

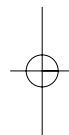
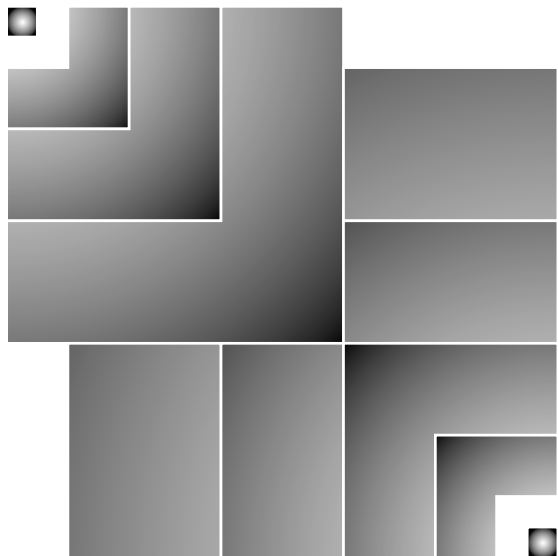
Nikon

The Nikon Guide to Digital Photography

with the

COOLPIX 4300

DIGITAL CAMERA



Overview

Thank you for your purchase of a COOLPIX4300 digital camera. The documentation for this product includes the manuals listed below. Please be sure to read all instructions thoroughly to get the most from your camera.

Quick-Start Guide

The Quick-Start Guide takes you through the process of unpacking and setting up your Nikon digital camera, taking your first pictures, and transferring them to your computer.

Guide to Digital Photography

The Guide to Digital Photography (this manual) provides complete operating instructions for your camera.

Nikon View Reference Manual

The Nikon View Reference Manual can be found in electronic format on the reference CD provided with your camera.

Symbols

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



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.

For Your Safety

To prevent damage to your Nikon product or injury to yourself or to others, read the following safety precautions in their entirety before using this equipment. Keep these safety instructions where all those who use the product will read them.

The consequences that could result from failure to observe the precautions listed in this section are indicated by the following symbols:



This icon marks warnings, information that should be read before using your Nikon product to prevent possible injury.

WARNINGS



Do not look at the sun through the viewfinder

Viewing the sun or other strong light source through the viewfinder could cause permanent visual impairment.



Turn off immediately in the event of malfunction

Should you notice smoke or an unusual smell coming from the equipment or from the AC adapter (available separately), unplug the AC adapter and remove the battery immediately, taking care to avoid burns. Continued operation could result in injury. After removing the battery, take the equipment to a Nikon-authorized service center for inspection.



Do not use in the presence of flammable gas

Do not use electronic equipment in the presence of flammable gas, as this could result in explosion or fire.



Do not place strap around neck

Placing the camera strap around your neck could result in strangulation. Special care should be taken to avoid placing the strap around the neck of an infant or child.



Do not disassemble

Touching the product's internal parts could result in injury. In the event of a malfunction, the product should be repaired only by a qualified technician. Should the product break open as the result of a fall or other accident, remove the battery and/or AC adapter and then take the product to a Nikon-authorized service center for inspection.



Observe proper precautions when handling batteries

Batteries may leak or explode if improperly handled. Observe the following precautions when handling batteries for use in this product:

- Be sure the product is off before replacing the battery. If you are using an AC adapter, be sure it is unplugged.
- Use only the Nikon EN-EL1 rechargeable lithium-ion battery (supplied) or a six-volt 2CR5 (DL245) lithium battery (available separately).
- The EN-EL-1 is for use only with selected Nikon Digital cameras. Do not use the EN-EL1 in equipment not approved for use with this battery.

- When inserting the battery, do not attempt to insert it upside down or backwards.
- Do not short or disassemble the battery.
- Do not expose the battery to flame or to excessive heat.
- Do not immerse in or expose to water.
- Do not transport or store with metal objects such as necklaces or hairpins.
- Batteries are prone to leakage when fully discharged. To avoid damage to the product, be sure to remove the battery when no charge remains.
- When the battery is not in use, attach the terminal cover and store in a cool place.
- Immediately after use, or when the product is used on battery power for an extended period, the battery may become hot. Before removing the battery, turn the camera off and allow the battery to cool.
- When used with a 2CR5 (DL245) lithium battery, the camera grip may become noticeably warm, but this does not indicate a malfunction.
- Discontinue use immediately should you notice any changes in the battery, such as discoloration or deformation.



Use appropriate cables

When connecting cables to the input and output jacks, use only the cables provided or sold by Nikon for the purpose, to maintain compliance with product regulations.



Keep out of reach of children

Particular care should be taken to prevent infants from putting the battery or other small parts into their mouths.



Removing memory cards

Memory cards may become hot during use. Observe due caution when removing memory cards from the camera.



CD-ROMs

The CD-ROMs on which the software and manuals are distributed should not be played back on audio CD equipment. Playing CD-ROMs on an audio CD player could cause hearing loss or damage the equipment.



Observe caution when operating the flash

Using the flash close to your subject's eyes could cause temporary visual impairment. Particular care should be observed if photographing infants, when the flash should be no less than one meter (3.3 ft.) from the subject.



When using the viewfinder

When operating the mode dial and the zoom button with your eye to the viewfinder, care should be taken not to put your finger in your eye accidentally.



Avoid contact with liquid crystal

Should the monitor break, care should be taken to avoid injury due to broken glass and to prevent liquid crystal from the monitor touching the skin or entering the eyes or mouth.

Notices

- No part of the manuals included with this product may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form, by any means, without Nikon's prior written permission.
- Nikon reserves the right to change the specifications of the hardware and software described in these manuals at any time and without prior notice.
- Nikon will not be held liable for any damages resulting from the use of this product.
- While every effort has been made to ensure that the information in these manuals is accurate and complete, we would appreciate it were you to bring any errors or omissions to the attention of the Nikon representative in your area (address provided separately).

Notice for customers in the U.S.A.

Federal Communications Commission (FCC) Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.



CAUTIONS

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Nikon Corporation may void the user's authority to operate the equipment.

Interface Cables

Use the interface cables sold or provided by Nikon for your equipment. Using other interface cables may exceed the limits of Class B Part 15 of the FCC rules.

Nikon Inc.,
1300 Walt Whitman Road,
Melville, New York
11747-3064, U.S.A.
Tel.: 631-547-4200

Notice for customers in Canada

CAUTION

This class B digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations.

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• Items prohibited by law from being copied or reproduced

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The copying or reproduction of paper money, coins, or securities which are circulated in a foreign country is prohibited.

