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Julie Adair King

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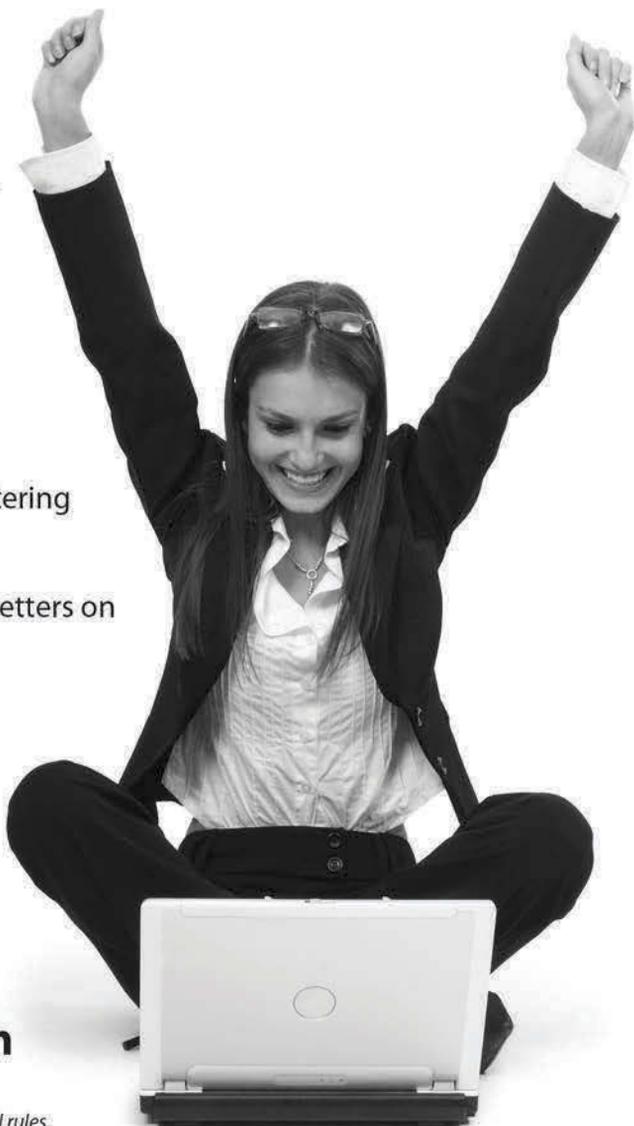
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Julie Adair King is the author of many books about digital photography and imaging, including the best-selling *Digital Photography For Dummies*. Her most recent titles include *Digital Photography Before & After Makeovers*, *Digital Photo Projects For Dummies*, *Julie King's Everyday Photoshop For Photographers*, *Julie King's Everyday Photoshop Elements*, and *Shoot Like a Pro!: Digital Photography Techniques*. When not writing, King teaches digital photography at such locations as the Palm Beach Photographic Center. A graduate of Purdue University, she resides in Indianapolis, Indiana.

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Introduction

Nikon. The name has been associated with top-flight photography equipment for generations. And the introduction of the D40 and its sibling, the D40x, only enriched Nikon's well-deserved reputation, offering the power and flexibility of a digital SLR in a revolutionary, compact size and at an equally compact price. When history looks back on these two cameras, it's a fair bet that they'll be recognized for enticing millions of former point-and-shoot photographers into the SLR world.

I'm also willing to wager that if you're new to digital photography, SLR cameras, or both, you've got more than a few questions. For starters, you may not even be sure what SLR means or how it affects your picture taking, let alone have a clue as to all the other techie terms you encounter in your camera manual — *resolution*, *aperture*, *white balance*, *file format*, 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. Which is a shame because it's sort of like buying a Porsche and never actually taking it on the road.

Therein lies the point of *Nikon D40/D40x For Dummies*: Through 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. Whether you own the D40 or D40x, you'll get the information you need to capture the great photos you envisioned when you became a Nikon owner.

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 tried to make

each chapter as self-standing as possible so that you can explore the topics that interest you in any order you please.

The following sections offer brief previews of each part. If you're eager to find details on a specific topic, the index shows you exactly where to look.

