Exploring the Nikon D5000

CHAPTER 1

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This chapter covers the key components of the Nikon D5000. These are the features that are most readily accessible because they are situated on the outside of the camera: the buttons, knobs, switches, and dials.

If you are upgrading from another dSLR, some of this will likely be a review, but there are some new features that you may or may not be aware of, so a quick read-through is a good idea even if you are an experienced Nikon dSLR user.

If you are new to the world of dSLRs, this chapter is a great way to get acquainted with some of the terms that are used in conjunction with your new camera.

So fasten your seatbelts, and get ready to explore the D5000!

Key Components of the D5000

If you have or are seriously looking at a camera of the Nikon D5000's caliber, you are probably pretty familiar with the basic buttons and switches that you need to work with the basic settings. In this section, you look at the camera from all sides and break down the layout so that you know what everything on the surface of the camera does.

This section doesn't cover the menus, only the exterior controls. Although there are many features you can access with just the push of a button, oftentimes you can change the same setting inside a menu option. Although the D5000 doesn't have the same number of buttons as some of its siblings in the Nikon line, it does have quite a few of them. Knowing exactly what these buttons do can save you loads of time and help you to not miss out on getting a shot.

Top of the camera

The top of the D5000 is where you find some of the most important buttons and dials. This is where you can change the shooting mode and press the Shutter Release button to take your photo. Also included in this section is a brief description of some of the things you will find on the top of the lens. Although your lens may vary, most of the features are quite similar from lens to lens.

- **Shutter Release button.** In my opinion, this is the most important button on the camera. Halfway pressing this button activates the camera's automatic focusing and light meter. When you fully depress this button, the shutter is released and a photograph is taken. When the camera has been idle and has "gone to sleep," lightly pressing the Shutter Release button wakes up the camera. When the image review is on, lightly pressing the Shutter Release button turns off the LCD and prepares the camera for another shot.
- **On/Off switch.** This switch, which is concentric to the Shutter Release button, is used to turn the camera on and off. Push the switch all the way to the left to turn off the camera. Pull the switch to the right to turn your camera on.
- **Mode dial.** This is an important dial; rotating it allows you to quickly change your shooting mode. You can choose one of the Scene modes or one of the semi-automatic modes, or you can choose to set the exposure manually. For a detailed description of all of the exposure modes, see Chapter 2.
- **Exposure Compensation/Aperture button.** Pressing this button in conjunction with rotating the Command dial allows you to modify the exposure that is set by the D5000's light meter or the exposure you set in Manual Exposure mode. Turning the Command dial to the right decreases the exposure, while turning the dial to the left increases the exposure. This button also doubles as the Aperture button when the camera is set to Manual Exposure mode. Pressing the button while rotating the Command dial allows you to adjust your lens aperture. Additionally, when pressing this button in conjunction with the flash mode, you can adjust your Flash Exposure Compensation (FEC) by rotating the Command dial.
- **Info button.** Pressing this button displays the Information Display on the LCD. This button also doubles as a reset button when pressed and held for 2 seconds in conjunction with the Info button on the back of the camera.
- **Focal plane mark.** The focal plane mark shows you where the plane of the image sensor is inside the camera. The sensor isn't exactly where the mark is; the sensor is directly behind the lens opening. This can be useful in determining the exact distance from the subject to the camera. Also, when doing certain types of photography, particularly macro photography using a bellows lens, you need to measure the length of the bellows from the front element of the lens to the focal plane. This is where the focal plane mark comes in handy.

Image courtesy of Nikon Inc.

1.1 Top of the camera controls.

- **Hot shoe.** This is where an accessory flash is attached to the camera body. The hot shoe has an electronic contact that tells the flash to fire when the shutter is released. There are also a number of other electronic contacts that allow the camera to communicate with the flash to enable the automated features of a dedicated flash unit such as the SB-600.
- **Focus ring.** Rotating the focus ring enables you to manually focus the camera. With some lenses, such as the high-end Nikkor AF-S lenses, you can manually adjust the focus at any time. On other lenses, typically older and non-Nikon lenses, you must switch the lens to manual focus to disable the focusing mechanism. With the kit lens, you must switch to manual focus. Rotating the focus ring while the lens is set to autofocus can damage your lens.
- **Zoom ring.** Rotating the zoom ring allows you to change the focal length of the lens. Prime lenses do not have a zoom ring.
- **Focal length indicators.** These numbers indicate which focal length in millimeters your lens is zoomed to.