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Introduction

**Parts of the
COOLPIX4300
pp. 12-15**

**First Steps
pp. 16-22**

This chapter is divided into the following sections:

.....

Parts of the COOLPIX4300

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

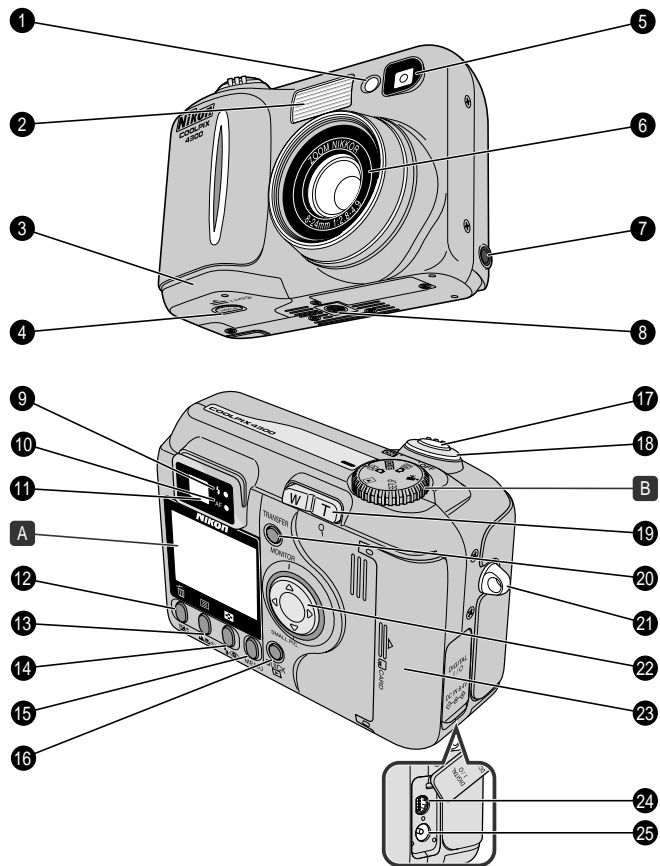
First Steps

Before using your camera for the first time, complete the steps on the following pages.

| | Step | Page |
|---------------|--------------------------------------|-------------|
| Step 1 | Attach the Camera Strap and Lens Cap | 16 |
| Step 2 | Insert the Battery | 16-18 |
| Step 3 | Insert the Memory Card | 18-19 |
| Step 4 | Choose a Language | 20 |
| Step 5 | Set the Date and Time | 21-22 |

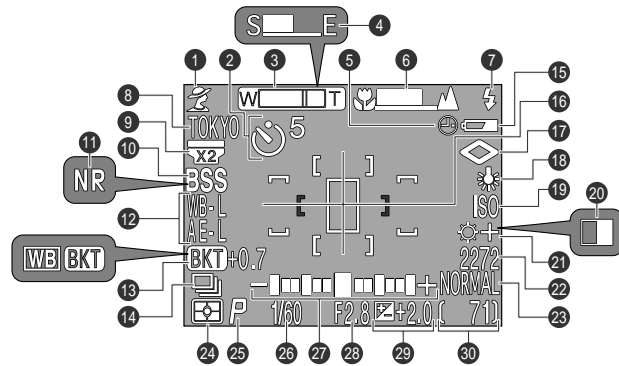
Parts of the COOLPIX4300

The parts of the camera are identified below. For more information on the function of each part, refer to the page number that follows it.



- 1 Red-eye reduction/Self-timer lampp. 48/42
 - 2 Built-in Speedlightp. 48
 - 3 Battery chamber coverp. 17
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 - 5 Viewfinder.....p. 26
 - 6 Lensp. 144
 - 7 Video output connectorp. 68
 - 8 Tripod socket
 - 9 Flash-ready lamp (red)p. 28
 - 10 Autofocus lamp (green).....p. 28
 - 11 Viewfinder.....p. 26
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 - 13 (focus mode/manual focus)/ buttonp. 41/54/63
 - 14 (flash mode)/ buttonp. 49/32, 33, 57, 58
 - 15 MENU buttonp. 34, 76
 - 16 QUICK (quick review) buttonp. 30
 - 17 Shutter release buttonp. 28
 - 18 Power switch.....p. 24, 29
 - 19 Zoom buttonp. 26, 46, 57, 59
 - 20 TRANSFER button.....p. 67
 - 21 Camera strap eyeletp. 16
 - 22 Multi selector
 - 23 Memory card slot coverp. 19
 - 24 USB connector (under cover)p. 66
 - 25 DC-in connector (under cover).....p. 18
-
- A Monitorp. 14
 - B Mode dial.....p. 15

A Monitor



In the shooting modes, the following indicators appear in the monitor.

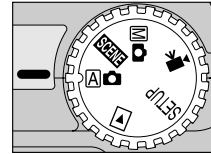
- | | |
|---|---|
| 1 Scenep. 34 | 16 Spot metering target/ Focus areap. 99/112 |
| 2 Self-timerp. 42 | 17 Image sharpeningp. 104 |
| 3 Zoom indicatorp. 26/46 | 18 White balancep. 97 |
| 4 Progress bar (Ultra HS)p. 100 | 19 Sensitivity (ISO equivalency).....p. 53 |
| 5 "Date not set" icon*1p. 22 | 20 Black-and-whitep. 103 |
| 6 Manual focus indicator.....p. 54 | 21 Image adjustmentp. 103 |
| 7 Flash mode.....p. 48 | 22 Image sizep. 82 |
| 8 Current Folder name*2p. 86 | 23 Image qualityp. 81 |
| 9 Converter lens setting.....p. 105 | 24 Metering methodp. 99 |
| 10 Best Shot Selectorp. 102 | 25 Exposure modep. 107 |
| 11 Noise reductionp. 116 | 26 Shutter speed.....p. 108 |
| 12 Exposure lock (Auto exposure lock/ White balance lock)p. 110 | 27 Exposure display (manual exposure mode).....p. 107 |
| 13 Bracketing/ White-balance bracketingp. 114 | 28 Aperturep. 107 |
| 14 Continuous setting.....p. 100 | 29 Exposure Compensationp. 51 |
| 15 Battery level indicator*3.....p. 25 | 30 Number of exposures remaining/ Length of moviep. 25/50 |






*1 Blinks if date/time has not been set.

*2 Not displayed when folder name is set to NIKON.

*3 Only displayed when battery power drops below a certain level.

