# **Exploring the Nikon D50**

f you've taken your first picture or two (or 200!) with your Nikon D50, you're probably eager to learn more about your camera's features and how to use them. The Quick Tour covered just the basics you need to know to get started. This chapter delves a little more deeply into the key features of the camera, what they're for, and how to use them.

I'm going to avoid the deadly trap that most camera manuals fall into when they provide three or four views of a camera (usually front, back, top, and perhaps side or bottom) and label everything willy-nilly without giving you a clue about what each control actually is used for. If you want to know where a specific button is located, you have to search for it in Where's Waldo? fashion amongst a thicket of labels. Then you may have to thumb through the manual to see exactly what the control does.

Although you've probably attempted to learn about your D50's buttons and wheels with the manual's confusing diagrams, this chapter's illustrations are more accessible roadmaps that will help you sort through the D50's features and controls much more quickly, especially when you're out in the field taking photos.

This chapter does not cover the D50's menu system. It concentrates on the buttons, dials, and other controls that you can access directly, without visiting menus. Some of the settings discussed in this chapter, such as flash options or white balance, are duplicated in the menus or have additional options available in there.



You can learn more about the D50's menu setup options in Chapter 2.



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### **Up Front**

The front panel of the Nikon D50 is shown in figure 1.1. You can't see all the buttons and controls from a straight-on perspective, so I'll show you separate, three-quartersview looks at each half of the front panel, which I've color-coded red (the left side of the camera when looking at it head-on) and green (the right side of the camera from this angle).



1.1 The "business end" of the Nikon D50.

The easiest way to hold the D50 is by wrapping your fingers of your right hand around the hand grip, with the left hand providing support and usually activating most of the controls. However, there are a few controls within the reach of the right hand's digits, as shown in figure 1.2. These controls and features include the following:

- The handgrip: The grip is the housing for the D50's battery, and also serves as a comfortable handhold for your fingers.
- Front lamp: This front-mounted source of illumination serves three different functions. Under dim lighting conditions that make autofocusing difficult, this light source

can be set to cast a little extra light on your subject to assist the autofocus system. If you've set your camera to self-timer mode, so that a picture is taken after a short delay (or if you're using the optional remote control in delay mode), the lamp blinks in a pattern as a sort of countdown to the eventual exposure. Finally, this lamp also can send out a little blast of light shortly before a flash exposure, which can serve to close down the pupils of your subjects' eyes, and reduce the demon redeve effect.



Nikon Speedlights as well as the Nikon SC-29 Speedlight cable have their own less-obtrusive focus assist lights that can take over for the one built into the camera.

- Infrared receiver: This is a dark red window (opaque to visible light) that captures a signal from the optional remote control. Because it's on the front of the camera you must use the remote from the front position.
- Shutter release: Canted atop the handgrip are the shutter-release button and power switch.

The other side of the D50 has a few more controls, as shown in figure 1.3. These include the following:

→ Flash multi-button: Nikon has kept the D50's design clean by assigning multiple functions to many buttons, and this flash control is one of them. It serves three different purposes, even though Nikon calls it the Flash Exposure Compensation button. Pressing the button when the built-in electronic flash is in its down/stowed position causes the flash to flip up (as shown in figure 1.4), ready for use. Holding this button while spinning the command dial changes among flash sync modes, such as red-eye reduction, or slow sync (which combines flash and a regular exposure to lighten backgrounds). Holding this button and the EV button on the top of the camera while spinning the command dial adds or subtracts from the flash exposure, making your

- flash picture a little lighter or darker, as you prefer.
- Lens release: Press and hold this button to unlock the lens so you can rotate the lens to remove it from the camera.
- ◆ Focus-mode selector: The autofocus/manual (AF/M) lever on the camera body can be flipped to set the focus mode for lenses that don't have such a control on the lens barrel, or for manual focus lenses. Figure 1.3 also shows such a control on the 18-70mm kit lens.



SD media compartment

1.2 Nikon D50 left front side, viewed from the subject's position.

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◆ AC Power/AV Connector/USB Connector covers: On the side of the camera, you'll see a rubber cover that protects the D50's primary external connectors. These include the AC power connector (bottom), which can operate the camera without batteries (for, say, studio work or time-lapse photography). Just above the AC power connector is an AV plug that can link the D50 to an external monitor for viewing pictures or menus. The topmost connector accepts the USB cable, which enables transferring pictures directly from the camera to your computer, and also lets you control the camera's functions using the Nikon Capture software.



