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Introduction

Before You Begin

Overview 2–3

Getting to Know the COOLPIX5000 4–19

Menu Guide 20–30

This chapter is divided into the following sections:

Overview
Read this section for a description of how this manual is organized and for an explanation of the symbols and conventions used.

Getting to Know the COOLPIX5000
Bookmark this section and refer to it as you read through the manual for information on the names and functions of camera parts.

Menu Guide
Refer to this section for instructions on using the menus that control some aspects of camera operation. This section also contains an index of menu options.

Thank you for your purchase of a COOLPIX5000 digital camera. This manual has been written to help you enjoy taking digital photographs with your COOLPIX5000. As you read through it, you will find explanations not only of how the camera works but also of why certain features have been included, and how they may be used to take photographs in many different situations.

The Introduction (this section) introduces the symbols and conventions used in this manual and provides a quick overview of camera parts and menus that can be referred to later as you read through the remainder of the manual.

The Introduction is followed by a "Tutorial" that gives you enough information for simple "point-and-shoot" photography when you first start using your camera. This section may be all you need to read if you want to take advantage of the simplicity and immediacy of digital photography.

Once you have taken a few photographs, "Where Do I Go from Here" outlines how to send copies to your friends and relatives by e-mail, and how to order prints using digital "print orders" that you create with the camera. It also provides some tips on how to take photographs for electronic distribution and for printing on a personal color printer.

For detailed information on taking pictures with your Nikon digital camera, refer to "Taking Photographs: The Details," which provides a complete description of when and how to use camera controls and advanced custom shooting options. Information on organizing your photographs into folders and on camera setup is available in "Camera Setup: The SET-UP Menu," while "Playing Images Back" details the options available in the camera's dedicated playback mode. Instructions for transferring images from your camera to a computer are given in "Connections." The final chapter, "Technical Notes," includes information on caring for your camera, optional accessories, and troubleshooting.

To make it easier to find the information you need, the following symbols and conventions are used:

This icon marks cautions, information that you should read before use to prevent damage to your camera.

This icon marks tips, additional information you may find helpful when using your camera.

This icon marks notes, information that you should read before using your camera.

This icon indicates that more information is available elsewhere in this manual.

Life-Long Learning

As part of Nikon's "Life-Long Learning" commitment to ongoing product support and education, continually-updated information is available on-line at the following sites:

- For users in the U.S.A.: *http://www.nikonusa.com/*
- For users in Europe: *http://www.nikon-euro.com/*
- For users in Asia, Oceania, the Middle East, and Africa: *http://www.nikon-asia.com/*

Visit these sites to keep up-to-date with the latest product information, tips, answers to frequently-asked questions (FAQs), and general advice on digital imaging and photography. Additional information may be available from the Nikon representative in your area. See the URL below for contact information:
http://www.nikon-image.com/eng/

This section lists some of the more notable features of your COOLPIX5000 and introduces camera controls and displays.

Principal Features

Your COOLPIX5000 boasts:

- An effective pixel count of 5.0 million for photographs up to 2,560 × 1,920 pixels in size, large enough for photo-quality prints in sizes up to A3 (11″ × 14″).
- Short shutter-release time lag, quick camera startup, quick autofocus, and quick zoom, which help to ensure that the camera will react fast enough to make the most of even the most fleeting opportunity.
- Shutter speeds as fast as $^{1}/_{4000}$ s.
- An advanced image-processing algorithm capable of capturing fine details and brilliant colors.
- Noise-reduction for long time-exposures, with a clear-image mode for reduced noise and smoother color gradations at sizes of 1,280 × 960 pixels or less.
- A 3 × Zoom-Nikkor lens with three aspherical lens elements and a focal range of 7.1–21.4 mm (equivalent to 28–85 mm in 35-mm [135] format). Large-diameter aspherical lens reduces image distortion to a bare minimum.
- An adjustable monitor that folds out and swivels to allow photographs to be framed with the camera held at arms length, or folds back onto the camera body to make a compact package. The monitor can even be swivelled to point in the same direction as the lens for a quick self-portrait.
- A microphone and speaker for recording and playback of up to sixty seconds of video footage with sound.

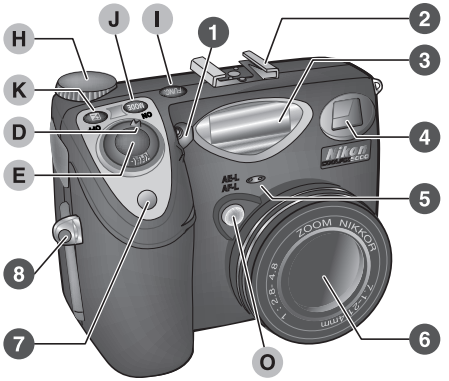
In addition, the COOLPIX5000 is compatible with a wide variety of optional accessories that will expand your photographic horizons. Options available for the COOLPIX5000 include:

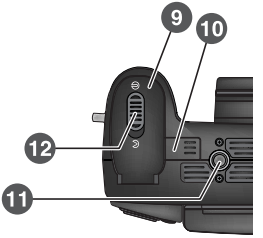
- **MB-E5000 battery pack (35)**
  The MB-E5000 battery pack can be used to power the camera for extended periods. The MB-E5000 takes six ordinary LR-6 (AA) batteries and is equipped with its own shutter release and zoom buttons for taking photographs in portrait orientation.
- **External Speedlights and flash accessories (192)**
  The camera is equipped with an accessory shoe that allows direct attachment of most Nikon Speedlights. An optional sync cable attached to the shoe can be used for off-camera flash photography.
- **Converter lenses (191)**
  A variety of converter lenses are available for telephoto, wide-angle and fisheye photography, including the WC-E68 wide-angle converter, which boasts a focal length equivalent to 19 mm in 35-mm (135) format.

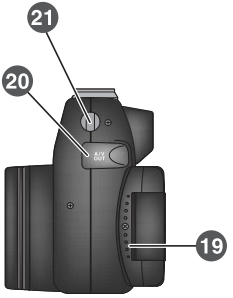
Where to Find It—Parts of the COOLPIX5000

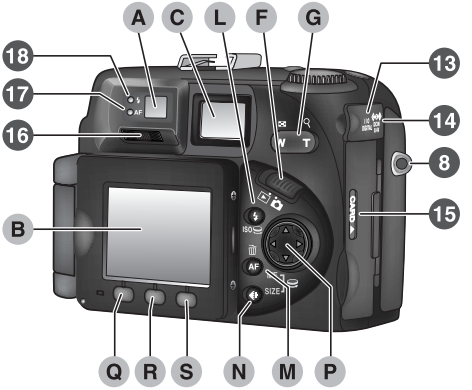
Take a few moments to familiarize yourself with camera controls and displays. You may find it helpful to bookmark this section and refer to it as you read through the rest of the manual.

The parts of the camera are identified below. For more information on the function of each part, refer to the page numbers listed.







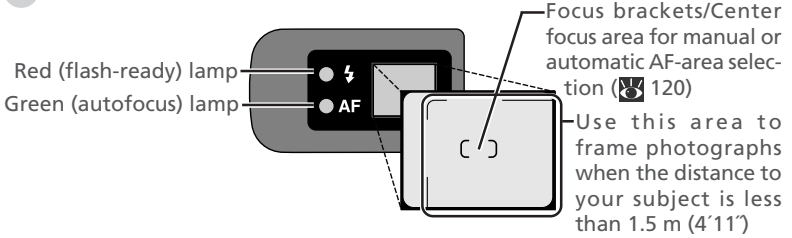


1 Photocell 51
2 Accessory shoe 192
3 Built-in Speedlight 82
4 Viewfinder window 8
5 Microphone 109
6 Lens 33, 191
7 Self-timer lamp 80
8 Eyelet for camera strap 33
9 Battery-chamber cover 34
10 Coupling contacts for MB-E5000 battery pack 35
11 Tripod socket
12 Battery-chamber cover latch . 34
13 USB connector (under cover) 182
14 DC-IN connector (under cover) 191
15 Memory card-slot cover 36
16 Diopter adjustment slider 47
17 Green (autofocus) lamp 8
18 Red (flash-ready) lamp 8
19 Speaker 164
20 Audio/video (A/V) out connector (under cover) 178
21 Eyelet for camera strap 33

A Viewfinder 8
B Monitor 9
C Control panel 11
D Power switch 12
E Shutter-release button 12
F Mode selector 12
G Zoom button 13
H Command dial 13
I FUNC. button 15
J MODE button 15
K button 15
L /ISO button 16
M AF/MF/ button 16
N /SIZE button 17
O AE/AF lock button 17
P Multi selector 18
Q MONITOR ( ) button 18
R MENU button 19
S QUICK button 19

How to Use It—Camera Controls and Displays

A The Viewfinder



Photographs can be framed in the *viewfinder* or in the monitor. Note that when your subject is within 1.5 m (4′11″) of the camera, the final picture will differ slightly from the image seen in the viewfinder. Use the smaller of the two frames in the viewfinder or frame photographs in the monitor when your subject is close to the camera.

The two lamps next to the viewfinder provide a guide to camera status while you frame your picture.

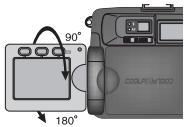
Lamp		Meaning
Red (flash-ready) lamp	On	Flash will fire when photograph is taken.
	Flickers	Flash charging (84).
	Off	Flash not required or flash set to "off."
Green (autofocus) lamp	On	Subject in focus.
	Flickers	Camera unable to focus on subject in focus brackets. Use focus lock (53) or manual focus (98).
	Blinks	Camera recording image(s) to memory card. Do not eject card or remove or disconnect power source while green light is blinking.
	Blinks slowly	Digital zoom (70) in effect or image size set to 3 : 2 (75). Frame photographs in the monitor.

B The Monitor

Like the viewfinder, the *monitor* can be used to frame photographs. During shooting, the monitor shows the view through the camera lens together with icons indicating the status of various camera settings (see list on following page). The monitor is also used to display pictures during quick review (56) and playback (158).

The monitor can be stowed on the camera body, or you can fold it out and rotate it to adjust the angle. The monitor folds out as shown at right.

When the monitor is parallel with the camera body, it can be swivelled through 270 °. This makes it possible to frame photographs in the monitor with the camera held at different angles. The monitor can even be swivelled to point in the same direction as the lens, allowing you to frame a quick arms-length self-portrait (in this position, the monitor shows a mirror image of what will appear in the final photograph).



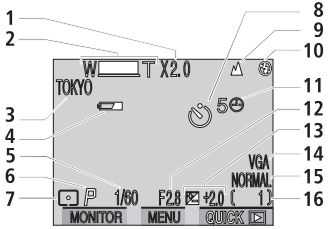
When the monitor is pointing in the same direction as the lens, it can be folded compactly onto the camera body for shooting or playback.

When the monitor is not in use, you can rotate it to face the rear of the camera, then fold it onto the camera body to protect it from dust or fingerprints.

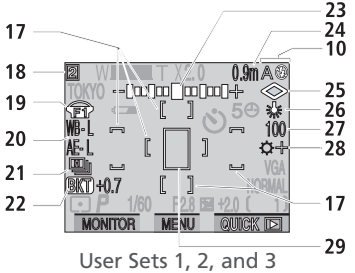
Using the Monitor

Do not apply excessive force to the monitor when it is folded out from the camera body. Failure to observe this precaution could damage the hinge that connects the monitor to the camera.

When the mode selector is set to (shooting mode), the icons in the monitor indicate the status of the following camera settings. The indicators displayed in (playback) mode are described in "Playing Images Back" (157).



User Set A

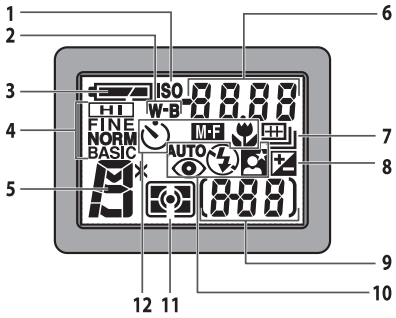


User Sets 1, 2, and 3

1 Digital zoom 70
2 Zoom indicator 69
3 Current folder 137
4 Battery level indicator 39
5 Shutter speed 89
6 Exposure mode 89
7 Metering mode 105
8 Self-timer indicator 80
9 Focus mode 76
10 Flash mode 82
11 "Date not set" icon 43
12 Aperture 89
13 Exposure compensation 85
14 Image size 74
15 Image quality 72
16 Number of exposures remaining 46
17 Focus areas 120
18 User Setting no. (User Set) 88
19 Lens converter setting 116
20 Exposure/white-balance lock 118
21 Continuous shooting mode 108
Best shot selector (BSS) 112
Noise reduction 128
22 Bracketing indicator 124
23 Exposure display 94
24 Manual focus distance 98
25 Image sharpening 123
26 White balance 102
27 Sensitivity (ISO equivalency) .. 96
28 Image adjustment/ 114
Black-and-white indicator ... 115
29 Spot metering exposure target 105

C The Control Panel

The indicators in the *control panel* show the status of the following camera settings:



1 Sensitivity (ISO equivalency) indicator 96

2 White balance indicator (appears when FUNC. button is used to set white balance; shutter-speed/aperture display shows white balance mode selected) 149

3 Battery level indicator 39

4 Image quality 72

5 Exposure mode 89

6 Shutter-speed/aperture display (depending on control in use, shows shutter speed [89], aperture [89], exposure compensation value [85], manual focus distance [98], sensitivity [96], white balance setting [149], or image transfer status [183])

7 Continuous shooting mode 108

8 Exposure compensation indicator 85

9 Exposure count display 46
Exposure indicator 94

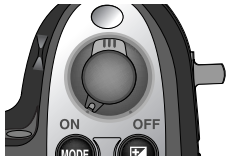
10 Flash mode 82

11 Metering mode 105

12 Focus mode 76

D The Power Switch

The *power switch* turns the camera on and off. When the power is turned on, the camera will beep once and indicators will appear in the control panel.



E The Shutter-Release Button

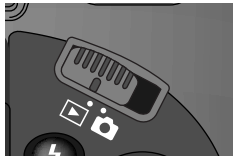
The COOLPIX5000 has a two-stage *shutter-release button*.

Press the shutter-release button halfway to focus (1). The green lamp next to the viewfinder will light when the camera has focused on the subject in the focus brackets. Focus will remain fixed while the button is held in this position (*focus lock*).

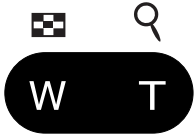
Press the shutter-release button all the way down to take a picture (2).

F The Mode Selector

The *mode selector* selects the operating mode. Choose 📷 (shooting mode) to take still pictures and movies (📖 108), ▶ (playback mode) to play them back (📖 158).



G The Zoom Button

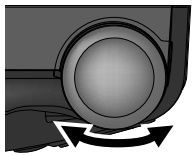


Use the *zoom button* to frame photographs. Press the end of the button labeled W (for wide angle) to zoom out from your subject, increasing the area visible in the final photograph. Press T (telephoto) to zoom in, enlarging small or distant objects to fill the frame.

When an image is displayed in full-screen review (58) or full-frame playback (158), pressing T (Q) zooms in on the image displayed in the monitor (59, 159). Press W to cancel zoom. In ▶ (playback mode) and quick review, press W (▪▪) to display images as small "thumbnails" that allow up to four or nine images to be viewed simultaneously (60, 160).

During movie playback, the zoom button controls playback volume (164).

H The Command Dial



The *command dial* is used for a variety of operations: to select options in the shooting menu, to page through photo information and thumbnail images in playback or quick review, and to set shutter speed and/or aperture when shooting in User Set 1, 2, or 3. In 📷 (shooting) mode, the command dial is used in combination with the MODE, ▣, ⚡, AF, and ◀ buttons to adjust the camera settings shown in the table following. Some of these operations can only be performed when User Set 1, 2, or 3 is selected.

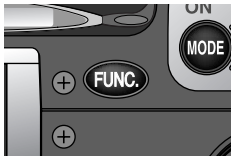
Situation	Operation	Function	
Camera in 📷 mode (User Set 1, 2, 3)	MODE + ⊜	Exposure mode selection	89
Exposure mode P (User Set 1, 2, 3)	⊜	Select combination of shutter speed and aperture	91
Exposure mode S (User Set 1, 2, 3)	⊜	Select shutter speed	92

Situation	Operation	Function	
Exposure mode A (User Set 1, 2, 3)	⊜	Select aperture	93
Exposure mode M (User Set 1, 2, 3)	⊜	Select shutter speed and/or aperture	94
Camera in 📷 mode	⊖ + ⊜	Adjust exposure compensation	85
Camera in 📷 mode (User Set 1, 2, 3)	**ISO** + ⊜	Sensitivity (ISO equivalency)	96
Camera in 📷 mode (User Set 1, 2, 3)	**MF** + ⊜	Manual focus	98
Camera in 📷 mode	**SIZE** + ⊜	Image size selection	74
► ⊜ appears next to item in shooting menu	⊜	Select option	25
Full-frame playback Full-screen review	⊜	Display next or previous page of photo information	162
Thumbnail playback Thumbnail review	⊜	Display next or previous page of thumbnail images	160

User Set (88)

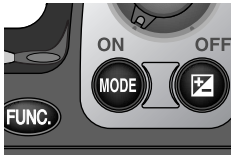
In 📷 (shooting) mode, the menus offer a choice of four User Sets: User Sets A, 1, 2, and 3. User Set A is a fully automatic, "point-and-shoot" mode in which the majority of settings are controlled by the camera. User Sets 1, 2, and 3 give you control of all camera settings. Settings for each of User Sets 1, 2, and 3 are stored separately in memory and recalled the next time the mode is selected, allowing you to create up to three combinations of custom settings for common tasks or shooting situations and recall them as desired.

I The FUNC. Button



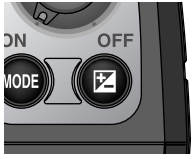
By default, the User Set can be selected by rotating the command dial while pressing the FUNC. button. Using the **Controls** option in the setup menu (148), you can choose the function assigned to the FUNC. button in User Sets 1, 2, and 3. Depending on the function selected, the FUNC. button can then be used in combination with the command dial to control white balance or metering without accessing the shooting menu, or to select the focus or flash mode without using the buttons on the rear of the camera.

J The MODE Button



In (shooting) mode (User Sets 1, 2, and 3), the MODE button is used in combination with the command dial to select the exposure mode (89). In User Set A, the exposure mode is automatically set to programmed auto, and the MODE button is disabled.

K The Button



In (shooting) mode, the button is used in combination with the command dial to select a value for exposure compensation (85).

L The ⚡/ISO Button

The ⚡/**ISO** button controls two settings: flash mode and, when used in combination with the command dial, sensitivity (ISO equivalency, available only in User Sets 1, 2, and 3).

Situation	Operation	Function	Button	
Camera in 📷 mode	⚡	Flash mode selection	⚡	82
Camera in 📷 mode (User Set 1, 2, 3)	**ISO** + ⚙	Sensitivity (ISO equivalency)	ISO (⚡)	96

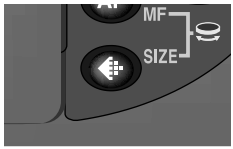
M The AF/MF/🗑 Button

In 📷 (shooting) mode, the AF/**MF**/🗑 button is used to select the focus mode. In User Sets 1, 2, and 3, it can be used in combination with the command dial to select a distance for manual focus. In quick review and playback, it is used to delete individual images.

Situation	Operation	Function	Button	
Camera in 📷 mode	AF	Focus mode selection	AF	76
Camera in 📷 mode (User Set 1, 2, 3)	**MF** + ⚙	Manual focus	MF (AF)	98
Full-screen review Full-frame playback	🗑	Delete image currently displayed in monitor	🗑 (AF)	58 158
Thumbnail review Thumbnail playback		Delete highlighted image		60 160

N The ◀/SIZE Button

The ◀/**SIZE** button controls image quality and size.



Situation	Operation	Function	Button	
Camera in 📷 mode	◀	Image quality selection	◀	72
	SIZE + ⊜	Image size selection	SIZE (◀)	74

O The AE/AF Lock Button

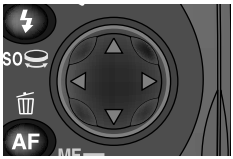
Pressing *the AE/AF lock* (**AE-L/AF-L**) *button* when the camera is in focus locks focus (📖 79) and exposure (📖 106). Focus and exposure remain locked while the button is held down, even if you remove your finger from the shutter-release button.

The AE-L/AF-L Button

By default, pressing the **AE-L/AF-L** button when the camera is in focus locks both focus and exposure. In User Sets 1, 2, and 3, the **Controls** > **AE-L, AF-L** option in the setup menu (📖 150) can be used to set the **AE-L/AF-L** button to lock only one of focus or exposure. Regardless of the setting chosen for the **AE-L/AF-L** button, pressing the shutter-release button halfway always locks both focus and exposure.

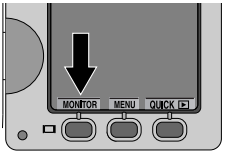
P The Multi Selector

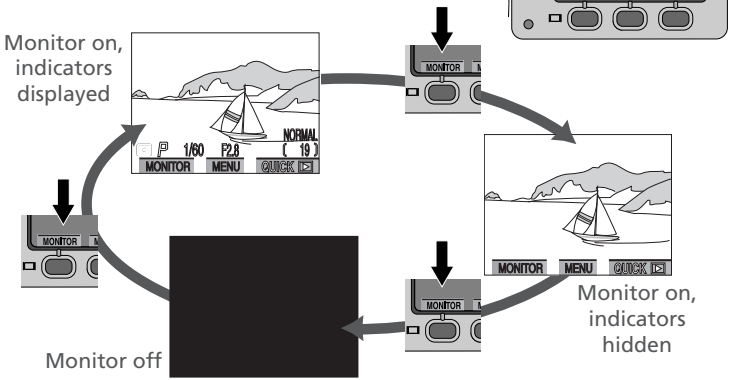
The *multi selector* is used to navigate through camera menus, to page through images in quick review and playback, and to highlight thumbnails in thumbnail review and playback.



Q The MONITOR (▭) Button

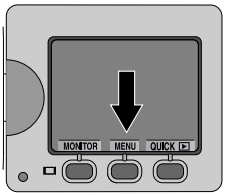
The **MONITOR** (▭) button turns the monitor on and off and controls the display of indicators in the monitor.





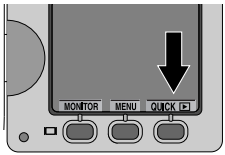
R The MENU Button

Press the **MENU** button to display the menu for the current operating mode. If the menu has more than one page, pressing the **MENU** button a second time will display the next page. When the last page is displayed, you can exit the menu by pressing the **MENU** button again.



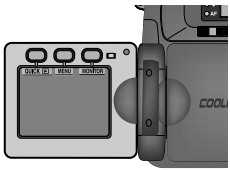
S The QUICK Button

In (shooting) mode, the *quick review* (QUICK) *button* is used to view the results of earlier photographs while setting up the next shot (56).



The MONITOR (), MENU, and QUICK Buttons

The order of these three buttons from left to right changes with the orientation of the monitor: QUICK, **MENU**, **MONITOR** () when the buttons are above the monitor, **MONITOR** (), **MENU**, QUICK when the buttons are below the monitor. Button names are displayed in the monitor when the monitor is on; when the monitor is off, pressing the **MONITOR** () button will turn the monitor on.

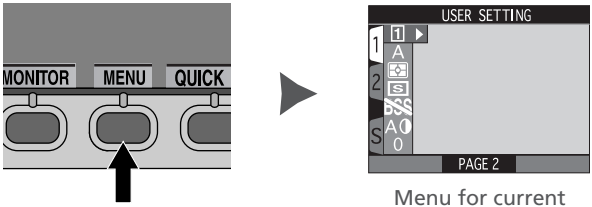


Changes to some settings can be made with the help of menus that appear in the monitor. The options available depend on the operating mode.

Mode	Menu	Description	
📷 ▶	SET-UP	The SET-UP menu contains options for basic camera setup (e.g., formatting memory cards, setting the time and date). The options available depend on the operating mode. In playback mode, the SET-UP menu is accessed from the PLAY BACK menu, and contains options for choosing the video mode for television playback and selecting the language in which menus and messages are displayed. In User Sets 1, 2, and 3, the SET-UP menu is accessed from the SHOOTING menu, and contains additional options for customizing camera controls.	134–156
📷 (User Set 1, 2, 3)	SHOOTING	The SHOOTING menu contains advanced shooting options, such as white balance and metering. It is only available in User Sets 1, 2, and 3.	100–131
▶	PLAY BACK	The PLAY BACK menu contains options for managing the images stored on the camera memory card by, for example, deleting selected photographs or selecting images for printing or for transfer to your computer. It also contains a slide show option for automated sequential playback.	165–177

Viewing the Menus

When the camera is on, the menu for the current operating mode can be displayed by pressing the **MENU** button.



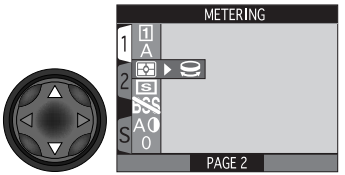
Press

Menu for current operating mode displayed

Making a Selection

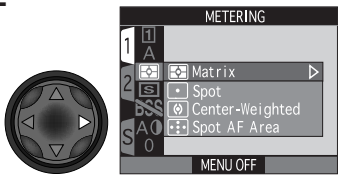
To navigate through the menus, press the multi selector in the direction you want to go.

1



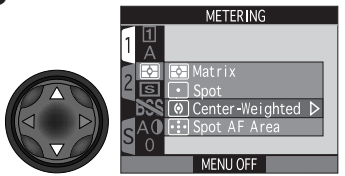
Highlight menu item

2



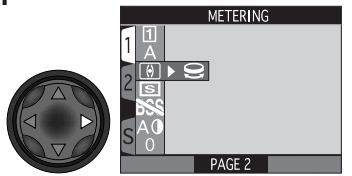
Display options

3



Highlight option

4



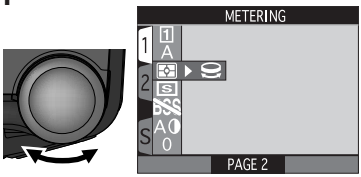
Make selection (changes to settings apply when selection is made)

- To go back one step, press the multi selector to the left.
- The selection for some options is made from a sub-menu. Repeat steps 3 and 4 to select the desired setting from the sub-menu.

Making Selections with the Command Dial

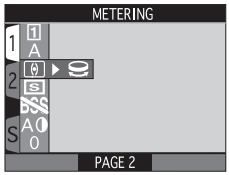
A ⊜ icon appearing next to a highlighted item in the SHOOTING menu indicates that a selection can be made directly from the main menu using the command dial. The current selection for these items is shown by the icon that appears in the main menu.

1



Rotate command dial

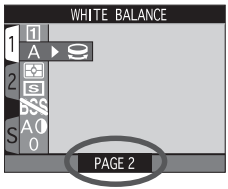
2



Stop when icon for desired option is displayed

Exiting the Menus

To exit the menu and return to shooting or playback mode, press the **MENU** button. If "PAGE 2" appears below the menu, pressing the **MENU** button will display the next page of options. When "MENU OFF" is displayed, pressing the **MENU** button returns you to shooting or playback mode.



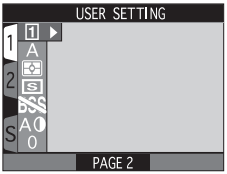
Taking Photographs while Menus Are Displayed

The view through the lens is visible behind the SHOOTING menu. To take a photograph while the menu is displayed, press the shutter-release button. If the SET-UP menu is displayed in ◘ (shooting) mode, the monitor will show the view through the lens when the shutter-release button is pressed halfway. A photograph can be taken by pressing the shutter-release button all the way down. When you take your finger off the shutter-release button, the SET-UP menu will be restored.

Multi-Page Menus

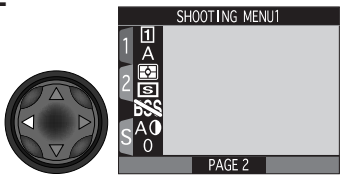
To move between pages of a multi-page menu, or to access the SET-UP menu from the SHOOTING and PLAY BACK menus:

1



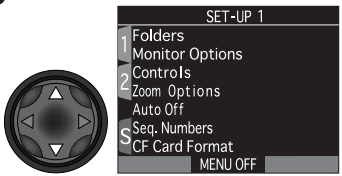
Position cursor in main menu

2



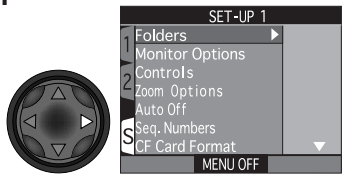
Highlight page tab (selected page tab highlighted in red)

3



Highlight page number, or **S** for SET-UP menu

4



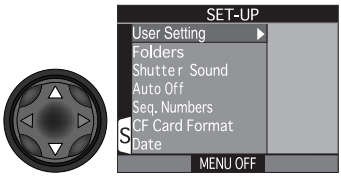
Display selected page

- You can also go from one page to another of a multi-page menu by pressing the multi selector up or down to scroll to the other page. If "PAGE 2" appears at the lower left corner of the menu, you can display the second page by pressing the **MENU** button. When "MENU OFF" is displayed, pressing the **MENU** button returns you to shooting or playback mode.

Accessing the Shooting Menu

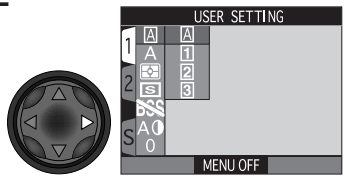
The SHOOTING menu is only available when User Set 1, 2, or 3 is selected in (shooting) mode. To access the SHOOTING menu from the SET-UP menu for User Set A:

1



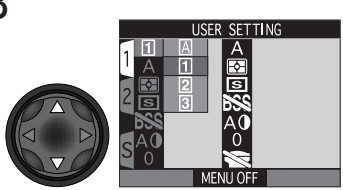
Highlight **User Setting**

2



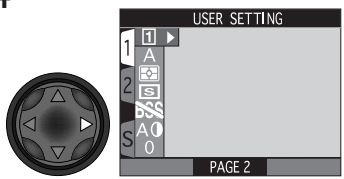
Display list of User Sets

3



Highlight 1, 2, or 3

4



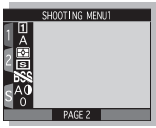
Position cursor in SHOOTING menu

- Settings for each of User Sets 1, 2, and 3 are stored separately in memory and recalled the next time the mode is selected, allowing you to create up to three combinations of custom settings for common tasks or shooting situations and recall them as desired.
- To return to the SET-UP menu for User Set A, follow the steps above to select User Set A and position the cursor in the SET-UP menu.