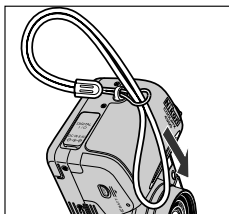
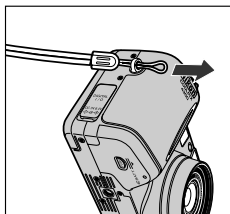
B The Mode dial



| Mode | Description | Page |
|--|---|------|
|  (Auto) | An automatic mode for simple, "point-and-shoot" snapshot pictures. | 24 |
|  (Scene) | This mode offers a choice of settings for specific scenes. Each of the 12 modes optimizes the camera for scenes of specific type, such as sunsets or portraits. | 34 |
|  (Manual) | Gives you complete control of all settings, including exposure mode. | 96 |
|  (Movie) | In this mode, you can record silent movies up to forty seconds in length. | 50 |
| SETUP (Setup) | This mode lets you configure the camera's basic settings such as date, time etc. | 79 |
|  (Playback) | This mode is used to play back and delete pictures. | 117 |

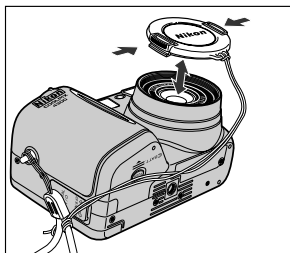
Step 1—Attach the Camera Strap and Lens Cap

Camera Strap



- Attach the strap as shown.

Lens cap



- Press the tabs on the lens cap to attach/detach it.
- We recommend attaching the lens cap to the strap loop with the supplied cord to prevent it from being misplaced.

Step 2—Insert the Battery

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

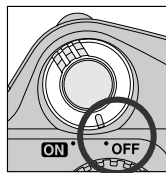
1 Charge the battery

- The EN-EL1 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.

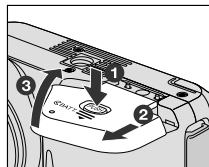
Read Battery Warnings

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

2 Turn the camera off



3 Open the battery-chamber cover

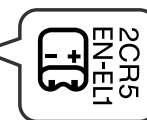
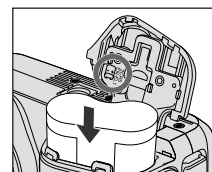
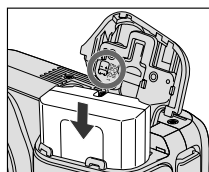


- Pressing the battery-chamber cover latch ①, slide the battery-chamber cover out ② and flip it open ③.

4 Insert the battery

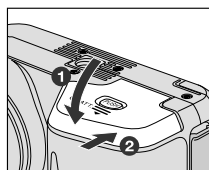
EN-EL1

2CR5 (DL245)



- Insert a fully charged EN-EL1 or new 2CR5 (DL245) battery as shown in the label on the underside of the battery-chamber cover.

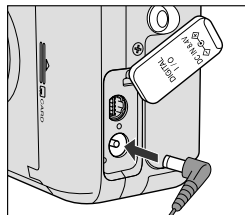
5 Close the battery-chamber cover



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


Alternative Power Sources

In addition to the rechargeable Nikon EN-EL1 Lithium-ion battery included with your camera, the COOLPIX4300 can be used with non-rechargeable 2CR5 (DL245) lithium batteries, available at a variety of retail outlets. To power your camera continuously for extended periods, use an EH-21 AC adapter/battery charger or EH-53 AC adapter (both available separately).



Connecting AC adapter to COOLPIX4300 DC-in connector

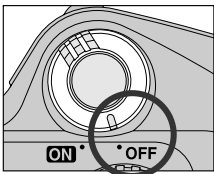
The Clock Battery

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 powered by an AC adapter (available separately). After charging for about ten hours, this power source can provide roughly ten hours of back-up power. If the main battery has been removed for an extended period, or removed before charging is complete, a flashing  icon may appear in the monitor, indicating that the clock needs to be reset.

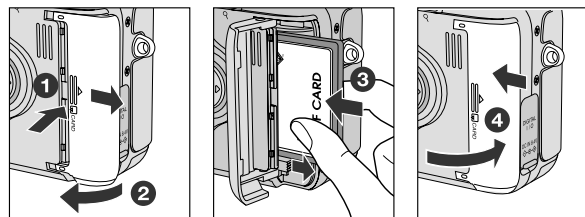
Step 3—Insert the Memory Card

Your Nikon digital camera uses CompactFlash™ (CF) memory cards to store pictures (p. 133).

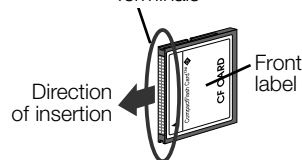
1 Turn the camera off







2 Insert the memory card





Terminals

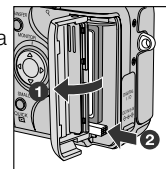


Insert card terminals first with front label facing camera back

- Slide the card-slot cover out  and flip it open . Hold the card with the arrow (s) facing towards you and insert it in the direction of the arrow , sliding it in until it is firmly in place and the eject button pops up. Close the card slot cover .

Removing Memory Cards

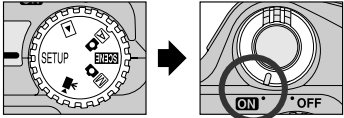
Memory cards can be removed without loss of data when the camera is off. To remove memory cards, turn the camera off and open the card-slot cover . Press the eject button to partially eject the card  and then remove the card by hand.



Step 4—Choose a Language

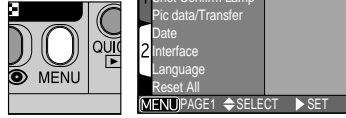
Camera menus and messages can be displayed in your choice of German, English, French, Japanese or Spanish.

1



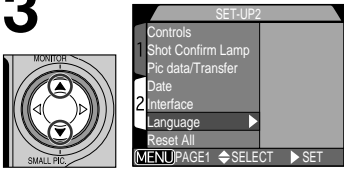
Set mode dial to **SETUP** and turn camera on

2



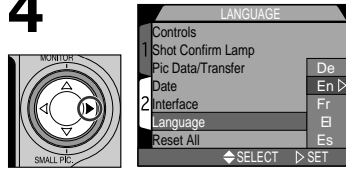
Press **MENU** button to display **SET-UP 2** menu

3



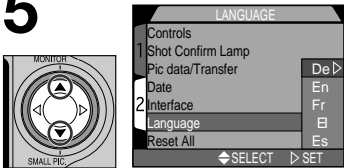
Highlight “**Language**”

4



Display options

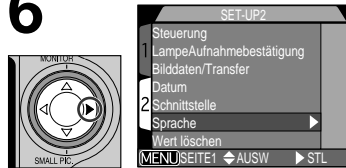
5



Choose a language from:

- De** : Deutsch (German)
- En** : English
- Fr** : Français (French)
- 日** : Japanese
- Es** : Español (Spanish)

6

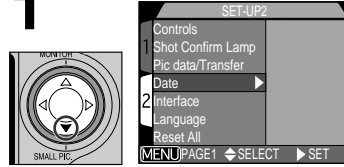


Press **▶** to set

Step 5—Set the Date and Time

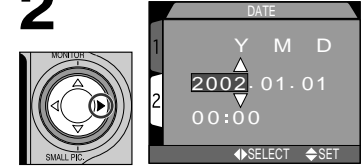
Information on the time and date of recording is included with all pictures and movies taken with your Nikon digital camera. To set the camera’s internal clock to the correct time and date, display the set-up menu as described in steps 1-2 of “Choose a Language” and then follow the steps below:

1



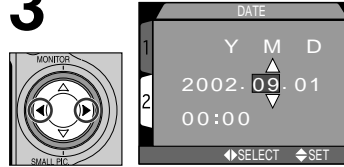
Highlight “**Date**”

2



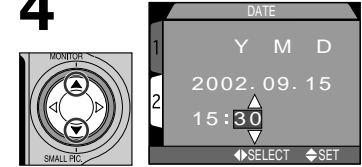
Display **DATE** menu

3



Highlight **Year, Month, Day, hour or minute**

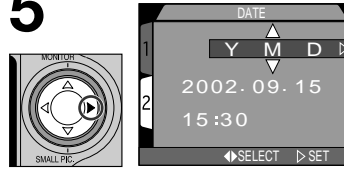
4



Edit selected item

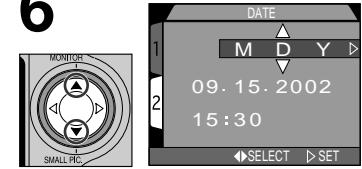
- Repeat steps 5 and 6 until all items have been set.

5



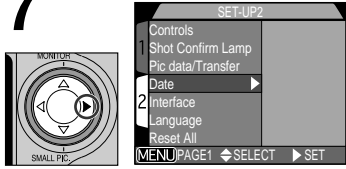
Highlight **YMD**

6



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

7



Press ► to save changes to settings and return to SET-UP menu.



Flashing Clock Icon

Any pictures 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.

Getting Started

Taking Pictures
pp. 24-29

Reviewing Your Pictures
pp. 30-33

Getting Creative: Select Scene Mode
pp. 34-38

This chapter is divided into three sections:



Taking Pictures

Read this section for a step-by-step guide to the basics of taking pictures with the COOLPIX4300.


| | Step | Page |
|---------------|---------------------|-------------|
| Step 1 | Ready the Camera | 24-25 |
| Step 2 | Compose the Picture | 26-27 |
| Step 3 | Focus and Shoot | 28 |
| Step 4 | Turn the Camera Off | 29 |

Reviewing Your Pictures

Learn how to review and delete pictures while setting up your new shot.

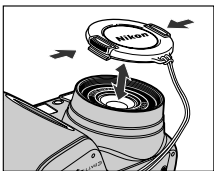
Getting Creative: Select Scene Mode




Explore the creative possibilities of scene mode.

This section details the basic steps involved in taking pictures in  (auto) mode. 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.

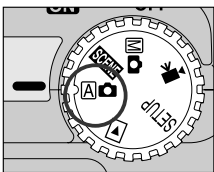
Step 1—Ready the Camera (Mode)

1 Remove the lens cap

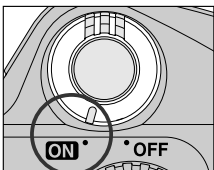


- If you turn the camera on with the lens cap in place and the mode dial set to , **SCENE**,  or , an error message will appear in the monitor. To clear this message from the display, turn the camera off and remove the lens cap.

2 Turn the mode dial to

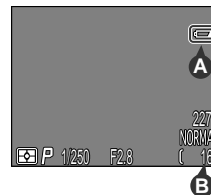


3 Turn the camera on




- The lens zooms out when the camera is turned on and the green lamp next to the viewfinder will turn on for a few seconds.

4 Check indicators in the monitor



- Before shooting, check the battery level (A) and the number of exposures remaining (B).

Battery level is displayed as follows:

| Display | Meaning | Camera status |
|--|---|---|
| NO ICON | Battery fully charged. | Camera functions normally. |
|  | Low battery. Charge EN-EL1 as soon as possible or ready new 2CR5 (DL245) battery. | As above, except that only a limited number of shots can be taken in Continuous mode (p. 100). |
| Warning!! Battery exhausted | Battery exhausted. Charge EN-EL1 and reinsert, or use new 2CR5 (DL245) battery. | Shutter release disabled. |

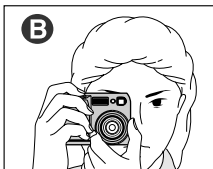
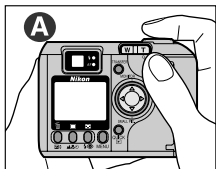
- If the message “Out of memory” appears in the monitor, the memory card is full. Delete pictures (p. 118), use a new memory card, or choose a lower quality of image size (p. 82).

Auto Power Off

To save power, the camera will enter “sleep” mode if no operations are performed for the period of time specified in the Auto Off menu (default 30 seconds; p. 88). In sleep mode, the monitor turns off and all camera functions are deactivated. The camera itself is effectively off. To reactivate the camera, press the shutter release button halfway.

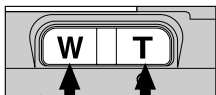
Step 2—Compose the Picture

1 Ready the camera.

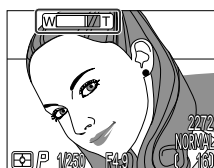


- Pictures can be framed in the monitor (A) or viewfinder (B).
- To prevent camera shake, hold the camera steadily in both hands.

2 Frame your subject.



Zoom out Zoom in



Indicator in monitor displays amount of zoom while either **W** or **T** is pressed.

- Frame your subject using the zoom button. Press the **W** to zoom out from your subject. Press the **T** to zoom in on your subject.
- When the camera is zoomed all the way in, hold **T** down for about two seconds to enlarge the image by a further four times using digital zoom (p. 46). When digital zoom is in effect, the autofocus lamp next to the viewfinder will blink and the zoom indicator will turn yellow to warn you to frame pictures in the monitor.

✓ 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.





Monitor or Viewfinder?