Part I: Fast Track to Super Snaps

Part I contains four chapters that help you get up and running with your D40 or D40x:

- ✔ Chapter 1, “Getting the Lay of the Land,” offers a tour of the external controls on your camera, shows you how to navigate camera menus to access internal options, and walks you through initial camera setup and customization steps.
- ✔ Chapter 2, “Taking Great Pictures, Automatically,” shows you how to get the best results when using the camera’s fully automatic exposure modes, including the Digital Vari-Program scene modes such as Sports mode, Portrait mode, and Child mode.
- ✔ Chapter 3, “Controlling Picture Quality and Size,” introduces you to two camera settings that are critical whether you shoot in automatic or manual modes: the Image Size and Image Quality settings, which control resolution (pixel count), file format, file size, and picture quality.
- ✔ Chapter 4, “Reviewing Your Photos,” explains how to view your pictures on the camera monitor and also how to display various types of picture information along with the image. In addition, this chapter discusses how to delete unwanted images and protect your favorites from accidental erasure.

Part II: Taking Creative Control

Chapters in this part help you unleash the full creative power of your Nikon by moving into semiautomatic or manual photography modes.

- ✔ Chapter 5, “Getting Creative with Exposure and Lighting,” covers the all-important topic of exposure, starting with an explanation of three critical exposure controls: aperture, shutter speed, and ISO. This chapter also discusses your camera’s advanced exposure modes (P, S, A, and M), explains exposure options such as metering mode and exposure compensation, and offers tips for using the built-in flash.
- ✔ Chapter 6, “Manipulating Focus and Color,” provides help with controlling those aspects of your pictures. Look here for information about your Nikon’s manual and autofocus features as well as details about color controls such as white balance and the Optimize Image options.

- ✓ Chapter 7, “Putting It All Together,” summarizes all the techniques explained in earlier chapters, providing a quick-reference guide to the camera settings and shooting strategies that produce the best results for specific types of pictures: portraits, action shots, landscape scenes, close-ups, and more.

Part III: Working with Picture Files

This part of the book, as its title implies, discusses the often-confusing aspect of moving your pictures from camera to computer and beyond.

- ✓ Chapter 8, “Downloading, Organizing, and Archiving Your Photos,” guides you through the process of transferring pictures from your camera memory card to your computer’s hard drive or other storage device. Just as important, this chapter explains how to organize and safeguard your photo files.
- ✓ Chapter 9, “Printing and Sharing Your Photos,” helps you turn your digital files into “hard copies,” covering both retail and do-it-yourself printing options. This chapter also explains how to prepare your pictures for online sharing and, for times when you have the neighbors over, how to display your pictures on a television screen.

Part IV: The Part of Tens

In famous *For Dummies* tradition, the book concludes with two “top ten” lists containing additional bits of information and advice.

- ✓ Chapter 10, “Ten Fast Photo-Retouching Tricks,” shows you how to fix less-than-perfect images using features found on your camera’s Retouch menu, such as automated red-eye removal. In case you can’t solve the problem that way, this chapter also explains how to perform some basic retouching by using tools found in most photo editing programs.
- ✓ Chapter 11, “Ten Special-Purpose Features to Explore on a Rainy Day,” presents information about some camera features that, while not found on most “Top Ten Reasons I Bought My Nikon” lists, are nonetheless interesting, useful on occasion, or a bit of both.

Appendix: Firmware Notes and Menu Map

Wrapping up the book, the appendix explains how to find out what version of the Nikon *firmware*, or internal software, is installed in your camera and how to find and download updates.



If the information you see on your camera menus and other displays isn't the same as what you see in this book, and you've explored other reasons for the discrepancy, a firmware update may be the issue. This book was written using version 1.10 of the firmware, which was the most current at the time of publication. Firmware updates typically don't carry major feature changes — they're mostly used to solve technical glitches in existing features — but if you do download an update, be sure to read the accompanying description of what it accomplishes so that you can adapt my instructions as necessary. (Again, changes that affect how you actually operate the camera should be minimal, if any.)

On a less technical note, the appendix also includes tables that provide brief descriptions of all commands found on the camera's five menus.

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:



- ✓ A Tip icon flags information that will save you time, effort, money, or some other valuable resource, including your sanity.



- ✓ When you see this icon, look alive. It indicates a potential danger zone that can result in much wailing and teeth-gnashing if ignored.



- ✓ 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 technology-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 some other pressing fact.

Additionally, I need to point out two other details that will help you use this book:

- ✓ **Other margin art:** Replicas of some of your camera's buttons, dials, controls, and menu graphics also appear in the margins of some paragraphs. I include these to provide a quick reminder of the appearance of the button or option 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→Print,” click the File menu to unfurl it and then click the Print command on the menu.

About the Software Shown in This Book

Providing specific instructions for performing photo organizing and editing tasks requires that I feature specific software. In sections that cover file downloading, archiving, printing, and e-mail sharing, I selected Nikon PictureProject, which ships free with your camera and works on both the Windows and Mac operating systems.