Cross-Reference *For more information on lenses, see Chapter 5.*

Back of the camera

The back of the camera is where you find the buttons that mainly control playback and menu options, although there are a few buttons that control some of the shooting functions. Most of the buttons have more than one function — a lot of them are used in conjunction with the main Command dial or the multi selector. On the back of the camera, you also find several key features, including the all-important viewfinder and LCD.

- **Vari-angle LCD.** This is the most obvious feature on the back of the camera. This 2.7-inch, 230,000-dot liquid crystal display (LCD) is a very bright, high-resolution screen. The LCD is where you view all of your current camera settings, as well as review your images after shooting. New to the D5000, the LCD is articulated so that you can move it into many different positions in order to make taking pictures easier in awkward circumstances. The monitor can fold down perpendicular to the back of the camera, and can be rotated 180 degrees to the left and 90 degrees to the right.
- **Viewfinder.** This is what you look through to compose your photographs. Light coming through the lens is reflected through a series of mirrors (called a pentamirror), enabling you to see exactly what you're shooting (as opposed to a rangefinder camera, which gives you an approximate view).

  Around the viewfinder is a rubber eyepiece that serves to give you a softer place to rest your eye and to block any extra light from entering the viewfinder as you compose and shoot your images.
- **Diopter adjustment control.** Just to the right of the viewfinder is the Diopter adjustment control. Use this control to adjust the viewfinder lens to suit your individual vision differences (not everyone's eyesight is the same). To adjust this, look through the viewfinder, and press the Shutter Release button halfway to focus on something.

Image courtesy of Nikon Inc.

1.2 Vari-angle LCD.

If what you see in the viewfinder isn't quite sharp, slide the Diopter adjustment control up or down until everything appears in focus.

✦ **AE-L/AF-L lock/Protect button.** The Auto-Exposure/Auto-Focus lock button is used to lock the Auto-Exposure (AE) and Auto-Focus (AF). You can also customize the button to lock only the AE or only the AF, or you can set the button to initiate AF (CSM-12). When in Playback mode, this button can be pressed to lock an image to protect it from being deleted. A small key icon displays in the upper-left corner of images that are protected.

- **Command dial.** This dial is used to change a variety of settings, depending on which button you are using in conjunction with it. By default, it is used to change the shutter speed when in Shutter Priority and Manual modes, or the aperture when in Aperture Priority mode. It is also used to adjust exposure compensation and change the flash mode.
- **Multi selector button.** The multi selector is another button that serves a few different purposes. In Playback mode, the multi selector is used to scroll through the photographs you've taken, and it can also be used to view image information such as histograms and shooting settings. When in certain shooting modes (P, S, A, or M and certain Advanced Scene Modes), the multi selector can be used to change the active focus point. This is only when the mode allows or you set Single point or Dynamic area AF mode.

Note

The active focus point cannot be changed when in Auto AF mode or Portrait, Child portrait, and Night portrait Advanced Scene Modes.

- **OK button.** When in the Menu mode, press this button to select the menu item that is highlighted.
- **Live View button.** Pressing this button initiates the Live view function; pressing the OK button while in Live view starts video recording.
- **Speaker.** The speaker is used to play back sound when reviewing video footage.
- **Memory card access lamp.** When the light is lit or blinking, the camera is writing data to the SD card. Under no circumstances should you attempt to remove the SD card while data is being written. This causes you to lose images, possibly damaging the card and/or camera as well.
- **Delete button.** When reviewing your pictures, if you find some that you don't want to keep, you can delete them by pressing this button marked with a trash can icon. To prevent accidental deletion of images, the camera displays a dialog box asking you to confirm that you want to erase the picture. Press the Delete button a second time to permanently erase the image.
- **Playback button.** Pressing this button displays the most recently taken photograph. You can also view other pictures by pressing the multi selector left and right.
- **Menu button.** Press this button to access the D5000 menu options. There are a number of different menus, including Playback, Shooting, Custom Settings, and Retouch. Use the multi selector to choose the menu you want to view.
- **Thumbnail/Zoom Out/Help button.** In Playback mode, pressing this button allows you to go from full-frame playback (or viewing the whole image) to viewing thumbnails. The thumbnails can be displayed either four or nine images on a page. When viewing the menu options, pressing this button displays a help screen that explains the functions of a particular menu option. When in shooting mode, pressing this button explains the functions of that particular mode.
- **Zoom In button/Info Display/Quick Settings button.** When reviewing your images, you can