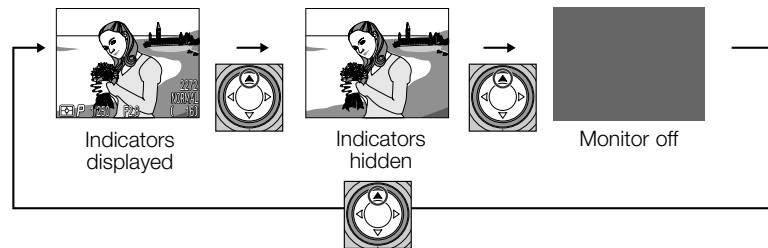
Use the monitor to confirm camera settings at a glance while at the same time viewing an image that shows how the final picture will appear. This is particularly important when the image in the viewfinder does not accurately reflect what will appear in the final picture, for example when:

- macro close-up is used (p. 42)
- your subject is within 1.5 m (4.9 ft.) of the camera
- you are using digital zoom (p. 46)
- you are using an optional lens converter for wide-angle or telephoto photography (p. 105)

Using the viewfinder allows you to save power by turning the monitor off (see below). The viewfinder can also be used when bright ambient lighting conditions make the display in the monitor difficult to see.

Controlling the Monitor

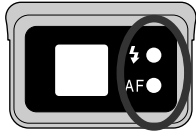
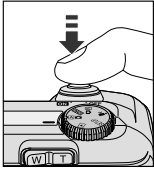
The ▲ on the Multi selector controls the monitor display in  and  mode. Press ▲ to cycle through monitor settings as shown at below.



Step 3—Focus and Shoot

The COOLPIX4300 has a two-stage shutter release button.

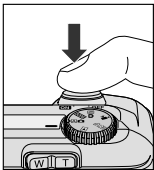
1 Focus



- Press the shutter release button halfway to set focus and exposure. In A mode, the camera focuses on the subject in the center of the frame. Check the indicator lamps (see table below).

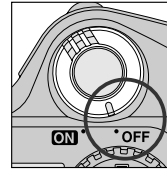
| Lamp | | Meaning |
|------------------------|----------------|--|
| Flash-ready lamp (red) | On | Flash will fire when picture is taken. |
| | Blinks rapidly | Flash charging. Remove finger briefly from shutter release button, then try again. |
| | Off | Flash not required or flash set to "off". |
| Autofocus lamp (green) | On | Subject in focus. |
| | Flickers | Camera unable to focus on subject. Use focus lock to focus on another subject at the same distance, then recompose your picture (p. 45). |

2 Take the picture



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

Step 4—Turn the Camera Off



When you have finished using the camera, turn the camera off to save battery power.

✓ During Recording

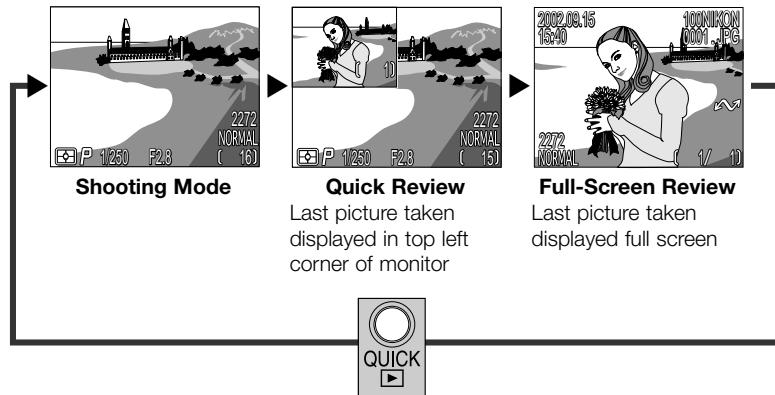
While pictures are being recorded to the memory card, the autofocus lamp (green) will blink.

Pictures taken while earlier images are being recorded are stored in a temporary memory buffer. When the buffer is full, an hourglass (⌚) icon will be displayed and the shutter release will be disabled.

Do not turn the camera off, remove the memory card, or remove or disconnect the power source while ⌚ is displayed or while the green autofocus lamp is blinking.


Reviewing Your Pictures

With a digital camera, you can view pictures immediately after they are taken. You can view the results of earlier attempts while setting up your next shot and use what you see to change camera settings or choose a better angle.







- To end quick review or full-screen review and focus the camera for the next shot, press the shutter release button halfway.

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.



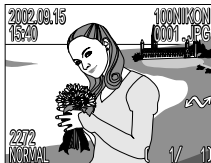
The following operations can be performed:















| To | Press | Description |
|----------------------------------|---|---|
| View other pictures |  | Press  to view images recorded before the current picture or  for pictures recorded after. Hold it down to scroll rapidly to the desired picture. |
| View current picture full screen | QUICK  | Enter full-screen review (see next page) with the current pictures displayed full screen. |
| Return to shooting mode | Shutter release button | To return to shooting mode, press the shutter release button. |

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 | Press | Description |
|---|--|--|
| View other pictures |  | Press  to view images recorded before the current picture, and  for images recorded after. Hold it down to scroll rapidly to desired picture. |
| Delete current picture |  | <p>A confirmation dialog will be displayed. Press / on the Multi selector to highlight the option and  to select.</p>  <ul style="list-style-type: none"> • Select No to keep picture • Select Yes to delete picture |
| View multiple Pictures |  | Press the  button to display a set of up to nine thumbnail pictures (see next page). |
| Select current picture for transfer to a computer | TRANSFER  | Pictures selected for transfer are marked with a  icon. Turn this marking on or off to select the pictures that will be transferred to a computer at a later date. |
| Return to shooting mode | Shutter release/ QUICK  button | Press the QUICK  button to end review and return to shooting mode. To return to shooting mode and focus, press shutter release button halfway. |

Thumbnail Review

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



| To | Press | Description |
|---|--|--|
| Highlight images |  | Press  /  /  /  on the Multi selector to highlight a thumbnail |
| Change number of pictures displayed |  /Q (T) | With nine thumbnails displayed, press the  button once to view four thumbnail images. Press Q (T) to “zoom in” from nine thumbnails to a four-thumbnail view, or when four thumbnails are displayed, to view highlighted picture full size. |
| Delete highlighted picture |  | <p>A confirmation dialog will be displayed. Press / on the Multi selector to highlight the option and  to select.</p>  <ul style="list-style-type: none"> • Select No to keep picture • Select Yes to delete picture |
| Select current picture for transfer to a computer | TRANSFER  | Pictures selected for transfer are marked with a  icon. Turn this marking on or off to select the pictures that will be transferred to a computer at a later date. |
| Return to shooting mode | Shutter release/ QUICK  button | Press the QUICK  button to end review and return to shooting mode. To return to shooting mode and focus, press shutter release button halfway. |



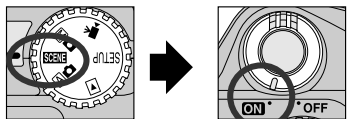
For more information on Playback: P. 55-64

Getting Creative: Select Scene Mode

The COOLPIX4300 offers a choice of twelve “scene” modes for common subjects and shooting situations.