1.3 Nikon D50 right-front side, viewed from the subject's position.



**1.4** Pressing the flash multi-button (Flash Exposure Compensation button) pops up the built-in electronic flash, ready for use.

### **On Top**

The top surface of the D50 has its own set of controls, shown in figure 1.5. In addition, a bird's-eye view provides the best perspective of some of the controls on the lens. I've divided these controls into a pair of bitesized color-coded pieces, too, with red assigned to the lens controls, and green to the camera-body controls.



1.5 The top view of the D50 and its kit lens.

You can see the basic controls found on many zoom lenses in figure 1.6. Not all these controls are found on all lenses, and some of them may be in different positions on different lenses (particularly those not produced by Nikon). The key components are

Focus ring: This is the ring to turn when manually focusing the lens. If the autofocus/manual switch (AF/M) on the lens or camera is set to Auto, this ring has no effect. Some lenses allow manual override of the camera's autofocus setting, and are marked with an A-M/M switch instead. By convention, turning the ring toward the right (when looking down on the lens from above) increases the focused distance.



1.6 Key components of a typical zoom lens.

- ◆ Zoom ring: This is the ring turned to change the zoom setting. With many lenses, turning this ring to the right increases the focal length, but you may find that the opposite is true with some lenses (which can be very frustrating!).
- **▼ Zoom scale:** These markings on the lens show the current focal length set.
- Lens hood alignment guide/bayonet: Used to mount the lens hood for lenses that don't use screw-mount hoods.
- Figure 1.7 shows a single focal length, or prime lens, a 105mm Nikkor macro lens used for close-up photography. This particular lens has some features not available on the kit lens, but that are found on some other zoom and non-zoom lenses. Of course, because it doesn't zoom, this lens lacks the zoom ring and zoom scale. Other components include the following:
  - Lens thread: Most lenses have a thread on the front for attaching filters and other add-ons. Some also use this thread for attaching a lens hood (you'd screw on the filter first, and then attach the hood to the screw thread on the front of the filter).

- Distance scale: This is a scale that moves in unison with the lens's focus mechanism (whether activated by manually focusing or by the autofocus system) to show approximately the distance at which the lens has been focused. It's a useful indicator for doublechecking autofocus, and for roughly setting manual focus. Although the 18mm-55mm kit lens doesn't have such a scale, many other lenses do.
- ◆ Limit switch: Lenses with an extensive focus range (such as this macro lens) often have a switch that can be used to limit the range used by the autofocus system. For example, if you're not shooting close-up pictures, you can set the lens to seek focus only at more distant settings, which can save a bit of time.
- **Aperture ring:** The kit lens, as well as many other newer lenses, use the camera's electronics exclusively to set the shooting aperture. These lenses, which include a G suffix in their name, have no aperture ring at all, and are compatible only with cameras that can set the f-stop through a control on the camera. Other lenses maintain compatibility with earlier cameras by including an aperture ring and a pair of aperture readouts (the numbers from f/32 down to f/2.8 in figure 1.7). The second, outermost readout is required by some cameras. These lenses include a D suffix in their name. Both G- and D-type lenses work fine with the Nikon D50 digital camera.

Aperture lock: When using a D-type lens on the D50, you'll need to set the aperture ring to the smallest f-stop, and then lock it in that position using the aperture lock. Set it once and then forget about it, unless you need to mount the lens on an older camera or you've mounted the lens on an accessory such as a bellows or extension ring.

Auto/manual focus switch

Focus ring

Lens thread

Auto/manual focus switch

Auto/manual focus switch

Auto/manual focus switch

1.7 Key components of a typical Type D lens.

Aperture lock

Focus scale

Aperture ring

Limit switch

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The top panel has relatively few controls as shown in figure 1.8. They include:

- Mode dial: This knurled wheel is turned to change from the various exposure and scene modes, discussed later in this chapter.
- Flash accessory shoe: Mount an external electronic flash unit (Nikon calls them Speedlights), such as the Nikon SB-600 or SB-800, on this slide-in shoe. The multiple electrical contacts shown in the photo are used to trigger the flash and to allow the camera and flash to communicate exposure, distance, zoom setting, and other information. You can also attach other flash units made by Nikon and other vendors, but not all functions may operate.
- Monochrome LCD control panel: This LCD readout provides information about the status of your camera and its settings, including exposure mode, number of pictures remaining, battery status, and many other settings.
- ◆ Self-timer/Reset #1 button: Press this button to activate the self-timer or wireless remote control features. This button also can be used to reset the D50's internal settings, if you hold it down simultaneously with the Reset #2 button on the back panel (described in the next section).
- Sensor focal plane: Some specialized kinds of close-up photography require knowing exactly where the plane of the camera sensor is



Monochrome LCD control panel

1.8 Key components on the top panel of the D50.

located. This marker shows that point, although it represents the *plane*, not the actual location of the sensor itself, which is placed aft of the lens.

- ★ Exposure compensation/Aperture button: Hold down this button while spinning the command dial to add or subtract exposure from the basic setting calculated by the D50's autoexposure system or, when using Manual mode, to adjust the aperture.
- Shutter-release button: Partially depress this button to lock in exposure and focus; press it all the way to take the picture. Tapping the shutter release when the camera has turned off the autoexposure and autofocus mechanisms will reactivate both. When a review image is displayed on the backpanel color LCD, tapping this button will remove the image from the display and reactivate the autoexposure and autofocus mechanisms.
- Power switch: Flip this switch to turn the D50 on or off.

#### On the Back

The back panel of the Nikon D50, shown in figure 1.9, is studded with more than a dozen controls, many of which serve more

than one function. Where other cameras may force you to access a menu to set image quality, change the camera's sensitivity, or to activate the self-timer, with the D50, just press the appropriate button, turn the command dial, and make the setting you want. I've divided this crowded back panel into four color-coded sections.



1.9 Key components on the back panel of the D50.

#### **Upper left**

The upper-left corner of the back panel includes just one button — the Shooting mode button. You can hold this button while spinning the command dial to choose from single shot or continuous/burst mode. This button also serves as the Reset #2 button.



**1.10** Key component on the upper-left corner of the back panel of the D50.

#### **Upper right**

There are only a few controls located on the upper-right corner of the D50. They include:

 Viewfinder eyepiece: The rubber eyecup shields the viewfinder from extraneous light, much like a lens hood — a necessary component

- because light entering the viewfinder can affect the exposure meter. The eyecup is removable and can be replaced by a cap to block that extra light when the camera is used on a tripod.
- Diopter correction control: Slide this lever to adjust the diopter correction for your eyesight. The lever is normally hidden behind the eyecup, but you can see it in the inset in figure 1.11.
- ◆ AE/AF (autoexposure/autofocus) lock button: Depending on settings you make in the Setup menu (see Chapter 2), pressing this button will lock exposure, focus setting, or both, either until you release the button or press it a second time.
- Command dial: This dial is spun to change settings such as shutter speed, bracketing, or shooting mode, depending on what function button is being pressed at the same time.



**1.11** Key components on the upper-right corner of the back panel of the D50.

#### **Lower left**

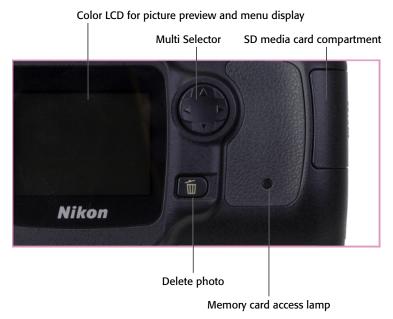
This is the D50's "hot corner," with a collection of the function buttons you'll use the most. They can have multiple functions, so you need to keep your camera's current mode (playback/shooting, and so on) in mind when you attempt to access a specific feature. A more complete description of each button's functions appears later in this chapter. The buttons include:

- Playback button: Enter picture review (playback) mode.
- Menu button: Access the D50's multilevel menu system.
- Sensitivity (ISO)/thumbnail button: In any shooting mode, hold this button and spin the command dial to change ISO. In playback mode, use it to change the number of thumbnails displayed on the LCD.
- White balance/help/protect button: In any shooting mode, hold and spin the command dial to change the white balance. When viewing the Custom Settings menu, press it to view the help screen. In playback mode, press it to lock the current image from accidental erasure.
- Image quality/size (QUAL)/ playback zoom/enter button: Press and spin the command dial to change the image quality. In playback mode, press it to zoom in and out of the reviewed image. When viewing menus, this button serves as an OK key.