The FUNC. Button (149)

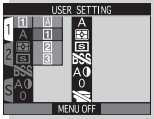
By default, the FUNC. button can be used to change the User Set without accessing the camera menus. Press the FUNC. button while rotating the command dial. The current User Set will be displayed in the top left corner of the monitor (User Sets 1, 2, and 3 only), and in the control panel shutter-speed/aperture display while the FUNC. button is pressed.

Index to Menu Options



SHOOTING Menu, Page 1

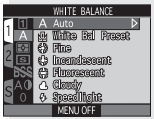
The SHOOTING menu contains two pages of advanced shooting options. It is available when User Set 1, 2, or 3 is selected in (shooting) mode.



USER SETTING

Select User Set A for automatic, "point-and-shoot" photography, User Set 1, 2, or 3 for complete control over camera settings.

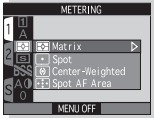
88



WHITE BALANCE

Match the white balance setting to the light source to ensure that colors are reproduced accurately.

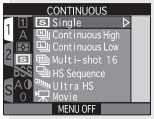
102–104



METERING

Control how the camera sets exposure.

105–107



CONTINUOUS

Take photos one at a time or in sequence, make movies, or create collages of sixteen consecutive photographs.

108–111

BEST SHOT SELECTOR

Use the Best Shot Selector (BSS) when photographs could be blurred by inadvertent camera movement.

112–113

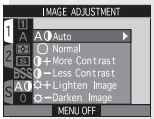


IMAGE ADJUSTMENT

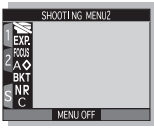
Raise or lower contrast and brightness for output on a printer or editing in a photo retouch program.

114

SATURATION CONTROL

Control color in your photographs by increasing or reducing vividness or taking photos in black-and-white.

115

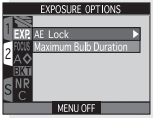


SHOOTING Menu, Page 2

LENS

Choose settings for optional converter lenses.

116–117



EXPOSURE OPTIONS

Lock exposure for a series of photographs or set the time limit for long time-exposures (BULB).

118–119

FOCUS OPTIONS

This menu contains options for controlling autofocus, including manual focus-area selection, single or continuous autofocus, and focus confirmation.

120–122

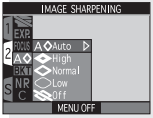
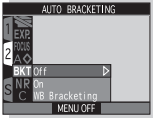


IMAGE SHARPENING

Heighten or reduce the sharpness of outlines in your photographs.

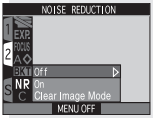
123



AUTO BRACKETING

Automatically vary exposure or white balance over a series of photographs.

124–127



NOISE REDUCTION

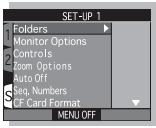
Reduce "noise," a mottling effect that appears in photographs taken at low shutter speeds or higher sensitivity settings.

128–129

RESET ALL

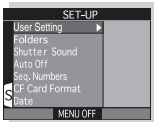
Reset settings for the current User Set to their default values.

130–131



SET-UP Menu

The options available in the SET-UP menu depend on the operating mode and, in ◘ (shooting) mode, on the User Set selected.



User Setting — **User Set A**

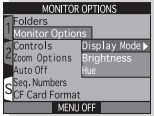
Select User Set A for automatic, "point-and-shoot" photography, User Set 1, 2, or 3 for complete control over camera settings.

134

Folders — **User Set A, 1, 2, 3**

Select the folder in which subsequent photographs will be stored; create, rename, and delete folders.

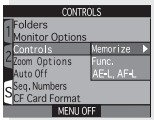
137–141



Monitor Options — **User Set 1, 2, 3/▶**

Control when the monitor turns on automatically and whether photos are displayed in the monitor after shooting; adjust monitor brightness and hue.

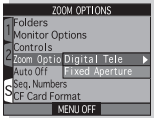
146–147



Controls — **User Set 1, 2, 3**

Specify the settings in effect when the camera is turned on; control the functions performed by the FUNC. and AE-L/AF-L buttons.

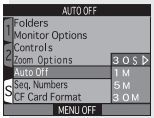
148–150



Zoom Options — **User Set 1, 2, 3**

Options for digital zoom and controlling aperture as the camera is zoomed in and out.

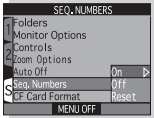
151



Auto Off — **All Modes**

Specify how long the monitor will remain on before turning off automatically to save power.

143



Seq. Numbers — **User Set A, 1, 2, 3**

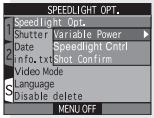
Control automatic file naming.

144–145

CF Card Format — All Modes

Format memory cards for use in your Nikon digital camera.

144



Speedlight Options — User Set 1, 2, 3

Options for controlling flash exposure, controlling the built-in Speedlight when a flash accessory is attached, and confirming shutter release.

152–153

Shutter Sound — All Modes

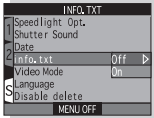
Control the beep produced by the camera to confirm such operations as shutter release.

142

Date — All Modes

Set the time and date.

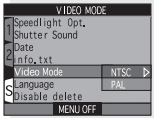
145



info.txt — User Set 1, 2, 3

Save photo information in text format.

154



Video Mode — User Set 1, 2, 3/▶

Choose the standard for video output from NTSC and PAL.

155

Language — User Set 1, 2, 3/▶

Choose the language in which camera messages and menus are displayed.

155

Disable Delete — User Set 1, 2, 3

Disable all delete and format options to protect images from accidental deletion.

156

PLAY BACK Menu

The PLAY BACK menu contains options for deleting images, managing the images stored on the memory card, and playing photos back in automatic "slide shows."

Delete

Delete all or selected images; cancel the current print order; remove transfer marking from all images.

166–168

Folders

Select the folder from which images will be played back; create, rename, and delete folders.

169

Slide Show

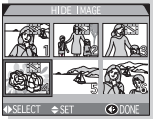
Select this option to play back all images in the current folder one after the other in an automatic "slide show."

170–171

Protect

Protect selected images from accidental deletion.

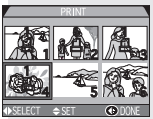
172



Hide Image

Hide images during playback.

173



Print Set

Select images for printing on a DPOF-compatible device.

174–175

Auto Transfer

Select images for transfer to a computer.

176–177

Tutorial

Getting Started

First Steps 1
32–43

Taking Photographs
44–55

Review and Deletion
56–60

This chapter is divided into the following three sections:

First Steps
This section details the steps you will take before using your camera for the first time.

Taking Photographs
Read this section for a step-by-step guide to the basics of taking pictures with the COOLPIX5000.

Review and Deletion
Learn how to review and delete pictures while setting up your next shot.

First Steps

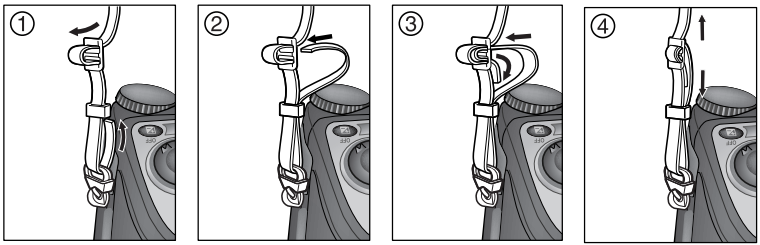
Getting Ready to Use Your Camera

Before using your camera for the first time, you will need to complete the steps shown below.

	STEP	
STEP 1	Attach the Camera Strap	33
STEP 2	Insert the Battery	34–35
STEP 3	Insert the Memory Card (Format the Memory Card)	36–38
STEP 4	Check the Battery Level	39
STEP 5	Choose a Language	40–41
STEP 6	Set the Time and Date	42–43

Step 1—Attach the Camera Strap

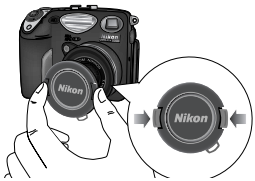
Attach the strap securely to the two eyelets on the camera body as shown below.



To avoid losing the lens cap, use the cord provided to attach it to the camera strap as shown.

Removing and Replacing the Lens Cap

When removing or replacing the lens cap, press the tabs on either side of the cap to release the latch. If you turn the camera on with the lens cap in place, an error message will appear in the monitor. To clear the message from the screen, turn the camera off and remove the lens cap.



Step 2—Insert the Battery

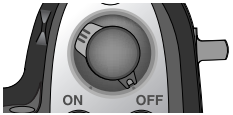
Your camera is powered by a single rechargeable Nikon EN-EL1 lithium-ion battery (provided) or a non-rechargeable 2CR5 (DL245) lithium battery (available separately).

2.1 Charge the battery

The rechargeable Nikon EN-EL1 lithium-ion battery supplied with your camera is not fully charged at shipment. A battery charger is provided with the camera; we recommend that you charge the battery before use. Instructions for charging the battery may be found in the instruction manual included with the charger.

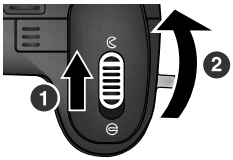
2.2 Turn the camera off

If the camera is on a tripod, remove it from the tripod before proceeding to the next step.



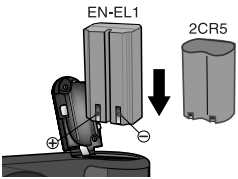
2.3 Open the battery-chamber cover

Slide the battery-chamber cover latch to the open position (ᗧ; 1) and flip the battery-chamber cover open (2).



2.4 Insert the battery

Insert a fully-charged Nikon EN-EL1 lithium-ion battery (provided) or 2CR5 (DL245) lithium battery (available separately) as shown at right.



2.5 Close the battery-chamber cover

Close the battery chamber cover (1) and slide the latch to the closed position (ᗤ; 2). To prevent the battery being dislodged during operation, be sure that the battery-chamber cover is properly latched.

Read Battery Warnings

Read and follow all warnings and instructions supplied by the battery manufacturer.

Before Inserting the Battery

Remove the lens cap before inserting the battery for the first time or when inserting the battery after the camera has been left unused for an extended period. If the lens cap is in place, a message will be displayed in the monitor, even if the camera is off. The camera will however function normally when the lens cap is removed and the camera turned on.

The Clock Battery

The camera's internal clock-calendar is powered by a separate, rechargeable power source, which is charged as necessary when the main battery is installed or the camera connected to AC power source using the EH-21 AC adapter (available separately). If the camera has been stored for an extended period with the main battery removed, the clock may need to be reset. After charging for about ten hours, the clock's power source can provide roughly three days of back up power.

Removing the Battery

The battery can be removed without affecting pictures stored on the memory card. All settings other than date and language will, however, be reset.

Alternative Power Sources

Although the COOLPIX5000 can be used with non-rechargeable 2CR5 (DL245) lithium batteries, available at a variety of retail outlets, we recommend the rechargeable Nikon EN-EL1 Li-ion battery included with your camera. This lithium-ion battery, for use exclusively with COOLPIX5000, 995, 885, 775, and 880 digital cameras, can be recharged with the EH-21 AC adapter/battery charger (available separately). In its role as an AC adapter, the EH-21 can be used to power your camera continuously for extended playback and similar tasks. Alternatively, the MB-E5000 battery pack (available separately) can be used to power the camera for extended periods. The MB-E5000 takes six ordinary LR-6 (AA) batteries and is equipped with its own shutter release and zoom buttons for taking photographs in portrait orientation.

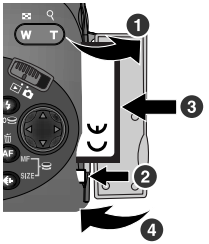
Step 3—Insert the Memory Card

In place of film, your Nikon digital camera uses CompactFlash™ (CF) memory cards or IBM Microdrive® memory cards to store pictures. This step provides instructions on inserting memory cards.

3.1 Turn the camera off

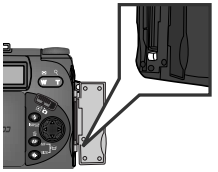
3.2 Insert the memory card

Open the card-slot cover (1) and make sure the eject button is pressed all the way down (2). Hold the card with the arrow (▲) facing away from you and insert it in the direction of the arrow (3), sliding it in until it is firmly in place. Close the card slot cover (4).



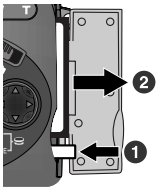
Closing the Card-Slot Cover

If the eject button is up when the card-slot cover is closed, closing the cover will partially eject the memory card, causing errors when the camera is turned on. Be sure the eject button is down before inserting memory cards.



Removing Memory Cards

Memory cards can be removed without loss of data when the camera is off. To remove memory cards, turn the camera off and open the card-slot cover. Press the eject button to pop it up (1), then press it again to partially eject the card (2). You can then remove the card by hand.



For more information on:

193 Approved memory cards

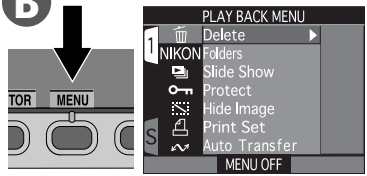
Formatting Memory Cards

While the memory card provided with your camera is formatted at shipment, other memory cards must be formatted before first use. To format a memory card:

A

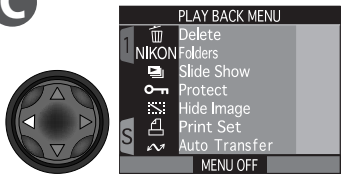
Set mode selector to ▶ and turn camera on

B



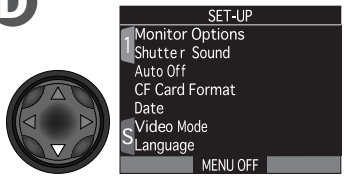
Press MENU button to display PLAY BACK menu

C



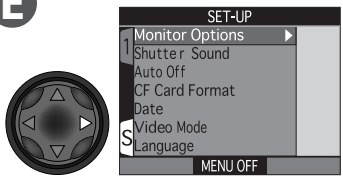
Highlight page tab

D



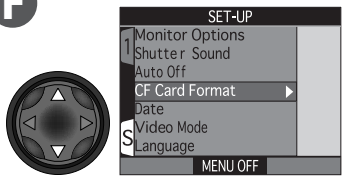
Highlight SET-UP menu page tab (**S**)

E



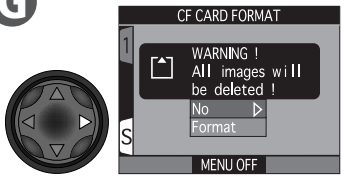
Position cursor in SET-UP menu

F



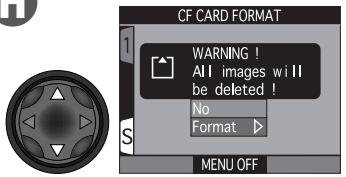
Highlight **CF Card Format**

G



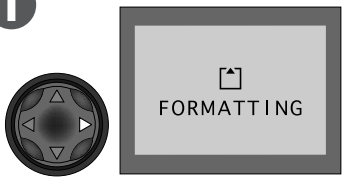
Confirmation dialog displayed

H



Highlight **Format** (to exit without formatting card, press MENU button or highlight **No** and press multi selector to right)

I



Press multi selector to right to start formatting. *Formatting begins immediately*. While formatting is in progress, the message shown at left will be displayed.

During Formatting

Do not remove the memory card, remove the battery, or unplug the AC adapter (available separately) while formatting is in progress.

Before Formatting

Formatting permanently deletes all data on the memory card. Before formatting, be sure to transfer to a computer any images you would like to keep.

CF Card Format

The **CF Card Format** option is also available in the (shooting) mode SETUP menu (144).

Step 4—Check the Battery Level

Before using the camera, check the battery level in the control panel or monitor to make sure that the battery is charged.

4.1 Turn the camera on

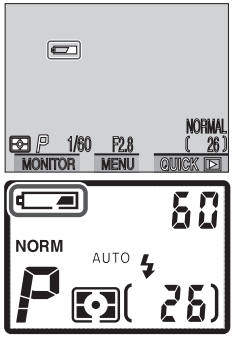
4.2 Check the battery level in the control panel or monitor

The battery level is shown by the battery level indicator in the control panel. A battery level indicator also appears in the monitor when the battery is running low.

A icon in the control panel indicates that the battery is fully charged.

A icon in the control panel or monitor indicates that the battery is running low. Recharge or replace the battery without delay.

A flashing icon in the control panel or monitor indicates that the battery is exhausted. No photographs can be taken until the battery has been recharged and/or replaced.



Before Turning the Camera On

If you turn the camera on with the lens cap in place, an error message will appear in the monitor. To clear the message from the screen, turn the camera off and remove the lens cap.

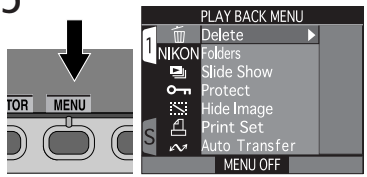
Step 5—Choose a Language

Camera menus and messages can be displayed in your choice of German, English, French, Japanese, and Spanish.

5.1

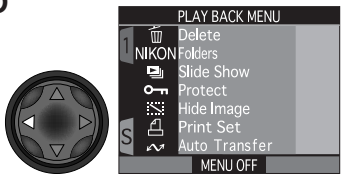
Set mode selector to ▶ and turn camera on

5.2



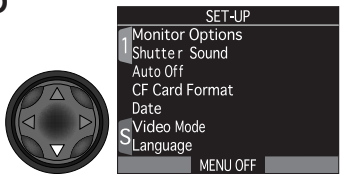
Press MENU button to display PLAY BACK menu

5.3



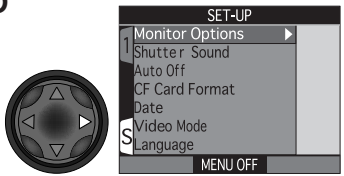
Highlight page tab

5.4



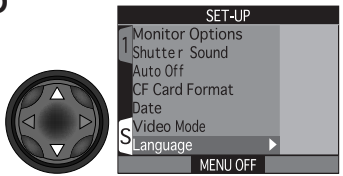
Highlight SET-UP menu page tab (**S**)

5.5



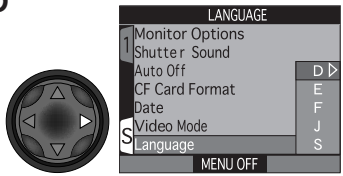
Position cursor in SET-UP menu

5.6



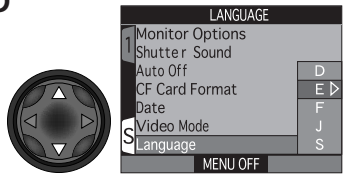
Highlight **Language**

5.7



Display options

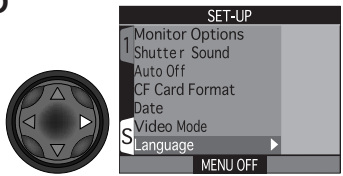
5.8



Choose a language from:

- **D** **D**eutsch (German)
- **E** **E**nglish
- **F** **F**rançais (French)
- **J** **J**apanese
- **S** **E**spañol (Spanish)

5.9

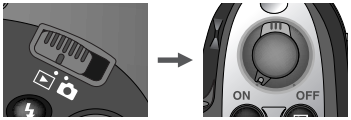


Make selection and return to SET-UP menu. If you have yet to set the time and date, proceed to Step 6.6 on the following page to set the time and date.

Step 6—Set the Time and Date

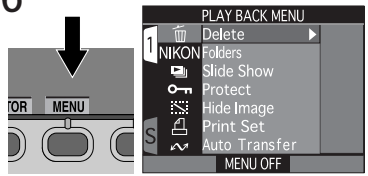
Information on the time and date of recording is included with all photographs and movies taken with your Nikon digital camera. To set the camera's internal clock to the correct time and date:

6.1



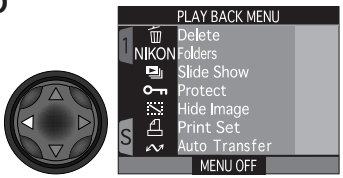
Set mode selector to ▶ and turn camera on

6.2



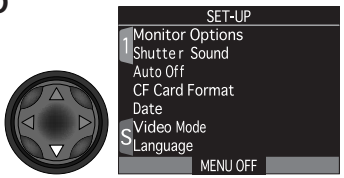
Press MENU button to display PLAY BACK menu

6.3



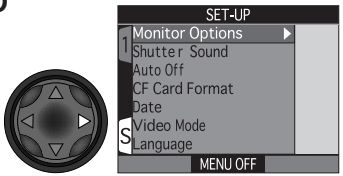
Highlight page tab

6.4



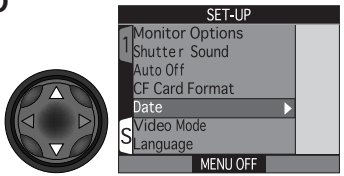
Highlight SET-UP menu page tab (**S**)

6.5



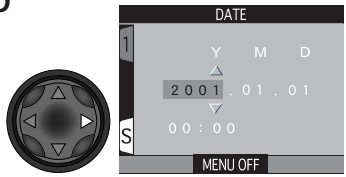
Position cursor in SET-UP menu

6.6



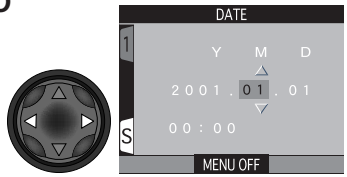
Highlight **Date**

6.7



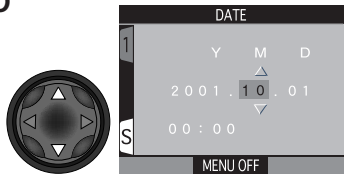
Display DATE menu

6.8



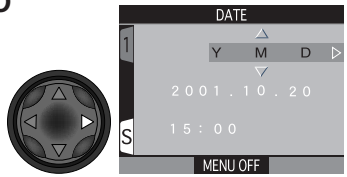
Highlight **Y**ear, **M**onth, **D**ay, hour, or minute (selected item blinks on and off in red)

6.9



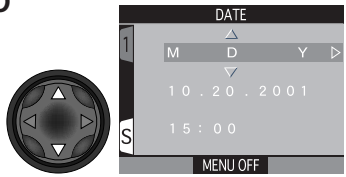
Edit selected item. Repeat steps 6.8–6.9 until all items have been set.

6.10



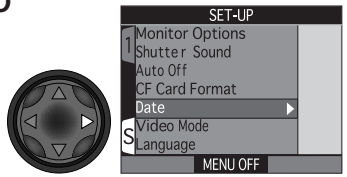
Highlight **Y M D**

6.11



Choose order in which year, month, and day will be displayed

6.12



Save changes to settings and return to SET-UP menu

Any photographs taken before the time and date have been set will have a time stamp of "0000.00.00 00:00." If the time and date have not been set, a flashing clock icon will be displayed in the top right corner of the monitor when the camera is in 📷 (shooting) mode.

This section details the basic steps involved in taking photographs in User Set A. In this automatic, "point-and-shoot" mode, the majority of settings are controlled by the camera in response to lighting conditions and focus distance, producing the best possible results in most situations.

STEP		
STEP 1	Ready the Camera	45–47
STEP 2	Adjust Camera Settings	48–49
STEP 3	Frame the Photograph	50–51
STEP 4	Focus and Shoot	52–53
STEP 5	Check the Results	54–55
STEP 6	Put the Camera Away	55

Step 1—Ready the Camera

Before using your camera, complete the following steps:

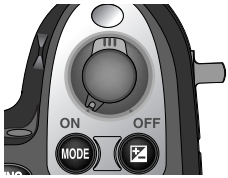
1.1 Remove the lens cap

If you turn the camera on with the lens cap in place, an error message will appear in the monitor. To clear the message from the screen, turn the camera off and remove the lens cap.

1.2 Slide the mode selector to

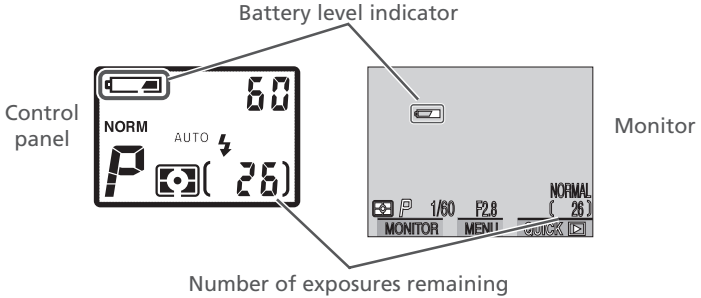
1.3 Turn the camera on

A beep will sound when the camera is turned on. After a short pause, current settings will be displayed in the control panel and monitor, and the monitor will show the view through the lens.



1.4 Check indicators in the control panel or monitor

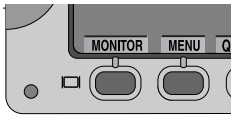
Before taking photographs, be sure that the battery is charged and that enough memory is available on the memory card. If the battery is low, a low-battery icon ( ) will appear in the control panel and monitor, indicating that the battery should be recharged or replaced without delay. If the icon flashes, the battery is exhausted, and no pictures can be taken until the battery has been recharged and/or replaced (34).

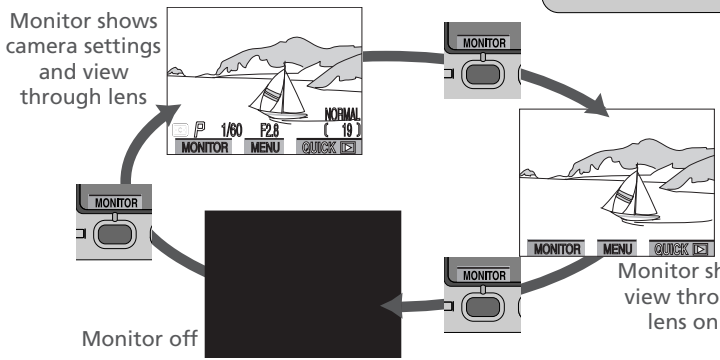


The control panel and monitor also show the number of exposures remaining, or in other words the number of photos that can be taken at current settings. When this number reaches zero, you will need to insert a new memory card or delete some pictures (166) before more images can be recorded. It may be possible to record more pictures at a different image quality or size (71).

Controlling the Monitor

Press the **MONITOR** (▭) button to hide indicators or to turn the monitor on or off.





Viewfinder Focus

If images in the viewfinder appear blurred even when the subject is in focus, viewfinder focus can be adjusted using the viewfinder diopter control. To adjust viewfinder focus, fold the monitor out from the camera (A), hold the camera with your eye to the viewfinder (B), and slide the diopter control (C) until the focus brackets in the viewfinder are clearly in focus.

Using the Diopter Control

When operating the diopter control with your eye to the viewfinder, care should be taken to avoid accidentally putting your fingers or fingernails in your eye.

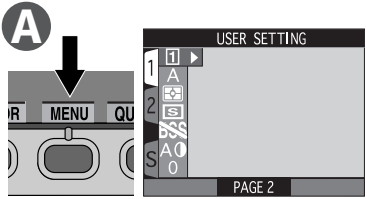
Step 2—Adjust Camera Settings (Optional)

In User Set A, you can use the ⚡, AF, ◀/SIZE, and ◪ buttons to control the settings listed in the following table. The first time you use the camera, these settings will be set to the default values shown below. These settings are suited to most situations, and the description in this section assumes that the defaults are used. For information on making changes to the settings listed below, refer to the page numbers in the rightmost column.

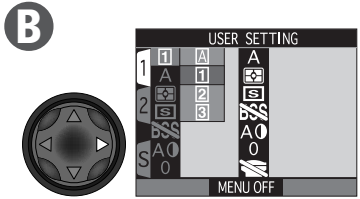
Setting	Default	Description	Control	👁
Flash mode	Auto	Flash fires automatically when lighting is poor.	⚡	82–84
Focus mode/ self-timer	Autofocus	Camera focuses automatically at distances over 50 cm (1′8″); self-timer off.	AF	76–81
Image quality	NORMAL	Photographs compressed for balance between quality and file size that is ideal for snapshots.	◀	72–73
Image size	FULL	Photographs are 2,560 × 1,920 pixels in size. At this size and an image quality of NORMAL, about 26 photographs can be stored on a 32 MB memory card.	SIZE (◀) + ⊜	74–75
Exposure compensation	±0	No exposure compensation performed.	◪ + ⊜	85–86

Restoring User Set A

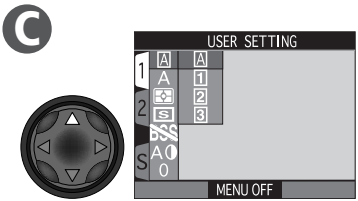
If you have selected User Set 1, 2, or 3 to use advanced camera settings, you can restore User Set A as shown below. If you later return to User Set 1, 2, or 3, the settings in effect in the last time you used the selected mode will automatically be restored.



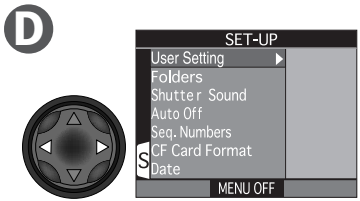
Press MENU button to display SHOOTING menu with USER SETTING option highlighted



Display list of User Sets



Highlight **A**



Display SET-UP menu for User Set A. Press MENU button to exit SET-UP menu and return to shooting mode.

The FUNC. Button (149)

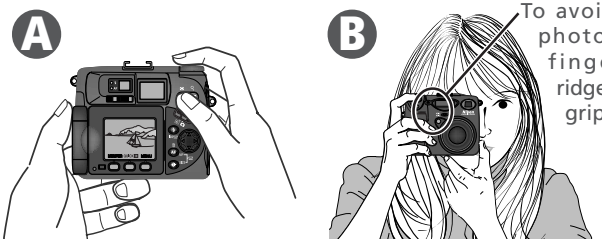
By default, the FUNC. button can be used to change the User Set without accessing the camera menus. Press the FUNC. button while rotating the command dial. The current User Set will be displayed in the top left corner of the monitor (User Sets 1, 2, and 3 only), and in the control panel shutter-speed/aperture display while the FUNC. button is pressed.