press the Zoom In button to get a closer look at the details. This is a handy feature for checking the sharpness and focus of your shot. When zoomed in, use the multi selector to navigate around within the image. To view other images at the same zoom ratio, you can rotate the Command dial. To return to full-frame playback, press the Zoom Out button. You may have to press the Zoom Out button multiple times, depending on how much you have zoomed in.

- **Info button.** Pressing this button displays the shooting information. When the shooting information is displayed, pressing this button gives access to the Quick Settings menu. When in the Quick Settings menu, use the multi selector to highlight the desired setting, then press OK to access the options.

Cross-Reference *For more detailed information on the Quick Settings menu, see Chapter 3.*

Image courtesy of Nikon Inc.

1.3 Back of the camera controls.

Front of the camera

The front of the D5000 (lens facing you) is where you find the buttons to quickly adjust the flash settings as well as some camera focusing options; with certain lenses, you also find some buttons that control focusing and Vibration Reduction (VR).

Image courtesy of Nikon Inc.

1.4 Front camera controls.

- **Built-in flash.** This option is a handy feature that allows you to take sharp pictures in low-light situations. Although not as versatile as one of the external Nikon Speedlights such as the SB-900, SB-800 or SB-600, the built-in flash can be used very effectively and is great for snapshots.

Cross-Reference *For more on using flash, see Chapter 6.*

- **Microphone.** The microphone records sound as video is recorded.
- **Flash Pop-up/Flash mode/Flash Exposure Compensation button.** Press this button to open and activate the built-in Speedlight. Pressing this button and rotating the Command dial on the rear of the camera allows you to choose a flash mode. You can choose from among Front-curtain sync, Red-eye reduction, Red-eye reduction with slow sync, Slow sync, and Rear curtain sync.

  Once the flash is popped up, pressing this button in conjunction with the Exposure Compensation button and rotating the Command dial allows you to adjust the Flash Exposure Compensation (FEC). The FEC allows you to adjust the flash output to make the flash brighter or dimmer, depending on your needs.
- **Self-timer/Fn (function) button.** By default, pressing this button activates the camera's self-timer. When the self-timer is on, the camera delays the shutter release to allow you to get into the picture, or to reduce vibration caused by shaking the camera when pressing the Shutter Release button while the

camera is attached to a tripod. This button can also be set to provide other functions.

You can set the button to quickly change the release mode, image quality, ISO sensitivity, or white balance through the Quick Settings menu. Pressing the Fn button and rotating the Command dial changes the settings. The Fn button can be assigned to the specific function in CSM f1.

Cross-Reference

For more information on the Custom Settings menu (CSM), see Chapter 3.

- **Lens Release button.** This button disengages the locking mechanism of the lens, allowing the lens to be rotated and removed from the lens mount.
- **Auto focus/Manual focus switch.** This switch is used to choose between using the lens in Auto or Manual Focus mode.
- **Vibration Reduction (VR) switch.** This allows you to turn the Vibration Reduction (VR) on or off. When shooting in bright light, it's best to turn the VR off to reduce battery consumption.
- **AF-assist illuminator.** This is an LED that shines on the subject to help the camera to focus when the lighting is dim. The AF-assist illuminator only lights when in Single Focus mode (AF-S) or Automatic Focus mode (AF-A).
- **Infrared receiver.** This allows you to wirelessly control the camera shutter release using the optional ML-L3 infrared transmitter.

Sides and bottom of the camera

The sides and bottom of the camera have places for connecting and inserting things such as cables, batteries, and memory cards.

Right side

On the right side of the camera (lens facing you) are the D5000's output terminals. These are used to connect your camera to a computer or to an external source for viewing your images directly from the camera. These terminals are hidden under a plastic cover that helps keep out dust and moisture.