Image quality/Size/Playback zoom/Enter

**1.12** Key components on the lower left panel of the D50.



1.13 Key components on the lower-right corner of the back panel of the D50.

#### **Lower right**

A second cluster of controls and components is found in the lower-right corner of the back panel (see figure 1.13):

- LCD: The color LCD displays your images for review and provides access to the menu system.
- Multi selector: Used to navigate menus as well as scroll through photos being reviewed (by pressing the left/right keys), and to change the type of image information displayed (by pressing the up/down keys.)
- Delete button: Erases the currently viewed image during review.
- Memory card access lamp: Blinks when an image is being written to the SD card.

SD card compartment: Your memory card goes here.

# **Viewfinder Display**

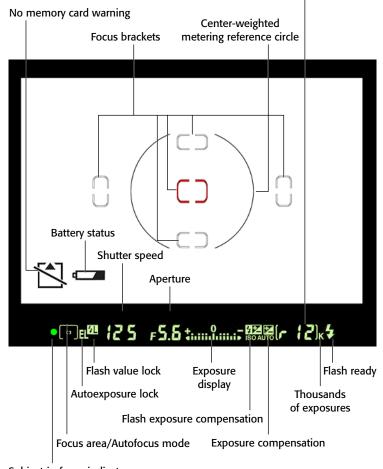
The D50 provides lots of status information in the viewfinder, although not all of it will be visible at one time. Here's the skinny:

- Center-weighted metering reference circle: Shows the 8mm circle that's the default area for centerweighted meter readings.
- Autofocus/spot metering zones:
   Shows the areas used by the D50 to focus and measure exposure.
- No Memory Card Warning:
   Appears when you operate the camera without an SD card installed.

- Battery Status: Flashes when battery power is low.
- In-focus indicator: Illuminates when an image is focused correctly.
- Focus area/autofocus mode:
   Shows the current focus area, and which autofocus mode is in use.
- Autoexposure (AE)/autofocus (AF) lock indicator: Shows that exposure and/or focus have been locked.

- Flash Value lock: Shows when the flash output has been fixed at a particular setting.
- Shutter speed: Selected shutter speed.
- ◆ Aperture: Selected lens opening.
- Exposure display: Shows the amount of over- or underexposure.
- Flash compensation: Shows added or subtracted flash exposure.

Number of shots remaining in buffer/Number of exposures remaining/White balance preset/EV/Flash compensation/PC connection



Subject-in-focus indicator

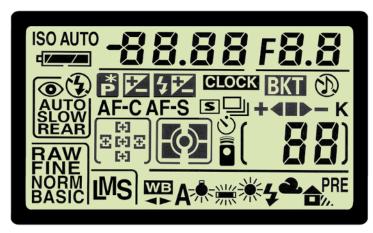
1.14 Viewfinder readouts and indicators.

- Exposure compensation: Shows added or subtracted exposure.
- Shots in buffer/other functions: Multifunction display that shows the number of shots remaining in the buffer when the shutter release is pressed. Also shows white balance preset status, exposure/flash compensation values, and PC/USB connection status.
- Flash ready: Lights when the Speedlight is charged for an exposure.
- ISO automatic indicator: Shows that ISO is being set automatically.
- Thousands of exposures indicator: Shows that the number of remaining exposures indicated exceeds 1,000.

# **LCD Display**

The top-panel monochrome LCD display shows a broad range of current status information. This display is a bit much to bite off in one chunk, so I've color-coded it for you.

- ISO auto: Indicates that ISO sensitivity is being set automatically by the camera.
- Flash sync mode: Shows the current flash synchronization setting.
- Image quality: Shows whether image files are being saved in RAW format, Fine (JPEG), Normal (JPEG), Basic (JPEG), or RAW+Basic.
- Image size: Indicates the current resolution being used, either 6 megapixels, 3.3 megapixels, or 1.5 megapixels, indicated by L (large), M (medium) or S (small) indicators.
- Shutter speed: Current shutter speed setting.
- ◆ Aperture: Current f-stop.
- Flexible program: Shows that program mode is in use and that shutter speed/f-stop combinations can be changed to other equivalent exposures by rotating the command dial.
- EV/Flash EV: Indicates that exposure compensation or flash exposure compensation are being used.