Step 3—Frame the Photograph

After adjusting camera settings, you are ready to frame your photograph.

3.1 Ready the camera

To prevent blurred photographs caused by unsteady hands (camera shake), hold the camera steadily in both hands. Photographs can be framed in the monitor (A) or viewfinder (B).

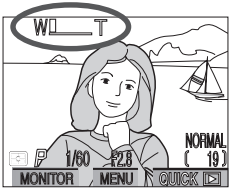


3.2 Frame your subject

Frame your subject using the zoom button. Press W to zoom out from your subject, increasing the area visible in the frame. Press T to zoom in on your subject so that it fills a larger area of the frame.

When the camera is zoomed all the way in to the **T** (Telephoto) side of the zoom indicator, holding T down for two seconds activates digital zoom, which can be used to magnify your subject even further (69).

Zoom out Zoom in



Indicator in monitor shows amount of zoom while button is pressed

Don't Block the Shot

To avoid dark or partially obscured pictures, keep your fingers and other objects away from the lens and flash window. Ridges on the camera grip keep your fingers from blocking the photocell when holding the camera. ***Placing your fingers above these ridges may block the photocell, preventing correct flash exposure.***

Move That Camera!

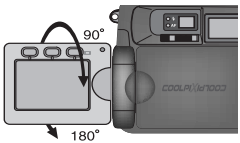
Although zoom is a useful tool for composing photographs, remember that original compositions can be created just by moving the camera to another position. If you have time, try framing your subject from a number of different angles—including from below and above—to find the one that produces the best shot.

Monitor or Viewfinder?

Use the monitor to confirm camera settings at a glance while at the same time viewing an image that shows how the final picture will appear. This is particularly important when the image in the viewfinder does not accurately reflect what will appear in the final picture, for example when:

- you are using macro close-up (77) at ranges of less than 50 cm (1′8″)
- you are using digital zoom (70), an image size setting of 3 : 2 (75), or an optional converter lens (191)

When using the monitor, you also have the advantage of being able to frame photographs with the camera held at almost any angle. You can even point the camera at yourself and frame a quick self-portrait in the monitor (9).



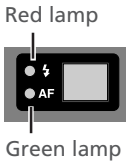
Using the viewfinder allows you to save power by turning the monitor off (47). The viewfinder can also be used when bright ambient lighting conditions make the display in the monitor difficult to see. When framing photographs in the viewfinder at ranges of 1.5 m (4′11″) or less, be sure to use the smaller of the two frames in the viewfinder display.

Use this frame at ranges of 1.5 m (4′11″) or less

Step 4—Focus and Shoot

4.1 Focus

In User Set A, the camera automatically focuses on the subject in the center of the frame, shown by the focus target in the viewfinder. To focus, press the shutter-release button halfway. Check the status of the green (autofocus) and red (flash) lamps next to the viewfinder.



Lamp		Meaning
Red lamp	On	Flash will fire when photograph is taken.
	Flickers	Flash charging. Remove finger briefly from shutter-release button, then try again.
	Off	Flash not required or flash set to "off."
Green lamp	On	Subject in focus.
	Flickers	Camera unable to focus on subject in focus brackets. Use focus lock to focus on another subject at the same distance, then recompose the photograph.

4.2 Take the photograph

To take a photograph, press the shutter-release button all the way down.

Custom Focus Settings (User Sets 1, 2, and 3)

In User Sets 1, 2, and 3, manual focus (98) can be used in situations in which the camera is unable to focus using autofocus. Manual or automatic focus-area selection (120) can be used to focus on an off-center subject without using focus lock.

Focusing on an Off-Center Subject: Focus Lock

Depending on the effect you want to achieve, your subject may not be at the center of the final composition. If your subject is not at the center of the frame when the shutter-release button is pressed halfway, the camera will focus on the background and the main subject may not be in focus. Focus lock allows you to adjust the composition after focusing on your subject.

1 Focus

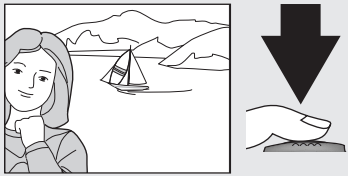
Position the subject in the center focus area (shown by the focus target in the viewfinder) and press the shutter-release button halfway.

2 Check the green (autofocus) lamp

With the shutter-release button pressed halfway, check that the green lamp next to the viewfinder glows steadily, indicating that the subject is in focus. Focus will remain locked while the shutter-release button is pressed halfway.

3 Recompose the photograph and shoot

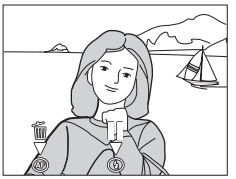
Keeping the shutter-release button pressed halfway, recompose your photograph. Press the shutter-release button the rest of the way down to shoot.



Do not change the distance between the camera and your subject while focus lock is in effect. If your subject moves, remove your finger from the shutter-release button and focus again at the new distance.

Step 5—Check the Results

After each shot, the green lamp will blink as the picture is recorded to the memory card. If the monitor is on, the shot you have just taken will be displayed briefly in the monitor. The following operations can be performed while the photograph is displayed:



To	Use	Description
Delete photo	🗑 (AF)	A confirmation dialog will be displayed. Press multi selector up or down to highlight option, press to right to select. • Select **No** to save photo and return to shooting mode • Select **Yes** to delete photo
Pause display	ϟ	Display will be paused for twenty seconds. During this time, you can press ϟ to record photograph and return to shooting mode, or press 🗑 (AF) to delete photo as described above. Photograph will be recorded automatically if no operations are performed for twenty seconds.
Save photo	Shutter release	Press shutter-release button halfway to record photograph and return to shooting mode.

During Recording

While photographs are recorded to the memory card, the green lamp will blink. *Do not eject the memory card, or remove or disconnect the power source until the light has stopped blinking*. Removing the card or cutting power in these circumstances could result in loss of data or in damage to the camera or the card.

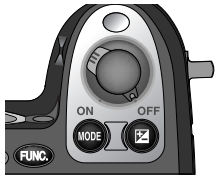
To	Use	Description
Take new photo	Shutter release	Press shutter-release button all the way down to take new photograph while saving photo displayed in monitor to memory card. Any additional shots you take while earlier pictures are being saved will be stored in temporary memory buffer before being saved to memory card. Pictures can be taken until buffer is full (buffer can hold about ten full-sized, normal-quality images). When buffer is full, an hourglass icon (⌛) will be displayed and shutter release will be disabled. Additional pictures can be taken as soon as enough memory is available in buffer and ⌛ icon is no longer displayed.

Step 6—Put the Camera Away

When you have finished using the camera, follow these steps before putting the camera away.

6.1 Turn the camera off

Turn the camera off to save battery power.

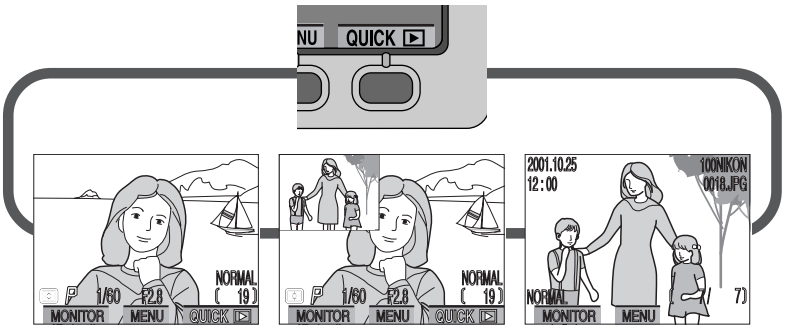


6.2 Close the monitor and replace the lens cap

Close the monitor and replace the lens cap to protect the monitor and lens from dust and fingerprints.

With a film camera, only when the film was developed would you know whether your pictures had turned out as you had hoped. Using the quick review function on your Nikon digital camera, on the other hand, you can view the results of earlier attempts while setting up the next shot, and use what you see to change camera settings or to choose a better angle. Was your last picture too dark? Take your finger off the flash window and try again. Does the brilliant white sand of the beach look dingy and grey? Raise exposure compensation (85) and try again. Are the flowers in that close-up shot blurred? Turn on the Best-Shot Selector (BSS; 112) and try again. Once you have the shot you want, you can delete your failures instantly to make room for more shots on the memory card.

To use quick review, the camera must be in (shooting) mode. Press the QUICK button once to display images at the top left corner of the monitor, twice to display pictures full screen. Pressing the button a third time returns you to shooting mode.



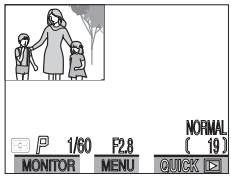
Shooting Mode

Quick Review
Photos in the current folder are displayed in the top left corner of the monitor, allowing you to view the results of previous attempts while setting up your next shot.

Full-Screen Review
Photos in the current folder are displayed full screen or in menus of four or nine "thumbnail" images. You can view photo information, zoom in on photos, and delete images one at a time.

Quick Review

When you press the QUICK ▶ button to enter quick review mode, the most recent picture on the memory card will be displayed at the top left corner of the monitor. The following operations can be performed:

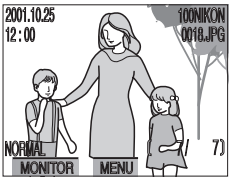


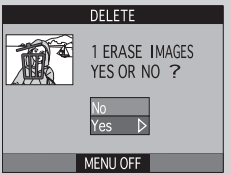
To	Use	Description
View other photos		Press the multi selector up or left to view images recorded before the current photo, down or right to view images recorded after the current photo. Keep multi selector pressed to scroll rapidly to the desired frame number.
View photo full screen	QUICK ▶	Enter full-screen review (see overleaf) with the current photo displayed full screen.
Return to shooting mode	Shutter release	Press shutter-release button halfway to return to shooting mode and focus. Press all the way down to return to shooting mode and take a photograph.

All other camera controls function as they do in shooting mode.

Full-Screen Review

From quick review, press the QUICK ▶ button to enter full-screen review. The picture displayed in quick-review mode will be displayed full screen. The following operations can be performed:



To	Use	Description
View other photos		Press the multi selector up or left to view images recorded before the current photo, down or right to view images recorded after the current photo. Keep multi selector pressed to scroll rapidly to the desired frame number.
View multiple images	▪▪ (W)	Press the ▪▪ (W) button to display up to nine images at a time as small thumbnail previews (60).
Delete current photo	🗑 (AF)	A confirmation dialog will be displayed. Press multi selector up or down to highlight option, press to right to select.  • Select **No** to exit without deleting photo • Select **Yes** to delete photo

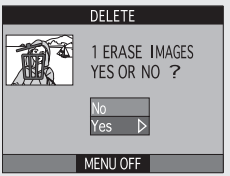
To	Use	Description
Zoom photo in	Q (T)	Press Q (T) on the zoom button for an enlarged view of the current photo (161). While photo is zoomed in, use the multi selector to view areas of the image not visible in the monitor. To cancel zoom, press W.
View photo info		Rotate the command dial to view additional information about the current photograph (162).
Return to shooting mode	Shutter release/ QUICK ▶	Press the QUICK ▶ button to end review and return to shooting mode. To return to shooting mode and focus, press the shutter-release button halfway. Press the shutter-release button all the way down to return to shooting mode and take a photograph.

Playback Mode (157)

The review function described in this section allows you to view photos without leaving shooting mode. Your Nikon digital camera is also equipped with a full playback mode, which can be accessed by setting the mode selector to ▶. In addition to the full-screen and thumbnail review functions described in this section, playback mode can be used to view movies. It also offers a menu of options for deleting multiple images, choosing the folder for playback, protecting images from deletion, hiding images during playback, viewing slide shows, selecting images for transfer to a computer, and preparing digital "print orders" for printing pictures directly from the memory card.

Thumbnail Review

Pressing the ▪ (W) button in full-screen review displays a menu of four thumbnail images. The following operations can be performed while thumbnails are displayed:

To	Use	Description
Highlight images		Press the multi selector up, down, left, or right to highlight thumbnails.
Page through images		Rotate the command dial to scroll through thumbnails a page at a time.
Change number of images displayed	▪ (W)/ T	With four thumbnails displayed, press the ▪ button once to view nine thumbnail images. Press T to "zoom in" from nine thumbnails to a four-thumbnail view or, when four thumbnails are displayed, to view highlighted image full size.
Delete selected image	🗑 (AF)	A confirmation dialog will be displayed. Press multi selector up or down to highlight option, press to right to select.  • Select **No** to exit without deleting photo • Select **Yes** to delete photo
Return to shooting mode	Shutter release/ QUICK ▶	Press the QUICK ▶ button to end review and return to shooting mode. To return to shooting mode and focus, press the shutter-release button halfway. Press the shutter-release button all the way down to return to shooting mode and take a photograph.

Where Do I Go from Here?

Doing More with Your Digital Camera

How Do I Make Prints? *62–64*

How Do I Share My Photos? *65–66*

As the name indicates, digital cameras produce digital images. As digital data, digital images can be readily transferred to a computer, where they can be stored, viewed, printed, sent to your acquaintances via e-mail, or saved to removable media (for example, a Zip disk or CD) for delivery to a photofinisher. This chapter offers some tips on how you can accomplish the following common tasks:

How Do I Make Prints?
This section outlines how to take photographs for printing on a color printer or for delivery to a photofinisher.

How Do I Share My Photos?
Read this section for advice on distributing your pictures via e-mail and the Web.

Digital photographs can be printed in a variety of ways. Many photofinishers now take delivery of image files on CompactFlash™ memory cards or on disk. Some photofinishing systems and personal photo printers also comply with **D**igital **P**rint **O**rder **F**ormat (DPOF), allowing you to print pictures from digital "print orders" that are stored on the camera memory card. If you have a suitable printer, you can also print pictures at home using Nikon View 4. Many newer color printers for the home market offer near photo-quality prints at an affordable price. This section describes how to take pictures for printing and outlines some of the options available for getting prints.

Taking Pictures for Printing

Image size and, to a lesser extent, quality, are important considerations when taking pictures for printing. Image size determines the maximum size at which the picture can be printed. If a small picture is printed at a large size, the individual dots that make up the photo (pixels) will be visible to the naked eye, giving the picture a rough, uneven appearance. Many household ink-jet printers have a target resolution for printing color images of around 300 dots per inch. At this resolution, a VGA photograph 640 × 480 pixels in size will print at a size of roughly 5.5 × 4 cm (2.1″ × 1.6″), while a full-size image will print at about 21.5 × 16 cm (8.5″ × 6.4″).

The higher the image quality and size, the better the results when the picture is printed, particularly at larger print sizes. We recommend that you set image quality to FINE or NORMAL and image size to SXGA, UXGA, 3 : 2, or FULL when taking images that you intend to print at a later date (an image size of 3 : 2 will produce prints of the same proportions as prints made from 35-mm film).

Taking Photographs for Editing and Enlarging

With its 2,560 × 1,920 recording pixels, your Nikon digital camera can capture fine details, particularly at an image quality of HI and sizes of FULL or 3 : 2. Because HI-quality images require large amounts of memory, however (see figure on page 66), only a few such images can be stored on a memory card. We recommend that you use this setting when taking photographs that will later be edited in an imaging application or printed at an enlarged size.

Printing Images on a Color Printer

If you have a suitable printer, you can install Nikon View 4 and print images directly from the camera or memory card, or follow the steps in "Connections" (179) to transfer selected images to your computer and print copies from your favorite imaging application. To print images directly, connect the camera to your computer or, if your computer does not have a USB interface, insert the camera memory card in a card reader or PC card slot (for details, see "Connections"; 179). Nikon View 4 will start automatically and the Image Transfer window will be displayed. Click the Thumbnail List button to view the images on the memory card as small thumbnail previews. Use the mouse to select the images you want to print, then click the Print button to print the images. For more information, see the *Nikon View 4 Reference Manual*.

Image Database Software

Once you have transferred large numbers of photos to your computer, you may have trouble finding the pictures you want to print or send by e-mail. The image database software included with your camera can make it easier for you to find the photo you want by organizing pictures into categories. Image database software can also be used to preview the pictures stored in your computer and to open them in your favorite imaging application. For details, see the documentation provided with the image database software.

Depending on where you purchased your camera, the COOLPIX5000 comes with Canto Cumulus, iView Media Pro, or FotoStation Easy. The documentation on the Nikon View 4 reference CD included with your camera provides instructions for installing these applications (180). If you will be using Cumulus or iView Media Pro, remember to install the image database software before installing Nikon View 4. If you will be using FotoStation Easy, install Nikon View 4 first, and then install FotoStation Easy.

For more information on:

71 Adjusting image quality and size

Digital Print-Order Format (DPOF)

The **Print Set** option in the playback menu is used to create a digital "print order" that is stored on the memory card in Digital Print-Order Format (DPOF). Once you have prepared a print order, the card can be removed from the camera and inserted in a DPOF-compatible device, be it a personal photo printer or a photofinisher's print system, and pictures printed directly from the card. See "Ordering Prints" (174) for information on creating digital print orders.

Printing from Removable Media

Even if your photofinisher does not offer support for DPOF, you may still be able to get professional prints made by copying the pictures you want to print to a Zip disk or other removable media and taking the disk to your photofinisher (check with your photofinisher first for information on pricing and the types of disks and file formats supported). Pictures can be copied to disk using Nikon View 4. For information on the operations that can be performed while the camera is connected to your computer, see the *Nikon View 4 Reference Manual*.

PRINT Image Matching

The COOLPIX5000 supports "PRINT Image Matching" (PIM) technology developed by Epson. Photographs taken with the COOLPIX5000 include additional information about color settings. When the images are output on a PIM-compliant printer, this information can be used to optimize printer settings for vivid, photo-quality results.

Print Size

The size of images when printed depends on the resolution of the printer (the higher the resolution, the smaller the final print size). The following table shows how images of different sizes will print at a resolution of 300 dpi.

Image size	Approximate dimensions at 300 dpi
FULL	21.5 × 16 cm (8.5″ × 6.4″)
3 : 2	21.5 × 14.5 cm (8.5″ × 5.7″)
UXGA	13 × 10 cm (5.3″ × 4″)

Image size	Approximate dimensions at 300 dpi
SXGA	10 × 8 cm (4.3″ × 3.2″)
XGA	9 × 7 cm (3.4″ × 2.6″)
VGA	5 × 4 cm (2.1″ × 1.6″)

Your camera stores photographs in JPEG and TIFF formats, which can be viewed using a wide variety of computer applications. JPEG images can be viewed in web browsers such as Netscape Navigator or Internet Explorer and e-mail software such as Eudora and Outlook. This makes them ideal for distribution by e-mail or the web. Note, however, that photos destined for electronic distribution should be small, both in terms of their physical dimensions (so that they will fit in the window of a web-browser or e-mail software) and in terms of the amount of data they contain (so that they don't take too long to upload or download over an Internet connection).

Taking Photos for E-Mail and the Web

When taking photographs for electronic distribution, we recommend that you choose an image quality of BASIC or NORMAL and an image size of VGA or XGA. This will produce smaller files (see figure on following page), reducing the time required to transmit images over an Internet connection. In addition, selecting an image size of VGA (640 × 480 pixels) will ensure that images will fit in a browser window when displayed on most computer monitors.

The following table shows how the chosen combination of image quality and size will affect file size and data transfer times.

Image quality	Image size	Approx. file size	Approx. transfer time (at 28.8 Kbps)
BASIC	XGA (1024 × 768 pixels)	100 KB	40 s
NORMAL	VGA (640 × 480 pixels)	90 KB	35 s
BASIC	VGA (640 × 480 pixels)	50 KB	20 s

For more information on:

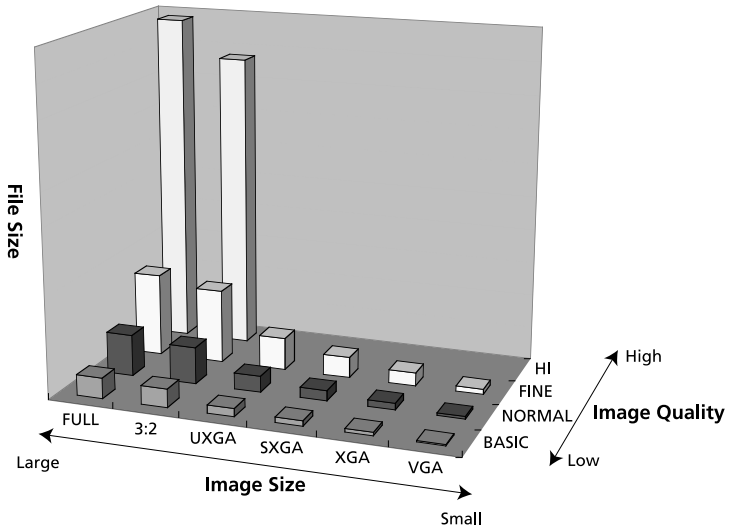
71 Adjusting image quality and size

Distributing Images Electronically

Once you have taken the images you want to send, you can transfer them to your computer for distribution via e-mail. If your computer is equipped with a USB interface, you can install Nikon View 4 and transfer images directly from the camera. The images to be copied can be selected beforehand using the **Auto Transfer** option in the playback menu (165). If your computer does not have a USB interface, you can copy images directly from the memory card as described in "Connections" (179). Once copied to your computer, images can be appended to e-mail messages (see the documentation provided with your e-mail application for details) or uploaded to your personal home page. For more information on copying images to your computer, see "Connections" (179).

Image Quality, Image Size, and File Size

The figure below shows the relationship between image quality, image size, and file size.



Taking Photographs

The Details

Beyond Point-and-Shoot *68–86*

Advanced Photography *87–131*

In "Tutorial: Taking Photographs," you learned the basic order of operations for taking photographs in User Set A. This chapter details the options available for recording photographs and movies in all User Sets. It is divided into the following sections:

Beyond Point-and-Shoot
Read this section for information on the most frequently-used camera controls: zoom, image quality and size, focus, flash, and exposure compensation.

Advanced Photography
This section details the options available in User Sets 1, 2, and 3.

This section covers operations that can be performed whenever the camera is in (shooting) mode. These operations are performed by means of the controls in the following table.

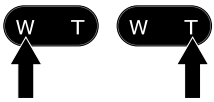
Control	Described in	
W T	Framing Photographs	69–70
	Making Effective Use of Memory	71–75
AF	Focusing Near and Far	76–79
	Delaying Shutter Release	80–81
	Throwing Light on Your Subject	82–84
	Bright, Dark, and High-Contrast Subjects	85–86

Framing Photographs: Optical and Digital Zoom

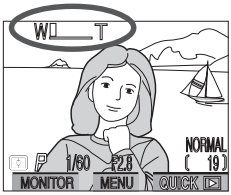
Your Nikon digital camera offers two kinds of zoom: optical zoom, in which the camera's telescoping lens can be used to magnify the subject up to 3 ×, and digital zoom, in which digital processing is used to further magnify the image up to 4 ×.

Optical Zoom

Photos can be framed in the viewfinder or monitor using the zoom button.



Zoom out Zoom in



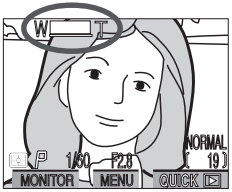
Indicator in monitor displays amount of zoom while either button is pressed

Optical vs. Digital Zoom

In digital zoom, data from the camera's image sensor are processed digitally, enlarging the center portion of the image to fill the frame. Unlike optical zoom, digital zoom does not increase the amount of detail visible in the photograph. Instead, details visible at maximum zoom are enlarged, producing a slightly "grainy" image. Digital zoom also differs from optical zoom in that its effects are visible only in the monitor, not the viewfinder, meaning that the monitor must be on before digital zoom can be used.

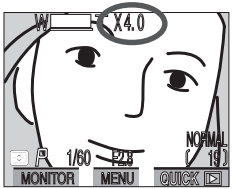
Digital Zoom

At the maximum optical zoom position, holding the T end of the zoom button down for two seconds triggers digital zoom.

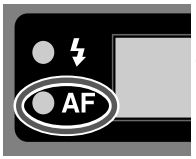


Maximum optical zoom position

Hold for 2 s



Zoom factor displayed in monitor



Green lamp blinks slowly to show that photos can not be accurately framed in viewfinder

While digital zoom is in effect, the zoom factor increases each time T is pressed, to a maximum of 4 ×. Pressing W decreases the zoom factor. To cancel digital zoom, press W until the zoom factor is no longer displayed.

Restrictions on Digital Zoom

Digital zoom can only be used when the monitor is on. Digital zoom is not available when:

- Image quality is set to HI (72)
- **Black&White** is selected in the SATURATION CONTROL sub-menu (115)
- **Multi-Shot 16** or **Ultra HS** is selected in the CONTINUOUS sub-menu (108)
- **Off** is selected for **Zoom Options** > **Digital Tele** in the SET-UP menu for User Sets 1, 2, and 3 (151)

The maximum value for digital zoom when **Movie** (109) is selected in the CONTINUOUS menu is 2 × (111).

Making Effective Use of Memory: Image Quality and Size

Together, image quality and size determine how much space each photograph occupies on the memory card. This in turn determines the total number of photographs that can be stored. To get an idea of how different settings for image quality and size affect the number of images that can be stored on a memory card, view the following table, which shows the approximate number of photographs that can be stored on 32 MB, 64 MB, and 96 MB cards at different combinations of image quality and size.

Card	Image Quality	Image Size					
		FULL	3 : 2	UXGA	SXGA	XGA	VGA
32 MB Card	HI	2	2	—	—	—	—
	FINE	13	14	32	50	75	173
	NORMAL	26	28	62	95	139	289
	BASIC	51	55	118	173	243	459
64 MB Card	HI	4	4	—	—	—	—
	FINE	26	29	65	100	151	347
	NORMAL	52	57	125	190	278	578
	BASIC	103	111	236	347	488	918
96 MB Card	HI	6	7	—	—	—	—
	FINE	39	43	97	150	227	520
	NORMAL	78	86	188	285	418	867
	BASIC	155	167	354	520	731	1377

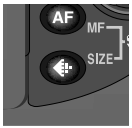
Confirming the Number of Shots Remaining

The number of photographs that can be stored on a memory card varies with the composition and type of card; the numbers given above are an approximation only. Confirm the number of exposures remaining in the control panel and monitor before shooting.

Image Quality

To reduce the amount of memory that each photograph occupies, images are compressed as they are saved to the memory card. The camera uses *JPEG* compression, which analyzes images in blocks eight pixels on a side and selectively reduces detail within each block. The more the image is compressed, the smaller the resulting file and the less space it occupies on the memory card. Compressing the image to make a very small file, however, may cause the block pattern to become visible, and there may be noticeable loss of detail. The actual effect depends on the size of the image when printed or displayed and on the type of subject.

To select an image-quality setting, press the ◀ button repeatedly until the desired setting is displayed in the control panel or monitor.



Press

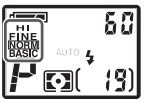
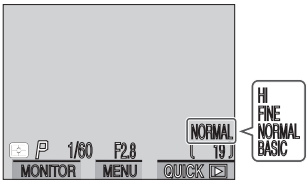


Image quality displayed in control panel and monitor



JPEG

"JPEG" (pronounced "jay-peg") stands for "**J**oint **P**hotographic **E**xperts **G**roup," the organization which developed the JPEG compression standard.

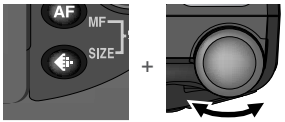
The following options are available:

Option	File Format	Description
HI	TIFF	Maximum image quality. Image stored as TIFF (**T**agged **I**mage **F**ile **F**ormat) file with no compression. Use when fidelity is of paramount importance. Not available in User Set A or at image sizes of UXGA, SXGA, XGA, or VGA.
FINE	JPEG	Fine image quality, suitable for enlargements or high-quality prints. File size reduced to roughly $^1/_4$ of original.
NORMAL	JPEG	Normal image quality, suited to most applications. File size reduced to roughly $^1/_8$ of original.
BASIC	JPEG	Basic image quality, suitable for photographs that will be distributed by e-mail or used in web pages. File size reduced to roughly $^1/_{16}$ of original.

Image Size

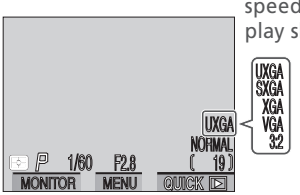
Image size refers to the physical dimensions of the image, measured in pixels. Smaller sizes require less space to store, making them suited to distribution by e-mail and the web. Conversely, the larger the image, the larger the size at which it can be printed without becoming noticeably "grainy." Choose an image size according to the space available on the memory card and the task at hand.

To choose an image size, rotate the command dial while pressing the ◀ button.



Press while rotating command dial

Image size displayed in monitor. While dial is rotated, control-panel shutter-speed/aperture display shows width of image in pixels.



The following options are available:

Option	Size (pixels)	Description
FULL (NO ICON)	2560 × 1920	Suited to print sizes up to B4 (roughly 13″ × 10″).
UXGA	1600 × 1200	Suited to print sizes ranging from large photo album through to A5 (roughly 8″ × 6″).
SXGA	1280 × 960	Suited to postcard-size prints.
XGA	1024 × 768	Suited to printing at smaller sizes (for example, as an illustration in a letter or report), or to display on monitors 17″ or larger.
VGA	640 × 480	Can be displayed full screen on 13″ monitors. Suited to distribution by e-mail or the web.
3 : 2	2560 × 1704	The top and bottom of the frame are cropped out to produce a picture of the same proportions as photographs taken with a 35-mm film camera. The green lamp blinks slowly to show that photographs can not be accurately framed in the viewfinder.

Restrictions on Image Size

Image sizes of FULL, UXGA, and 3 : 2 are not available when NOISE REDUCTION is set to **Clear Image Mode** (128).

Print Size

The size of images when printed depends on the resolution of the printer (the higher the resolution, the smaller the final print size).

For more information on:

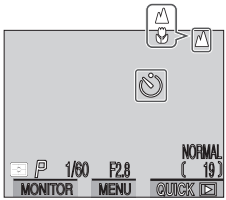
62 Choosing an image size for printing
65 Choosing an image size for electronic distribution

Focusing Near and Far: The AF Button

By default, the camera adjusts focus automatically for subjects 50 cm (1′8″) or more from the lens, which is ideal for snapshots. Under some circumstances, however, you may want to force the camera to focus on distant objects rather than on the closest object visible in the focus area—for example, when photographing a distant landscape through a screen of branches or when taking a shot through a window. Or you may want the camera to focus on something closer than 50 cm—for example, to create a close-up of a flower or business card. Your Nikon digital camera offers focus modes for both situations. In addition, a self-timer mode is available for delaying shutter release, either to keep the camera from shaking or to allow you to appear in your own photographs.

