Exploring the Nikon D70

CHAPTER 1

If you've taken your first picture or two (or 200!) with your Nikon D70 or Nikon D70s, 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 D70'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 D70's features and controls much more quickly, especially when you're out in the field taking photos.

This chapter does not cover the D70'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 D70's menu setup options in Chapter 2.

In This Chapter

Up Front

The front panel of the Nikon D70 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-quarters-view 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). While this illustration shows the D70, the D70s is identical except for the model number plate.

1.1 The "business end" of the Nikon D70.

The easiest way to hold the D70 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 D70's battery, and also serves as a comfortable handhold for your fingers.
- **Depth of field preview:** This is a small button (see the figure) next to the lens mount. Press and hold the depth of field preview button. The lens stops down to the taking aperture, the view through the finder may dim a little (or a lot), and you can see just how much of the image is in focus.
- **Sub-command dial:** This is a *secondary* control dial used to supplement the main command dial on the back of the D70. It's used when two different, related settings can be made, as in manual exposure mode when the shutter speed is set using the main command dial, and the aperture is adjusted using the sub-command dial. Another example of this use is in setting the white balance (which controls how the D70 reacts to illumination sources of different colors, such as daylight and incandescent light). The main command dial flips among the different light-source types, while the sub-command dial fine-tunes those settings. Although you can "swap" the command dials (turning the sub-command dial into the command dial, and vice versa) using the D70's menus, it's best to leave them in their default configuration to start out.
- **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 red-eye effect.

Note

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.

- **Shutter release:** Canted atop the handgrip are the shutter-release button and power switch.

The other side of the D70 has a few more controls, as shown in figure 1.3. These include the following:

- **Flash multi-button:** Nikon has kept the D70'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

1.2 Nikon D70 left front side, viewed from the subject's position.

spinning the command dial on the back of the camera 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 while spinning the sub-command dial adds or subtracts from the flash exposure, making your flash picture a little lighter or darker, as you prefer.

- **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.
- **Lens release:** Press and hold this button to unlock the lens so you can rotate the lens to remove it from the camera.

1.3 Nikon D70 right-front side, viewed from the subject's position.

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

- **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.
- **AC Power/AV Connector/USB Connector covers:** On the side of the camera, you'll see two rubber covers that protect the D70's primary external connectors. These include the AC power connector, which can operate the camera without batteries (for, say, studio work or time-lapse photography). Just below the AC power connector is an AV plug that can link the D70 to an external monitor for viewing pictures or menus. The bottom-most 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. The Nikon D70s also has a connector for the wired remote control accessory.

On Top

The top surface of the D70 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 bite-sized color-coded pieces, too, with red assigned to the lens controls, and green to the camera-body controls.

1.5 The top of view of the D70 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, such as the kit lens, allow manual override of the camera's autofocus setting, and are marked with an M/A-M switch instead. By convention, turning the ring toward the right (when looking down on the lens from above) increases the focused distance.
- **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 double-checking autofocus, and for roughly setting manual focus.
- **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).
- **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.

1.6 Key components of a typical zoom lens.

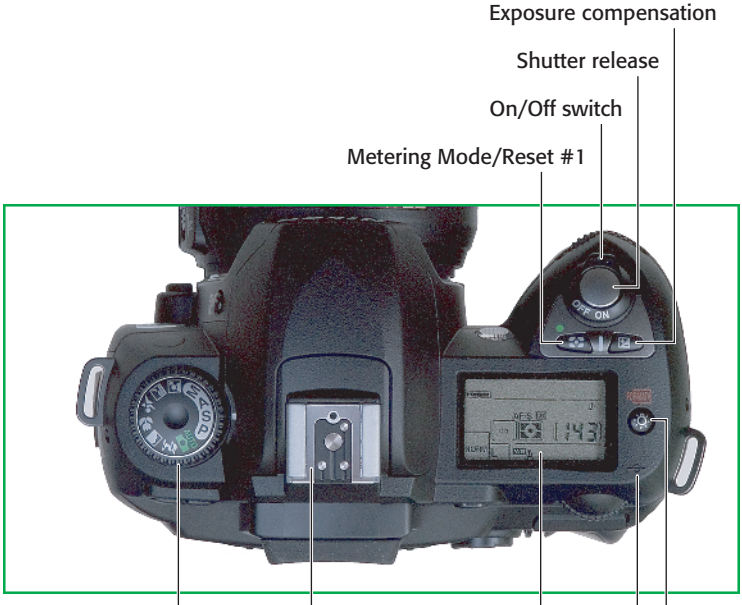
- **Aperture ring:** The kit lens, as well as many other newer lenses, use the camera's electronics exclusively to set the shooting aperture. These lenses, which include a *G* suffix in their name, have no aperture ring at all, and are compatible only with cameras that can set the f-stop through a control 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 D70 digital camera.
- **Aperture lock:** When using a D-type lens on the D70, 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.