The amount of compensation (for example +0.7) is shown in the shutter speed readout area immediately above these indicators.

- AF-C AF-S indicator: Shows whether continuous or single autofocus is being used.
- Clock battery: Shows that the date/time should be set, or that the permanent built-in clock battery must be replaced by an authorized technician.
- Bracketing: When bracketing is being used, the BKT indicator will

- appear, the EV indicator on the LCD and viewfinder will flash, and the icons under the BKT indicator will disappear as each bracketed picture is taken.
- Beep indicator: Shows whether a beep will sound during certain camera functions, such as selftimer operation or when single autofocus is achieved.
- Thousands of exposures: Appears to show that the number of remaining exposures exceeds 1,000.

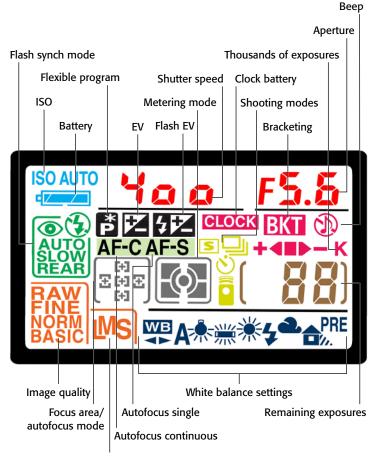


Image size

#### Remaining exposures:

Approximate number of pictures remaining on your memory card.

#### Focus area/autofocus mode: Shows the currently selected focus area and type of autofocus operation in use.

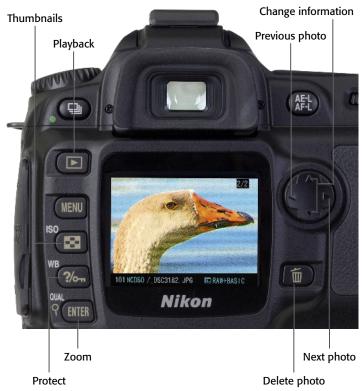
- Metering mode: Indicates current exposure metering mode.
- White balance settings: Shows whether white balance is being set automatically, to one of the built-in settings, or to a manually preset value.

# Viewing and Playing Back Images

The D50's playback mode lets you review your images, delete the bad ones, and decide on exposure or compositional tweaks to improve your following shots.

Follow these steps to review your images:

 Press the playback button to produce the most recently taken photo on the back panel LCD.



1.17 Review your photos using the color LCD.

- Press the thumbnail button repeatedly to cycle among single-picture display, or tiled views that show four or nine reduced-size thumbnails at one time.
  - In single-picture display, the up and down keys on the multi selector move to the next or previous image.
  - When viewing four or nine thumbnails, use the multiselector keys to navigate among the available images. Press the playback button to view a selected image on the LCD in full size.
- 3. Press the playback zoom button to enlarge the viewed image on the screen.
  - Use the multi selector's cursor keys to move the zoomed area around within the enlarged view.
  - Hold down the thumbnail key to view an inset area with a miniature view of the entire image, with the zoomed area highlighted. You can move this highlighted area around with the multi selector's cursor keys.

- Hold down the thumbnail key and spin the command dial to change the size of the zoomed area.
- 4. Press the up and down keys on the multi selector while viewing an image to change the type of information shown with your preview. Your options include:
  - File Information: Shows the image, its filename, frame number, size, quality, folder name, and so on.
  - Shooting Data 1: Gives you a screen with more information, including the info in the basic File Information page, plus camera name, date, time, metering and exposure methods, shutter speed, aperture, lens focal length, flash information, and any EV adjustment you've made.
  - Shooting Data 2: Includes the File Information basics, plus ISO setting, white balance, sharpening, color mode, hue, saturation, and some other data.



1.18 Moving the zoomed area.

- Histogram: Adds to the basics a histogram graph that displays the relationship between the dark and light tones in the image.
- Highlights: The brightest areas of an image are represented with a flashing border so you can easily see any portions that might lack detail because of overexposure.
- Press the protect button to keep the selected image from accidental erasure. The photo can still be removed if the card is reformatted, however.
- 6. Press the delete button to erase the selected image.