To select the focus mode, press the AF button repeatedly until the desired setting is displayed in the control panel or monitor.

Press



Focus mode displayed in control panel and monitor. At setting of infinity, ▲ icon appears in monitor; control panel shows **M-F**. "InF" appears briefly in shutter-speed/aperture display when infinity selected.

Macro Close-Up

We recommend that you frame photographs in the monitor when using macro close-up.

While the flash can be used in macro close-up mode, it may be unable to light the entire subject at distances under 30 cm (1′). Take a test picture and verify the results in the monitor.

The following options are available:

Option	How it works	When to use it
NO ICON Autofocus	Camera automatically adjusts focus according to distance to subject.	Use with subjects 50 cm (1′8″) or more from lens.
 Infinity	Focus is fixed at infinity. Flash is disabled.	Use when photographing distant scenes through foreground objects such as a window.
 Macro close-up	Camera can focus on objects as close as 2 cm (0.8″, measured from lens).	Use for close-ups.
 Macro close-up + self-timer	Combines autofocus (see above) at distances of 2 cm (0.8″) or more with shutter release delay of 10 s or 3 s.	Use for self-portraits or to prevent photos from blurring when shutter-release button is pressed.

Macro Close-Up (Continued)

When the camera is zoomed out to or past the middle optical zoom position, the macro close-up icon () in the monitor will turn yellow, indicating that macro close-up can be used to focus on objects as little as 2 cm (0.8″) from the lens. The camera may be unable to focus at very short ranges when zoomed in closer than the middle optical zoom position. To minimize distortion when photographing flat objects such as printed text or business cards, however, we recommend that you zoom the camera in and adjust the range until you find a distance at which focus can be achieved.

Autofocus

In autofocus and macro close-up modes, the camera adjusts focus automatically. In User Set A, the camera adjusts focus continuously while the monitor is on (*continuous autofocus*; 121). When the monitor is off, the camera does not focus until the shutter-release button is pressed halfway (*single autofocus*; 121). In either case, focus locks when the shutter-release button is pressed halfway, and remains locked as long as the button is held in this position (*focus lock*; 53). When User Set 1, 2, or 3 is selected, the FOCUS OPTIONS > **Auto-Focus Mode** item in the SHOOTING menu can be used to enable single autofocus when the monitor is on (121).

Getting Good Results with Autofocus

Autofocus performs best when:

- There is contrast between the subject and the background. For example, autofocus may not perform well on subjects that are the same color as the background.
- The subject is evenly lit.

Autofocus does not perform well when:

- You attempt to focus simultaneously on two or more objects at different distances from the camera. For example, autofocus may not perform well when photographing an object inside a cage, because the bars of the cage will be closer to the camera than the main subject, and both the bars and the main subject will be in the focus area.
- The subject is very dark (the subject should not, however, be too much brighter than the background).
- The subject is moving rapidly.

If the camera is unable to focus using autofocus, the green lamp next to the viewfinder will flicker when the shutter-release button is pressed halfway. Use focus lock (53) to focus on another subject at the same distance, or measure the distance to your subject and use manual focus (98).

Locking Autofocus with the AE-L/AF-L Button

If desired, focus can be locked using the **AE-L/AF-L** button on the front of the camera. For more information on using focus lock to focus on an off-center subject, see "Tutorial: Taking Photographs" (53).

1 Focus

Position your subject in the focus area and press the shutter-release button halfway. Check that the green lamp next to the viewfinder lights, indicating that the subject is in focus.

2 Press the AE-L/AF-L button

With the shutter-release button held halfway down, press the **AE-L/AF-L** button to lock focus. Focus will remain locked while the **AE-L/AF-L** button is pressed, even if you remove your finger from the shutter-release button.

3 Recompose the photograph and shoot

With the **AE-L/AF-L** button held down, recompose your photograph and press the shutter-release button all the way down to shoot. To take a series of photographs without pausing between shots to refocus the camera, keep the **AE-L/AF-L** button pressed between shots. Focus will also remain locked if you keep the shutter-release button pressed halfway between shots.

By default, pressing the **AE-L/AF-L** button when the camera is in focus locks both focus and exposure (106). In User Sets 1, 2, and 3, the **Controls** > **AE-L, AF-L** option in the setup menu (150) can be used to set the **AE-L/AF-L** button to lock only one of focus or exposure. If the **AE-L/AF-L** button is set to lock only focus, you can adjust exposure without refocusing the camera by keeping the **AE-L/AF-L** button pressed while lifting your finger off the shutter-release button between shots.

Delaying Shutter Release: Self-Timer Mode

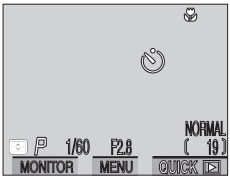
When the self-timer is used, the camera will not take a picture until either ten or three seconds after the shutter-release button is pressed. The ten-second timer is generally used for photographs in which you wish to appear yourself, when it gives you time to position yourself in front of the camera after pressing the shutter-release button. The three-second timer prevents photographs from being blurred by camera movement that occurs when the shutter-release button is pressed. This feature is most useful when taking low-light or close-up shots with the flash turned off.

To use the self-timer:

1 Position the camera
Mount the camera on a tripod (recommended) or rest it on a flat, stable surface.

2 Select a self-timer mode
Press the AF button until the self-timer icon (⏲) is displayed.

Press



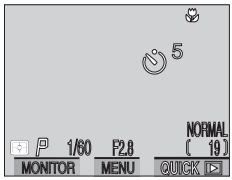
Self-timer icon displayed in control panel and monitor

3 Compose the photograph
Adjust camera settings and frame the picture.

4 Start the timer
Press the shutter-release button all the way down to activate the timer. Press once for a ten-second delay, twice for a three-second delay. To stop the timer, press the shutter-release button a third time.

The self-timer lamp next to the shutter-release button will start to blink when the shutter-release button is pressed, and continue to blink until one second before the photo is taken. The self-timer lamp will stay lit during the final second to warn that the shutter is about to be released.

Full press



Count-down timer in monitor shows number of seconds remaining until picture is taken

Focusing in Self-Timer Mode

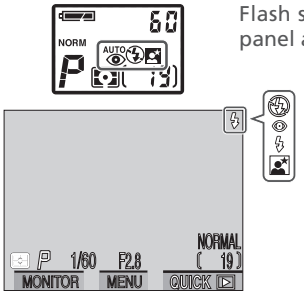
If your subject is not in the center of the frame when the shutter is released in self-timer mode, the camera will focus on the background and the photograph may not be in focus. To prevent this, choose User Set 1, 2, or 3 (88), select **Manual** from the FOCUS OPTIONS > **AF Area Mode** sub-menu in the SHOOTING menu (120), and select the focus area containing your subject manually using the multi selector. If you are taking a self-portrait and are unsure of precisely where your subject will appear in the frame, select User Set 1, 2, or 3 and use manual focus (98). Be sure the self-timer icon (ⓘ) is showing in the control panel and monitor before choosing the focus distance, as changing the focus mode after setting the focus distance will cancel manual focus.

Throwing Light on Your Subject: The Button

The flash can be adjusted for a variety of situations, as described in the table on the following page under the heading, "When to use it."

To change the flash setting, press the button repeatedly until the desired setting is displayed in the control panel or monitor.

Press



Flash setting displayed in control panel and monitor

Sensitivity (ISO Equivalency)

The built-in Speedlight is able to adjust output for correct flash exposure at sensitivity settings equivalent to ISO 400 or less. We recommend that you set sensitivity (ISO equivalency) to **AUTO** or to a fixed value of **400** or less when using the flash (96).

For more information on:

iii Safe flash use

The following options are available:

Option	How it works	When to use it
AUTO Auto	Flash fires when lighting is poor.	Best choice in most circumstances.
Flash Cancel (off)	Flash will not fire even when lighting is poor.	Use when subject is outside range of flash, to capture natural lighting under dim light, or where use of a flash is prohibited. Use of a tripod is recommended to prevent blurring.
AUTO Auto with red-eye reduction	Pre-flash fires before main flash. This causes subjects' pupils to contract before photo is taken, minimizing "red-eye" effect caused by flash reflecting from retina.	Use for portraits (works best when subjects are well within range of flash and looking at pre-flash). Because a slight delay occurs after the shutter-release button is fully pressed to allow the pre-flash to take effect, this setting is not recommended with subjects that are moving erratically or in other situations in which you want the camera to react quickly.
Anytime Flash (fill flash)	Flash fires whenever photo is taken.	Use to "fill-in" (illuminate) shadows and back-lit subjects.
Slow Sync	Auto flash combined with slow shutter speed.	Use to capture both subject and background at night or under dim light. Use of a tripod is recommended to prevent blurring.

The Flash-Ready Light

A short pause is required between exposures for the flash system to charge. If the shutter-release button is pressed halfway while the flash is charging, the red light next to the viewfinder will flicker. Remove your finger briefly from the shutter-release button and try again.

Keep the Flash Window Clear

Keep your fingers and other objects away from the flash window and photocell when using the flash. If a shot seems dark even though the flash fired, this may indicate that you accidentally blocked the flash window; check that the flash is unobstructed and try again.

When Lighting Is Poor

When lighting is poor and the flash is off (⊘) or set to slow sync (ϟ), shutter speed slows and photos may be blurred. Use of a tripod is recommended in these circumstances. At speeds of below $^1/_4$ s, the shutter-speed indicator in the monitor will turn yellow. Mottling ("noise") may appear in photographs taken at this speed or slower. To reduce noise, turn noise reduction on (128). Shutter speeds can also be increased by zooming the camera out (69), raising sensitivity (ISO equivalency; 96), selecting an exposure mode of aperture-priority auto and choosing a larger aperture (smaller f/-number; 93), or selecting shutter-priority auto as the exposure mode and choosing a faster shutter speed (92).

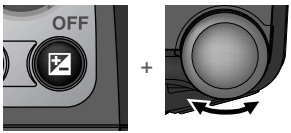
Note that the built-in Speedlight will turn off (⊘) automatically when:

- Autofocus is set to "Infinity" (▲; 77)
- An external flash accessory is attached with **Auto** selected for **Speedlight Opt.** > **Speedlight Cntrl** in the SET-UP menu for User Sets 1, 2, and 3 (152)
- Any of the following are in effect (User Sets 1, 2, 3): BSS is on (112), a setting other than **Single** is selected for CONTINUOUS (108), a setting other than **Normal** is selected in the LENS sub-menu (116), **On** is selected for the **AE Lock** option in the EXPOSURE OPTIONS sub-menu (118), or NOISE REDUCTION is set to **Clear Image Mode** (128)

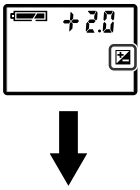
Bright, Dark, and High-Contrast Subjects: The ⊠ Button

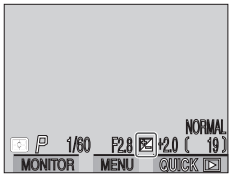
To obtain the desired results with certain subject compositions (for example, when large areas of the frame are very bright, very dark, or contain areas of strong contrast), it may be necessary to alter exposure from the value suggested by the camera. This can be done using exposure compensation.

Exposure compensation can be set to values between –2.0 EV (underexposure) and +2.0 EV (overexposure) in increments of $^1/_3$ EV. Rotate the command dial while pressing the ⊠ button.



Press while rotating command dial





Exposure compensation displayed in control panel and monitor. At values other than ±0.0, ⊠ icon is displayed in control panel after ⊠ button has been released.

Choosing an Exposure Compensation Value

As a rule of thumb, select *positive* values when large areas of the frame are very bright (for example, when photographing an expanse of sunlit water, sand, or snow) or when the background is much brighter than the main subject. Use *negative* values when large areas of the frame are very dark (for example, when photographing a forest of dark green leaves) or when the background is much darker than the main subject. This is because the camera, in order to avoid extreme over- or under-exposure, tends to lower exposure when the frame is very bright and raise exposure when the frame is very dark, which can make naturally bright subjects look dim and naturally dark subjects appear over-bright, or "washed out."

The easiest way to choose an exposure compensation value is to examine the view through the lens in the monitor. If image appears too dark, raise exposure compensation. If it is too bright, lower compensation. Continue to adjust exposure until the desired result has been achieved.

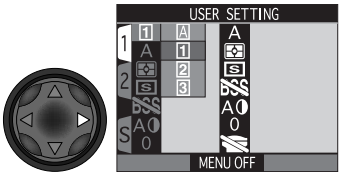
This section covers operations that can be performed only when User Set 1, 2, or 3 is selected from the menu for (shooting) mode. In addition to the settings described in the previous section, in User Sets 1, 2, and 3 the user has access to the following controls:

Control	Described in	
MODE	Controlling Shutter Speed and Aperture	89–95
ISO (⚡)	Reacting Faster to Light	96–97
MF (AF)	Focusing at a Preset Distance	98–99
SHOOTING menu	Shooting Menu Options	100–131

User Settings: Choosing a User Set

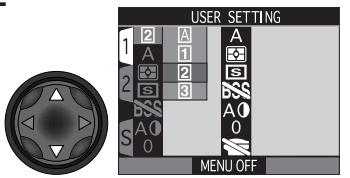
The options described in this section are only available when User Set 1, 2, or 3 is selected. To use these options, press the **MENU** button in (shooting mode) to display the menu for the current set. The USER SETTING option will be highlighted; choose User Set 1, 2, or 3 as follows:

1



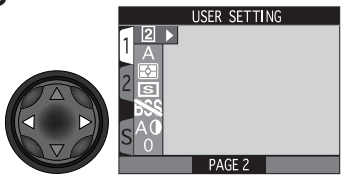
Display list of User Sets

2



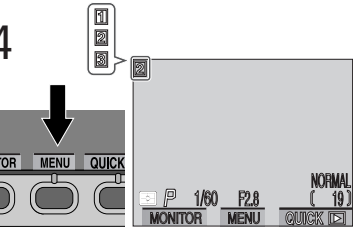
Highlight 1, 2, or 3

3



Position cursor in SHOOTING menu

4

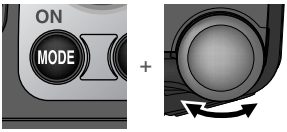


Press MENU button twice to exit menu. Except in case of User Set A, User Set number displayed in monitor.

Menu settings for User Sets 1, 2, and 3 are stored separately from one another. If there is a particular combination of settings you use frequently, you can select User Set 1 and set the camera to these settings. The camera will "remember" this combination of settings even when turned off, and will automatically restore these settings the next time User Set 1 is selected. You can create further combinations of settings for User Sets 2 and 3, and switch instantly from one combination of settings to the other simply by selecting the desired User Set.

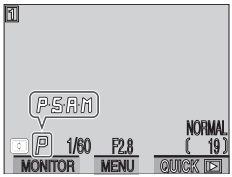
Controlling Shutter Speed and Aperture: Exposure Mode

When User Set A is selected, the camera automatically adjusts shutter speed and aperture to produce optimal exposure. In User Sets 1, 2, and 3, you can choose from four exposure modes that give you direct control over shutter speed and aperture. To choose the exposure mode, rotate the command dial while pressing the MODE button.



Press while rotating command dial

Exposure mode displayed in control panel and monitor



The FUNC. Button (149)

By default, the FUNC. button can be used to choose a User Set without accessing the camera menus. Press the FUNC. button while rotating the command dial. The selected User Set will be displayed in the top left corner of the monitor (User Sets 1, 2, and 3 only), and in the control panel shutter-speed/aperture display while the FUNC. button is pressed.

The following options are available:

Option	How it works	When to use it
P Programmed auto	Camera sets shutter speed and aperture for best exposure. Flexible program can be used to select additional combinations of shutter speed and aperture that will produce the same exposure.	Best choice in most circumstances.
S Shutter-priority auto	User chooses shutter speed; camera sets aperture for best exposure.	High shutter speeds freeze action. Low shutter speeds suggest movement by blurring moving objects.
A Aperture-priority auto	User chooses aperture; camera sets shutter speed for best exposure.	Large apertures (small f/-numbers) soften background details and let more light into camera, increasing range of flash. Small apertures (large f/-numbers) increase depth of field, bringing main subject and background into focus.
M Manual	User chooses both shutter speed and aperture.	Use when you want complete control over exposure.

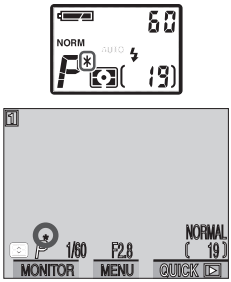
P Programmed Auto

In programmed auto, the camera automatically adjusts shutter speed and aperture according to the amount of light available, producing optimal exposures in most situations. Adjustments to exposure can be made using exposure compensation (85) or exposure bracketing (124).

Flexible Program

When User Set 1, 2, or 3 is selected, different combinations of shutter speed and aperture can be selected by rotating the command dial. Each combination of shutter speed and aperture will produce the same exposure.

Rotate



Values for shutter speed and aperture are displayed in monitor. Asterisk ("∗") appears next to exposure-mode indicator in control panel and monitor to indicate that flexible program is in effect.

Flexible Program

Flexible program is only available when the monitor is on.

The Control Panel Shutter-Speed/Aperture Display

The shutter-speed/aperture display in the control panel shows either shutter speed or aperture. To switch from one to the other, press the MODE button.

Restoring Default Programmed Auto Exposure

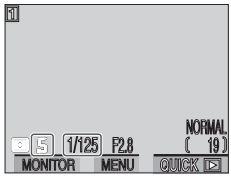
The default values for shutter speed and aperture can be restored by rotating the command dial until the asterisk ("∗") is no longer displayed next to the exposure-mode indicator. Default values are also restored when another User Set is selected, the mode selector is set to ▶ (playback mode), another exposure mode is selected, or the camera is turned off.

S Shutter-Priority Auto

In shutter-priority auto, shutter-speed is controlled by rotating the command dial. Options range from 8 s to $^{1}/_{2000}$ s in increments equivalent to 1 EV (1 step).

Rotate

Shutter-speed displayed in control panel and monitor



If the selected shutter-speed would result in the photograph being under- or over-exposed, the shutter speed displayed in the control panel and monitor will flash when the shutter-release button is pressed halfway. Choose another shutter speed and try again. At shutter speeds of $^{1}/_{4}$ s or slower, the shutter-speed indicator in the monitor will turn yellow to show that mottling ("noise") may appear in the final photograph. We recommend that you either choose a faster shutter speed or turn noise reduction on (128).

Shutter-Speed Limitations

At CONTINUOUS settings of **Ultra HS** and **Movie** (109), the camera takes a fixed number of frames per second. Shutter speed can not be set to values slower than the frame advance rate ($^{1}/_{30}$ s and $^{1}/_{15}$ s, respectively).

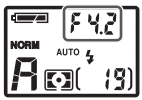
Faster Shutter Speeds

For shutter speeds faster than $^{1}/_{2000}$ s, choose an exposure mode of aperture-priority auto (see opposite), select the largest aperture setting (smallest f/-number), and zoom the camera all the way out. If lighting is sufficient, shutter speeds of up to $^{1}/_{4000}$ s can be achieved.

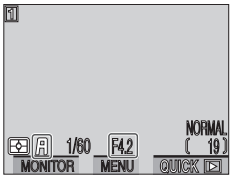
A Aperture-Priority Auto

In aperture-priority auto, aperture is controlled by rotating the command dial. Aperture varies in increments equivalent to $^1/_3$ EV ($^1/_3$ step).

Rotate



Aperture displayed in control panel and monitor



If the aperture value selected would result in the photograph being under- or over-exposed, the aperture value displayed in the control panel and monitor will flash when the shutter-release button is pressed halfway. Choose another aperture setting and try again.

Aperture and Zoom

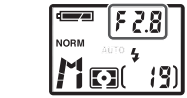
The maximum and minimum values for aperture are the maximum and minimum values for the camera lens, adjusted for the current zoom setting. Higher f/-numbers (smaller apertures) can be achieved by zooming the camera in, lower f/-numbers (larger apertures) by zooming the camera out. Unless **On** is chosen for **Fixed Aperture** in the ZOOM OPTIONS sub-menu (accessible from the SET-UP menu for User Sets 1, 2, and 3; 151), aperture will change as the camera is zoomed in or out. If, for example, you choose the second-highest aperture setting with the camera zoomed all the way out, the camera will vary the f/-number to maintain aperture at the second-highest setting for the current zoom position as you zoom the camera in.

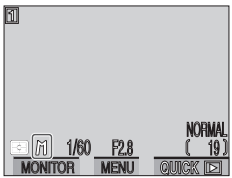
M Manual

In manual exposure mode, you can adjust both shutter speed and aperture as described below:

1 After choosing manual as the exposure mode, remove your finger from the MODE button.

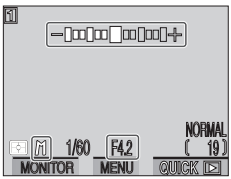
2 Press the MODE button to select shutter speed or aperture in the control panel shutter-speed/aperture display or the monitor, where the selected item is shown in green. The item selected will change each time the MODE button is pressed.





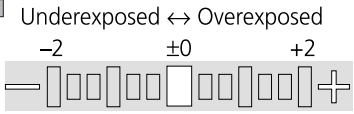
3 Rotate the command dial to set the selected item (aperture or shutter speed) to the desired value. The amount the photograph would be under- or over-exposed at the selected setting is displayed in the control panel exposure-count display and in the exposure display in the monitor.

Rotate



Control panel display is in EVs, rounded to nearest EV. Value is displayed for 8 s before being replaced by exposure-count display. If image would be under- or over-exposed by more than 9 EV, display shows flashing –9 (underexposure) or +9 (overexposure). Monitor exposure display shows values from –2 to +2 EV in increments of $^1/_3$ EV.

Underexposed ↔ Overexposed



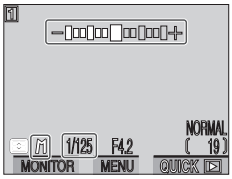
(Values in EVs)

4 Press the MODE button to select the other item (shutter speed or aperture).

5 Rotate the command dial to choose a value that will produce the desired exposure. If necessary, repeat steps 4 and 5 until the desired combination of shutter speed and aperture has been achieved.

Rotate

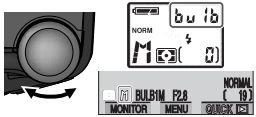
Confirm exposure in control panel and monitor



The Multi Selector

The item not currently selected in the control panel shutter-speed/aperture display or monitor can be adjusted by pressing the multi selector left or right while the MODE button is held down. If the command dial is being used to set aperture, the multi selector can be used to set shutter speed, and vice-versa.

Long Time-Exposures (BULB)



When manual exposure mode is selected and CONTINOUS set to **Single** (108), shutter speed can be set to BULB for long time-exposures of up to five minutes. With shutter speed selected in the control panel shutter-speed/aperture display or the monitor, rotate the command dial until the shutter-speed display shows bu lb (BULB). At this setting, the shutter will remain open while the shutter-release button is pressed, to a maximum of 60 s (for exposures of up to five minutes, set the EXPOSURE OPTIONS > **Maximum Bulb Duration** item in the SHOOTING menu to **5 min**; 119). To prevent blurring caused by camera shake, we recommend that you use a tripod and a remote shutter release such as the MC-EU1 remote cord. We also recommend that you turn noise reduction on (128) to reduce mottling ("noise").

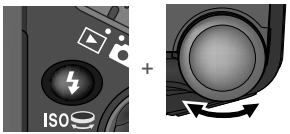
Reacting Faster to Light: Sensitivity (ISO Equivalency)

What Is "Sensitivity"?

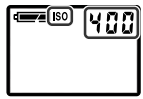
"Sensitivity" is a measure of how quickly your camera reacts to light. The higher the sensitivity, the less light needed to make an exposure, allowing the same exposure to be achieved with higher shutter speeds or smaller apertures. In a film camera, sensitivity is a characteristic of the film, not the camera. The ISO ratings you see on packages of film are a measure of their sensitivity—the higher the ISO rating, the more sensitive the film. Higher sensitivity is achieved by altering the chemical composition of the film, causing a random pattern, called "grain," to appear in the final photograph. In a digital camera, increased sensitivity has a similar effect: higher sensitivities allow higher shutter speeds, at the expense of mottling, or "noise" (the digital equivalent of film "grain") appearing in the final image.

Adjusting Sensitivity

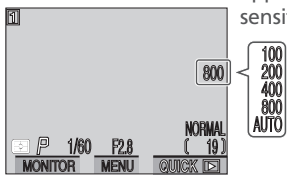
In User Set A, the camera sets sensitivity automatically in response to lighting conditions. When User Set 1, 2, or 3 is selected, you can choose a fixed value for sensitivity from four possible settings. Sensitivity is set by rotating the command dial while pressing the **ISO** ( ) button.



Press while rotating command dial



Sensitivity is displayed in control panel and monitor. After ISO button is released, **ISO** icon appears in control panel when sensitivity is above 100. At setting of AUTO, **AUTO** is displayed in monitor until ISO button is released; **ISO** icon then appears whenever sensitivity is above 100.



The following options are available:

Option	When to use it
100	Approximately equivalent to an ISO rating of 100, recommended except when lighting is poor or when higher shutter speeds are required (for example, when photographing a moving object). Noise may appear in photographs taken at settings above this value.
200	Approximately equivalent to an ISO rating of 200.
400	Approximately equivalent to an ISO rating of 400.
800	Approximately equivalent to an ISO rating of 800. Value is displayed in red in monitor to indicate that photographs taken at this setting will likely contain an appreciable amount of noise. Use only to capture natural lighting under low light conditions or when a fast shutter speed is required to avoid blurring. We recommend that image sharpening (123) be turned off at this setting to avoid heightening the effects of noise.
AUTO	Equivalent to a setting of **100** under normal conditions; when lighting is poor, however, camera automatically raises sensitivity to compensate. When sensitivity is raised above a value approximately equivalent to ISO 100, **ISO** icon appears in control panel and monitor.

Using the Flash

A setting of **800** is intended for use with natural lighting. We recommend that you choose **AUTO** or a fixed value of **400** or less when using the flash.

Exposure Mode

If sensitivity is set to **AUTO** in shutter-priority auto or manual exposure modes, sensitivity will be fixed at ISO 100 equivalent and will not vary with lighting conditions.

Focusing at a Preset Distance: Manual Focus

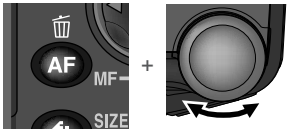
In User Sets 1, 2, and 3, manual focus can be used in place of autofocus for situations in which you know the distance to your subject. Focus distance can be selected from fifty preset distances, ranging from 0.02 m (0.06′) to infinity. To use manual focus:

1 Measure the distance to your subject

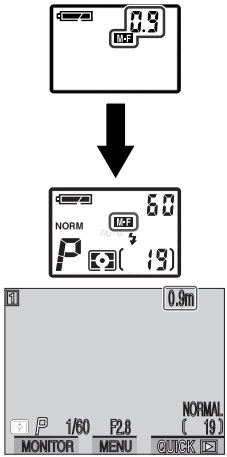
Measure or estimate the distance to your subject from the front of the camera lens. This will be the distance you will select for manual focus.

2 Choose the focus distance

Rotate the command dial while pressing the **MF** (AF) button.



Press while rotating command dial



Focus distance is displayed in monitor, and in control panel while MF (AF) button is pressed. After command dial is released, M-F icon in control panel shows that manual focus is in effect.

Close-ups and Optical Zoom

At short focus distances, the camera may be unable to focus at some zoom positions. If the camera is unable to focus at the current zoom position, the focus distance display in the monitor will turn red. Zoom the camera in or out until the focus distance is no longer shown in red.

3 Take the photograph
Press the shutter-release button all the way down to take the photograph. Note that the actual focus distance may differ slightly from the value shown in the control panel and monitor; check focus in the monitor before shooting and adjust the camera position as necessary.

Manual focus can be cancelled by pressing the AF button to select a new focus mode.

Focus Lock and Manual Focus

When manual focus is in effect, the AE-L/AF-L button can not be used to lock focus.

Using a Converter Lens

Use autofocus (77) when an optional converter lens is attached (191). In manual focus mode, the actual focus distance will differ from the value shown in the control panel and monitor.

Using the Flash

The flash can be used while manual focus is in effect. This makes it possible to combine the flash with a focus setting of infinity.

Using the Self-Timer

When using the self-timer, be sure that the self-timer is selected (80) *before* selecting a focus distance. Changing the focus mode after setting the focus distance will cancel manual focus.

Meters or Feet?

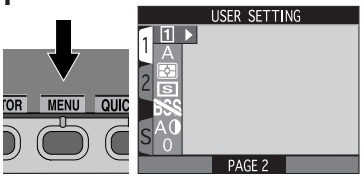
The units used for manual focus can be chosen from meters or feet using the FOCUS OPTIONS > **Distance Units** option in the SHOOTING menu (122).

Shooting Menu Options

In User Sets 1, 2, and 3, many settings can be adjusted from the SHOOTING menu. Menu settings for each User Set are made independently of one another, so that, for example, changes to settings in User Set 1 have no effect on settings in User Sets 2 and 3. If there are particular combinations of settings that you use frequently, you can select User Set 1 and set the camera to these settings. The camera will "remember" these settings even when turned off, and will restore them the next time User Set 1 is selected. You can create different combinations of settings for User Sets 2 and 3 and switch instantly from one combination to the other by selecting the desired User Set from the **User Settings** menu.

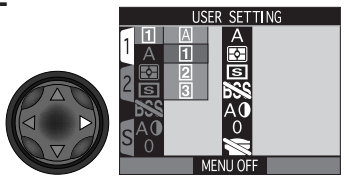
The SHOOTING menu is not available in User Set A, in which the majority of settings are controlled automatically by the camera. To display menu settings for User Set 1, 2, or 3, slide the mode selector to 📷 (shooting mode) and follow the steps below to select the desired User Set from either the SHOOTING menu or the SET-UP menu for User Set A.

1



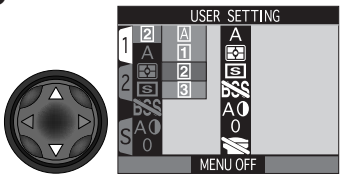
Press MENU button to display menu for current set. **USER SETTING** will be highlighted.

