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Julie Adair King

Author of Digital Photography For Dummies



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by Julie Adair King



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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 a series of For Dummies guides to popular digital SLR cameras, including the Nikon D5000, D300s, D90, D60, and D40/D40x. Other works 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

Once upon a time, making the move from a point-and-shoot digital camera to an SLR model required boatloads of cash and the willingness to cart around a bulky, heavy piece of equipment. All that changed a few years ago when Nikon introduced the D40, a digital SLR that offered a compact size *and* an equally compact price.

With the D3000, Nikon proves once again that you don't have to give an arm and a leg — or strain your back and neck — to enjoy dSLR photography. This new addition to the Nikon family of dSLRs offers the same easy-to-love size and price tag that made the D40 so popular. And the two cameras share another important characteristic: Like the D40, the D3000 doesn't skimp on power or performance, offering a great set of features to help you take your photography to the next level.

In fact, the D3000 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 as to 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. Which is a shame because it's sort of like buying a Porsche 911 and never heading out for the open road.

Therein lies the point of *Nikon D3000 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.

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 D3000:

- ✓ 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 Scene modes such as Sports mode, Portrait mode, and Landscape mode.
- ✓ Chapter 3, "Controlling Picture Quality and Size," introduces you to two camera settings that are critical whether you shoot in automatic or manual mode: the Image Size and Image Quality settings, which control resolution (pixel count), file format, file size, and picture quality.
- ✓ Chapter 4, "Reviewing Your Photos" offers just what its title implies. Look here to find out how to view your photos on the camera monitor, 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 D3000 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 Active D-Lighting, metering modes, and exposure compensation; and offers tips for using flash.

- ✔ Chapter 6, “Manipulating Focus and Color,” provides help with controlling those aspects of your pictures. Head here for information about your camera’s many autofocus options, for tips on how to manipulate depth of field (the zone of sharp focus in a picture), and for details about color controls such as white balance.
- ✔ 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, landscapes, 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 Picture Files,” guides you through the process of transferring pictures from your camera memory card to your computer’s hard drive or other storage device. Look here, too, for details about using the D3000’s built-in tool for processing files that you shoot in the Nikon RAW format (NEF). Just as important, this chapter explains how to organize and safeguard your photo files.
- ✔ Chapter 9, “Printing and Sharing Your Pictures,” helps you turn your digital files into “hard copies” that look as good as those you see on the camera monitor. This chapter also explains how to prepare your pictures for online sharing, create digital slide shows, and, for times when you have the neighbors over, 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 Fun and Practical Retouch Menu Features,” shows you how to fix less-than-perfect images using features found on your camera’s Retouch menu, such as automated red-eye removal. You also find out how to apply color effects and perform a few other photo-enhancement tricks.
- ✔ 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 D3000” 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:



A 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 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 three additional details that will help you use this book:

- ✓ **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.
- ✓ **Camera firmware:** *Firmware* is the internal software that controls many of your camera's operations. The D3000 firmware consists of two parts, called A and B. At the time this book was written, both A and B were version 1.00.

Occasionally, Nikon releases firmware updates, and it's a good idea to check out the Nikon Web site (www.nikon.com) periodically to find out whether any updates are available. (Chapter 1 tells you how to determine which firmware version your camera is running.) 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.

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, and e-mail sharing, I selected Nikon ViewNX and Nikon Transfer, both of which ship free with your camera and work on both the Windows and Mac operating systems.

Rest assured, though, that the tools used in ViewNX and Nikon Transfer 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. And of course, there are *For Dummies* books on all the major image editing applications, and you can use them if you find the manual a tad — ahem — boring.)

eCheat Sheet

As a little added bonus, you can find an electronic version of the famous *For Dummies* Cheat Sheet at www.dummies.com/cheatsheet/nikond3000. The Cheat Sheet contains a quick-reference guide to all the buttons, dials, switches, and exposure modes on your D3000. Log on, 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 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 D3000 is the perfect partner for your photographic journey, and I thank you for allowing me, through this book, to serve as your tour guide.

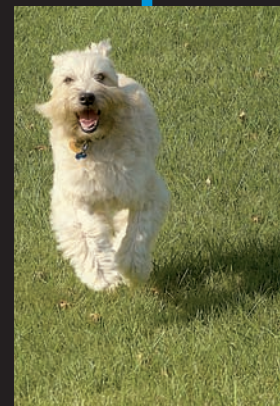
Part I

Fast Track to Super Snaps



Making sense of all the controls on your D3000 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 automatic point-and-shoot 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 memory cards
- ▶ Selecting from menus
- ▶ Using the Shooting Information and Quick Settings displays
- ▶ Viewing onscreen help
- ▶ Customizing basic operations

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 D3000 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 D3000 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 memory cards, navigating your camera's menus, and customizing basic camera operations.

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 a *macro lens*, which enables you to shoot extreme close-ups, to a *wide-angle lens*, which encompasses a wide field of view, to a *telephoto lens*, which lets you photograph subjects from a distance. 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 several sections explain the process of attaching, removing, and using this critical part of your camera.

Attaching a lens



Your camera can autofocus only with a type of lens that carries the specification *AF-S*. (Well, technically speaking, the camera can also autofocus with *AF-I* lenses. But since those are high-end, very expensive lenses that are no longer made, this is the only mention you'll find of *AF-I* lenses in this book.) You can use other types of lenses, as long as they're compatible with the camera's lens mount, but you'll have to focus manually.

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

- 1. Turn the camera off and 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.**
- 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, you can see the markings in question in Figure 1-1.