### Activating the Onboard Flash

In some scene modes, the built-in electronic flash can be set to pop up automatically when the D50 detects low light levels suitable for flash photography. Or you can manually pop up the flash by pressing the flash button on the left side of the camera. Once the flash is in place, you have the following options:



You'll find more on using flash in Chapter 4.

- If you're using programmed, shutter priority, aperture priority, or manual modes, hold down the flash button and spin the command dial to switch among:
  - Front curtain sync: The flash fires as soon as the shutter opens. Set the shutter speed of

- your choice (generally up to 1/500 second), when using manual or shutter priority modes. In programmed and aperture priority mode, the D50 sets the shutter speed between 1/60 and 1/500 second.
- Red-eye reduction: Triggers the front-panel lamp (also used for focus assist) 1 second prior to exposure to reduce red-eye effect.
- Slow sync: Uses slow shutter speeds (as long as 30 seconds) to add background illumination to the flash exposure. Not available with shutter priority or manual modes.
- Slow sync with red-eye: Adds red-eye reduction to slow sync mode.
- Rear-curtain sync: The flash is delayed until just before the shutter closes. This puts any "ghost" images from the ambient light caused by moving objects to appear behind the flash image.
- Slow rear-curtain sync: Also delays flash until just before the shutter closes, but adds long shutter speeds to add background illumination to the flash exposure. Not available with shutter priority or manual modes.
- If you're using auto, portrait, or close-up modes, hold down the flash button and spin the command dial to switch among:
  - Auto front-curtain sync: Similar to front-curtain sync, but the flash pops up automatically.

- Auto with red-eye: Same as auto front-curtain sync, with red-eye reduction.
- Off: Flash does not fire.
- If you're using the night portrait mode, hold down the flash button and spin the command dial to choose.
  - Auto slow sync: Similar to slow sync, but the flash pops up automatically.



 Auto slow sync with red-eye:

1.19 Flash options.

Same as auto slow sync, but with red-eye reduction.

Off: Flash does not fire.

Tip

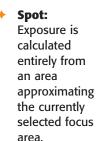
In certain modes, such as Programmed mode, the camera's viewfinder will signal the user with an icon when flash is suggested so that the flash button can be used to raise the flash head.

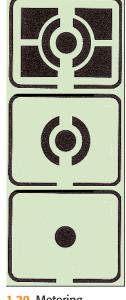
# **Metering Modes**

The D50 can use any of three different exposure metering methods when set to any of the semi-automatic or manual exposure modes (which are discussed later in the chapter). Select the metering mode by pressing the Menu button, choosing the Custom Settings Menu, selecting CSM #13, and scrolling down to Matrix, Centerweighted, or Spot. Press the right cursor key to confirm the setting. Here is more information on the metering modes:

- Matrix: The camera examines 420 pixels in the frame and chooses the exposure based on that information (plus, with Type G and D lenses, distance range data).
- Centerweighted: The camera collects exposure information over the entire frame.

but when making its calculations emphasizes the 8mm center circle (or other size chosen by you) shown in the viewfinder.





1.20 Metering modes.

# **ISO Sensitivity**

The D50 can choose the sensitivity setting (ISO) for you automatically, or you can manually choose a setting. Just follow these steps:

- If the LCD monitor is on, tap the shutter-release button to cancel the display.
- 2. Hold down the ISO button on the back panel.
- 3. Rotate the command dial to choose an ISO setting from ISO 200 to ISO 1600.



ISO and white balance can alternatively be set using the menu system, which is discussed in Chapter 2. You can also find more information on ISO and white balance in Chapter 3.

# **Setting White Balance**

To more closely match the D50's color rendition to the color of the illumination used to expose an image, you can set the white balance. To use a preset value, follow these steps:

- If the LCD monitor is on, tap the shutter-release button to cancel the display.
- 2. Hold down the white balance button on the back panel.
- Rotate the command dial to choose a white balance from among auto, incandescent, fluorescent, direct sunlight, flash, cloudy, shade, and preset.

White balance can also be set using the menu system, where you have additional options for fine-tuning or defining a preset value.