2



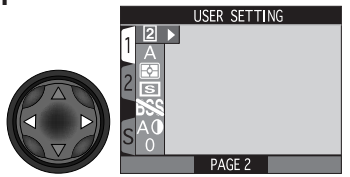
Display list of User Sets

3



Highlight 1, 2, or 3

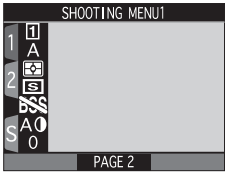
4



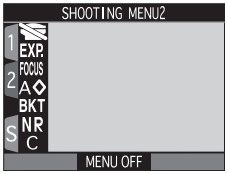
Position cursor in SHOOTING menu

Any changes to settings in the SHOOTING menu are automatically stored in the selected User Set, and will be recalled the next time the User Set is selected.

The SHOOTING menu contains two pages of options:



Option	
USER SETTING	88
WHITE BALANCE	102–104
METERING	105–107
CONTINUOUS	108–111
BEST SHOT SELECTOR	112–113
IMAGE ADJUSTMENT	114
SATURATION CONTROL	115



Option	
LENS	116–117
EXPOSURE OPTIONS	118–119
FOCUS OPTIONS	120–122
IMAGE SHARPENING	123
AUTO BRACKETING	124–127
NOISE REDUCTION	128–129
RESET ALL	130–131

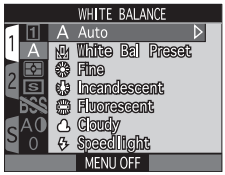
Keeping Colors True: *The White-Balance Menu*

What Is "White Balance"?

The color of the light reflected by an object depends on the color of the light source. The human brain is able to detect and compensate for such changes in color, with the result that a white object will look white to humans whether viewed in sunlight, under overcast skies, or indoors under incandescent or fluorescent lighting. To a camera, however, the "whites" produced by these different sources of light vary in color, some being slightly blue and others yellow or red. A digital camera can adjust colors according to lighting so that colors that appear white to the human eye also appear white when viewed in the final photograph. This adjustment is called "white balance."

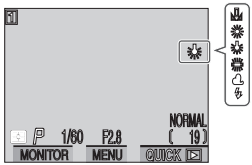
Choosing a White Balance Setting

In User Sets 1, 2, and 3, white balance can be chosen using the white-balance option in the SHOOTING menu (in User Set A, white balance is adjusted automatically).



Viewing the Current White-Balance Setting

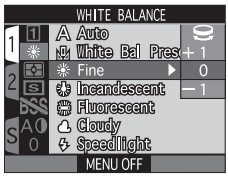
At settings other than **Auto**, the current white-balance setting is indicated by an icon in the monitor.



The following options are available:

Option	Description
Auto	White balance automatically adjusted to suit lighting conditions. Best choice in most circumstances.
White Bal Preset	White object used as reference to set white balance under unusual lighting conditions.
Fine	White balance adjusted for direct sunlight.
Incandescent	Use when taking photos indoors under incandescent light.
Fluorescent	Use when taking photos indoors under fluorescent light.
Cloudy	Use for photos taken outdoors under overcast skies.
Speedlight	White balance adjusted to match light produced by Nikon Speedlights.

Fine-Tuning White Balance

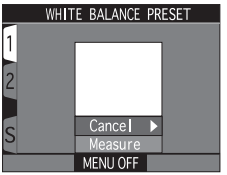


At settings other than (**Auto**) and (**White Bal Preset**), white balance can be "fine tuned" by highlighting the desired setting and rotating the command dial to select an option from a sub-menu. Adjustments range from –3 to +3 in increments of one; raising white balance tends to give images a blue cast, while lowering white balance generally makes photos appear slightly yellow or red. In the case of (**Fluorescent**), the sub-menu offers a choice of bulb types (see table at right).

Option	Bulb Type
FL1	White (W)
FL2	Daylight White (Neutral [N])
FL3	Daylight (D)

Preset White Balance

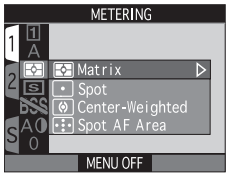
Preset white balance is used to adjust white balance when shooting under mixed lighting or to compensate for light sources with a strong color cast (for example, to make photographs taken under a lamp with a red shade look as though they had been taken under white light). When (**White Bal Preset**) is selected from the white-balance menu, the camera will zoom in and the menu shown at right will be displayed in the monitor.



Option	Description
Cancel	Recalls the most recent setting for preset white balance from memory and sets white balance to this value.
Measure	To measure a new value for white balance, place a white object, such as a piece of paper, under the lighting that will be used in the final photograph. Frame this object so that it fills the square in the center of the menu shown above. Highlight **Measure** and press the multi selector to the right to measure a new value for white balance (shutter will be released and camera will return to original zoom position, but no photograph will be recorded).

Measuring Light: *The Metering Menu*

In User Sets 1, 2, and 3, the metering menu offers a choice of four metering methods that determine how the camera sets exposure (in User Set A, matrix metering is used). Choose a metering method suited to your composition and lighting conditions. The following options are available:



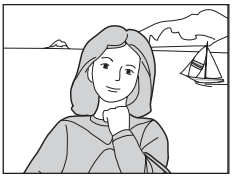
Option	How it works	When to use it
Matrix	Compares measurements from 256 areas of frame with library of typical compositions to produce optimal exposure for entire image.	Best choice in most circumstances.
Spot	Camera measures light in area shown by square in center of monitor. Only about $^1/_{32}$ of entire frame is metered.	Ensures that subject in metering target will be correctly exposed even when background is much brighter or darker. Can be used with autoexposure lock (106) to meter off-center subjects.
Center-Weighted	Camera meters light in entire frame but assigns a weight of 80% to area in center of frame occupying roughly $^1/_4$ of total.	Classic meter for portraits; preserves background details while letting lighting conditions at center of frame determine exposure. Can be used with autoexposure lock (106) to meter off-center subjects.
Spot AF Area	Camera measures light in current focus area only.	Useful when you want to link spot metering with manual or automatic focus-area selection (120) to meter an off-center subject.

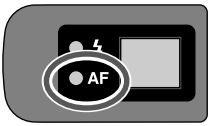
Locking Exposure: Spot and Center-Weighted Metering

When spot or center-weighted metering is selected, pressing the shutter-release button halfway sets exposure for the subject at the center of the frame. If your subject is not in the center of the frame when the shutter-release button is pressed halfway, exposure will be set for an object in the background, with the result that your intended subject will be over- or under-exposed. In this situation, autoexposure lock can be used to lock exposure after metering your main subject, allowing you to adjust the composition before taking the photograph.

1 Set focus and exposure

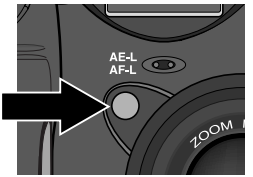
After positioning your subject in the center of the frame, press the shutter-release button halfway and check that the green lamp next to the viewfinder lights, indicating that the subject is in focus.





2 Lock exposure

With the shutter-release button pressed halfway, press and hold the **AE-L/AF-L** button. Focus and exposure will remain locked as long as the **AE-L/AF-L** button is pressed, even if you remove your finger from the shutter-release button.

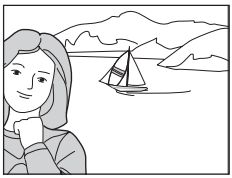


Options for the AE-L/AF-L Button

By default, pressing the **AE-L/AF-L** button when the camera is in focus locks both focus and exposure. In User Sets 1, 2, and 3, the **Controls** > **AE-L, AF-L** option in the setup menu (150) can be used to set the **AE-L/AF-L** button to lock only one of focus or exposure.

3 Recompose the photograph and shoot

Keeping focus and exposure locked, recompose your photograph. Press the shutter-release button all the way down to shoot.



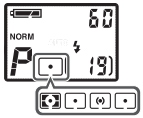
Spot AF Area

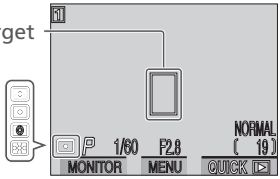
Spot AF-area metering can be used in place of autoexposure lock to meter an off-center subject. This option is only available when **Manual** or **Auto** is selected from FOCUS OPTIONS > **AF Area Mode** in the SHOOTING menu (120). Selecting either option when spot AF-area metering is in effect links metering to the active focus area. If **Off** is selected, matrix metering will be used. Note that focus-area selection is only available when the monitor is on; if the monitor is off when spot AF-area metering is in effect, the center focus area will be used to determine exposure.

When spot AF-area metering is selected, a spot metering icon ([•]) appears in the control panel; the spot AF-area icon ([⊡]) is displayed in the monitor.

Viewing the Current Metering Method

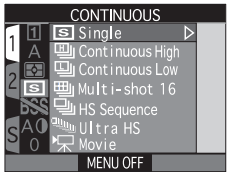
The current metering method is indicated by icons in the control panel and monitor.





Making Movies and Taking Photographs in a Sequence: *The Continuous Menu*

The options in the "continuous" menu determine whether the camera takes one photograph each time the shutter-release button is pressed, or records a continuous sequence of photographs while the shutter-release button is held down. A movie option is also included for recording short video clips with audio.



Option	Description
Single	Camera records one shot each time the shutter-release button is pressed all the way down.
Continuous High	Camera records photographs at about three frames per second while shutter-release button is held down, to a maximum of three shots. Monitor turns off automatically during shooting. Not available at an image-quality setting of HI.
Continuous Low	While the shutter-release button is held down, photographs are recorded at a rate of about 1.5 fps (three frames every two seconds). This setting can be used to capture fleeting expressions on a portrait subject, or to photograph a subject that is moving unpredictably. Not available at an image-quality setting of HI.
Multi-shot 16	Camera takes sixteen consecutive "thumbnail" images 640 × 480 pixels in size and combines them into a collage measuring 2560 × 1920 pixels. This option is only available at an image size of FULL and image-quality settings of FINE, NORMAL, or BASIC.

HI Image Quality

At an image-quality setting of HI, only **Single** can be selected in the CONTINUOUS menu. All other options are disabled.

Option	Description
HS Sequence	Camera takes photos at sizes of SXGA or smaller as long as the shutter-release button is held down. Image quality is set to NORMAL, allowing photos to be taken at approximately three frames per second.
Ultra HS	While the shutter-release button is held down, the camera records up to one hundred QVGA photos 320 × 240 pixels in size. Image quality is set to NORMAL, allowing photos to be taken at a rate of approximately thirty frames per second. With each sequence of photos, the camera creates a new folder in which all photos in the sequence are stored. Folders created at this setting are given names beginning with "N_" followed by a three digit number assigned automatically by the camera. In place of the number of exposures remaining, exposure count displays in control panel and monitor show number of hundred-photo sequences that can be recorded.
Movie	This option is used to make QVGA movies 320 × 240 pixels in size, with sound recorded via the camera's built-in microphone. Recording begins when the shutter-release button is pressed all the way down and ends when the shutter-release button is fully pressed a second time. While recording is in progress, frames are shot at about fifteen frames per second. In place of the number of exposures remaining, monitor exposure-count display shows length of movie that can be recorded. Movie ends automatically after 60 s or when no more space is available on memory card. Movies are stored as QuickTime movie files with names ending in ".MOV".

During Recording

While images are being transferred from the buffer to the memory card for permanent storage, the green lamp next to the viewfinder will blink. *Do not eject the memory card, or remove or disconnect the power source until the lamp has stopped blinking*. Removing the card or cutting power in these circumstances could result in loss of data. Be sure that the camera is off before you remove the memory card.

At a setting of **Ultra HS**, the zoom indicator in the monitor moves from **S** (start) to **E** (end) as recording progresses. To interrupt shooting before one hundred photos have been recorded, remove your finger from the shutter-release button.

Using a Flash

At settings other than **Single**, the built-in Speedlight turns off automatically and will not fire even when lighting is poor. External Speedlights connected to the camera's accessory shoe can be used at settings other than **Movie** and **Ultra HS** (108).

Focus, Exposure, and White Balance

At settings other than **Single** and **Movie**, focus, exposure, and white balance are determined by the first photograph in each series.

The Memory Buffer

The camera is equipped with a memory buffer for temporary storage of photos during shooting, allowing you to take several photographs in succession without waiting for the images to be transferred to the memory card. The number of images that can be stored in the buffer depends on the quality and size of the images. When the buffer becomes full, an hourglass icon (⌛) will be displayed in the monitor until enough data have been transferred to the card to allow more photographs to be taken. More photographs can be taken as soon as enough memory becomes available in the buffer. At settings of **Continuous Low** and **HS Sequence**, you can continue to take photographs as long as the shutter-release button is held down, although the rate at which photographs are taken will drop when the buffer fills up.

Noise Reduction

When NOISE REDUCTION is on or set to **Clear Image Mode** (128), CONTINUOUS is automatically set to **Single**, and the options in the CONTINUOUS menu are disabled.

Movie/Ultra HS

Settings of **Movie** and **Ultra HS** only take effect when the monitor is on. If the monitor is turned off, the camera will revert to a setting of **Single** until the monitor is turned on. If the monitor is swivelled to point in the same direction as the lens, the display in the monitor will be inverted.

Using Zoom while Recording Movies

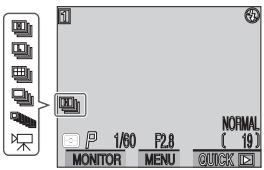
In **Movie** mode, optical zoom can only be adjusted *before* recording begins. Digital zoom can also be adjusted before recording in the range 1.2 × to 2.0 × (values of more than 2.0 × are not available in **Movie** mode). Once recording has started, pressing the zoom button triggers digital zoom, even if **Off** has been selected in the setup **Zoom Options** > **Digital Tele** menu (151). The zoom settings available in **Movie** mode are summarized in the following table:

	Before recording	During recording
Optical zoom	Can be adjusted normally.	Fixed at position selected before recording.
Digital zoom	1.2 – 2.0 × from maximum optical zoom position.	Up to 2.0 × from current optical zoom position.*

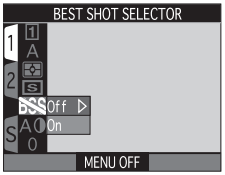
* If digital zoom was in effect before recording began, digital zoom can be adjusted freely up to 2.0 × from the maximum optical zoom position.

Viewing the Current Continuous Setting

At settings other than **Single**, the current "continuous" setting is indicated by an icon in the monitor.



Getting Sharper Photos: *The Best Shot Selector Menu*



The "best-shot selector" (BSS) option is recommended for situations in which inadvertent camera movement can produce blurred photographs, for example when:

- the camera is zoomed in
- you are using macro close-up to take photographs at ranges of less than 50 cm (1′8″)
- the flash can not be used although lighting is poor (for example, the subject is outside the range of the flash or you want to capture natural lighting under low-light conditions)

The BSS function may not produce the desired results with a moving subject or if you change the composition while the shutter-release button is pressed all the way down.

The best-shot selector menu contains the following options:

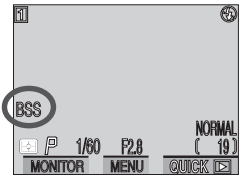
Option	Description
Off	BSS off; camera functions normally.
On	Camera takes photos as long as the shutter-release button is held down, to a maximum of ten. These images are then compared and the sharpest photo (the image with the highest level of detail) saved to the memory card. The flash is turned off, and focus, exposure, and white balance are determined by the first photograph in the series.

Restrictions on the Best Shot Selector

BSS is not available at "continuous" settings other than **Single** (108) or when NOISE REDUCTION is on or set to **Clear Image Mode** (128). Selecting these settings automatically cancels BSS.

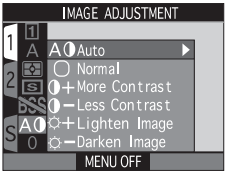
Viewing the Current BSS Setting

When the best-shot selector is on, a BSS icon appears in the monitor.



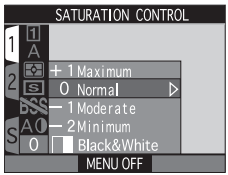
Adjusting Contrast and Brightness: *The Image Adjustment Menu*

In User Set A, the camera automatically performs image compensation for optimal brightness and contrast before recording the photograph to the memory card. In User Sets 1, 2, and 3, the image-adjustment sub-menu gives you control over this image-compensation operation.



Option	Description
Auto	Camera automatically adjusts brightness and contrast according to shooting conditions.
Normal	Camera performs same standard brightness and contrast adjustment on all images. This setting is recommended for images that will later be retouched on a computer.
More Contrast	Image processed to emphasize difference between light and dark areas, enhancing contrast. This is useful when shooting under overcast skies or shooting landscapes and other low-contrast subjects.
Less Contrast	Image processed to decrease difference between light and dark areas, reducing contrast. Recommended when light is very bright, creating strongly shadows on the subject.
Lighten Image	Increases brightness of mid-tones in image, without affecting detail in highlights and shadows. This setting can be used with images destined for output on a printer or monitor if the device tends to produce images that are too dark.
Darken Image	Decreases brightness of mid-tones in image, without affecting detail in highlights and shadows. This setting can be used with images destined for output on a printer or monitor if the device tends to produce images that are too bright.

Controlling Color: *The Saturation Control Menu*

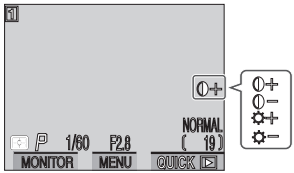


Saturation control is used to heighten or reduce the vividness of colors. Raise saturation to **+1 Maximum** for a vivid, photoprint effect when taking photos that will be printed "as is," without further editing. Settings of **–1 Moderate** or **–2 Minimum** can be used when taking photos that will later be retouched on a computer. A setting of **0 Normal** is the best choice in most other circumstances.

The color saturation menu also includes a ◨ **Black&White** option for taking photographs in black-and-white. When this option is in effect, photographs will be recorded as monochrome images. Black-and-white images require the same amount of memory as color images, but show a higher level of detail.

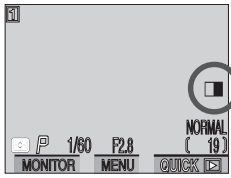
Viewing the Current Image Adjustment Setting

At settings other than **Auto** and **Normal**, an image-adjustment icon appears in the monitor.

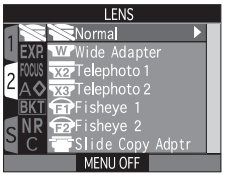


Black-and-White

At a setting of **Black&White**, the monitor shows the view through the lens in black-and-white, with indicators displayed in green. A ◨ icon appears in the monitor.



Settings for Optional Converter Lenses: *The Lens Menu*



With a lens adapter ring (available separately; 191) attached to the camera lens, you can use optional converter lenses for wide-angle, telephoto, and fisheye photography, as well as an adapter for taking photographs of film. Each of these lenses is suited to a particular combination of settings, including focus mode, zoom position, and metering method. Using the lens sub-menu, you can select combinations of settings suited to particular converter lenses. For complete information on use and handling, see the documentation provided with your converter lens.

Option	Description
Normal	No modifications are made to settings. Use this option when no converter lens is attached (be sure to remove lens adapter ring when no converter lens is in place).
Wide Adapter (for WC-E68) [1, 2]	Camera zooms out to widest angle. Zoom can be adjusted manually (69).
Telephoto1 (for TC-E2) [1, 2]	Camera zooms in to maximum optical zoom position. Optical zoom can be adjusted in range between this position and third step in monitor zoom display (69).
Telephoto2 (for TC-E3ED) [1, 2]	Zoom fixed at maximum optical zoom position; digital zoom set to 1.2 × (69). Digital zoom can be adjusted manually; note, however, that corners of image may be eclipsed at settings below 1.2 ×.
Fisheye1 (for FC-E8) [3]	• Zoom fixed close to widest angle (69). • Focus fixed at infinity; self-timer can be used (77). • Metering method fixed at center-weighted (105). • Corners of frame blacked out to create circular image.
Fisheye2 (for FC-E8) [2, 3]	• Zoom fixed close to maximum optical zoom position (69). • Image fills entire frame.

Option	Description
Slide Copy Adptr (for ES-E28) [3]	Selecting this item displays options shown at right. Choose **Positive** when making photographs from color slide film, **Inverse Color** when examining film negatives in the monitor. • Zoom set close to maximum optical zoom position; digital zoom set to 1.4 × (69). Digital zoom can be adjusted manually; note, however, that corners of image may be eclipsed at settings below 1.4 ×. • Focus mode can be chosen from macro close-up and macro close-up with self-timer (77). • Exposure compensation set to +0.7 EV (85). • Aperture set to minimum (largest f/-number) to increase depth of field. Minimum aperture recommended when setting aperture manually (93, 94–95). • Image adjustment set to **Less Contrast** (114).

[1] Built-in Speedlight turns off. External flash accessories can still be used.
[2] Use autofocus (77). At settings of manual focus (98) or infinity (77), the actual focus distance will differ from the distance selected.
[3] Both built-in and external Speedlights turn off automatically.

Slide Copy Adapter: Inverse Color

The **Inverse Color** option requires a bright light source. If lighting is insufficient, the image in the monitor will be too bright. Should you notice excessive "noise" in the form of randomly spaced bright pixels, set the IMAGE SHARPENING option in the SHOOTING menu to **Off** or **Low** (123).

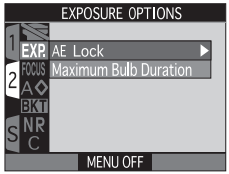
Inverse Color is intended for use only when examining film negatives in the monitor, and the quality of the image produced will vary widely with the type and make of film used. We recommend that you use a film scanner such as the Nikon COOLSCAN to obtain high-quality digital images from negative film.

Viewing the Current Lens Setting

At settings other than **Normal**, a converter lens icon appears in the monitor.

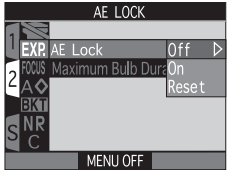
Controlling Exposure: *The Exposure Options Menu*

The exposure options sub-menu contains two options for controlling exposure.



Taking Multiple Photographs with the Same Exposure: AE Lock

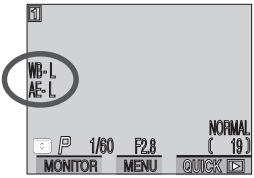
When taking a series of photographs that will later be joined to form a single image (for example, when taking shots for a panorama or 360 ° virtual-reality image), you may wish to use the same exposure, sensitivity, and white-balance settings for all images in the series. This task can be performed using AE-lock.



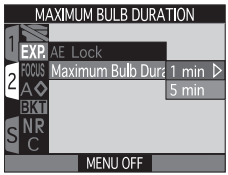
Option	Description
Off	Restores normal exposure, sensitivity, and white balance.
On	The first photo taken after **On** is selected sets exposure (shutter speed, aperture, sensitivity, and white balance) for all subsequent photographs. The flash is turned off while AE lock is in effect.
Reset	Clears existing exposure settings. The first photograph taken after this option is selected sets exposure (shutter speed, aperture, sensitivity, and white balance) for all subsequent photographs.

Confirming AE-Lock Settings

While **AE-Lock** is in effect, **AE-L** (AE Lock) and **WB-L** (White-Balance Lock) icons appear in the monitor. These icons turn yellow to indicate that exposure for subsequent photographs will be locked with the next shot, either because you have just chosen **On** or **Reset** in the **AE-Lock** menu, or because you have selected a new value for white balance, shutter speed, or aperture.



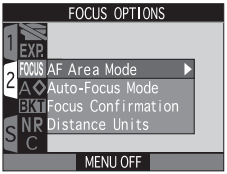
Setting the Time Limit for Long-Time Exposures: Maximum Bulb Duration



In manual exposure mode, a shutter speed setting of BULB allows the shutter to remain open as long as the shutter-release button is pressed (95). When **Maximum Bulb Duration** is set to **1 min** (the default setting), the maximum for such long time-exposures is sixty seconds. You can extend this limit to five minutes by choosing **5 min**. Note that longer exposure times increase the amount of noise visible in the final photograph.

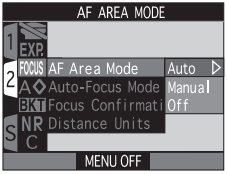
Controlling Focus: *The Focus Options Menu*

The focus options sub-menu provides control over focus settings.



Focus-Area Selection: AF Area Mode

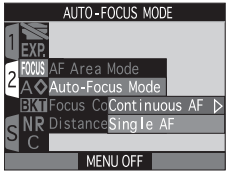
In User Set A, the camera automatically focuses on the subject in the focus area at the center of the frame, shown by the focus brackets in the viewfinder. In User Sets 1, 2, and 3, a total of five focus areas are available, making it possible to focus on an off-center subject without using focus lock. The options in the AF-area mode sub-menu determine how the focus area is selected.



Option	Description
Auto	Camera automatically selects focus area containing subject closest to camera. Selected focus area is displayed in red in monitor when shutter-release button is pressed halfway. This setting minimizes the risk of your photograph being out of focus when your subject is moving erratically or in other situations where there is little time to check focus.
Manual	User selects focus area manually using multi selector. This option can be used instead of focus lock (53) to focus on a relatively motionless subject that is not at the center of the frame.
Off	Center focus area (shown by focus brackets in viewfinder) is used. No focus area indicators are shown in monitor. This option can be used in combination with focus lock to focus on an off-center subject.

Auto-Focus Mode

In User Sets 1, 2, and 3, you can choose the autofocus mode that takes effect when the monitor is on (when the monitor is off, single autofocus is used, regardless of the setting chosen in the autofocus mode sub-menu). For more information on autofocus, see page 78.



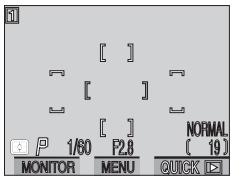
Option	Description
Continuous AF	Camera adjusts focus continuously until shutter-release button is pressed halfway, minimizing time needed to focus before photo is taken. Note, however, that photos can be taken even when camera is not in focus; check green (autofocus) lamp before shooting.
Single AF	Camera focuses when shutter-release button is pressed halfway. If monitor is off, photos can only be taken when camera is in focus. Choose this setting to save batteries.

Restrictions on Focus Area Selection

Focus-area selection is not available when the monitor is off or digital zoom (70) is in effect. In these cases, the center focus area is used.

Manual Focus Area Selection

When **Manual** is selected in the AF-area mode sub-menu, five focus areas are displayed in the monitor. Use the multi selector to select the focus area containing your subject. Manual focus-area selection can be used in combination with focus lock (53) if the subject does not fall in any of the five focus areas.

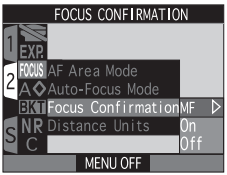


Spot AF Area Metering (105)

Manual and auto focus-area selection can be used in combination with spot AF-area metering to meter exposure only in the selected focus area.

Focus Confirmation

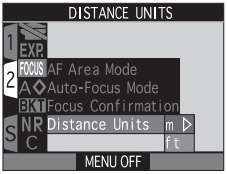
Use focus confirmation when you want to know exactly what areas of the frame will be in focus before taking a photograph. Focus confirmation affects only the view through the lens in the monitor; no indicators of focus appear in the final photograph.



Option	Description
MF	Areas of the image that are in focus will be sharply outlined in the monitor when manual focus is used (98).
On	Areas of the image that are in focus will be sharply outlined in the monitor in all focus modes.
Off	No indication of focus is given.

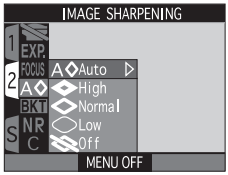
Distance Units

Use this sub-menu to select the units in which distances for manual focus will be displayed (98). You can choose from meters (**m**) or feet (**ft**).



Making Edges More Distinct: *The Image Sharpening Menu*

When you take a photograph, the camera automatically outlines edges, making the image appear sharper. In User Sets 1, 2, and 3, the image sharpening menu gives you control over the amount of sharpening performed (in User Set A, the camera automatically adjusts sharpening according to the subject). The following options are available:

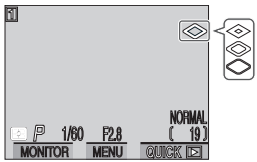


Option	Description
A◇ **Auto**	Camera sharpens edges for optimal results; adjustment performed differs from image to image.
◇ **High**	Image processed to increase sharpness, making edges more distinct.
◇ **Normal**	Camera performs same standard level of sharpening on all images.
⬭ **Low**	Amount of sharpening reduced below normal level.
Off	No sharpening performed.

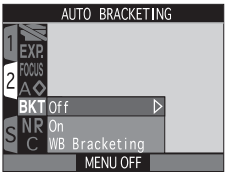
The effects of sharpening are not visible in the monitor when the camera is in (shooting) mode.

Viewing the Current Image Sharpening Setting

At settings other than **Auto** and **Off**, the current image-sharpening setting is shown by an icon in the monitor.



Varying Settings over a Series of Photos: *Auto Bracketing*

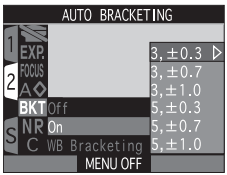


In some situations, you may find it difficult to select appropriate exposure-compensation and white-balance settings, and yet not have time to check the results and adjust settings after each shot. The options in the auto bracketing menu can be used to vary these settings automatically over a series of photographs, "bracketing" a selected exposure-compensation or white-balance setting.

Option	Description
Off	Restores normal exposure and white balance.
On	Camera varies exposure with each shot; the number of shots and the amount of exposure compensation performed can be selected from a sub-menu (see below). Values are added to the exposure-compensation value selected with the ⊠ button (📖 85). Bracketing is performed by varying shutter speed in programmed auto, aperture-priority auto, and manual exposure modes, and in shutter-priority auto by varying aperture.
WB Bracketing	The camera takes three shots each time the shutter-release button is fully pressed, varying white balance to produce one image with the white balance selected in the WHITE BALANCE menu (📖 102), one image with a reddish cast, and one with a bluish cast.

Autoexposure Bracketing

Autoexposure bracketing is useful when shooting high contrast subjects and in other situations in which you are unsure as to the correct exposure. Selecting **On** in the auto bracketing menu displays the sub-menu of exposure bracketing options shown at right, where you can choose the number of shots and the amount exposure will vary with each shot.