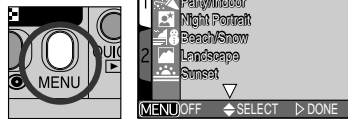
To choose a scene:

1



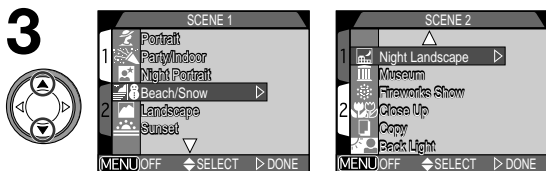
Set mode dial to SCENE and turn camera on

2



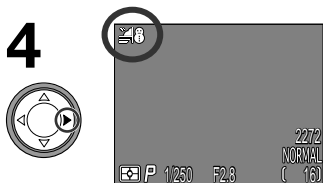
Press the MENU button to display the SCENE mode menu

3



Press ▲/▼ to highlight the desired composition type

4



Press ► to make the selection and return to shooting mode

- The selected scene mode icon is displayed on the monitor.
- Image quality and size can be adjusted from the SETUP menu (p. 80).

When you press the MENU button to display the SCENE mode menu, the most-recently selected setting will be highlighted. Press the MENU button a second time to exit the menu.

Depending on the scene selected, restrictions may apply to flash (p. 48) and focus mode (p. 41). The table of scene choices on the pages that follow lists the flash and focus mode settings possible in each scene. If in doubt about the meanings of the icons used, consult the following table:

| Icon | Flash mode (⚡👁) |
|-------------|-----------------------------|
| None | Auto |
| 🚫 | Flash Cancel |
| 👁 | Auto with red-eye reduction |
| ⚡ | Anytime Flash (fill flash) |
| SLOW | Slow sync |

| Icon | Focus mode (▲👁👁) |
|------|----------------------------|
| None | Autofocus (Auto) |
| 🕒 | Self-timer |
| ▲ | Infinity |
| 👁 | Macro Close-up |
| 🕒👁 | Macro close-up+ self-timer |





















In scenes in which the flash turns off (🚫) automatically, shutter speeds slow and pictures may be blurred by inadvertent camera movement (“camera shake”). While use of a tripod is recommended, other methods that may be successful in preventing blurring are indicated by the “camera shake” rating:





























- ★ Support the camera steadily in both hands with your elbows against your torso.
- ★★ Use a tripod or place the camera on a flat, level surface such as a wall or table.












Note on SCENE mode

- Depending on the subject, SCENE mode setting may not always produce the desired results. If you are dissatisfied with the results in SCENE mode, try using [A] mode instead.

| Scene | Description |  (p. 48) |  (p. 41) | Camera shake |
|--|--|---|--|--------------|
|  Portrait | Use for portraits. Main subject stands out clearly while background details are softened, lending the composition a sense of depth.  <ul style="list-style-type: none"> Degree to which background details are softened depends on the amount of light available Focus area can be selected manually using multi selector (p. 112). | Any | Auto,  | — |
|  Party/ Indoor | Use for shots that include details of the background behind the main subject, or to capture the effects of candlelight and other indoor background lighting.  |  | Auto,  | * |
|  Night Portrait | Use for shots that provide a natural balance between the main subject and the background when shooting portraits against a backdrop of night scenery.  |  | Auto,  | * |
|  Beach/ Snow | Vividly captures the brightness of such subjects as snowfields, beaches, or sunlight expanses of water.  | Any | Any | — |
|  Landscape | Use for vivid landscape shots that enhance outlines, colors, and contrast in such subjects as skylscapes and forests.  |  |   | — |

| Scene | Description |  (p. 48) |  (p. 41) | Camera shake |
|--|---|---|--|--------------|
|  Sunset | Captures the beautiful reds in sunsets or sunrises exactly as you see them.  |  | Auto,   | * |
|  Night Landscape | Use for pictures that employ slow shutter speeds to produce stunning night landscape.  |  |   | ** |
|  Museum | Use indoors where flash photography is prohibited (for example in museums and art galleries) or in other settings in which you do not want to use the flash.  <ul style="list-style-type: none"> Photography may be prohibited altogether in some settings. Be sure to obtain permission first. |  | Auto,    | * |
|  Fireworks Show | Slow shutter speeds are used to capture the expanding burst of light from a firework.  |  |  | ** |
|  Close Up | Use to take up-close pictures of subjects such as flowers or insects, with an artistically blurred background.  <ul style="list-style-type: none"> Focus area can be selected manually using multi selector (p. 112). Focus distance is 4cm (1.6 in.) to 20cm (7.9 in.) from the lens. Minimum focus distance varies with zoom position. When camera is zoomed in to widest zoom position, focus mode indicator () in monitor will turn yellow. At this position, camera can focus on objects as close as 4cm (1.6 in.) from the lens. |  |   | * |

| Scene | Description |  (p. 48) |  (p. 41) | Camera shake | |
|---|--|---|---|--|---|
|  Copy | <p>Use to obtain clear pictures of text or drawings on a white board, business card, or in printed matter. To shoot a close subject, set the camera to Macro close-up mode (p. 42).</p> <ul style="list-style-type: none"> • In autofocus mode, minimum shooting distance becomes approximately 70cm (2.3 ft.) from the lens. • Minimum focus distance varies with zoom position. When Macro close-up mode is selected and camera is zoomed in to widest zoom position, focus mode indicator () in monitor will turn yellow. At this position, camera can focus on objects as close as 4cm (1.6 in.) from the lens. |  | Any | Any | — |
|  Back Light | <p>Use when light is coming from behind your subject, throwing their features into shadow, or when your subject is in the shade but the background is brightly lit. The flash will fire automatically to “fill in” (illuminate) shadows.</p> |  |  | Auto,  | — |

Noise Reduction

“Noise” in the form of randomly-spaced, brightly-colored pixels tends to appear in pictures taken at slow shutter speeds. This effect is particularly noticeable in dark areas of the picture. At a setting of **Night Portrait** and **Night Landscape**, pictures taken at shutter speeds of 1/4 sec. or slower are processed to reduce noise (note that this increases the time needed to process pictures before they are saved to the memory card). **NR** is displayed when noise reduction is in effect.