The top panel has relatively few controls. 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.

1.7 Key components of a typical Type D lens.

- **LCD Lamp/Format #1 button:** Press this button to backlight the control panel for about 8 seconds when working under illumination that makes it difficult to view the panel's information without a little help. This button also can be used to reformat the D70's digital memory card, if you hold it down simultaneously with the Format #1 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 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.
- **Metering Mode/Reset #1 button:** Press this button while spinning the command dial on the back of the camera to change from matrix to center weighted or spot metering modes (explained later in this chapter). This button also can be used to reset the D70's internal settings to the original factory settings if held down simultaneously with the Reset #2 button (described later in this chapter).
- **Exposure compensation button:** Hold down this button while spinning the command dial to add or subtract exposure from the basic setting calculated by the D70's autoexposure system.



1.8 Key components on the top panel of the D70.

- **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 back-panel 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 D70 on or off.

On the Back

The back panel of the Nikon D70 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 D70, 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 D70.

Upper left

The upper-left corner of the back panel includes just two buttons:

- **Bracketing (BKT) button:** Hold the bracketing button while spinning the main command dial (to select the bracketing function), and the sub-command dial (to choose the type of bracketing to be applied), as described later in this chapter. This button also serves as the Reset #2 button.
- **Shooting mode button:** Hold this button while spinning the main command dial to choose from single shot, continuous/burst mode, self-timer, or remote-control operation. This button also serves as the Format #2 button.

1.10 Key components on the upper-left corner of the back panel of the D70.

Upper right

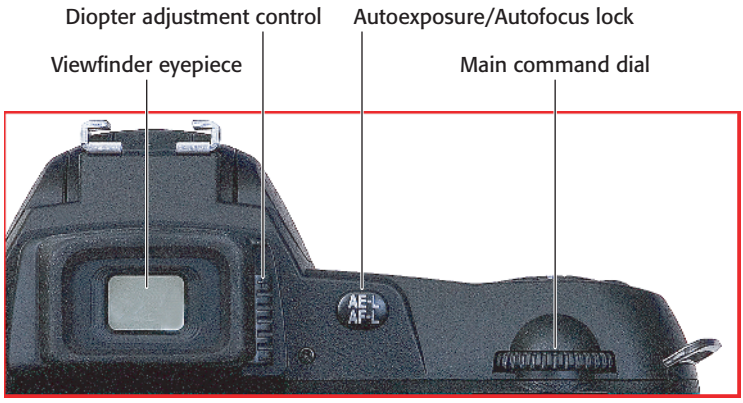
There are only a few controls located on the upper-right corner of the D70. They include:

- **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 adjustment control:** Slide this lever to adjust the diopter correction for your eyesight.
- **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.
- **Main 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.

Lower left

This is the D70'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 D70's multilevel menu system.
- **Sensitivity (ISO)/thumbnail button:** In any shooting mode, hold this button and spin the main command dial to change ISO. In playback mode, use it to change the number of thumbnails displayed on the LCD.



1.11 Key components on the upper-right corner of the back panel of the D70.

- **White balance/help/protect button:** In any shooting mode, hold and spin the main 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.

