help.)

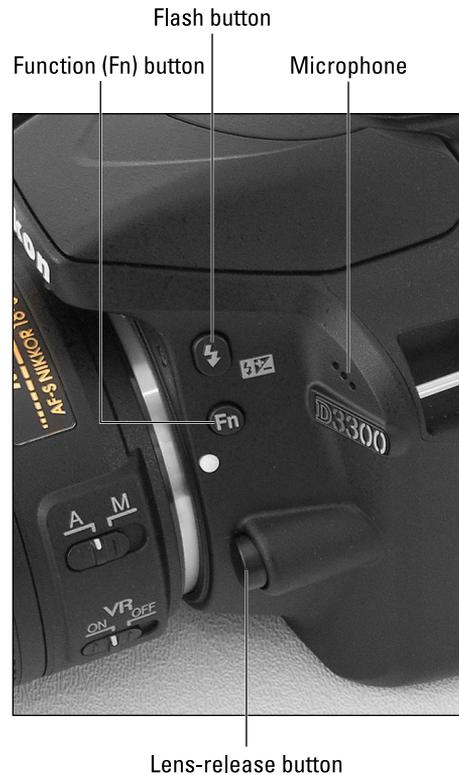


Figure 1-7: Press the Flash button to use the built-in flash in P, S, A, or M mode.

Hidden connections

Hidden under the covers on the left side of the camera are the following connection ports, labeled in Figure 1-8:

✓ **Accessory terminal:** This terminal accepts the following accessories: Nikon MC-DC2 remote shutter-release cable; WR-1 and WR-R10 wireless

remote controllers; and GP-1/GP-1A GPS units. I don't cover these optional accessories, but the manual that comes with each device can get you up and running.



Figure 1-8: Open the covers on the side of the camera to reveal these connections.

- ✓ **Microphone jack:** If you're not happy with the audio quality provided by the internal microphone, you can plug in the optional ME-1 stereo microphone here.
- ✓ **USB and A/V port:** Through this port, you can connect your camera to a USB port on the computer for picture downloading. The same camera port enables you to connect the camera to a television via an A/V cable for picture playback. Nikon supplies the cables you need for both connections in the camera box; see Chapter 9 for information on television connections and Chapter 10 for help with downloading pictures.

If you buy the wireless mobile adapter WU-1a, you also use this port to connect the device to the camera.

- ✓ **HDMI port:** You can use this port to connect your camera to a high-definition TV, but you need to buy an HDMI cable to do so. Look for a Type C mini-pin cable. Chapter 9 offers details on television playback.

If you turn the camera over, you find a tripod socket, which enables you to mount the camera on a tripod that uses a 1/4-inch screw, plus the battery chamber.



Ordering from camera menus

Pressing the Menu button gives you access to a slew of options in addition to those you control via the external buttons and dials. But what type of menu screens you see depends on the setting of the Mode dial:

- ✓ **Guide:** Pressing the Menu button brings up the first screen of the guided menus, which provide a simple, walk-me-through-it approach to using the camera.
- ✓ **All other settings:** Pressing the Menu button brings up the normal, text-based menus.

The next two sections provide an overview of using both types of menus.

Using the guided menus

The guided menus work much like interactive menus you encounter in other areas of your life — on cellphones, bank machines, grocery-store self-checkout kiosks, and the like — except that instead of pressing buttons on the screen, you use the Multi Selector and OK button to make your menu selections. And thankfully, your camera also doesn't nag you to hurry up and "please place the item in the bagging area!" every 3 seconds.

To explore the guided menu feature, set the Mode dial to Guide, as shown in Figure 1-9.

You see the initial guided menu screen, shown on the left in Figure 1-10. Using the Multi Selector, highlight one of these options:

- ✓ **Shoot:** Select this icon to access screens that walk you through the process of choosing basic picture-taking settings and shooting pictures.
- ✓ **View/Delete:** Select this category to access picture-playback functions and erase pictures from your memory card.

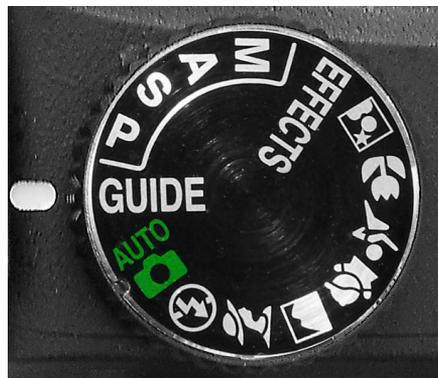


Figure 1-9: Set the Mode dial to Guide to use the guided menus.