- **Accessory terminal.** This port is used to connect accessories to the D5000. At present, this port accepts the Nikon GP-1 GPS unit and Nikon's cable release, the MC-DC2.
- **USB port.** This is where the USB cable plugs in to attach the camera to your computer to transfer images straight from the camera. The USB cable is also used to connect the camera to the computer when using Nikon's optional Camera Control Pro 2 software, as well as to connect to a printer for direct printing. Using the supplied EG-CP-14 A/V cable, you can also connect the D5000 to a standard TV.
- **HDMI Video out.** This connection allows you to connect your D5000 to an HDTV or monitor using an HDMI cable that can be purchased separately from an electronics store.

Image courtesy of Nikon Inc.
1.5 The D5000's output terminals.

Left side

On the left side of the camera (lens facing you) is the memory card slot cover. Sliding this door towards the back of the camera opens it so that you can insert or remove your memory card.

Bottom

The bottom of the camera has a couple of features that are quite important.

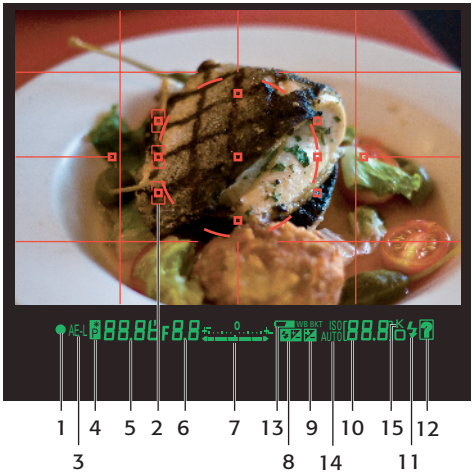
- **Battery chamber cover.** This covers the chamber that holds the EN-EL9a battery that is supplied with your D5000.
- **Tripod socket.** This is where you attach a tripod or monopod to help steady your camera.

Viewfinder Display

When looking through the viewfinder, you see a lot of useful information about the photo you are setting up. Most of the information is also displayed in the control panel LCD screen on the top of the camera, but it is less handy on top when you are composing a shot.

Here is a complete list of all the information you get from the viewfinder display:

1. **Focus indicator.** This is a green dot that lets you know if the camera detects that the scene is in focus. When focus is achieved, the green dot lights up; if the camera is not in focus, no dot is displayed. When the camera is attempting to focus, the green dot blinks.
2. **Focus point display.** This shows you which AF point(s) is chosen by showing it with a bracket around it. When set to closest subject, no AF point is chosen.
3. **AE lock.** When this is lit, you know that the Auto-Exposure is locked.
4. **Flexible Program indicator.** When this is lit, it lets you know that the exposure has been modified from the original settings defined when using the Programmed Auto Exposure mode. To return to the default settings, rotate the Command dial until this indicator disappears, or turn the camera off.



1.6 Viewfinder display.

5. **Shutter speed display/Noise Reduction indicator.** This shows how long your shutter is set to stay open. When the camera is performing Noise Reduction, *job nr* is displayed here.

6. **Aperture/f-stop display.** This shows your current lens opening setting.

7. **Electronic analog exposure display/Exposure Compensation/Rangefinder.** Although Nikon gives this feature a long and confusing name, in simpler terms, this is your light meter. When the bars are in the center, you are at the proper settings to get a good exposure; when the bars are to the left, you are overexposed; and when the bars are to the right, you are underexposing your image. This feature is especially handy when using manual exposure. When the Exposure Compensation button is pressed, this indicates how much over- or under-exposure is being set. When the Rangefinder option is turned on (CSM a4), this shows you a bar graph that indicates distance. When the subject is in focus, there is one bar on either side of a 0. When the bars are displayed to the left, this indicates that you are focused in front of the subject; bars to the right indicate that the focus is falling behind the subject. Use the focus ring to adjust the focus. The Rangefinder display is not available when shooting in Manual mode.

8. **FEC indicator.** When this is displayed, your Flash Exposure Compensation is on.

9. **Exposure Compensation indicator.** When this appears in the viewfinder, your camera has Exposure Compensation activated.