However, because that program doesn't offer a good tool for processing Camera Raw (NEF) files (an advanced option covered in Chapter 3) and provides only a few photo-retouching tools, I also feature Adobe Photoshop Elements for some discussions. The version shown in the book is Elements 6.0 for Windows, but the tools covered here work mostly the same in versions 4.0 and 5.0, and for Mac as well as Windows, unless otherwise specified.

Rest assured, though, that the tools used in both PictureProject and Elements work very similarly in other programs, so you should be able to easily adapt the steps to whatever software you use. (I recommend that you read your software manual for details, of course.)

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 a little mind-boggling at first. So take it slowly, experimenting with just one or two new camera settings or techniques at first. Then, each 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 Nikon is the perfect partner for your photographic journey, and I thank you for allowing me, through this book, to serve as your tour guide.

Part I

Fast Track to Super Snaps



In This Part

Making sense of all the controls on your D40 or D40x isn't something you can do in an afternoon — heck, in a week, or maybe even a month. But that doesn't mean that you can't take great pictures today. By using your camera's point-and-shoot automatic modes, you can capture terrific images with very little effort. All you do is compose the scene, and the camera takes care of almost everything else.

This part shows you how to take best advantage of your camera's automatic features and also addresses some basic setup steps, such as adjusting the viewfinder to your eyesight and getting familiar with the camera menus, buttons, and dials. In addition, chapters in this part explain how to obtain the very best picture quality, whether you shoot in an automatic or manual mode, and how to use your camera's picture-playback features.



Getting the Lay of the Land

In This Chapter

- ▶ Attaching and using an SLR lens
 - ▶ Adjusting the viewfinder to your eyesight
 - ▶ Working with camera memory cards
 - ▶ Getting acquainted with external camera controls
 - ▶ Using the camera menus and Shooting Info display
 - ▶ Deciphering the viewfinder data
 - ▶ Displaying onscreen help
-

I still remember the day that I bought my first 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 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 Nikon is both your first SLR and first digital camera, you may be doubly intimidated.

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



This chapter also guides you through the process of mounting and using an SLR lens, working with digital memory cards, and navigating your camera's internal menus. And for times when you don't have this book handy, I show you how to access the Help system that's built into your camera.

Getting Comfortable with Your Lens

One of the biggest differences between a point-and-shoot camera and an SLR (*single-lens reflex*) camera is the lens. With an SLR, you can swap out lenses to suit different photographic needs, going from an extreme close-up lens to a super-long telephoto, for example. 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.

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

Attaching a lens

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

- 1. Remove the cap that covers the lens mount on the front of the camera.**
- 2. Remove the cap that covers the back of the lens.**

The cap is the one that doesn't say *Nikon* on it, in case you aren't sure.

- 3. 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, I highlight the markings in question with a red circle in Figure 1-1.

Note that the figure (and others in this chapter) show you the D40 with its so-called "kit lens" — the 18–55mm zoom lens that Nikon sells as a unit with the body. 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.

- 4. Keeping the dots aligned, position the lens on the camera's lens mount as shown in Figure 1-1.**

When you do so, grip the lens by its back collar as shown in the figure — that is, not the movable, forward end of the lens barrel.



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

- 5. Turn the lens in a counter-clockwise direction until the lens clicks into place.**

In other words, turn the lens toward the side of the camera that sports the shutter button, as indicated by the red arrow in the figure.

- 6. On a 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. (The D40 kit lens doesn't.) To find out more about apertures and f-stops, see Chapter 5.



Always attach (or switch) lenses in a clean environment to reduce the risk of getting dust, dirt, and other contaminants inside the camera or lens. Changing lenses on a sandy beach, for example, isn't a good idea. For added safety, point the camera body slightly down when performing this maneuver; doing so helps prevent any flotsam in the air from being drawn into the camera by gravity. See Chapter 3 for tips on cleaning your lens.

Removing a lens

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

1. **Locate the lens-release button, circled in Figure 1-2.**
2. **Grip the rear collar of the lens.**
In other words, hold onto the stationary part of the lens that's closest to the camera body and not the movable focusing ring or zoom ring, if your lens has one.
3. **Press the lens-release button while turning the lens clockwise until the mounting index on the lens is aligned with the index on the camera body.**

The mounting indexes are the little guide dots circled in Figure 1-1. When the dots line up, the lens should detach from the mount.

4. **Place the rear protective cap onto the back of the lens.**

If you aren't putting another lens on the camera, cover the lens mount with the protective cap that came with your camera, too.



Figure 1-2: Press the lens-release button to disengage the lens from the mount.