Option	No. of shots	Exposure increment	Bracketing order
3, ±0.3	3	±1/3 EV	+0.3, 0, –0.3
3, ±0.7	3	±2/3 EV	+0.7, 0, –0.7
3, ±1.0	3	±1 EV	+1.0, 0, –1.0
5, ±0.3	5	±1/3 EV	+0.7, +0.3, 0, –0.3, –0.7
5, ±0.7	5	±2/3 EV	+1.3, +0.7, 0, –0.7, –1.3
5, ±1.0	5	±1 EV	+2.0, +1.0, 0, –1.0, –2.0

After taking a series of shots using bracketing, you can view the results in quick review (57) or playback (158) and select the image with the desired exposure, discarding the remaining shots if so desired.

Restrictions on Autoexposure Bracketing

Autoexposure bracketing can not be used when: BSS (112) or AE-lock (118) is on, noise reduction is on or set to **Clear Image Mode** (128), or **Multi-shot 16**, **Ultra HS**, or **Movie** is selected for CONTINUOUS (108).

Resetting Autoexposure Bracketing

Autoexposure bracketing starts over from the highest exposure compensation value when changes are made to any settings that affect exposure, including exposure mode, exposure compensation, shutter speed, aperture, sensitivity, flash mode, and **Variable Power** (152). Bracketing is also reset when the camera enters sleep mode (143) or User Set A is selected.

Continuous Shooting

If the shutter-release button is held down at settings of **Continuous Low** and **HS Sequence** (108), shooting will pause after each bracketing cycle is completed.

Auto Flash and Sensitivity Settings

If auto flash is used (83), the flash setting for the first photograph in each bracketing cycle applies to the remaining photographs. If the flash fires for the first photograph in a three-shot cycle, it will also fire for the remaining two. If the flash is not required for the first photograph, it will not fire for the remaining two.

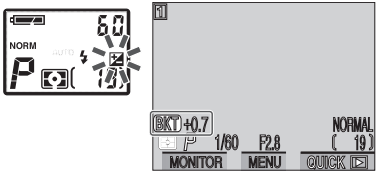
If sensitivity (ISO equivalency) is set to AUTO (97), the sensitivity value for the first photograph in each bracketing cycle applies to the remaining photographs.

Cancelling Autoexposure Bracketing

Autoexposure bracketing can be cancelled by selecting **Off** from the AUTO BRACKETING menu or turning the camera off.

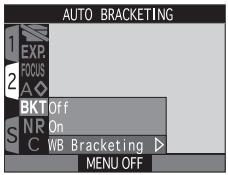
Confirming Autoexposure Bracketing

While bracketing is in effect, the ± icon in the control panel flashes, and a **BKT** icon appears in the monitor with the selected exposure increment.



White Balance Bracketing

White-balance bracketing can be used if you are uncertain whether the option selected in the WHITE BALANCE menu will produce the desired results, or if you want to experiment with different white balance settings without confirming the view in the monitor before each shot. When this option is in effect, the camera takes three shots each time the shutter-release button is fully pressed: one image with the selected white balance value, one image with a reddish cast, and one image with a bluish cast.



Recording Time

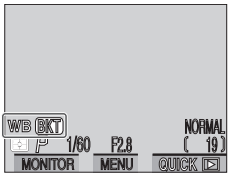
Because the camera takes three shots each time the shutter-release button is pressed, the time required to save images to the memory card is approximately tripled when white-balance bracketing is used.

Restrictions on White Balance Bracketing

White-balance bracketing can not be used when: BSS is on (112), image quality is set to HI (73), noise reduction is on or set to **Clear Image Mode** (128), or a setting other than **Single** is chosen for CONTINUOUS (108).

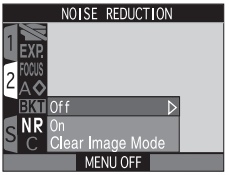
Confirming White Balance Bracketing

While white-balance bracketing is in effect, a **WB BKT** icon appears in the monitor.



Avoiding "Grainy" Photographs: *Noise Reduction*

When sensitivity (ISO equivalency) settings above ISO 100 equivalent or shutter speeds slower than $^{1}/_{15}$ s are used, "noise" in the form of randomly-spaced brightly-colored pixels may appear in photographs, particularly in shadows. The noise reduction menu offers two options for reducing noise: **On** and **Clear Image Mode**.



Option	Description
Off	All noise reduction options off; camera functions normally.
On	This option, which only takes effect at shutter speeds of $^{1}/_{15}$ s or slower, is used to reduce noise in long time-exposures. This setting can be used with the flash and is available at all image sizes. Time required to save images to memory card more than doubles.
Clear Image Mode	This option is used to minimize noise and improve color gradation in photos SXGA or smaller. Each time the shutter-release button is pressed, the camera makes two exposures with the shutter open, and a third with the shutter closed. The results are compared to reduce noise, and the single photograph that results saved to the memory card. Time required to save images to memory card more than triples.

Restrictions on Noise Reduction

NOISE REDUCTION settings of **On** and **Clear Image Mode** can not be used in combination with BSS (112), bracketing (124), or CONTINUOUS settings other than **Single** (108). **Clear Image Mode** can not be used with image sizes of FULL, 3 : 2, or UXGA. If any of these image sizes is in effect when **Clear Image Mode** is chosen, image size will be set to SXGA while **Clear Image Mode** is in effect, reverting to the original size when **Clear Image Mode** is turned off.

Clear Image Mode

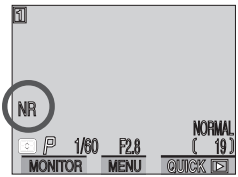
Clear Image Mode may not produce the desired results with moving subjects or if the camera is shaken or moved during shooting.

Using the Flash

When **Clear Image Mode** is on, both the built-in Speedlight and any external Speedlights turn off automatically.

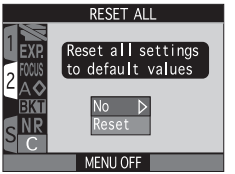
Confirming Noise Reduction

While noise reduction is in effect, an **NR** icon appears in the monitor.



Restoring Default Settings: *Reset All*

The **C** (RESET ALL) option in the SHOOTING menu is used to reset settings for the current User Set to their default values. The items listed on the following page are also reset for all User Sets and for playback mode. The RESET ALL menu contains the following options:



Option	Description
No	Exit menu, leaving settings unchanged.
Reset	Restore settings to default values.

Choosing **Reset** restores the following options for the current User Set to their default values. Settings in other User Sets are unaffected.

Setting	Default
White balance	Auto*
Metering	Matrix
Continuous	Single
BSS	Off
Image adjustment	Auto
Saturation control	Normal
Lens	Normal
Exposure options	
AE lock	Off
Maximum bulb duration	1 min.

Setting	Default
Focus options	
AF area mode	Auto
Autofocus mode	Continuous AF
Focus confirmation	MF
Image sharpening	Auto
Auto bracketing	Off
Noise reduction	Off

*Fine-tuning reset to 0.

In addition, the following items are reset for all User Sets and playback mode. RESET ALL does not affect **Distance Units**, **Seq. Numbers**, **Func.**, date, video mode, and language settings. It also has no effect on settings made with the camera buttons and command dial.

Setting	Default
Folders*	NIKON
Monitor options	
Display mode	On
Brightness	3
Hue	6
Shutter sound	On
Controls	
Memorize	All options on
AE-L, AF-L	AE&AF

Setting	Default
Speedlight options	
Variable power	±0
Speedlight control	Auto
Shot confirm	Off
info.txt	Off
Auto off	30 s
Zoom options	
Digital tele	On
Fixed aperture	Off

* **Folders** option for playback reset to **All Folders**.

Camera Setup

The SET-UP Menu

This chapter details the options available in the SET-UP menu, where you can adjust basic camera settings and perform such tasks as formatting memory cards and choosing a folder to store your photographs.

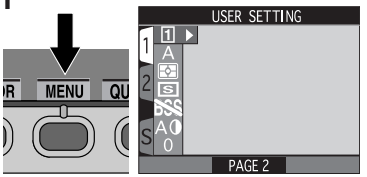
SET-UP Menu Options

The SET-UP menu contains options for basic camera setup, including formatting memory cards and setting the time and date. The options available in the SET-UP menu depend on the operating mode and, in 📷 (shooting) mode, the User Set selected.

📷 (Shooting) Mode, User Set A

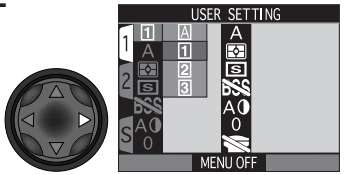
The SET-UP menu for User Set A contains six options for basic camera setup. To display the SET-UP menu for User Set A, slide the mode selector to 📷 (shooting mode), and:

1



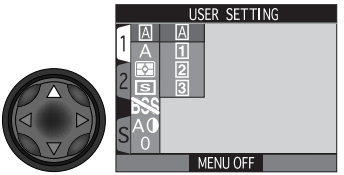
Press MENU button to display menu for current User Set. USER SETTING will be highlighted.

2



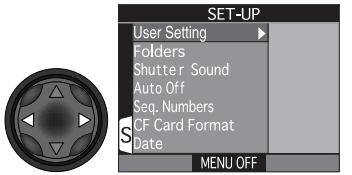
If SET-UP menu is not displayed, press multi selector to right to display list of User Sets

3



Highlight **A**

4

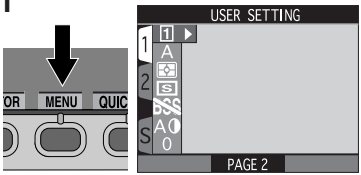


Display SET-UP menu for User Set A

(Shooting) Mode, User Sets 1, 2, 3/▶ (Playback) Mode

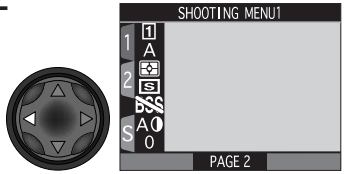
In playback mode, the SET-UP menu contains options for choosing the video mode for television playback and selecting the language in which menus and messages are displayed. The SET-UP menu for User Sets 1, 2, and 3 contains all the options available in the SET-UP menus for playback and User Set A, as well as advanced setup options and options for customizing camera controls. The SET-UP menu for User Sets 1, 2, and 3 is accessed from the SHOOTING menu (100), the playback SET-UP menu from the PLAY BACK menu (165).

1



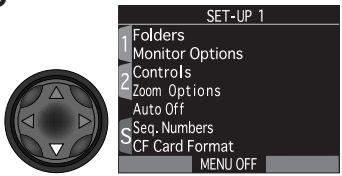
Press MENU button to display menu for current mode

2



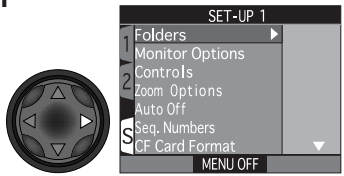
Highlight page tab (selected page tab highlighted in red)

3



Highlight **S**

4



Display SET-UP menu for current mode

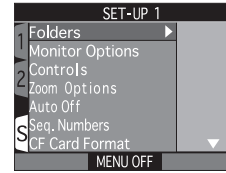
The following table lists the options available in each operating mode and User Set:

Option	User Set A	User Set 1, 2, 3	▶	
Folders	✔	✔	—*	137–141
Shutter Sound	✔	✔	✔	142
Auto Off	✔	✔	✔	143
CF Card Format	✔	✔	✔	144
Seq. Numbers	✔	✔	—	144–145
Date	✔	✔	✔	145
Monitor Options	—	✔	✔	146–147
Controls	—	✔	—	148–150
Zoom Options	—	✔	—	151
Speedlight Opt.	—	✔	—	152–153
info.txt	—	✔	—	154
Video Mode	—	✔	✔	155
Language	—	✔	✔	155
Disable Delete	—	✔	—	156

* Playback **Folders** option accessible from main PLAY BACK menu (169).

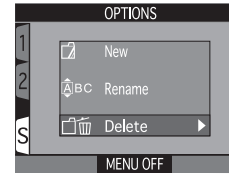
Organizing Your Photographs: *The Folders Menu*

By default, photographs are stored on the memory card in a folder labeled NIKON. To make it easier to locate photographs during playback, you can create additional folders and organize photographs by theme. The **Folders** sub-menu is used to create, rename, and delete folders, and to select the folder in which subsequent photographs and movies will be stored, or from which images will be played back.



Creating, Renaming, and Deleting Folders: The Options Menu

The **Options** sub-menu in the **Folders** menu can be used to create, rename, or delete folders.

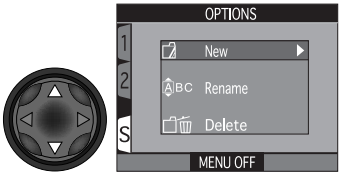


Design Rule for Camera File Systems

The camera file system conforms to the Design Rule for Camera File Systems (DCF). Under this system, folder names consist of a three-digit folder number followed by the folder name (e.g., "100NIKON"). Each folder can hold a maximum of two hundred images (it may hold less, depending on the size of the memory card and other factors). Should a folder fill up, another folder will automatically be created with the same name but a different folder number (e.g., "101NIKON"). For most purposes, the folder number can be ignored—when viewed from the camera, folders with the same name but different folder numbers are the same folder. For example, the camera shows the folders "100NIKON" and "101NIKON" as the single folder "NIKON" with no folder number. When the memory card is viewed on a computer, however, folders with the same name but different folder numbers will be treated as separate folders.

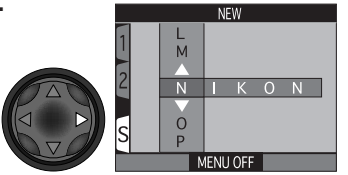
Creating New Folders

1



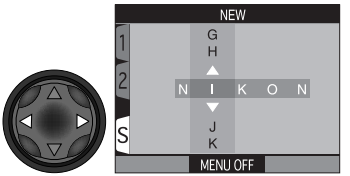
Highlight **New**

2



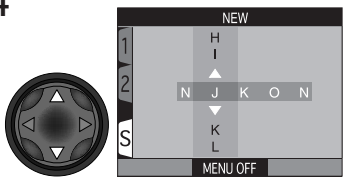
Display default folder name (NIKON)

3



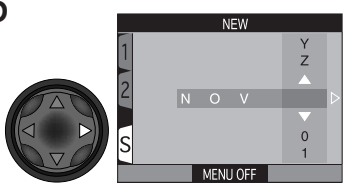
Highlight letter

4



Edit selected letter. Folder name can include uppercase letters ("A"–"Z"), numbers, and spaces. Repeat steps 3 and 4 to create new five-letter folder name.

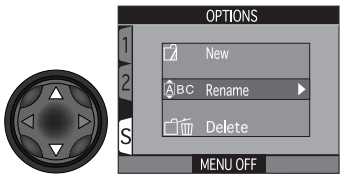
5



Highlight last letter and press multi selector to right to create new folder. Until a different folder is selected from **Folders** menu, all new images will be stored in new folder. Press MENU button to exit without creating folder.

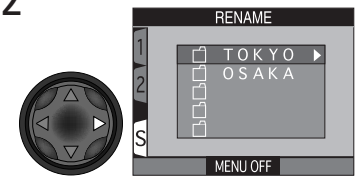
Renaming Existing Folders

1



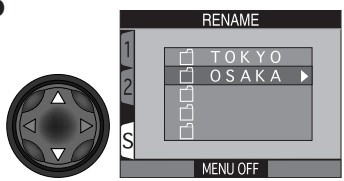
Highlight **Rename**

2



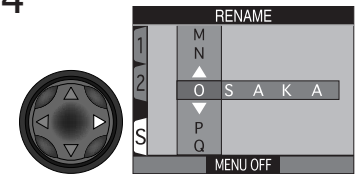
Display list of existing folders (folder NIKON can not be renamed)

3



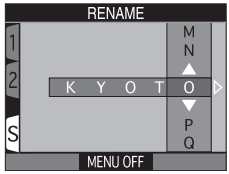
Highlight folder name

4



Display menu

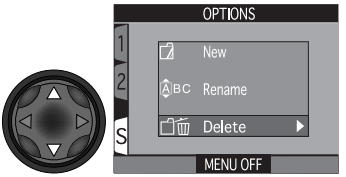
5



Edit name as described in steps 3–5 of "Creating New Folders," opposite

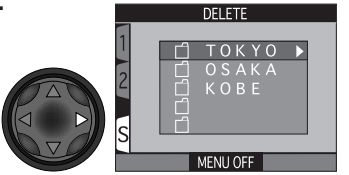
Deleting Folders

1



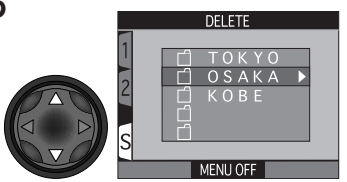
Highlight **Delete**

2



Display list of folders (folder NIKON not available for deletion)

3



Highlight folder name

4

Confirmation dialog displayed. Press multi selector up or down to highlight option, press to right to select:

- Select **No** or press MENU button to exit without deleting folder
- Select **Yes** to delete selected folder

Hidden and Protected Images

If the selected folder contains hidden or protected images, the folder will not be deleted. Any images it contains that are neither hidden nor protected will, however, be deleted.

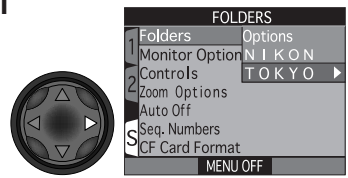
Disable Delete

Folders can not be deleted when **Disable Delete** (156) is on.

Choosing a Folder

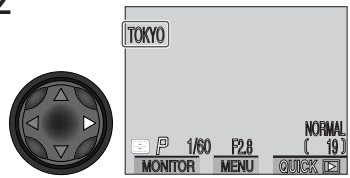
Once additional folders have been created, you can select the folder that will be used for playback or to store photographs in (shooting) mode. Until a new folder is selected, all subsequent images will be stored in this folder, which will also be used for playback.

1



Highlight folder name

2



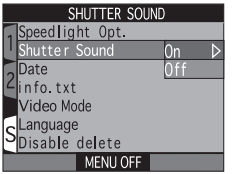
Folder name shown in monitor (no name displayed when folder NIKON is selected)

Ultra HS

Each series of one hundred photographs taken at a setting of **Ultra HS** (109) is stored in a separate folder with a name consisting of "N_" followed by a three-digit number assigned by the camera. The **Folders** menu can be used to select these folders for playback or to delete the entire folder and all images it contains. Note, however, that no additional images can be stored in folders created at a setting of **Ultra HS**.

Audio Confirmation: *Shutter Sound*

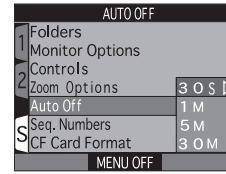
The **Shutter Sound** sub-menu controls the "beep" made by the camera's speaker.



Option	Description
On	*The camera beeps once to confirm that:* • the camera has been turned on • the shutter-release button has been pressed all the way down to release the shutter • manual focus has been activated or a lens-converter option selected in the LENS menu • images have been deleted or the memory card formatted • changes have been made to image status with the **Hide**, **Protect**, **Print Set**, or **Auto Transfer** items in the playback menu • **Shutter Sound** has been set to **On** *The camera beeps twice to warn that:* • the camera is not in focus when the shutter-release button is pressed halfway (only when monitor off) • the memory card is full or not inserted • the battery is exhausted
Off	Confirmation and warning beeps disabled. Sound recorded with movies can still be played back.

Conserving Battery Power: *The Auto-Off Menu*

When operated on battery power, the camera will enter sleep mode if no operations are performed for thirty seconds (or three minutes when menus are displayed). The time limit for sleep mode can be chosen from thirty seconds, one minute, five minutes, and thirty minutes using the **Auto Off** menu.



The time limit for 📷 (shooting) mode can be set from the setup menu for any User Set, and applies to all User Sets. The time limit for playback is independent of the time limit for 📷 mode, and is set using the **Auto Off** option in the playback setup menu.

Using a 2CR5 (DL245) Battery

When powered by a six-volt 2CR5 (DL245) lithium battery, the camera may become hot if left on for an extended period. We recommend that you set **Auto Off** to five minutes or less when using a 2CR5 (DL245) lithium battery.

Sleep Mode

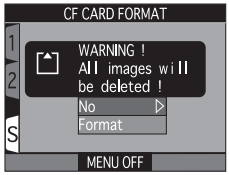
In sleep mode, all camera functions are deactivated and the camera itself is effectively off, consuming almost no power. The camera can be reactivated by pressing the **MONITOR** (🖵) button or by pressing the shutter-release button halfway.

Using an AC Adapter

When the camera is powered by the EH-21 AC adapter/battery charger (available separately), the camera will remain on for thirty minutes if no operations are performed, regardless of the setting in the **Auto Off** menu. If the camera is connected to a video device, video output will continue indefinitely after the monitor has turned off.

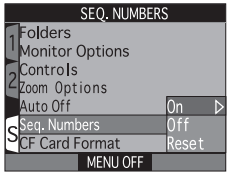
Formatting Memory Cards: *CF Card Format*

The memory card supplied with your camera is already formatted for use in the COOLPIX5000. Other memory cards will however need to be formatted prior to use. For more information on formatting memory cards, see "Tutorial: First Steps" (37).



File Numbering: *The Seq. Numbers Menu*

When saving photographs and movies, the camera assigns each image a file name consisting of "DSCN" followed by a four-digit number assigned automatically by the camera (e.g., "DSCN0001.JPG"). Image files are stored in folders with names beginning with a three digit number between 100 and 999 (e.g., "100NIKON"). When sequential numbering is off, the same file name may be assigned to images in different folders or on different memory cards, causing confusion when the files are copied to the same location on a computer. This can be prevented by turning sequential file numbering on.



File Numbering

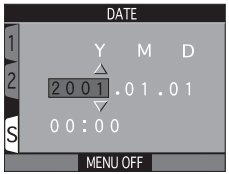
When sequential file numbering is off, file numbering will begin again from 0001 whenever the user creates a new folder (137). File numbering will also begin again from 0001 whenever a new folder is created automatically, regardless of whether sequential file numbering is on or off. A new folder is created automatically if a photograph is taken when the current folder contains two hundred files or a file numbered 9999.

The following file-numbering options are available:

Option	Description
On	When this option is selected, the camera assigns all subsequent file and folder numbers sequentially in ascending order, starting from the last number used. If the memory card is formatted or a new card inserted in the camera, file and folder numbering will continue from the last numbers used.
Off	The camera does not store the last file and folder numbers used. When a new file or folder is created, numbering starts from the lowest number available.
Reset	Clears the current file and folder numbers from memory. Sequential numbering begins again from the lowest numbers available on the memory card.

Setting the Time and Date: *The Date Menu*

This option is used to set the camera to the current date and time. For more information, see "Tutorial: First Steps" (42).

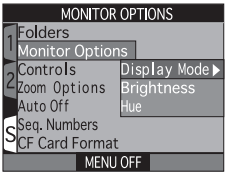


File Names

Files created by the camera have names of the form "DSCN*nnnn.xxx*," where *nnnn* is a four-digit number assigned automatically by the camera and *xxx* is a three-letter extension. Photos taken at HI image quality have the extension ".TIF" (e.g., "DSCN0001.TIF"), while photographs taken at other image qualities have the extension ".JPG" (e.g., "DSCN0001.JPG"). Movie files have the extension ".MOV" (e.g., "DSCN0001.MOV").

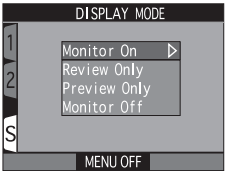
Adjusting Monitor Settings: *Monitor Options*

The monitor options menu is used to set monitor brightness and hue. In User Sets 1, 2, and 3, it also contains an option for specifying whether and when the monitor will turn on automatically.



Controlling the Monitor: The Display Mode Menu

This option, which is available only in User Sets 1, 2, and 3, is used to specify the conditions under which the monitor will turn on, and to specify whether or not photographs are displayed in the monitor after shooting. This option takes effect only in User Sets 1, 2, and 3; in User Set A and playback, the monitor functions normally.

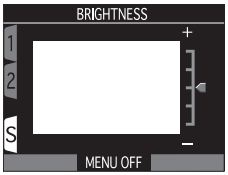


Option	Description
Monitor On	Monitor turns on automatically at start-up; photographs are displayed in monitor after shooting.
Review Only	Monitor turns on only to display photographs immediately after shooting. Choose this option to save batteries.
Preview Only	Monitor turns on automatically at start-up, but photographs are not displayed in monitor after shooting.
Monitor Off	Monitor off at start-up; monitor remains off unless **MENU** button pressed display SHOOTING menu. This option is most effective for saving batteries.

Regardless of the setting chosen for **Display Mode**, the monitor can be turned on or off at any time by pressing the **MONITOR** (|□|) button.

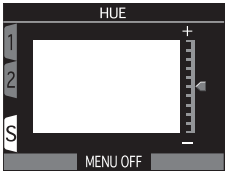
Adjusting Monitor Brightness: The Brightness Menu

This option controls monitor brightness. Press the multi selector up or down to increase or decrease the brightness of the monitor by moving the arrow to the right of the display up or down. The results of any changes are immediately visible in the center of the display.



Adjusting Monitor Tone: The Hue Menu

This option controls the hue (tone) of the monitor. Press the multi selector up or down to alter hue by moving the arrow to the right of the display up or down. Moving the arrow up gives the display in the monitor a bluish cast, moving it down a reddish cast. The results of any changes are immediately visible in the center of the display.

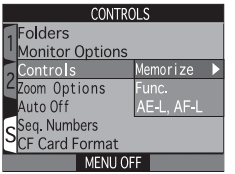


Monitor Brightness

Increasing monitor brightness also increases the brightness of images displayed on a television set when the camera is connected to a television or VCR (178).

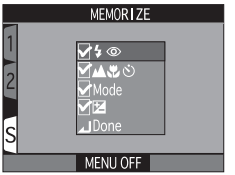
Customizing Camera Controls: *The Controls Menu*

The options in the **Controls** sub-menu determine what settings made with the camera buttons are recalled when User Set 1, 2, or 3 is selected, what function is assigned to the FUNC. button in User Sets 1, 2, and 3, and what function is assigned to the AE-L/AF-L button.



Restoring Button Settings: Memorize

The **Memorize** option determines what settings made with the camera buttons in User Set 1, 2, or 3 remain in memory when the camera is turned off. Any items that are not checked will be restored to default values settings when the camera is turned off.

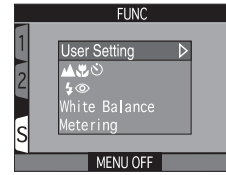


Option	Setting affected	Default
⚡ 👁	Flash mode	Auto
▲ 🌷 ⏱	Focus mode	Autofocus
MODE	Exposure mode	Programmed auto
±	Exposure compensation	±0

To check an option, or to remove the check from an option that has already been checked, highlight the item and press the multi selector to the right. Highlight **Done** and press the multi selector to the right to put any changes into effect.

Assigning Functions to the FUNC. Button: Func.

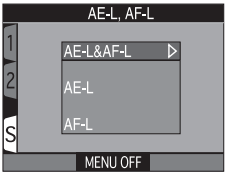
In User Sets 1, 2, and 3, you can choose the function assigned to the FUNC. button, making it possible to select the User Set or adjust white balance and metering without accessing the camera menus, or to adjust flash and focus mode without using the buttons on the back of the camera. The following options are available:



Option	Description
User Setting	User Setting can be chosen by pressing the selected button and rotating the command dial. User Set number is displayed in control panel shutter-speed/aperture display while the FUNC. button is pressed.
AF/MF/Self-timer	Focus mode can be set by pressing the FUNC. button.
Flash/Red-eye	Flash mode can be set by pressing the FUNC. button.
White Balance	White balance can be set by pressing the FUNC. button and rotating the command dial. While the button is pressed, the **W-B** indicator will appear in the control panel and the current white-balance setting will be displayed in the shutter-speed/aperture display as follows: PrE (**Preset White Bal**; select this option to restore the last recorded value for preset white balance), Sun (**Fine**), Inc (**Incandescent**), Flu (**Fluorescent**), Clo (**Cloudy**), Fla (**Speedlight**), no display (**Auto**).
Metering	Metering can be set by pressing the FUNC. button and rotating the command dial.

Options for the AE-L/AF-L Button: AE-L, AF-L

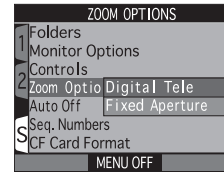
By default, both focus and exposure are locked when the **AE-L/AF-L** button is pressed. The options in the **AE-L, AF-L** menu can be used to set the button to lock only one of focus or exposure.



Option	Description
AE-L&AF-L	Pressing the **AE-L/AF-L** button locks both focus and exposure.
AE-L	Pressing the **AE-L/AF-L** button locks exposure only. Focus is locked when shutter-release button is pressed halfway.
AF-L	Pressing the **AE-L/AF-L** button locks focus only. Exposure is locked when shutter-release button is pressed halfway.

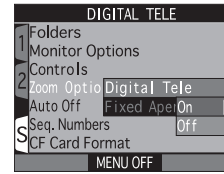
Controlling Zoom: *Zoom Options*

The zoom-options sub-menu contains settings for optical and digital zoom.



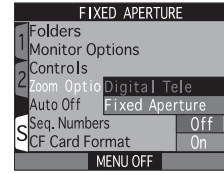
Digital Tele

This sub-menu is used to turn digital zoom on and off. If **On** is selected, the camera enters digital zoom mode when the T button is held down for more than two seconds at the maximum optical zoom position (digital zoom does not take effect if monitor is off). If **Off** selected, pressing the T button at the maximum optical zoom position has no effect (digital zoom can still be used while recording movies; 111).



Fixed Aperture

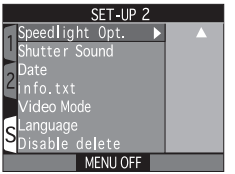
Normally, aperture changes with the zoom position. If desired, you can set the camera to maintain the f/-number selected in aperture-priority or manual exposure modes as you zoom in or out.



Option	Description
Off	Aperture changes as you zoom in or out.
On	In aperture-priority and manual exposure modes, aperture is fixed at selected f/-number as camera is zoomed in or out. Note that the selected f/-number may exceed the camera's exposure range at the new zoom position; to prevent this, choose an f/-number from about f/5 to around f/8.