10. **Remaining exposures.** This set of numbers lets you know how many more exposures can fit on the memory card. The actual number of exposures may vary according to file information and compression. When the Shutter Release button is half-pressed, the display changes to show how many exposures can fit in the camera's *buffer* before the buffer is full and the frame rate slows down. The buffer is in-camera RAM that stores your image data while the data is being written to the memory card. This area also indicates that the WB is ready to be set by flashing "PRE"; it displays the amount of exposure compensation and FEC when the Exposure Compensation button is pressed; it tells you whether the Active D-Lighting is on or off when the ADL button is pressed; and it also indicates when your camera is attached to a computer.

11. **Flash ready indicator.** When this is displayed, the flash — whether it is the built-in flash or an external Speedlight attached to the hot shoe — is fully charged and ready to fire at full power.
12. **Warning indicator.** When this question mark icon is flashing, the camera is warning you that there may be a problem with your settings. Press the Help button to view the warning.
13. **Battery indicator.** This shows up when the battery is low. When the battery is completely exhausted, this icon blinks and the shutter release is disabled.
14. **Auto ISO indicator.** This is displayed when the Automatic ISO setting is activated, to let you know that the camera is controlling the ISO settings.
15. **K.** This lets you know that there are more than 1,000 exposures remaining on your memory card.

Information Display

The Information Display (also referred to as Shooting Info Display) shows some of the same shooting information that appears in the viewfinder, but there are also some settings that are only displayed here. When this is displayed on the LCD, you can view and change the settings without looking through the viewfinder.

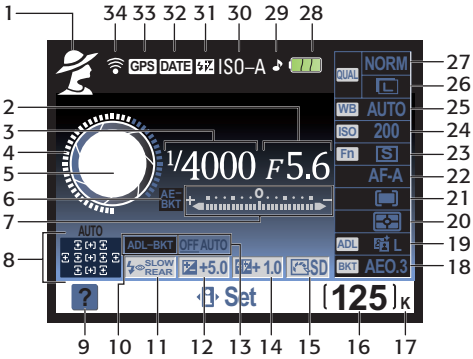
When the camera is turned on, the Information Display is automatically displayed on the LCD monitor. The information remains on display until no buttons have been pushed for about 8 seconds or the Shutter Release button is pressed.

This display shows you everything you need to know about your camera settings. Additionally, the camera has a built-in sensor that tells it when the camera is being held vertically, and the shooting information is displayed upright, regardless of which way you are holding your camera.

The camera also offers a number of options on how the information is displayed. You can choose between Classic and Graphic, and you can also change the color of the Shooting Info Display. You can also choose a different display for the Advanced Scene modes and P, S, A, and M modes. These settings can be accessed in the Setup menu under the Info display format heading.

Cross-Reference *For more information on the Setup menu, see Chapter 3.*

1. **Shooting mode.** This displays the shooting mode that your camera is currently set to. This can be one of the DVP modes, in which case either the appropriate icon or one of the Semi-auto modes (such as P, S, A, or M) appears, in which case the display shows the corresponding letter. This display changes when the mode dial is rotated.
2. **Aperture/f-stop number.** This tells you how wide your aperture or lens opening is. The terms *aperture* and *f-stop* are interchangeable. Higher f/numbers denote smaller openings, while lower f/numbers mean that the opening is wider, letting in more light.
3. **Shutter speed.** This shows, in seconds or fractions of seconds, how long your shutter will stay open when the Shutter Release button is pressed.



1.7 LCD display wide (landscape) orientation.

4. **Shutter speed display.** When set to Graphic mode, this gives you a visual idea about the length of your shutter speed.

5. **Aperture display.** When set to Graphic mode, this shows you approximately what your lens opening looks like.

6. **Bracketing indicator.** When this icon is shown, auto-bracketing is turned on.