Focusing and zooming the lens

When paired with a compatible lens, your camera offers autofocus capabilities, which you can explore in detail in Chapter 6. But with some subjects, autofocus can be slow or impossible, which is why your camera also offers manual focusing. The process is quick and easy: You just turn the focusing ring on the lens until your subject comes into focus. To try it out, take these steps:

1. **Locate the A-M focusing switch on the side of the lens.**

In Figure 1-3, I circled the switch as it appears on the D40's kit lens. The switch should be in a similar location on other Nikon lenses; if you use a lens from another manufacturer, check the lens instruction manual.

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

Don't try to move the focusing ring with the switch set to the A (autofocus) position; doing so can damage the lens.





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

3. While looking through the viewfinder, twist the focusing ring to adjust focus.

If you have trouble focusing, you may be too close to your subject; every lens has a minimum focusing distance. (See Chapter 6 for more tips on focus issues.) You may also need to adjust the viewfinder to accommodate your eyesight; see the next section for details.

If you bought a zoom lens, a movable zoom ring lies behind the focusing ring, as shown in Figure 1-3. To zoom in or out, just move that zoom ring forward and backward.

The numbers on the zoom ring, by the way, represent *focal lengths*. I explain focal lengths in Chapter 6. In the meantime, just note that when the lens is mounted on the camera, the number that's aligned with the lens mounting index (the white dot) represents the current focal length. In Figure 1-3, for example, the focal length is 55mm.

Adjusting the Viewfinder Focus

On the right side of the camera viewfinder is a tiny vertical switch, called a *diopter adjustment control*. I circled the switch in Figure 1-4. With this control, you can adjust the focus of your viewfinder to accommodate 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.

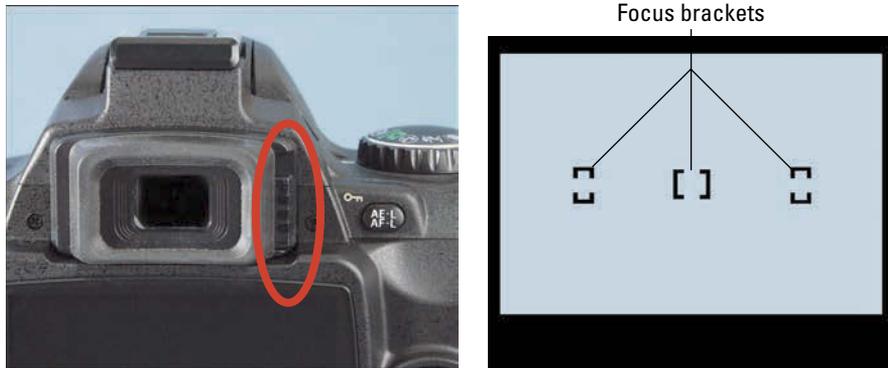


Figure 1-4: Use the diopter adjustment control to set the viewfinder focus for your eyesight.

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 three pairs of brackets shown on the right side of Figure 1-4.**

The brackets are officially called *focusing brackets*, but don't worry about focusing the actual picture now; just pay attention to the brackets.

3. **Slide the diopter adjustment control up or down until the brackets 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.

Working with Memory Cards

Instead of recording images on film, digital cameras store pictures on *memory cards*. Some people, in fact, refer to memory cards as *digital film*, but I hate

that term because film and memory cards actually have little in common. Film must be developed before you can view your pictures, a process that involves time and some not-so-nice chemicals. Film can be damaged when exposed to some airport security scanners; memory cards are immune to those devices. The cost per picture is also much higher for film: You have to develop and print each negative, whether the shot is a keeper or a clunker. With digital, you print only the pictures you like — and you can reuse your memory cards over and over and over, saving even more money.

Whatever term you prefer, your Nikon uses a specific type of memory card called an *SD card* (for *Secure Digital*), shown in Figure 1-5. Other card types — CompactFlash, Memory Stick, or any others — aren't compatible with your camera. However, if you use SD cards in your cell phone, portable music player, or other device, you can use the same cards in your camera.

Safeguarding your memory cards — and the images you store on them — requires just a few precautions:



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

- ✓ **Inserting a card:** First, be sure that the camera is turned off. Then put the card in the card slot with the label facing the back of the camera, as shown in Figure 1-5. Push the card into the slot until it clicks into place; the memory card access light (circled in Figure 1-5) 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, take a few seconds to *format* it by choosing the Format Memory Card option on the Setup menu. This step simply ensures that the card is properly prepared to record your pictures. See the upcoming section “Cruising the Setup menu” for details.
- ✓ **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 the camera off. Open the memory card door, as shown in Figure 1-5. Depress the memory card slightly until you hear a little click and then let go. The card should pop halfway out of the slot, enabling you to grab it by the tail and remove it.
- ✓ **Handling cards:** Don't touch the gold contacts on the back of the card (see the left card in Figure 1-6). When cards aren't in use, store them in



the protective cases they came in or in a memory card wallet. Keep cards away from extreme heat and cold as well.