Beyond Point-and-Shoot

Read this chapter for advice on the most frequently-used shooting controls, including:
.....
Shooting-Mode Selection

Focus Mode

Digital Zoom

Flash Mode

Making Movies

Exposure Compensation

Keep or Delete

Sensitivity (ISO Equivalency)

Manual Focus

Camera Controls

Shooting-Mode Selection
p. 40

Focus Mode
pp. 41-45

Digital Zoom
pp. 46-47

Flash Mode
pp. 48-49

Making Movies
p. 50

Exposure Compensation
p. 51

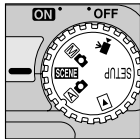
Keep or Delete
pp. 52

Sensitivity (ISO Equivalency)
p. 53






Manual Focus
p. 54

Shooting-Mode Selection

This section describes when to use each of the shooting modes. To choose a shooting mode, turn the mode dial to the appropriate position.








The table below illustrates when to use each of the shooting modes.


| Mode | When to Use It | Page |
|--|--|------|
|  Auto | An automatic mode for simple, “point-and-shoot” photography. Use for snapshots.  mode is also recommended for pictures that will later be retouched on a computer. | 24 |
|  SCENE | In this mode, most camera settings are automatically adjusted to suit the chosen scene. | 34 |
|  Manual | Various setting can be adjusted one-by-one to suit the composition. | 96 |
|  Movie | Record silent movies 320 x 240 pixels in size (QVGA). Recording starts at rate of about 15 fps when shutter release button is pressed, ends after 40 sec. or when shutter release button is pressed again. | 50 |

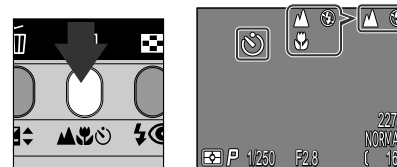
Focus Mode

The  Button

Choose a focus mode according to your subject and composition.

| Setting | Description |
|---|---|
| No icon Autofocus | Camera automatically adjusts focus according to distance to subject. Use with subjects 30 cm (1 ft.) <at widest angle>, 60 cm (2 ft.) <at telephoto> or more from lens. |
|  Autofocus + self-timer | Combines autofocus with self-timer duration of 10 or 3 sec. Use for self-portrait or prevent pictures from blurring when shutter release button is pressed. |
|  Infinity | Focus is fixed at infinity, allowing camera to focus on distant scenes through foreground objects such as a window. Flash is disabled. |
|  Macro close-up | In widest zoom range,  icon in monitor turns yellow and camera can focus on objects as close as 4 cm (1.6 in.), measured from the lens. Use for close-ups. |
|  Macro close-up + self-timer | Combines macro close-up with shutter-release delay of 10 or 3 sec. Use for close-ups to prevent pictures from blurring when shutter release button is pressed. |

To choose a focus mode, press the  button repeatedly until the desired setting is displayed in the monitor



Macro Close-Up

At widest zoom position where  is displayed in yellow, you can focus as close as 4cm (1.6 in.) from the lens.

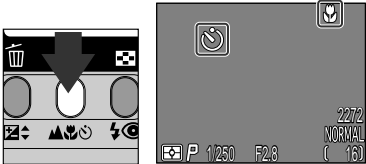
- We recommend that you frame pictures in the monitor when using macro close-up.
- While the flash can be used in macro close-up mode, it may sometimes be unable to light the entire subject. Take a test picture and verify the results in the monitor.

Self-Timer






1 Position the camera

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

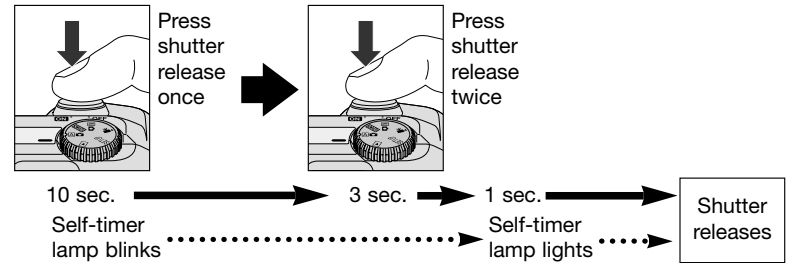
2 Select a self-timer mode



Self-timer icon displayed in monitor.

Press the    button until either  or  appears in the monitor.


3 Start the timer



Countdown timer in monitor shows number of seconds remaining until picture is taken

- Compose the picture so that your main subject is placed closest the camera.
- The self-timer lamp next to the flash window 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.
- To stop the timer, press the shutter-release button twice with the 10-second delay and once with the 3-second delay.

Note on using self-timer

When using the self-timer with off-center subject, select **Manual** option in **FOCUS OPTIONS: AF-Area Mode** in  shooting mode (p. 111) and select appropriate focus area, then set the self-timer. Or, select **Close Up** in scene mode and select appropriate focus area, then set the self-timer.

Autofocus mode (Continuous AF/Single AF)

The autofocus system operates in one of two modes, depending on whether the monitor is on or off. In **A** mode, scene mode or Movie mode, the camera adjusts focus continuously while the monitor is on (*continuous autofocus*; p. 113). When the monitor is off, the camera does not focus until the shutter-release button is pressed halfway (*single autofocus*; p. 113). 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*; p. 45).

In **M** mode, single autofocus is used whether the monitor is on or off, although the **Focus Options: Auto-Focus Mode** item in the SHOOTING menu can be used to enable continuous autofocus when the monitor is on (p. 113).

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:

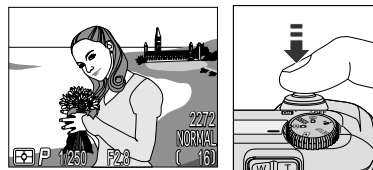
- You attempt to focus simultaneously on two or more objects at different distances from the camera. For example, autofocus may not perform well when photographing an object inside a cage, because the bars of the cage will be closer to the camera than the main subject, and both the bars and the main subject will be in focus area at the center of the frame.
- 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, use focus lock (p. 45) to focus on another subject at the same distance.

Focus Lock

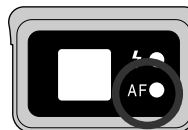
Depending on the effect you want to achieve, your subject may not be at the center of the final composition. In **A** and all SCENE modes except **Portrait** and **Close Up** (p. 36, 37), the camera automatically focuses on the subject at the center of the frame. If your subject is not located at the 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 is used to focus first on your subject, then adjust the composition before taking the picture.

1 Focus



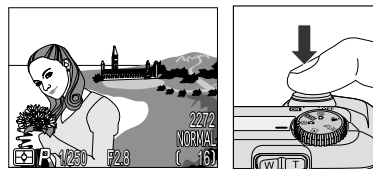
- Position the subject in the center of the frame and press the shutter release button halfway.