**1.21** White balance options.

# Programmed Exposure Modes

The D50 has seven Digital Vari-Program (DVP), or scene, modes that make some of the setting decisions for you. You can choose these modes from the mode dial. They include:

Full auto: In this exposure mode, the D50's brains take care of most of the settings, based on what kind of shot you've framed in the viewfinder. For example, the camera knows how far away the subject is (from the automatic focus mechanism), the color of the light (which tells the camera whether you're indoors or outdoors), and it can make some pretty good guesses about what kind of subject matter (landscape, portrait, and so forth) from exposure data and other information. After comparing your shot to its 30,000-picture database, the D50 decides on the best settings to use when you press the shutter-release button. Auto is the mode to use when you want one of those fumble-fingered neophytes in your tour group to take your picture in front of the Eiffel Tower. Don't use this mode if you want every picture in a series to be exposed exactly the same. If you change shooting angles or reframe your image, the D50 might match your shot with a different image in its database and produce a slightly different (but still "optimized") look.

- Portrait: In this mode, the D50 assumes you're taking a portrait of a subject (or two) standing relatively close to the camera. So, it automatically focuses on the nearest subject and uses a wider lens opening (which can throw the background out of focus). The camera's built-in sharpening effects are not used, to produce less detailed, but smoother skin tones. Exposure is also set to create smoother tonal gradations that are flattering for your subjects. Flash (if used) is set to reduce red-eye effects. Don't use this mode if your portrait subject is not the closest object to the camera.
- ◆ Landscape: Scenic photos are usually taken of distant objects, but the D50 doesn't lock focus at infinity; it uses the "closest subject" setting, just as with portrait mode. However, it does assume that electronic flash won't be of much help in shooting your vistas, so it locks out the built-in Speedlight. The camera automatically boosts sharpness and color richness to help you capture distant details and the vivid colors of foliage. Don't use this mode if you need to use flash as a fill-in to illuminate shadows in subjects relatively close to the camera who are posing in front of your vistas.
- ◆ Close up: Your D50 makes some adjustments suitable for close-up photos when you choose this mode. For example, the automatic focusing mechanism will concentrate on the center of the frame (because that's where most closeup subjects are located), and not seek sharp focus until you partially depress the shutter-release button.

- ◆ Sports: The D50 switches into a continuous autofocus mode that tries to track moving subjects to keep them in focus. It also uses higher shutter speeds and turns the flash off. Because the D50 figures you don't want to miss a fast-moving shot, the shutter will trip even if focus hasn't been achieved.
- Child: In this mode, the D50 automatically boosts the saturation in bright colors, including the background, while retaining realistic flesh tones. It also selects continuous focus on moving subjects closest to the camera.
- Night portrait: This mode adds flash capability and tries to balance flash exposure with the background illumination using frontcurtain slow synchronization.

## Semiautomatic and Manual Exposure Modes

The Nikon D50 has three semiautomatic exposure modes that allow you to specify shutter speed, aperture, or combinations of the two; and a manual exposure mode that gives you the complete freedom to set shutter speed and aperture. These four exposure modes are also set using the mode dial. Your choices include:

Program: In this mode, the D50 automatically chooses an appropriate shutter speed and f-stop to provide the correct exposure. However, you can override these settings in several ways. In all cases, if your attempted adjustments result in an exposure

beyond the range of the system (that is, you're asking for a shutter speed or f-stop that's not available), either HI or LO will appear in the viewfinder.

- Rotate the command dial to the left to change to a slower shutter speed and smaller f-stop combination that provides the same overall exposure.
- Rotate the command dial to the right to change to a higher shutter speed and larger f-stop combination that provides the same overall exposure.
- Hold down the EV button and rotate the command dial to the left or right to add or subtract exposure from the metered exposure reading.
- Shutter priority: In this exposure mode, you specify the shutter speed with the command dial, and the D50 will select an appropriate f-stop. The HI and LO warnings will appear if you exceed the range of available settings.

- Aperture-priority: In this exposure mode, you specify the f-stop to be used with the command dial, and the D50 will select the shutter speed for you, or display the HI and LO indicators if this isn't possible.
- Manual: You can select both the shutter speed. Hold down the EV/Aperture button while spinning the dial to set aperture. The D50 will still let you know when proper exposure is achieved using the exposure readout in the viewfinder.

Tip

As you work with these exposure modes, keep in mind that each of them may lock you out of making the full range of adjustments of a particular type. For example, when using any DVP/scene mode, you won't be able to adjust the exposure manually using the EV settings. In portrait mode, electronic flash options can be set only to automatic, or red-eye reduction either on or off