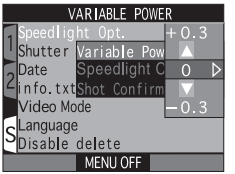
Controlling the Flash: *Speedlight Options*

This sub-menu contains options for controlling built-in and external Speedlights.



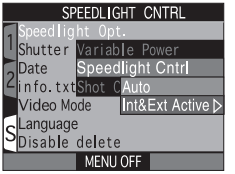
Controlling Flash Output: Variable Power

This sub-menu is used to adjust flash output. Flash output can be lowered or raised by from –2.0 EV to +2.0 EV in increments of $^1/_3$ EV.



Options for External Speedlights: Speedlight Cntrl

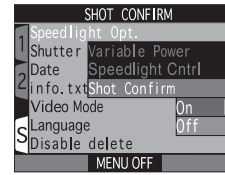
This sub-menu is used to control the built-in Speedlight when using external flash accessories connected to the camera's accessory shoe (192).



Option	Description
Auto	Built-in Speedlight functions normally when no external flash accessories are attached. When external flash accessory is attached, built-in Speedlight emits low-intensity pre-flash immediately before main flash to help ensure correct exposure, but flash lighting for photograph is provided by external flash only. Flash mode for flash accessory is set by pressing ⚡ button (82). Flash mode selected for external flash is displayed in control panel and monitor as shown in table opposite; monitor shows ⚡ in all modes to indicate that light from built-in Speedlight will not affect outcome of photograph.
Int&Ext Active	Built-in Speedlight fires at same time as external flash.

Confirming Shutter Release: The Shot Confirm Menu

If desired, the flash can be fired at low intensity after the shutter is released to let your subjects know that a picture has been taken. The flash will only fire to confirm shutter release if the flash did not fire when the photograph was taken. This feature can be useful when taking portraits with the flash turned off.



Note that when shot confirmation is on, the flash will fire to confirm shutter release even when the flash has been turned off (⚡). We recommend that you turn shot confirmation off where use of a flash is prohibited, for example in aquariums or museums.

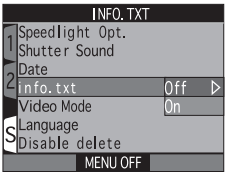
To turn shot confirmation on, select **On** in the **Shot Confirm** sub-menu. The default setting is **Off**.

Flash-Mode Indicators for External Speedlights

When **Auto** is selected in the **Speedlight Cntrl** sub-menu and a flash accessory is attached, the flash-mode indicators in the control panel and monitor show the flash mode as follows:

Flash mode	Control panel	Monitor
Auto	AUTO ϟ	A ⚡
Flash Cancel (off)	⚡	⚡
Auto with red-eye reduction	AUTO 👁 ϟ	👁 ⚡
Anytime Flash (fill flash)	ϟ	ϟ ⚡
Slow sync	ϟ 🌙	SL ⚡

Storing Photo Info in a Separate File: *info.txt*



While **On** is selected in the **info.txt** sub-menu, information about each image recorded is stored in an independent text file ("info.txt") in the same folder as the image. When the contents of the memory card are viewed from a computer, this file can be read with a text browser such as Notepad or SimpleText. Selecting **Off** (the default option) in the **info.txt** sub-menu suspends recording of photo information to the info.txt file (information about each image can still be viewed in the photo information display; 162).

info.txt

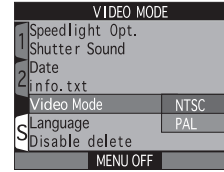
The info.txt file gives the following information for each image recorded while **On** is selected in the **info.txt** sub-menu:

- File number and type
- Camera type and firmware version
- Metering method
- Exposure mode
- Shutter speed
- Aperture
- Exposure compensation
- Focal length and digital zoom factor
- Image adjustment
- Sensitivity (ISO equivalency)
- White balance
- Sharpening
- Date of recording
- Image size and quality
- Saturation control
- Focus area

Images are listed in the order recorded, separated by a blank line.

Choosing a Video Standard: *The Video-Mode Menu*

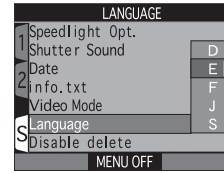
The **Video Mode** menu is used to select the standard used for video output. Adjust this setting to match the standard used in any video device to which you connect the camera.



Option	Description
NTSC	Use when connecting camera to NTSC devices.
PAL	Use when connecting camera to PAL devices. If the video cable is connected to the camera at this setting, the camera monitor will turn off.

Choosing a Language: *The Language Menu*

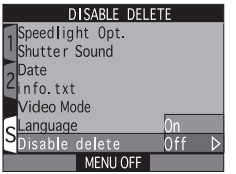
This option is used to choose the language in which camera menus and messages are displayed. For more information, see "Tutorial: First Steps" (40).



For more information on:

178 Connecting the camera to a TV or VCR

Protecting Images from Deletion: *Disable Delete*



The **Disable Delete** option is used to protect images from accidental deletion. Select **On** to disable all operations or menu options that delete or erase images, including deletion with the 🗑 (AF) button, the **Delete** option in the playback menu, and the **CF Card Format** option in the setup menus. When **Off** is selected, images can be deleted and memory cards formatted normally.

Playing Images Back

Playback Mode

Basic Playback

158–164

The Playback Menu

165–177

Television Playback

178

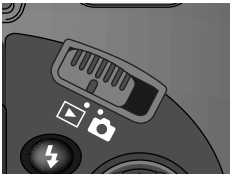
This section details the operations that can be performed when the mode selector is set to ▶. It is divided into the following three sections:

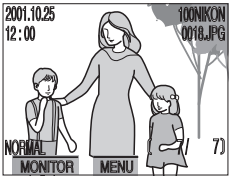
Basic Playback
This section covers playback operations that can be performed using the buttons on the back of the camera, the multi selector, and the command dial.

The Playback Menu
Read this section for a description of the operations that can be performed in the playback menu.

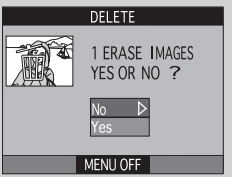
Television Playback
Learn how to connect your camera for playback on a television set.

When the mode selector is set to ▶, the camera enters playback mode with the most recent photograph displayed in the monitor. This section covers the operations that can be performed in playback mode using the multi selector, the command dial, and the buttons on the back of the camera.





The following operations can be performed in playback mode:

To	Use	Description
View other photos		Press the multi selector up or left to view images recorded before the current photo, down or right to view images recorded after the current photo. Keep multi selector pressed to scroll rapidly to the desired frame number.
View multiple images	▪ (W)	Press the ▪ (W) button to display up to nine images at a time as small thumbnail previews (160).
Delete current photo	🗑 (AF)	A confirmation dialog will be displayed. Press multi selector up or down to highlight option, press to right to select.  • Select **No** to exit without deleting photo • Select **Yes** to delete photo

To	Use	Description
Zoom photo in	Q (T)	Press Q (T) on the zoom button for an enlarged view of the current photo (161). While photo is zoomed in, use the multi selector to view areas of the image not visible in the monitor. To cancel zoom, press W.
View photo info		Rotate the command dial to view additional information about the current photograph (162).
Play movie back		If the current image is marked with a icon to show that it is a movie, pressing the button starts movie playback (164).
Display playback menu	MENU	Press the MENU button to display or hide the playback menu (165).

Playback Tips

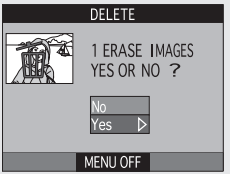
In single-image playback, photographs are displayed briefly at low resolution while being read from the memory card. This makes it possible to scroll rapidly through the photographs in memory without waiting for each image to be displayed at full resolution.

To scroll quickly to a particular frame number without viewing the intervening photos, press and hold the multi selector. The photograph displayed will not change, but the frame number displayed at the bottom right corner of the monitor will increase or decrease rapidly. Release the multi selector when the desired frame number is reached.

The first and last photographs in memory are linked. Pressing the multi selector up when the first photo in memory is displayed will take you to the last photo. Pressing the multi selector down when the last photo is displayed takes you to the first photo.

Viewing Multiple Images: Thumbnail Playback

Pressing the ▪ (W) button in single image playback displays a menu of four thumbnail images, where you can select photos or movies for viewing or delete images.

To	Use	Description
Highlight images		Press the multi selector up, down, left, or right to highlight thumbnails.
Page through images		Rotate the command dial to scroll through thumbnails a page at a time.
Change number of images displayed	▪ (W)/ T	With four thumbnails displayed, press the ▪ button once to view nine thumbnail images. Press T to "zoom in" from nine thumbnails to a four-thumbnails view or, when four thumbnails are displayed, to view highlighted image full size.
Delete selected image	🗑 (AF)	A confirmation dialog will be displayed. Press multi selector up or down to highlight option, press to right to select.  • Select **No** to exit without deleting photo • Select **Yes** to delete photo

Movie Playback (📖 164)

Movies can not be played back while thumbnails are displayed. When playing movies back, first highlight the movie using the multi selector and press T until the picture is displayed full screen.

Taking a Closer Look: Playback Zoom

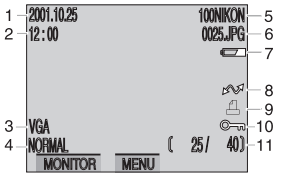
Use the Q (T) button to zoom in on images displayed in single-image playback.

To	Use	Description
Zoom photo in	Q (T)	Zoom increases each time button is pressed, to a maximum of 6.0 ×. While image is zoomed in, Q icon and zoom ratio are displayed in upper left corner of monitor.
View other areas of image		Press the multi selector to scroll to areas of the image not visible in the monitor.
Cancel zoom	W	Press W to cancel zoom.

Photo Information

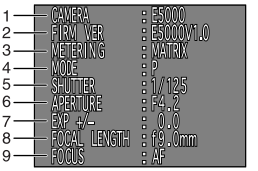
Photo information is shown superimposed on images displayed in single-image playback. There are five pages of photo information for each photo. Rotate the command dial to cycle through photo information as follows: Page 1 ⇔ Page 2 ⇔ Page 3 ⇔ Page 4 ⇔ Page 5 ⇔ Page 1.

Page 1



1. Date of recording
2. Time of recording
3. Image size
4. Image quality
5. Folder
6. File number and type
7. Battery level indicator
8. Transfer icon
9. Print-order icon
10. Protect icon
11. Current frame number/total number of frames visible in current folder

Page 2 (Shooting Information)



1. Camera type
2. Firmware version
3. Metering method
4. Exposure mode
5. Shutter speed
6. Aperture
7. Exposure compensation
8. Focal length
9. Focus mode or manual focus distance

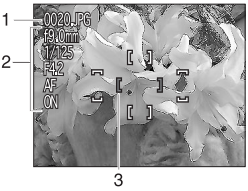
Page 3 (Shooting Information)

1. Flash status
2. Image adjustment
3. Sensitivity (ISO equivalency)
4. White balance
5. Color saturation
6. Sharpening
7. Digital zoom
8. Lens-converter status
9. File size

Page 4 (Exposure Information)

1. Thumbnail preview (flashing border marks image highlights—i.e., brightest areas of image)
2. Histogram (shows distribution of tones in image: horizontal axis gives pixel brightness, with dark tones to left and bright tones to right, while vertical axis shows number of pixels of each brightness in image)
3. File number and type
4. Exposure information (metering method, shutter speed, aperture, exposure compensation, sensitivity)

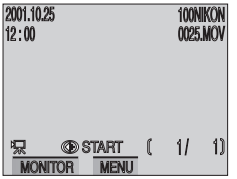
Page 5 (Focus Confirmation)



1. File number and type
2. Focus information (focal length, aperture, shutter speed, focus mode or manual focus distance, noise reduction)
3. Focus confirmation (areas of image that are in focus are sharply outlined, and active focus area is shown in red)

Movie Playback

In single-image playback, movies are indicated by a icon in the lower left corner of the display. Movie playback is controlled with the and buttons. During playback, sound recorded with the movie is played back over the camera's built-in speaker, and the zoom button is used to control playback volume.



To	Use	Description
Start/resume playback		When movie ends, final frame is displayed for one second, followed by a still image of the first frame.
Adjust playback volume	W T	While playback is in progress, press W to lower playback volume, T to increase. Three settings are available: • mute (off) • soft • loud (default)
Pause playback		Pressing while playback is in progress pauses display. To resume playback, press .
Rewind movie one frame		When movie is paused, pressing the multi selector up or left rewinds the movie one frame.
Advance movie one frame		When movie is paused, pressing the multi selector down or right advances the movie one frame. If the last frame of the movie is displayed, pressing the multi selector down or right ends movie playback and displays the first frame of the movie.

The Playback Menu

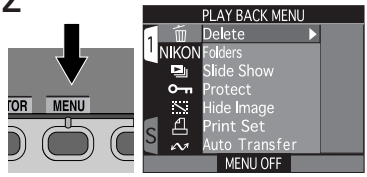
The playback menu contains options for deleting images and folders, cancelling print-orders, and removing transfer marking from all images, for protecting images from deletion, for hiding images, and for playing images back one after the other in automatic "slide shows." You can also create a digital "print order" for printing photographs on any device compatible with the **D**igital **P**rint **O**rder **F**ormat (DPOF), and select images for transfer to a computer.

To view the playback menu:

1

Select ▶

2



Press MENU button to display playback menu

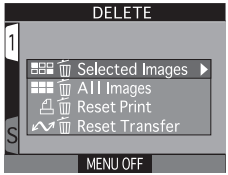
The playback menu contains the following options:

Option	
Delete	166–168
Folders	169
Slide Show	170–171
Protect	172
Hide Image	173
Print Set	174–175
Auto Transfer	176–177

Deleting Images: *The Delete Menu*

Using the options in the **Delete** menu, you can:

- delete selected photos and movies
- delete all images
- cancel the current print order (174)
- reset transfer marking for all images (177)



Before Deletion

Once deleted, images can not be recovered. Be sure that any images you would like to keep have been transferred to your computer.

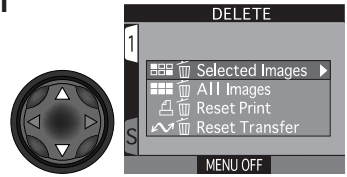
Hidden and Protected Images

Images marked with a ⊶ icon are protected and can not be selected for deletion. Images hidden with the **Hide Image** (173) option are not displayed in the **Delete** > **Selected Images** menu and can not be deleted.

Deleting Selected Photographs and Movies

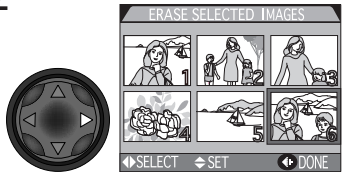
To delete selected photographs and movies:

1



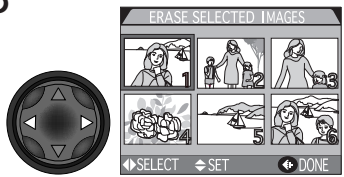
Highlight **Selected Images**

2



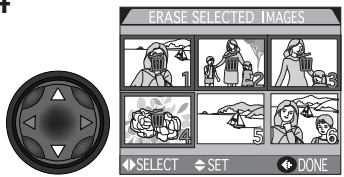
Display menu of thumbnail images

3



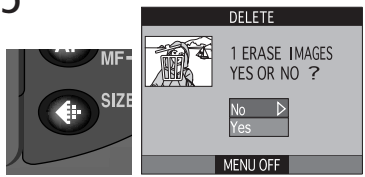
Highlight image

4



Press multi selector up or down to select image for deletion. Selected images are marked by 🗑 icon. Repeat steps 3 and 4 to select additional images for deletion. To deselect image, highlight and press multi selector up or down. To exit without deleting images, press MENU button.

5



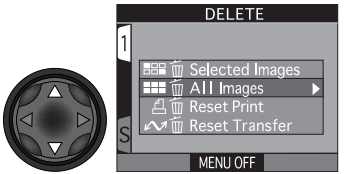
Press ⊛ to display a confirmation dialog. Press multi selector up or down to highlight option, press to right to put choice into effect:

- Select **No** to return to playback menu without deleting images
- Select **Yes** to delete all selected images

Deleting All Photographs and Movies

To delete all images on the memory card:

1



Highlight **All Images**

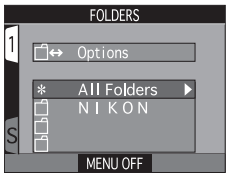
2

Confirmation dialog displayed. Press multi selector up or down to highlight option, press to right to put choice into effect:

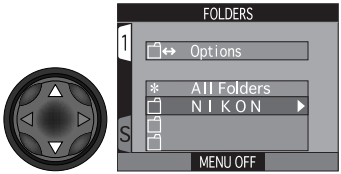
- Select **No** to return to playback menu without deleting images
- Select **Yes** to delete all images on memory card (images that are protected or hidden will not be deleted)

Selecting a Folder for Playback: *The Folders Menu*

The **Folders** item in the playback menu can be used to select images in all folders for playback, or play back images in a selected folder.

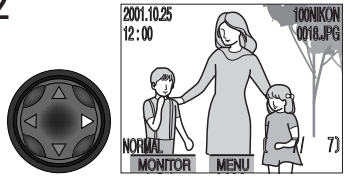


1



Highlight desired folder. To view images in all folders, select **All Folders**

2



Display most recent image in selected folder

Ultra HS

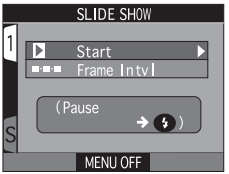
Each series of one hundred photographs taken at a setting of **Ultra HS** (109) is stored in a separate folder with a name consisting of "N_" followed by a three-digit number assigned by the camera. The **Folders** menu can be used to select the folder containing the images in each series for playback.

For more information on:

137 Folder options

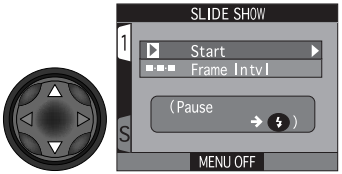
Automated Playback: *The Slide-Show Menu*

The slide-show option in the playback menu is used for automated sequential playback. When **Start** is selected in the slide-show menu, all images in the current folder that have not been hidden using **Hide Image** will be played back one after the other in the order recorded, with a pause between each image.



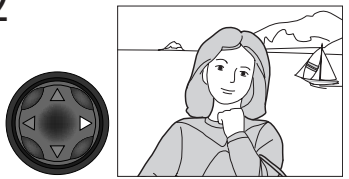
Starting a Slide Show

1



Highlight **Start**

2



Press multi selector to right to start slide show. Images are displayed one-by-one in order recorded, starting from oldest photo on card. Movies will be played back as still images showing first frame of movie.

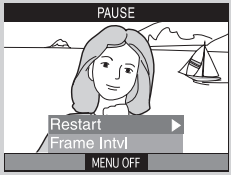
Auto Off

If no operation is performed for more than half an hour during a slide show, the monitor will turn off automatically to save power.

After the Slide Show Ends

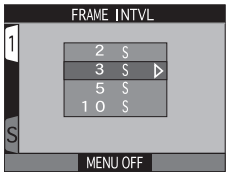
When the slide show ends, the PAUSE menu shown on the opposite page will be displayed. Press the multi selector to the left to display the playback menu, or press **MENU** to return to single-image playback.

The following operations can be performed while a slide show is in progress:

To	Use	Description
Pause slide show		Press the button to pause the slide show. The dialog shown at right will be displayed. To restart the slide show, highlight **Restart** and press the multi selector to the right. 
Go forward or back one frame		Press the multi selector up or left to go back one frame, down or right to skip to the next frame.
End slide show	MENU	Press the **MENU** button to end the slide show and return to single-image playback.

Changing the Display Interval

The slide show menu shown on the opposite page and the pause dialog shown above both contain a **Frame Intvl** option for changing the length of time each image in the slide show is displayed. To change the display interval, highlight **Frame Intvl** and press the multi selector to the right. The menu of interval settings shown at right will be displayed; highlight the desired setting and press the multi selector to the right.

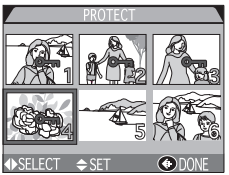


Frame Interval

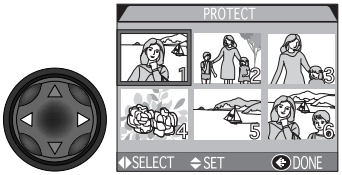
Owing to differences in the file size of the images in the slide show and the speed at which they can be read from the memory card, the actual interval may differ from the value shown in the menu.

Safeguarding Valuable Images: *The Protect Menu*

Selecting **Protect** from the playback menu displays the menu shown at right, where you can select images to protect from accidental deletion. Protected files can not be deleted in review, single-image playback, or from the delete sub-menu. Note, however, that protected images will be deleted when a memory card is formatted.

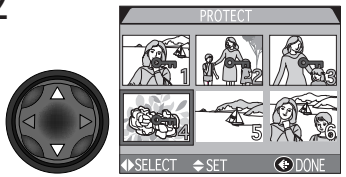


1



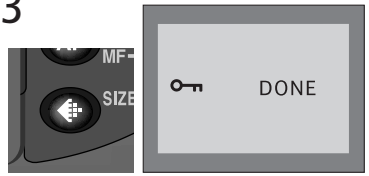
Highlight image

2



Press multi selector up or down to select image. Selected images are marked by ⊙⊸ icon. Repeat steps 1 and 2 to select additional images. To deselect image, highlight and press multi selector up or down.

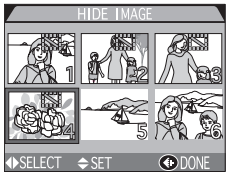
3



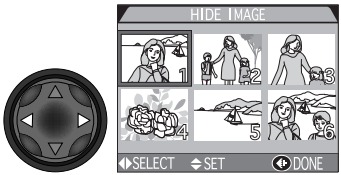
Press ⊛ to complete operation. To exit **Protect** menu without changing protected status of images, press MENU button.

Hiding Images During Playback: *The Hide-Image Menu*

When creating a slide show or showing photographs to an audience, you may want to use the **Hide Image** option to hide some of the images in the current folder. Hidden images are only visible in the **Hide Image** menu. They can not be deleted in single-image playback or using the options in the **Delete** sub-menu.

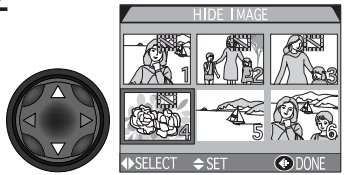


1



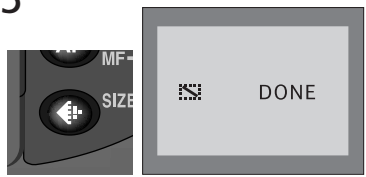
Highlight image

2



Press multi selector up or down to select image. Selected images are marked by ▨ icon. Repeat steps 1 and 2 to select additional images. To deselect image, highlight and press multi selector up or down.

3



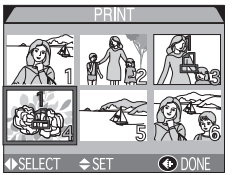
Press ⊛ to complete operation. To exit **Hide Image** menu without changing hidden status of images, press MENU button.

"ALL IMAGES ARE HIDDEN"

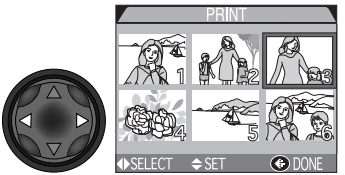
If all the images in the folder currently selected for playback are hidden, the message "ALL IMAGES ARE HIDDEN" will be displayed in single-image playback. No images can be played back until another folder has been selected or **Hide Image** is used to reveal some of the images in the current folder.

Ordering Prints: *The Print-Set Menu*

Selecting **Print Set** from the playback menu displays the menu shown at right. Here you can specify photographs to be printed, the number of prints, and the information to be included on each print. This information is stored on the memory card in Digital Print Order Format (DPOF). Once a print order has been created, the memory card can be removed from the camera and inserted in any DPOF-compatible device—be it your personal photo printer or a photofinisher's print system—and images printed directly from the card.

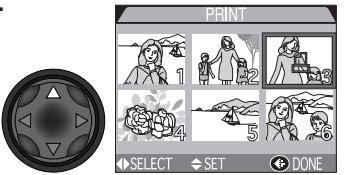


1



Highlight image

2

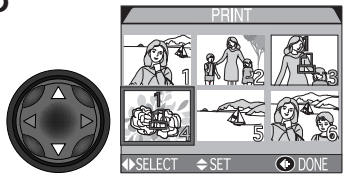


Press multi selector up to select image. Selected images are marked by icon.

Cancelling the Print Order

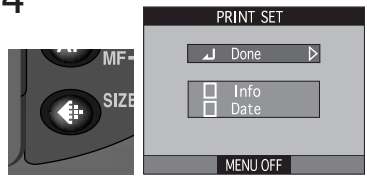
To cancel the current print order when it is no longer needed, select **Reset Print** from the **Delete** sub-menu (166).

3



Use multi selector to specify number of prints. Press up to increase (maximum 9), down to decrease. To deselect image, press multi selector down when number of prints is 1. Repeat steps 1–3 to select additional images. To exit without altering print order, press MENU button.

4



Press ⊛ to complete operation and display menu of print options. To highlight option, press multi selector up or down.

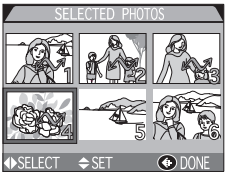
- To print shutter speed and aperture on all selected photographs, highlight **Info** and press multi selector to right. Check will appear in box next to item.
- To print date of recording on all selected photographs, highlight **Date** and press multi selector to right. Check will appear in box next to item.
- To deselect a checked item, highlight and press multi selector to right.
- To complete print order and return to playback, highlight **Done** and press multi selector to right. To exit without altering print order, press MENU button.

Selecting Images for Transfer: *The Auto Transfer Menu*

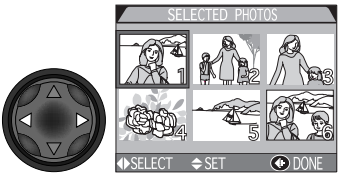
When the camera is connected to a computer running Nikon View 4, images that have been selected for transfer using the **Auto Transfer** option can be copied to the computer (182).

Selecting Images for Transfer

Highlight **Selected Photos** in the **Auto Transfer** menu and press the multi selector to the right. The menu shown at right will be displayed. To select images for transfer to a computer:

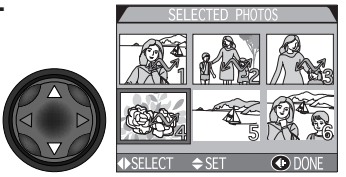


1



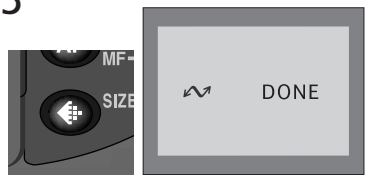
Highlight image

2



Press multi selector up or down to select image. Selected images are marked by icon. Repeat steps 1 and 2 to select additional images. To deselect image, highlight and press multi selector up or down.

3

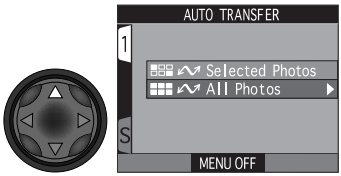


Press to complete operation. To exit **Auto Transfer** menu without changing transfer status of images, press MENU button.

Marking All Images for Transfer

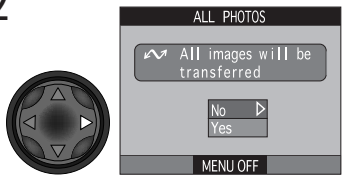
To mark all images for later transfer to a computer:

1



Highlight **All Photos**

2



A confirmation dialog will be displayed. Press multi selector up or down to highlight option, press to right to select:

- Select **No** to exit without changing the transfer status of images
- Select **Yes** to select all images on the memory card for transfer

Marking All Images for Transfer

No more than 999 images can be transferred to a computer at one time using the **Auto Transfer** option. If a thousand images or more are selected for transfer, no images will be transferred when the camera is connected to a computer. To transfer more than 999 images, select the images to be transferred using Nikon View 4, or select 999 images or less using the **Selected Photos** option, transfer these images, remove transfer marking using the **Delete** > **Reset Transfer** option (see below), mark a new batch of images for transfer, and repeat the process until all images have been transferred.

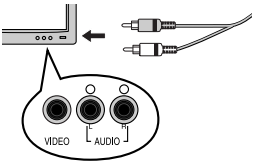
Removing Transfer Marking from All Images

To remove transfer marking from all images on the memory card, select **Reset Transfer** from the **Delete** menu (166).

Using the EG-E5000 audio/video cable provided with your camera, you can connect the COOLPIX5000 to a television or VCR. The video device will show the same picture as is displayed in the camera monitor.

1 **Connect the EG-E5000 to the camera**
Insert the black plug on the EG-E5000 into the camera's A/V OUT connector.

2 **Connect the EG-E5000 to the video device**
Connect the yellow plug to the video-in jack on the television or VCR. Connect the white plug to the audio-in jack.



3 **Tune the television to the video channel**

4 **Turn the camera on**
The television will mirror the image in the camera monitor. Note that if the monitor is rotated to face the same direction as the lens or stowed face out on the camera body, the image in the monitor will be inverted. Television playback will not be affected.

Use an AC Adapter

To prevent the display in the television from turning off whenever the camera enters sleep mode, connect the camera to an EH-21 AC adapter/battery charger (available separately). Note that camera settings and photo info will not be displayed on the television screen when the camera monitor is off.

Choosing a Video Mode (155)

The **Video Mode** item offers a choice of NTSC and PAL standards for video output. Be sure that the standard selected matches that of any video device to which you connect the camera.

PAL Video Mode (155)

At a setting of PAL, the monitor will turn off when an audio/video cable is connected. During recording at settings of **Ultra HS** or **Movie**, however, the monitor will turn on and output to the video device will be suspended.

Connections

Your Camera and Your Computer

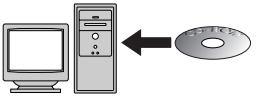
By connecting your Nikon digital camera to a computer running Nikon View 4, you unleash its full potential. Images can be transferred to your computer and from there distributed electronically to family and friends. Selected images can be copied to removable media directly from the camera's memory card, then delivered to a photofinisher, or you can save copies to your hard disk and use your favorite imaging software to retouch images or print copies on a color printer.