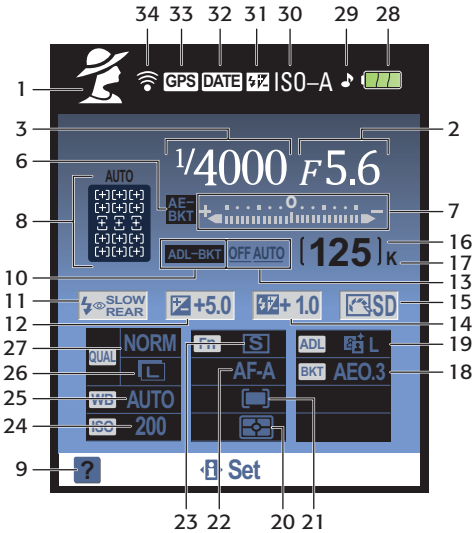
7. **Electronic analog exposure display/Exposure Compensation/Bracketing progress indicator.** This is your light meter. When the bars are in the center, you are at the proper settings to get a good exposure; when the bars are to the left, you are underexposed; when the bars are to the right, you are overexposing your image. This is only displayed when using Manual exposure. When you apply exposure compensation, the bars indicate how much exposure compensation is applied. When bracketing is turned on, this shows where you are at in the bracketing sequence.

8. **Autofocus (AF) indicators.** This area shows you which AF-area mode is in use, as well as which focus point is selected (unless Auto-area is selected).

9. **Help indicator.** When this icon is flashing, there may be a problem with one of your settings. Pressing the Help/Zoom Out button displays information on rectifying the problem.

10. **Active D-Lighting Bracketing indicator.** When Auto-bracketing is set to AD-L and turned on, this icon is shown.

11. **Flash sync mode.** This shows which mode your flash is set to. You can change the flash mode by pressing the flash button and rotating the Command dial.



1.8 LCD display tall (portrait) orientation.

12. **Exposure compensation value.** This shows the amount of exposure compensation, if any, that has been set. Exposure compensation is used to increase or decrease the amount of exposure to fine-tune your image.

13. **AD-L Bracketing.** This icon is displayed when auto bracketing is turned on and set to AD-L.

14. **Flash Exposure Compensation.** This shows you the amount, if any, of Flash Exposure Compensation (FEC). FEC is used to make the flash more or less bright. FEC is set by simultaneously pressing the Flash Mode button and Exposure Compensation button, and rotating the Command dial.

15. **Picture Control.** This indicates which Picture Control setting is being used. Picture Controls can be changed in the Quick Settings menu or Shooting menu.

16. **Number of remaining exposures.** This shows you approximately how many exposures can be saved to your memory card. When the Preset White Balance is ready to be set, this blinks "PRE." When the camera is attached to the computer using Camera Control Pro 2, "PC" appears here.

17. **K.** This icon appears when you have more than 1,000 exposures remaining on your memory card.

18. **Bracketing increment.** This shows the EV increments for the auto bracketing feature.

19. **Active D-Lighting indicator.** This shows which setting you have Active D-Lighting set to, or whether it is on or off. Active D-Lighting can be set in the Quick Settings menu.

20. **Metering mode.** This displays which metering mode your camera is set to: Dynamic, Center-weighted, or Spot.

21. **AF-area mode.** This tells you which AF-area mode is selected: Auto-area, Dynamic area, or Single point.

22. **Focus mode.** This tells you which focus mode your camera is set to: AF-A (Automatic), AF-C (Continuous), AF-S (Single), or MF (Manual Focus).

23. **Release mode.** This lets you know what release mode your camera is set to: Single Frame, Continuous, Self-Timer, Delayed Remote, Quick Response Remote, or Quiet Release mode.

24. **ISO sensitivity.** This tells you what your current ISO setting is.

25. **White Balance.** This displays which White Balance setting you are currently using.

26. **Image size.** This tells you the size of the image you are recording.

27. **Image Quality.** This shows the quality or compression of the JPEG, or it shows that you are recording a RAW image.

28. **Battery indicator.** This shows you the remaining charge on your battery.

29. **Beep indicator.** This tells you whether you have the camera set to beep when focus is achieved.

30. **ISO Auto indicator.** When this is shown (ISO-A), the camera is set to Auto ISO.

31. **Manual Flash indicator.** When this is displayed, the built-in flash is set to Manual mode; if a Speedlight such as an SB-400 is attached, this indicates that FEC is applied.

32. **Date imprint indicator.** This is shown when the optional date imprint function is applied. This function prints the date at the bottom of the image as it's being recorded.

33. **GPS.** This is displayed when an optional GPS unit is connected to the camera through the accessory terminal.

34. **Eye-Fi.** This is only displayed when an optional Eye-Fi SD card is being used.