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



You can protect individual images by using the camera's Protect feature, covered in Chapter 4.



Figure 1-6: Avoid touching the gold contacts on the card.

Do you need high-speed memory cards?

Memory cards are categorized not just by their storage capacity, but also by their data-transfer speed. The speed specs you see on memory cards — 10x, 40x, 80x, 133x, and the like — reflect the transfer rate compared to a single-speed CD-ROM, which can move about 156K (kilobytes) of data per second. So a 10x card, for example, is 10 times faster than that, offering a transfer speed of 1.5MB (megabytes) per second.

Faster data-transfer speeds reduce the time your camera needs to write a picture file onto the card and the time required to download files from the card to your computer. Of course, card prices rise along with card speed. And whether you will really notice much difference depends on a couple of factors.

On the picture-taking end, users who want to capture fast-paced action benefit the most from high-speed cards. Bumping up your card speed can enable you to fire off a continuous series of shots at a slightly faster pace than with a slower

card. Users who shoot at the highest resolution or prefer the NEF (Raw) file format also gain the most from high-speed cards; both options increase file size and, thus, the time needed to store the picture on the card. (See Chapter 3 for details.)

When it comes to picture downloading, you may or may not enjoy much of a speed increase because transfer time isn't just dependent on the card. How long it takes for files to shuffle from card to computer also depends on the capabilities of your computer and, if you use a memory-card reader to download files, on the speed of that device. (Chapter 8 covers the file-downloading process.)

To sum up, if you want to push your camera to its speed limit — and money is no object — go for a high-speed card. Otherwise, you probably don't need to make the extra investment; even a “slow” card is usually more than fast enough to satisfy all but the most demanding users.

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. Sometimes a single twist of a dial gets the job done; other times, you press several buttons in sequence.

In later chapters, I discuss all your camera's functions in detail and provide the exact steps to follow to access those functions. This section provides just a basic road map to the external controls plus a quick introduction to each. You may want to put a sticky note or other bookmark on this page so that you can find it for easier reference later. (The cheat sheet at the front of the book offers a similar guide, albeit with less detail.)

With that preamble out of the way, the next three sections break down the external controls found on the top, back, and front-left side of the camera.

Topside controls

Your virtual tour begins at the top of the camera, shown in Figure 1-7. There are four controls of note here, as follows:



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



- ✓ **On/Off switch and shutter button:** Okay, I'm pretty sure you already figured this combo button out. But check out Chapter 2 to discover the proper shutter-button-pressing technique — you'd be surprised how many people mess up their pictures because they press that button incorrectly.



- ✓ **Info button:** Press this button to display the Shooting Info screen on the monitor. Via this screen, you can review and adjust critical camera settings. See the upcoming section “Using the Shooting Info Display” for details.



- ✓ **Exposure compensation button:** This button activates a feature that enables you to tweak exposure when working in any autoexposure mode. Chapter 5 explains.
- ✓ **Mode dial:** With this dial, you set the camera to fully automatic, semi-automatic, or manual photography mode. The little pictographs, or icons, represent the Nikon Digital Vari-Program modes, which are automatic settings geared to specific types of photos: action shots, portraits, landscapes, and so on. Chapter 2 details the Digital Vari-Program and Auto modes; Chapter 5 explains the four others (P, S, A, and M).

Back-of-the-body controls

Traveling over the top of the camera to its back side, shown in Figure 1-8, you encounter the following controls:



- ✓ **Command dial:** After you activate certain camera features, you rotate this dial, labeled in Figure 1-8, to select a specific setting. For example, when you shoot in the A exposure mode (aperture-priority autoexposure, detailed in Chapter 5), rotating the Command dial changes the aperture (f-stop).



- ✓ **AE-L/AF-L and Protect button:** Like several buttons, this one serves multiple purposes. When you're taking pictures in automatic mode, you can lock in your focus and exposure settings by pressing and holding this button. Chapter 5 explains why you may want to do so. In picture playback mode, pressing the button locks the picture file — hence the little key symbol next to the button — so that you can't accidentally delete or alter it. See Chapter 4 for details on that option.

You can adjust the performance of the button as it relates to locking focus and exposure, too. Instructions in this book assume that you stick with the default setting, but if you want to explore your options, see Chapter 11.