This section describes how to connect your camera to a computer running Nikon View 4 using the UC-E1 Universal Serial Bus (USB) cable supplied with your camera. Users whose computers are not equipped with a USB interface can insert the camera memory card in a card reader or card slot, as described below.

Before You Begin: Installing Nikon View 4

The first step to using Nikon View 4 is to read the directions for installation. These are included on the reference CD provided with your camera.

1 Insert the reference CD in a CD-ROM drive
After turning your computer on and waiting for the operating system to start up, place the reference CD in a CD-ROM drive.



If you are using a Macintosh computer, the reference CD window will open automatically on the desktop. Windows users will need first to double-click the **My Computer** icon and then the **Nikon** icon to open the reference CD window.

Already Have Nikon View?

In order to transfer images to your computer using the UC-E1 USB cable, the COOLPIX5000 requires the version of Nikon View 4 provided with the camera. If you have a version of Nikon View that was included with another Nikon digital camera, you will need to upgrade to the version provided with the COOLPIX5000 as described in the *Nikon View 4 Reference Manual* (on CD).

Image Database Software

Depending on where you purchased your camera, the COOLPIX5000 comes with Canto Cumulus, iView Media Pro, or FotoStation Easy image database software. See the reference CD for information on installing these applications. If you will be using Cumulus or iView Media Pro, remember to install the image database software before installing Nikon View 4. If you will be using FotoStation Easy, install Nikon View 4 first, and then install FotoStation Easy.

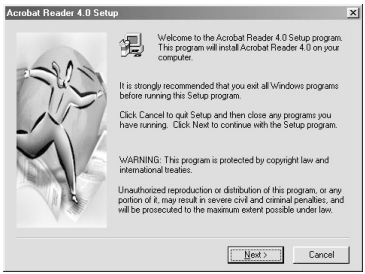
2 Install Adobe Acrobat Reader

The installation instructions for Nikon View 4 are in Portable Document Format (PDF). To view the instructions requires Adobe Acrobat Reader 4.0 or later. If Adobe Acrobat Reader is already installed on your system, proceed to Step 3.

To install Adobe Acrobat Reader, open the folder for the language of your choice and then double-click the installer icon. The installer start-up screen will be displayed; follow the on-screen instructions to complete installation.

setup
Installer icon
(Windows)

Reader Installer
Installer icon
(Macintosh)



Start-up screen (Windows)

Start-up screen (Macintosh)

3 Read the installation instructions and install Nikon View 4

Once installation is complete, double-click the **INDEX.pdf** icon in the root directory of the reference CD to view a clickable index of the documentation available for Nikon View 4. Follow the links to display the installation instructions for your computer system. If desired, you can print the installation instructions using the **Print...** command in the Acrobat Reader **File** menu and follow along during installation of Nikon View 4.

Before Starting the Install

Before installing image database software or Nikon View 4, be sure to exit all other programs, including Adobe Acrobat Reader and any virus-checking software.

Getting Connected: Connecting to Your Computer

Once you have installed Nikon View 4, you are ready to transfer photographs and movies to your computer. Images can be transferred either via a direct USB connection between the camera and computer, or by removing the memory card from the camera and inserting it in a card reader or PC card slot.

Direct Connection: Connecting Your Camera by Cable

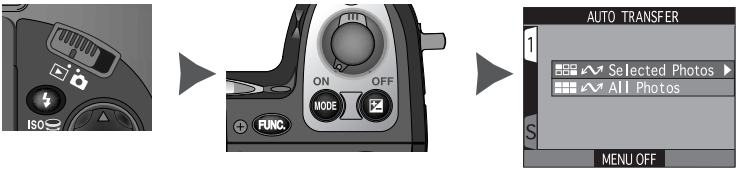
If your computer is equipped with a built-in USB interface, you can connect the camera and computer using the UC-E1 USB cable provided with your camera. If your computer does not have a built-in USB connection, you can transfer images using a card reader or PC card slot (see following section).

1 Turn the computer on

Turn the computer on and wait for the operating system to start up.

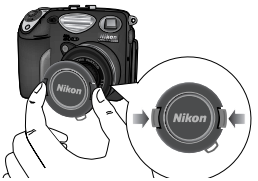
2 Select the images to be transferred

After setting the mode selector to ▶, turn the camera on and select the images to be transferred using the **Auto Transfer** option in the playback menu (176).

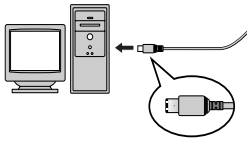


Before Turning the Camera On

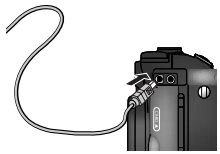
If you turn the camera on with the lens cap in place, an error message will appear in the monitor. To clear the message from the screen, turn the camera off and remove the lens cap.



3 Connect the interface cable to the computer
Connect the UC-E1 USB cable to the computer as shown at right. Use the flat connector for connection to the computer.



4 Connect the interface cable to the camera
Connect the other end of the cable to the camera's USB connector. While the interface cable is connected, the borders of the shutter-speed/aperture display in the control panel will flash on and off in sequence ([. . .]). The monitor will be off and all controls except the power switch disabled.



Connect the Camera Directly to the Computer

The camera may not function as expected when connected via a USB hub or keyboard.

Register the Camera with the System (Windows)

The first time the camera is connected to a Windows computer, the camera must be "registered" with the system so that the computer will know how to communicate with the camera. If you are using Windows Millennium Edition (Me) or Windows 2000 Professional, the computer will register the camera automatically the first time the camera is connected. The files needed to register the camera with Windows 98/Windows 98 Second Edition (SE) are provided on the Nikon View 4 installer CD. Be sure the CD is inserted in the drive when you first connect your camera. Other versions of Windows do not support USB. More information on registering your camera can be found in the Nikon View 4 Reference Manual.

Mac OS 8.6

Users of Mac OS 8.6 will need to upgrade to version 1.3.5 of the Apple Computer USB driver.

5 Begin transfer

Once the camera is connected and turned on, Nikon View 4 will automatically detect the camera and the Image Transfer window will be displayed in the computer monitor. If "All images" is displayed in the text box under the **Image transfer rule** button, clicking the Transfer button will copy all images on the memory card to the computer. To copy only the images selected in Step 2, click **Image transfer rule**. A list of transfer options will be displayed; select **Transfer Marked images only** and click **OK** to return to the Image Transfer window. Confirm that is displayed in the text box under **Image transfer rule** and click the Transfer button to begin transfer.

Transferring More than 999 Images

No more than 999 images can be transferred using auto transfer. If a thousand images or more are selected for transfer, no images will be transferred automatically when the camera is connected to the computer. To transfer more than 999 images, select the images to be transferred using Nikon View 4, or use the **Auto Transfer** option to select 999 images or less, transfer these images, remove transfer marking using the **Delete** > **Reset Transfer** option in the playback menu, mark a new batch of images for transfer, and repeat the process until all images have been transferred.

Transfer Time

Note that when large numbers of images are selected, some time will be required for transfer.

"Hot Plug"

The USB interface supports "hot plug" connection of peripheral devices. This means that the camera can be on or off when you connect it to the computer. If the camera is off when connected, Nikon View 4 will not start until the camera is turned on.

6 Wait for the images to be transferred to the computer

While images being copied to the computer, Nikon View 4 will display the progress dialog shown at right. Do not turn the camera off or disconnect the cable while the progress indicator is displayed.

7 Remove the camera from the system

When all marked images have been transferred, the progress indicator will no longer be displayed in the computer monitor. Before disconnecting the cable or turning the camera off, you must remove the camera from the system as described below.

Windows Millennium Edition (Me)/Windows 2000 Professional

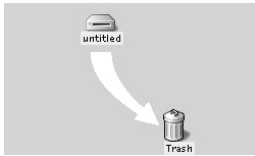
Click the "Unplug or Eject Hardware" icon ( ) in the taskbar and select **Stop USB Disk** from the menu that appears. If this step is not performed before the camera is disconnected or turned off, a warning will be displayed. Click **OK** to clear the warning from the screen.

Windows 98/Windows 98 Second Edition (SE)

Double-click the **My Computer** icon and select the removable disk corresponding to the camera. Open the **File** menu and select **Eject**.

Macintosh

Drag the "untitled" camera volume into the Trash.



Interrupting Transfer

To end transfer before all marked images have been copied to the computer, click the **Cancel** button in the Nikon View 4 transfer progress dialog. When the progress indicator is no longer displayed, you can remove the camera from the system and disconnect it or turn it off as described in steps 7–8.

8 Disconnect the camera

Once you have removed the camera from the system, you can disconnect the interface cable or turn the camera off.

Disconnecting the Camera

Before turning the camera off or disconnecting the interface cable, be sure that image transfer is complete and that the transfer progress dialog is no longer displayed in the computer monitor. Do not turn the camera off or disconnect the cable while the progress indicator is displayed. If the interface cable is disconnected or the memory card removed from the camera while data transfer is in progress, an error message will be displayed in the computer monitor. Click **OK** to exit Nikon View 4, then turn the camera off and reconnect the cable or replace the memory card. When you turn the camera on, Nikon View 4 will automatically detect the camera and restart.

Use a Reliable Power Source

When transferring data between the camera and the computer, we recommend that you use an EH-21 AC adapter/battery charger (available separately) to ensure a reliable power supply. If the camera is running on battery power, be sure that the battery is charged. If possible, have spare batteries on hand. If the battery runs low, turn the camera off and replace the battery after verifying that the image transfer dialog is not displayed in the computer monitor.

Reading Photographs from Memory Cards

If you have a *CompactFlash™* card reader or your computer is equipped with a *PC card slot*, you can transfer images directly from the memory card. Before inserting the memory card in a card reader or card slot, turn the camera off and remove the card from the camera.

Using a CompactFlash™ Card Reader

Before using your card reader, be sure to read all documentation provided by the manufacturer. Then follow the steps below to transfer images from the memory card using the card reader.

1 **Turn the computer on**
Turn the computer on and wait for the operating system to start up.

2 **Insert the memory card into the card reader**
If Nikon View 4 is installed, it will automatically detect cards from Nikon digital cameras. See the *Nikon View 4 Reference Manual* (180) for information on transferring images to your computer.

"CompactFlash™ Card Reader"

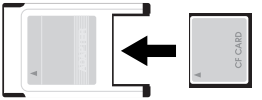
A *CompactFlash™ (CF) card reader* is a device that allows your computer to read memory cards of the type used in your camera. CF card readers come in many varieties, ranging from inexpensive USB card readers to the built-in readers found on some newer computers.

"PC Card Slot"

Commonly found on laptop computers, *PC card slots* take "PCMCIA" (Personal Computer Memory Card International Association) cards, which are larger than the CompactFlash™ memory cards used in your camera. To read CompactFlash™ memory cards using a PC card slot, you will require an EC-AD1 PC-card adapter, available separately from Nikon.

Using a PC Card Slot

1 **Insert the memory card into a PC-card adapter**
Insert the memory card into a PC-card adapter as shown at right.



2 **Turn the computer on**
Turn the computer on and wait for the operating system to start up.

3 **Insert the adapter into the card slot**
If Nikon View 4 is installed, it will automatically detect cards from Nikon digital cameras. See the *Nikon View 4 Reference Manual* for information on transferring images to your computer.

Removing the Memory Card

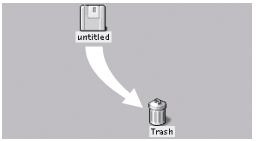
Be sure that image transfer is complete before removing the memory card from the card reader or PC card slot. Do not remove the card while the transfer progress meter is displayed in the computer monitor.

Before removing the memory card from a PC card slot or USB card reader, you will need to remove the card from the system.

Windows Millennium Edition (Me)/Windows 2000 Professional
Click the "Unplug or Eject Hardware" icon ( ) in the taskbar and remove the memory card from the system. If this step is omitted, a warning will be displayed. Click **OK** to clear the warning from the screen.

Windows 98/Windows 98 Second Edition (SE)
Double click the **My Computer** icon and select the removable disk corresponding to the memory card. Open the **File** menu and select **Eject**.

Macintosh
Drag the "untitled" volume that represents the memory card into the Trash.



Technical Notes

Camera Care, Options, and Resources

This chapter provides tips on cleaning and storing your camera, a list of optional accessories available for the COOLPIX5000, information on where to get help on line, troubleshooting advice, and camera specifications.

Caring for Your Camera

Cleaning

Lens/ Viewfinder	A key to cleaning these glass parts is to not touch them with your fingers. Use a *blower* (typically a small device with a rubber bulb attached to one end that you pump to produce a stream of air out the other) to remove dust or lint. To remove fingerprints or other stains that can not be removed with a blower, wipe the lens or viewfinder with a soft cloth, using a spiral motion that starts in the center of the lens and works out to the edges.
Monitor	Remove dust or lint with a blower. To remove fingerprints and other stains, clean the monitor with a soft, dry cloth, being careful not to apply pressure.
Camera Body	Use a blower to remove dust and lint, then wipe gently with a soft, dry cloth. After using the camera at the beach or seaside, wipe off any sand or salt with a cloth lightly dampened with fresh water, then dry thoroughly.

Do not use alcohol, thinner, or other volatile chemicals

Storage

When the camera will not be used for an extended period, remove the battery after checking to make sure that the camera is off, the monitor closed, and the lens cap in place. Do not store your camera in locations that:

- are poorly ventilated or damp
- are next to equipment that produces strong electromagnetic fields, such as televisions or radios
- are exposed to temperatures above 50 °C (122 °F) or below –10 °C (14 °F)
- are subject to humidities of over 60%

Optional Accessories

At the time of writing, the following optional accessories were available for the COOLPIX5000. Contact your retailer or local Nikon representative for details.

Rechargeable battery	Additional EN-EL1 Li-ion batteries are available from your retailer or local Nikon representative
AC adapter/battery charger	EH-21 AC adapter/battery charger
Battery pack	MB-E5000 battery pack
Carrying case	CS-E5000 soft case
CompactFlash™ memory cards and adapters	• EC-CF series CompactFlash™ memory cards (available in a variety of capacities) • EC-AD1 PC-card adapter
Lens adapter rings	• UR-E5 step-down ring lens adapter for WC-E68 wide-angle converter • UR-E6 step-down ring lens adapter for FC-E8, TC-E2, TC-E3ED, and ES-E28
Converter lenses and lens adapters (requires lens adapter ring)	• FC-E8 fisheye converter (0.21 ×) • WC-E68 wide-angle converter (0.68 ×) • TC-E2 telephoto converter (2 ×) • TC-E3ED telephoto converter (3 ×) • ES-E28 slide copy adapter

WC-E24 and WC-E63 Wide-Angle Converters

WC-E24 and WC-E63 wide-angle converter lenses can not be used with the COOLPIX5000.

Using the UR-E6

Remove the optional UR-E6 lens adapter ring when not in use. If the UR-E6 is used without a converter lens attached, the corners of the frame will be eclipsed in any photographs taken.

Wired remote cable	MC-EU1 remote cord
Lens hood	HN-E5000 lens hood
Monitor hood	HL-E5000 monitor hood
Flash accessories	The following SB-series Nikon Speedlights can be attached directly to the camera accessory shoe without a sync cable: 50DX, 28DX, 28, 27, 26, 25, 24, 23, and 22s. The accessory shoe is equipped with a safety lock for Speedlights with a locking pin (SB-series 28DX, 28, 27, 26, 25, and 22s). An SC-17 sync cable can be attached to the accessory shoe for off-camera flash photography.

Using an External Speedlight

Refer to your Speedlight manual for detailed instructions. Before using an external Speedlight, set the zoom head to an angle wider than 28 mm. At smaller angles, the flash may not be able to light the entire subject. We recommend that you take a test shot and view the results in the monitor; if the results are not satisfactory, try zooming the camera in or adjusting the illuminating angle. When a WC-E68 wide-angle converter lens is used with the camera zoomed all the way out, the combined focal length is 19 mm (35-mm format equivalent). Use a wide panel for an illuminating angle wider than 19 mm.

Set the Speedlight flash mode to TTL. At this setting, the external Speedlight will be controlled by the camera in response to flash mode (82) and **Speedlight Opt.** (152) settings. When the flash is fired, the amount of light produced by the external Speedlight is measured by the camera's photocell, and the length of the flash adjusted to ensure optimal exposure. D-TTL flash control (available with the SB-50DX and SB-28DX) is not supported.

The COOLPIX5000 does not support power zoom, AF-assist illumination, or red-eye reduction using the red-eye reduction lamp on the external Speedlight.

At a setting of STBY (standby), the Speedlight will turn on automatically when the camera recovers from sleep mode (143).

Web Resources

At the time of writing, the following on-line resources were available for users of Nikon digital imaging equipment:

For Product Information and Tips

- For users in the USA: *http://www.nikonusa.com/*
- For users in Europe: *http://www.nikon-euro.com/*
- For users in Asia, Oceania, the Middle East, and Africa: *http://www.nikon-asia.com/*

For Contact Information

Contact information for the Nikon representative in your area may be found at: *http://www.nikon-image.com/eng/*

Use Only Nikon Flash Accessories

Use only Nikon Speedlights. Using another make of flash could damage the internal circuitry of the camera or flash. Before using a Nikon Speedlight not included in the list on the opposite page, contact a Nikon-authorized service representative for more information.

Approved Memory Cards

In addition to CompactFlash™ memory cards in the EC-CF series, the following memory cards have been tested and approved for use in the COOLPIX5000:

CompactFlash™ memory cards:

- SanDisk SDCFB series 16 MB, 32 MB, 48 MB, 64 MB, 96 MB, and 128 MB
- Lexar Media 4× USB series 8 MB, 16 MB, 32 MB, 48 MB, 64 MB, and 80 MB
- Lexar Media 8× USB series 8 MB, 16 MB, 32 MB, 48 MB, 64 MB, and 80 MB
- Lexar Media 10× USB series 128 MB and 160 MB

Microdrive® cards:

- IBM DSCM-10512 and DSCM-11000 Microdrive® cards

Operation is not guaranteed with other makes of memory card. For more details on the above cards, please contact the manufacturer.

Troubleshooting

If your camera fails to function as expected, check the list of common problems below before consulting your retailer or Nikon representative. Refer to the page numbers listed in the rightmost column for information on solving the problems listed here.

Problem	Possible cause	
Control panel display is blank	• Camera is off.	12
	• Battery is not correctly inserted or battery-chamber cover is not fully closed.	34
	• Battery is exhausted.	39
	• EH-21 AC adapter/battery charger (available separately) is not properly connected.	—
	• Camera is in sleep mode. Press shutter-release button halfway.	143
Camera turns off immediately	• Battery is low.	39
	• Battery is cold.	v
Monitor is blank	• Monitor is off. Press **MONITOR** (▭) button to turn monitor on.	18
	• PAL is selected in **Video Mode** menu and audio/video cable is connected.	178
No indicators appear in monitor	• Indicators are hidden. Press **MONITOR** (▭) button until indicators are displayed.	18
	• Slide show is in progress.	170
Monitor is hard to read	• Ambient lighting is too bright: use viewfinder or move to a darker location.	—
	• Monitor is dirty.	190
	• Display options require adjustment.	147

Problem	Possible cause	
No photo is taken when shutter-release button is fully pressed	• Camera is in playback mode.	12
	• Battery is exhausted.	39
	• Number of exposures remaining is zero: not enough memory remaining.	46
	• Green lamp flickers: camera unable to focus.	52
	• Red lamp flickers: flash is charging.	52
	• Message "MEMORY CARD IS NOT FORMATTED" appears in monitor: memory card is not formatted for use in COOLPIX5000.	37
	• Message "NO MEMORY CARD" appears in monitor: no memory card in camera.	36
Photos are too dark (underexposed)	• Flash is off.	82
	• Flash window is blocked.	84
	• Subject is outside range of flash.	83
	• Exposure compensation is too low.	85
	• Shutter-speed indicator in monitor blinks: shutter speed too fast.	92
	• Aperture indicator in monitor blinks: f/-number too high.	93
Photos are too bright (overexposed)	• Exposure compensation is too high.	85
	• Shutter-speed indicator in monitor blinks: shutter speed too slow.	92
	• Aperture indicator in monitor blinks: f/-number too low.	93
Photos are out of focus	• Subject was not in focus area when shutter-release button was pressed halfway or AE-L/AF-L button was pressed.	53
	• Green lamp flickers: camera unable to focus.	52
	• Manual focus distance does not match distance to subject.	98

Problem	Possible cause	
Photos are blurred	• Camera shook during shot: increase shutter speed. If shutter speed can not be increased without causing underexposure:	89
	– Use the flash	82
	– Zoom the camera out	69
	– Raise sensitivity (ISO equivalency)	96
	– Select a larger aperture	89
	To minimize blur at low shutter speeds:	
	– Use the Best-Shot Selector (BSS)	112
	– Use the self-timer	80
	– Use a tripod	—
Randomly-spaced bright pixels ("noise") appear in image	• Sensitivity raised above 100.	96
	• Shutter speed too slow. If making a long time-exposure of $^{1}/_{15}$ s or longer, turn noise reduction on.	128
	• **Clear Image Mode** is not selected: select **Clear Image Mode**.	128
Flash does not fire	• Flash is off. Note that built-in Speedlight turns off automatically when:	82
	– Focus is set to ▲ (infinity)	77
	– A setting other than **Single** is selected for CONTINUOUS (User Set 1, 2, 3)	108
	– The Best-Shot Selector (BSS) is on (User Set 1, 2, 3)	112
	– A setting other than **Normal** is selected for LENS (User Set 1, 2, 3)	116
	– **AE Lock** is on (User Set 1, 2, 3)	118
	– **Clear Image Mode** is selected (User Set 1, 2, 3)	128
	– **Speedlight Cntrl** is set to **Auto** and an external flash accessory attached	152
	• Battery level is low.	39

Problem	Possible cause	
Colors are unnatural	• White balance does not match light source. • Saturation control is too low or too high.	102 115
Image can not be played back	• Image has been overwritten or renamed by a computer or other make of camera.	—
Television does not mirror image in monitor	• Video cable not correctly connected. • Television not tuned to video channel. • **Video Mode** setting does not match video device.	178 178 155
Nikon View 4 does not start when camera connected or memory card inserted in card reader or card slot	• Camera is off. • EH-21 AC adapter/battery charger (available separately) is not properly connected, or battery is dead. • Interface cable not correctly connected, or card not properly inserted in card reader, card adapter, or card slot. See *Nikon View 4 Reference Manual* for further information on troubleshooting Nikon View 4.	12 — 182 187 180

Error Messages

The following table lists the error messages and other warnings that appear in the monitor and how to deal with them.

Display	Problem	Solution	
(Flashes)	Clock calendar not set.	Set clock calendar to current date and time.	42
(Flashes)	Battery exhausted.	Turn camera off and replace battery.	34
WARNING ! ! Remove Lens Cap !	Camera turned on with lens cap in place.	Turn camera off and remove lens cap.	33
NO CARD PRESENT	Camera can not detect memory card.	Turn camera off and confirm that memory card is correctly inserted.	36
THIS CARD CANNOT BE USED	Error accessing memory card.	• Use approved memory card. • Check that connectors are clean. If card is damaged, contact retailer or Nikon representative.	193 —
CARD IS NOT FORMATTED FORMAT NO ▷	Memory card has not been formatted for use in COOLPIX5000.	Press multi selector up to highlight **FORMAT** and press to right to format card, or turn camera off and replace card.	37

A flashing icon in the control panel indicates that the battery is exhausted. A flashing CArd icon appears in the control panel when the camera can not detect a memory card, when an error occurs accessing the memory card, or when the card has not been formatted for use in the camera.

Display	Problem	Solution	
OUT OF MEMORY	*Error occurs during shooting:* Insufficient memory to record further pictures at current settings.	• Reduce image quality or size. • Delete photographs. • Insert new card.	71 166 36
	Error appears when you try to transfer images to computer: Not enough space on memory card to record information needed for transfer.	Disconnect camera, delete unwanted photographs and try again.	166
IMAGE CANNOT BE SAVED	• Memory card has not been formatted for use in COOLPIX5000. • Error encountered while saving photo. • Camera has run out of folder or file numbers.	• Reformat memory card. • Insert new card or delete images after selecting **Off** or **Reset** for **Seq. Numbers**.	37 144
CARD CONTAINS NO IMAGES	Folder selected in playback or quick review contains no images.	To play images back, select folder containing images from **Folders** menu.	141 169
ALL IMAGES ARE HIDDEN	All images in current folder are hidden.	Select another folder or use **Hide Image** to change hidden status of images in current folder.	141 169 173
FILE CONTAINS NO IMAGE DATA	File created by computer or different make of camera.	Delete file or reformat memory card.	37 166

Display	Problem	Solution	
THE FOLDER CANNOT BE DELETED	Folder contains hidden or protected images, or images not created with COOLPIX5000.	Folder can only be deleted if all images it contains are neither hidden nor protected.	172 173
SYSTEM ERROR	Error has occurred in camera's internal circuitry.	Turn camera off, unplug optional AC adapter (if using), remove and reinsert battery, and turn camera on. If error persists, contact retailer or Nikon representative.	34

The letters **Err** appear in the control panel when a system error has occurred.

PRINT Image Matching

The COOLPIX5000 supports "PRINT Image Matching" (PIM) technology developed by Epson. Photographs taken with the COOLPIX5000 include additional information which ensures that the colors recorded by the camera will be reproduced with vivid, photo-quality results when output on a PIM-compliant printer.

Specifications

Type	E5000 digital camera
Effective pixels	5.0 million
CCD	$^2/_3$″ high-density CCD; total pixels: 5.24 million
Image size (pixels)	• 2560 × 1920 (Full) • 1280 × 960 (SXGA) • 2560 × 1704 (3 : 2) • 1024 × 768 (XGA) • 1600 × 1200 (UXGA) • 640 × 480 (VGA)
Lens	3 × Zoom Nikkor
Focal length	F = 7.1 – 21.4 mm (35-mm [135] camera format equivalent: 28 – 85 mm)
f/-number	f/2.8 – f/4.8
Construction	Nine elements in seven groups
Digital zoom	4.0 ×
Autofocus (AF)	Contrast-detect through-the-lens (TTL) AF
Focus range	50 cm (1′8″) – ∞; 2 cm (0.8″) – ∞ in macro mode
Focus-area selection	Five-area multi AF and spot AF available
Viewfinder	Real-image zoom viewfinder with LED indication
Magnification	0.30 – 0.84 ×
Frame coverage	Approximately 82%
Diopter adjustment	–2 – +1 m^{-1}
Monitor	1.8″, 110,000-dot, low temperature polysilicon TFT LCD with brightness and hue adjustment
Frame coverage	Approximately 97% (through/freeze image)

Storage	
Media	Type I and II CompactFlash™ (CF) and Microdrive® cards
File system	Compliant with Design rule for Camera File systems (DCF) and Digital Print Order Format (DPOF)
Compression	JPEG-baseline-compliant
Exposure	
Metering	Four mode through-the-lens (TTL) metering: • 256-segment matrix • Spot • Center-weighted • AF spot
Exposure control	Programmed auto with flexible program, shutter-priority auto, aperture-priority auto, manual, exposure compensation (–2.0 – +2.0 EV in steps of $^1/_3$ EV), autoexposure bracketing
Range (ISO 100 equivalent)	W: –2.0 – +18.0 EV T: –0.5 – +17.0 EV
Shutter	Mechanical and charge-coupled electronic shutter
Speed	1 – $^1/_{4000}$ s (programmed auto); 8 – $^1/_{2000}$ s (shutter-priority auto); 8 – $^1/_{4000}$ s (aperture-priority auto); Bulb (up to 5 min.) and 8 – $^1/_{2000}$ s (manual exposure mode)
Aperture	Seven-blade iris diaphragm
Range	Ten settings in steps of $^1/_3$ EV
Sensitivity	ISO equivalent approximately 100, 200, 400, 800, or Auto (auto gain to ISO 800)
Self-timer	Ten- or three-second duration
Built-in Speedlight	Guide number 10/32 (ISO 100, m/ft)
Sync method	Automatic sync control

Accessory shoe	Standard ISO hot-shoe contact with safety lock
Sync contact	X-contact only
Interface	USB
Video output	User can choose from NTSC and PAL
I/O terminals	• DC input • Audio/video (A/V) output • Data output (USB)
Power sources	• One rechargeable Nikon EN-EL1 lithium-ion battery (supplied) or six-volt 2CR5 (DL245) lithium battery (available separately) • MB-E5000 battery pack (available separately) with six LR6 (AA) alkaline, lithium, NiCad, or NiMH batteries • EH-21 AC adapter/battery charger (available separately)
Battery life (EN-EL1)	Approximately 100 minutes (as measured at room temperature [20 °C/68 °F] under standard Nikon test conditions: monitor on, zoom adjusted with each shot, flash used in approximately one third of photographs, image quality set to NORMAL)
Dimensions (W × H × D)	101.5 × 81.5 × 67.5 mm (4.0″ × 3.2″ × 2.6″)
Weight	Approximately 360 g (12.8 oz) without battery and memory card
Operating Environment	
Temperature	0 – 40 °C (32 – 104 °F)
Humidity	Less than 85% (no condensation)

System requirements (Nikon View 4): Windows	
OS	Pre-installed versions of Windows 98/98 SE, Windows 2000 Professional, Windows Me
Models	Only models with built-in USB ports supported
CPU	MMX Pentium or better
RAM	64 MB (128 MB or more recommended)
Hard-disk space	15 MB required for installation, with additional amount equivalent to twice the capacity of the camera memory card required when Nikon View 4 is running
Video resolution	640 × 480 with High Color (800 × 600 with True Color recommended)
Miscellaneous	CD-ROM drive required for installation

System requirements (Nikon View 4): Macintosh	
OS	Mac OS 8.6, Mac OS 9.0, Mac OS 9.1, Mac OS 9.2
Models	iMac, iMac DV, Power Mac G3 (Blue & White), Power Mac G4 or later, iBook, PowerBook G3 or later; only models with built-in USB ports supported
RAM	32 MB (64 MB or more recommended)
Hard-disk space	15 MB required for installation, with additional amount equivalent to twice the capacity of the camera memory card required when Nikon View 4 is running
Video resolution	640 × 480 with thousands of colors (800 × 600 with millions of colors recommended)
Miscellaneous	• CD-ROM drive required for installation • USB driver 1.3.5 required for Mac OS 8.6

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