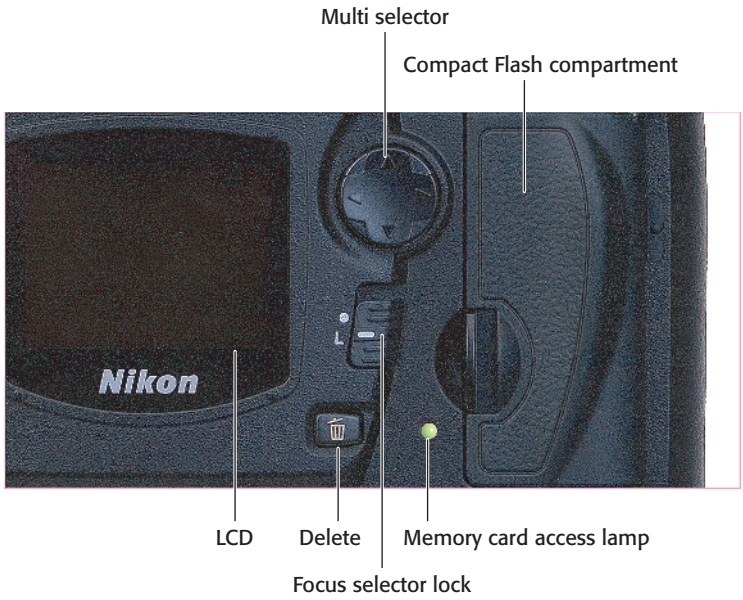
1.12 Key components on the lower left panel of the D70.

- **Image quality/size (QUAL)/ playback zoom/enter button:** Press and spin the main command dial or sub-command dial to change the image quality or picture size. In playback mode, press it to zoom in and out of the reviewed image. When viewing menus, this button services as an OK key.

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 up/down keys), and to change the type of image information displayed (by pressing the left/right keys.)
- **Focus selector lock:** Enables/disables manual focus area selection.
- **Delete button:** Erases the currently viewed image during review.
- **Memory card access lamp:** Blinks when an image is being written to the Compact Flash card.
- **Compact Flash compartment:** Your memory card goes here.



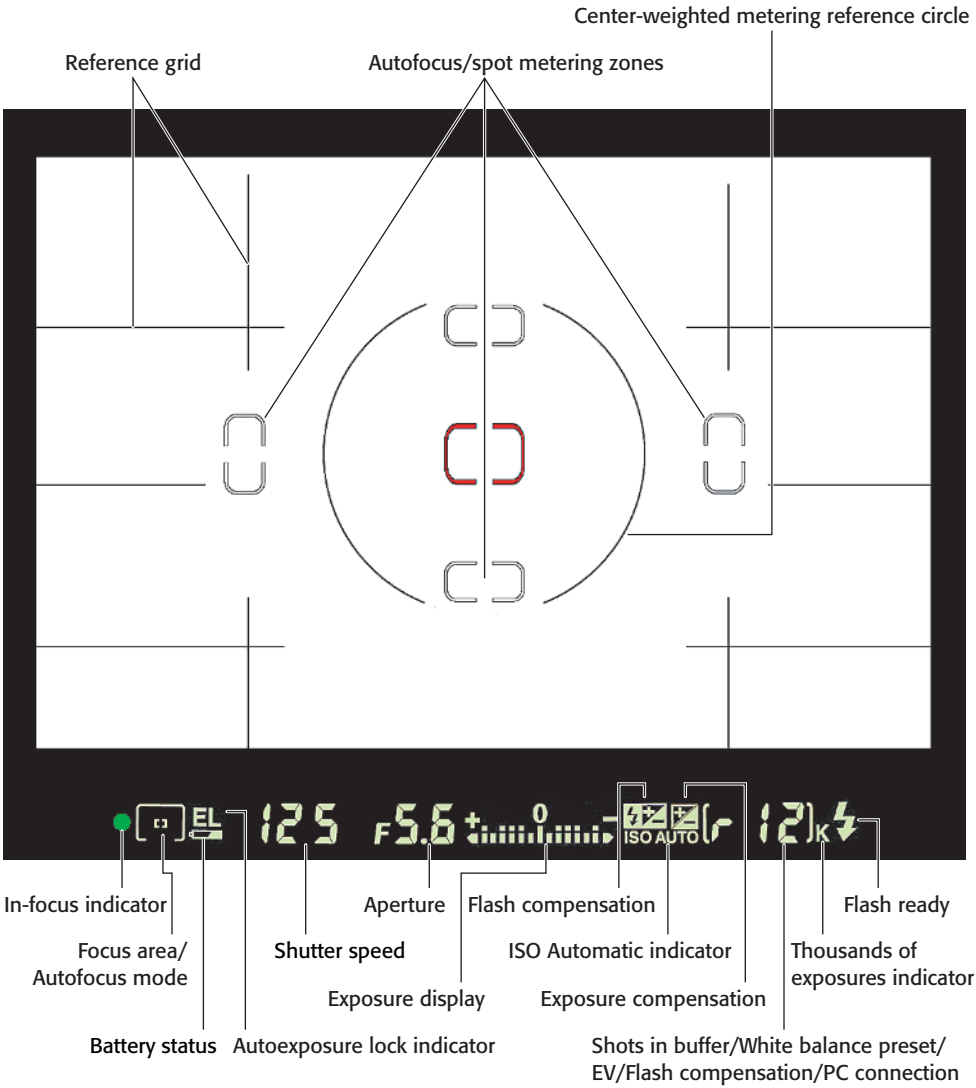
1.13 Key components on the lower-right corner of the back panel of the D70.