Note that the figure (and others in this book) shows the D3000 with its so-called “kit lens” — the 18–55mm AF-S Vibration Reduction (VR) 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, 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 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.

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 D3000 kit lens doesn’t.) To find out more about apertures and f-stops, see Chapter 5.



Even though the D3000 is equipped with a dust reduction system, you should 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.

Removing a lens

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

1. Turn the camera off and then locate the lens-release button, labeled in Figure 1-2.
2. Grip the rear collar of the lens.

In other words, hold on to 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 (toward the button) until the mounting index on the lens is aligned with the index on the camera body.

The mounting indexes are the little guide dots labeled 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.



Lens-release button

Vibration Reduction switch

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

Using a VR (vibration reduction) lens

If you purchased the D3000 kit — the body-and-lens combination put together by Nikon — your lens offers a feature called *vibration reduction*. On Nikon lenses, this feature is indicated by the initials *VR* in the lens name.

Vibration reduction 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.



However, 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. That's why your kit lens — and all Nikon VR lenses — have an On/Off switch, which is located on the side of the lens, as shown in Figure 1-2. Whether you should turn off the VR feature, though, depends on the specific lens, so check the manual. For the 18–55mm kit lens, Nikon does recommend setting the switch to the Off position for tripod shooting, assuming that the tripod is “locked down” so the camera is immovable.

If you use a non-Nikon lens, the vibration reduction feature 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, so be sure to check the lens manual for information.

Chapter 6 offers more tips on achieving blur-free photos, and it also explains focal length and its impact on your pictures. See Chapter 5 for an explanation of shutter speed.

Setting the focus mode (auto or manual)

Again, the option to switch between autofocus and manual focusing depends on matching the D3000 with a fully compatible lens, as I explain in the earlier section, “Attaching a lens.” With the kit lens, as well as with other AF-S lenses, you can enjoy autofocus as well as manual focusing.



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

For times when you attach a lens that doesn't support autofocus or the autofocus system has trouble locking on your subject, you can focus manually by twisting a focusing ring on the lens barrel. The placement and appearance of the focusing ring depend on the lens; Figure 1-3 shows you the one on the kit lens.

To focus manually with the kit lens, take these steps:

- 1. Set the lens to manual focus mode.**

On the kit lens, look for the switch labeled in Figure 1-3, and move it from the A to the M position, as shown in the figure.

- 2. 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. You may also need to adjust the viewfinder to accommodate your eyesight; you can get help with the process a few paragraphs from here.



Figure 1-3: On the 18–55mm kit lens, the manual-focusing ring is set near the front of the lens, as shown here.

If you use a lens other than the kit lens, check the lens instruction guide for details about focusing manually; your lens may or may not have a switch similar to the one on the kit lens. Also see the Chapter 6 section related to the Focus mode option, which should be set to MF for manual focusing. (With the kit lens and some other lenses, the camera automatically chooses the MF setting for you.)

Zooming in and out

If you bought a zoom lens, it has a movable zoom barrel. The location of the zoom barrel on the D3000 kit lens is shown in Figure 1-3. To zoom in or out, just rotate that zoom barrel clockwise or counterclockwise.

The numbers on the zoom barrel, 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 18mm.

Adjusting the Viewfinder Focus

Tucked behind the right side of the rubber eyepiece that surrounds the viewfinder is a tiny slider called a *diopter adjustment control*. With this control, labeled in Figure 1-4, you can adjust the focus of your viewfinder to accommodate your eyesight.

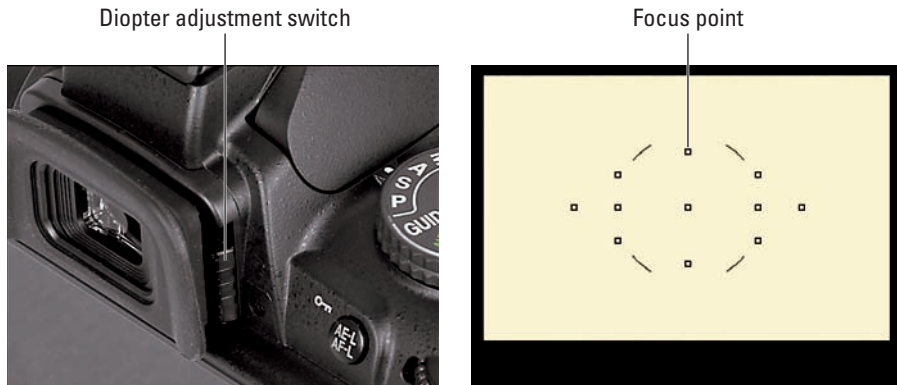


Figure 1-4: Use the diopter adjustment control to set the viewfinder focus for your eyesight.



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 little black markings in the center of the screen.**

The little rectangles represent the camera's autofocus points, which you can read more about in Chapters 2 and 6. I labeled one of the points in Figure 1-4. The four curved lines represent the center-weighted metering area, which relates to an exposure option you can explore in Chapter 5.

3. Push the diopter adjustment slider up or down 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.

Working with Memory Cards

Instead of recording images on film, digital cameras store pictures on *memory cards*. Your D3000 uses a specific type of memory card called an *SD card* (for *Secure Digital*), shown in Figures 1-5 and 1-6. You can also use the new, high-capacity Secure Digital cards, which are labeled SDHC, as well as Eye-Fi SD cards, which enable 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.)

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

- ✓ **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 or insert a card that has been used in other devices (such as an MP3 player), you should *format* it. Formatting ensures that the card is properly prepared to record your pictures.



Memory card access light

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