Viewfinder Display

The D70 provides lots of status information in the viewfinder, although not all of it will be visible at one time. Here's the skinny:

- **Reference grid:** This optional set of reference lines can be used to align images.
- **Center-weighted metering reference circle:** Shows the 8mm circle that's the default area for center-weighted meter readings. The size of the circle used can be changed in the menu system.
- **Autofocus/spot metering zones:** Shows the areas used by the D70 to focus and measure exposure.
- **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.
- **Battery status:** Current power level of the battery.
- **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.
- **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.

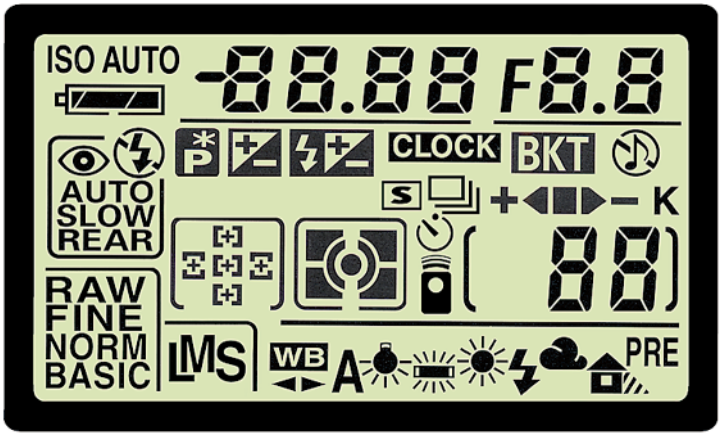


1.14 Viewfinder readouts and indicators.

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 main 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.
- **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 self-timer operation or when single autofocus is achieved.



1.15 Top-panel LCD display readouts and indicators.

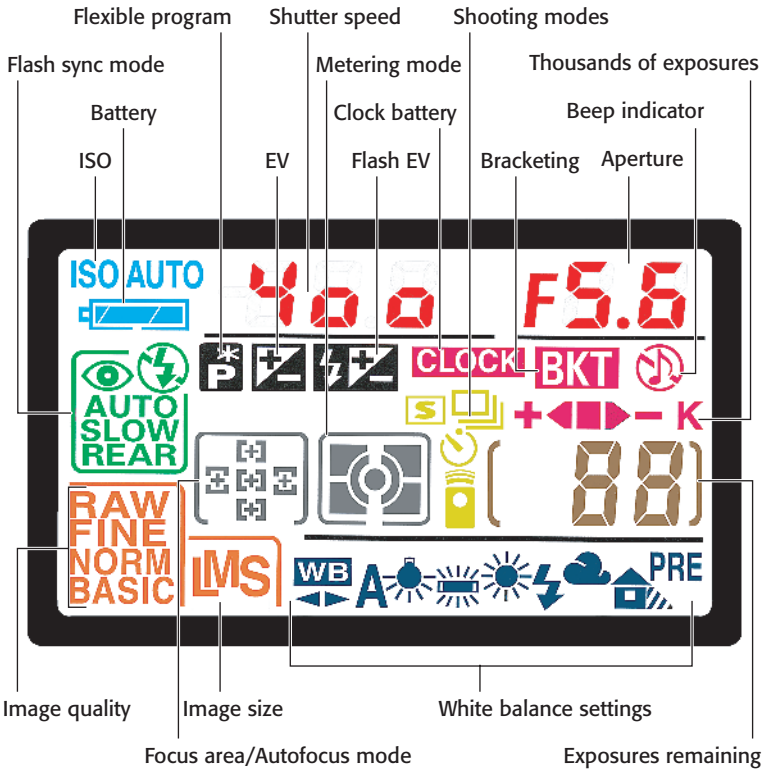
- **Thousands of exposures:** Appears to show that the number of remaining exposures exceeds 1,000.
- **Remaining Exposures:** Approximate number of pictures remaining on your memory card. (With RAW format, this estimate is often about half of the true number of pictures available.)
- **Focus Area/autofocus 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 D70'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:

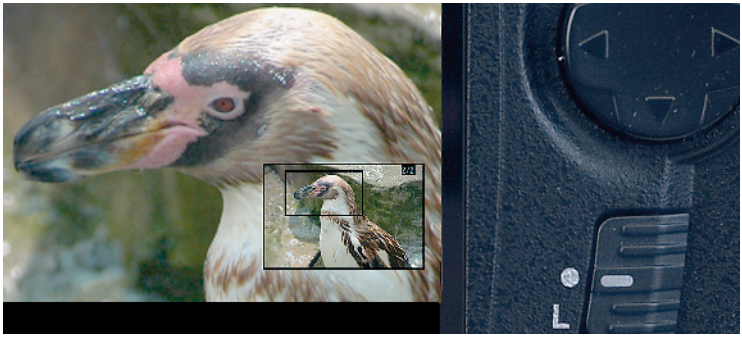
1. **Press the playback button to produce the most recently taken photo on the back panel LCD.**



1.16 Monochrome LCD readouts.

1.17 Review your photos using the color LCD.

2. **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, the up and down keys 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



1.18 Moving the zoomed area.

highlighted area around with the multi selector's cursor keys.

- Hold down the thumbnail key and spin the main command dial to change the size of the zoomed area.

4. **Press the left and right 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.
   - **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.
5. **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 D70 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:

Cross-Reference *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 main 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 D70 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 main 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 main command dial to choose.
  - **Auto slow sync:** Similar to slow sync, but the flash pops up automatically.
  - **Auto slow sync with red-eye:** Same as auto slow sync, but with red-eye reduction.
  - **Off:** Flash does not fire.

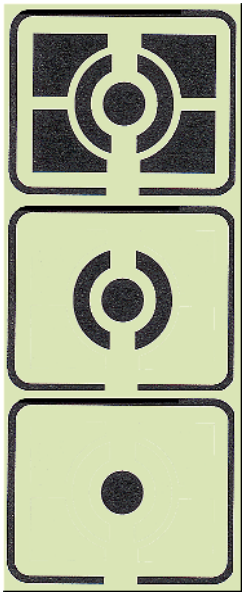
1.19 Flash options.

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 D70 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 holding down the metering mode button and spinning the main command dial until one of these metering modes appears in the monochrome LCD:

- **Matrix:** The camera examines 1,005 pixels in the frame and chooses the exposure based on that information (plus, with Type G and D lenses, distance range data).
- **Center-weighted:** 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.
- **Spot:** Exposure is calculated entirely from an area approximating the currently selected focus area.



1.20 Metering modes.

ISO Sensitivity

The D70 can choose the sensitivity setting (ISO) for you automatically, or you can manually choose a setting. Just follow these steps:

1. **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 main 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 D70'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:

1. **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.**
3. **Rotate the main 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 D70 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 D70'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 D70 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 D70 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 D70 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 D70 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 D70 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 close-up subjects are located), and not seek sharp focus until you partially depress the shutter-release button.
- **Sports:** The D70 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 D70 figures you don't want to miss a fast-moving shot, the shutter will trip even if focus hasn't been achieved.
- **Night landscape:** In this mode, the D70 uses shutter speeds as long as 17 seconds to allow dark backgrounds and shadows to be properly exposed. The flash is turned off.
- **Night portrait:** Similar to night landscape mode, this mode adds flash capability and tries to balance flash exposure with the background illumination using front-curtain slow synchronization.

Semiautomatic and Manual Exposure Modes

The Nikon D70 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 D70 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 main 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 main 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 main 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 main command dial, and the D70 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 sub-command

dial, and the D70 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 and f-stop using the main and sub-command dials. The D70 will still let you know when proper exposure is achieved using the exposure readout in the viewfinder.

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.