2 Check the autofocus lamp



- With the shutter release button pressed halfway, check that the autofocus (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 picture and shoot



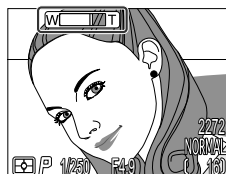
- Keeping the shutter release button pressed halfway, recompose your picture. Press the shutter release button the rest of the way down to shoot.

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.

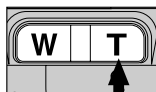
Your Nikon digital camera offers two kinds of zoom: optical zoom, in which the camera's telescoping lens can be used to magnify the subject up to 3X, and digital zoom, in which digital processing is used to further magnify the image up to 4X for a total magnification of up to 12X.

Digital Zoom

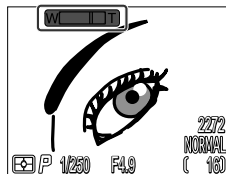
At the maximum zoom position, holding the **T** down for two seconds triggers digital zoom.



Maximum optical zoom position



Hold for 2 sec.



Zoom indicator turns yellow in digital zoom range



Autofocus lamp blinks slowly to show that pictures can not be accurately framed in viewfinder

The camera can be zoomed in and out in the digital zoom range by pressing the **W** and **T**. To cancel digital zoom, press **W** until the zoom indicator turns white or turn the camera off.



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 picture. 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.






Restrictions on Digital Zoom

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

- The monitor is off
- Image quality is set to **HI** (p. 81)
- **Black&White** is selected in the **Image Adjustment** sub-menu (p.103)
- **Multi-Shot 16** or **Ultra HS** is selected in the **Continuous** sub-menu (p. 100)

The flash mode can be chosen from the following five options.


| Setting | Description |
|---|---|
| No icon Auto | Flash fires when lighting is poor. Best choice in most circumstances. |
|  Flash Cancel | Flash will not fire even when lighting is poor. |
|  Auto with red-eye reduction | Flash fires after a short delay. Use for portraits (works best when subjects are well within range of flash and looking at pre-flash lamp). |
|  Anytime Flash (fill-flash) | Flash fires whenever picture is taken. Used to “fill-in” (illuminate) shadows and backlit subjects. |
| SLOW Slow Sync | Auto flash combined with slow shutter speed. Use to capture both subject and background at night or under dim light. |

The Flash-Ready Lamp

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 flash-ready lamp next to the viewfinder will blink. Remove your finger briefly from the shutter release button and try again.

The flash mode is controlled with the  button.













Press  button repeatedly until desired mode is displayed in monitor

Keep the Flash Window Clear


Keep your fingers and other objects away from the flash window 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

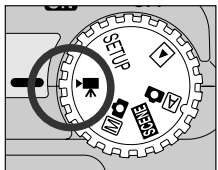
When lighting is poor and the flash is off () or set to slow sync (**SLOW**), pictures may be blurred. Use of a tripod is recommended in these circumstances. At shutter speeds of below 1/4 sec., the shutter speed indicator in the monitor will turn yellow. Pictures taken when this indicator appears may be blurred or slightly mottled. At shutter speeds of below 1/4 sec., noise may also appear in the dark part of the frame. This noise in the form randomly spaced bright-colored pixels can be reduced with the Noise Reduction setting. Note that the flash will turn off () automatically when:

- Autofocus is set to “▲” (Infinity; p. 41)
-  (landscape),  (sunset),  (night landscape),  (museum),  (fireworks show) or  (close up) is selected in scene mode (p. 36, 37) or the mode dial is set to  (movie) (p. 50)
- **BSS** is on (p. 102) or a setting other than **Single** is selected for **CONTINUOUS** (p. 100) in  mode
- You use lens converter (**LENS**) settings (p. 105)
- The **AE Lock** option in the **Exposure Options** sub-menu is on (p. 110)

Making Movies

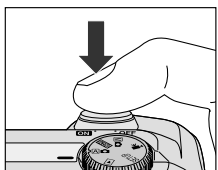
In  (movie) mode, the COOLPIX4300 can record silent movies up to forty seconds in length at a rate of about fifteen frames per second.

1 Set the mode dial to (movie).

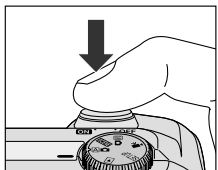


- The exposure count display will show the length of the movie that can be recorded.
- The movie mode icon appears in the bottom left corner of the monitor.

2 Press to start recording.



3 Press again to end recording.



- Recording will end automatically forty seconds after recording starts or if no more memory is available on the memory card.
- The movie will be stored as a QuickTime movie file with a file name ending in “.MOV”.

Notes on Movie mode


- Digital zoom is not available.
- Movies can not be recorded unless the monitor is on.
- The flash turns off automatically.

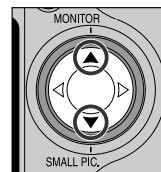
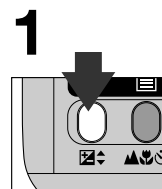
 For more information on Playing movies back: P. 62


Exposure Compensation

The  Button

Alter the exposure from the value set by the camera to make pictures bright or darker.


Exposure compensation can be set to values between -2.0 EV (underexposure) and $+2.0$ EV (overexposure) in increments of $1/3$ EV. Press $\blacktriangle/\blacktriangledown$ on the Multi selector while holding the  button.




Press \blacktriangle to increase exposure value, \blacktriangledown to decrease exposure value while holding the  button.

2



Confirm exposure value in monitor. Effects of compensation are visible in monitor; adjust until desired result is achieved.  icon is displayed in monitor.

By default, the camera “remembers” the exposure-compensation value restoring it the next time the mode dial is set to . If desired, exposure compensation can be set to return to ± 0.0 EV when the mode dial is turned to a new setting or the camera is turned off.

Keep or Delete: Picture Review

After each shot, the picture you have just taken will be displayed briefly in the monitor until being recorded to the memory card. The following operations can be performed while the picture is displayed:



| To | Press | Description |
|----------------|-------|--|
| Delete picture | | <p>A confirmation dialog will be displayed. Press multi selector ▲/▼ to highlight option, press ► to select.</p> <ul style="list-style-type: none"> • Select No to save picture and return to shooting mode • Select Yes to delete picture |
| Pause display | | <p>Display will be paused for twenty seconds and pause icon () will change to REC. During this time, you can press ▲▲/◁ button to record picture and return to shooting mode, or press ◻◻ button to delete photo as described above. Picture will be recorded automatically if no operations are performed for twenty seconds.</p> |

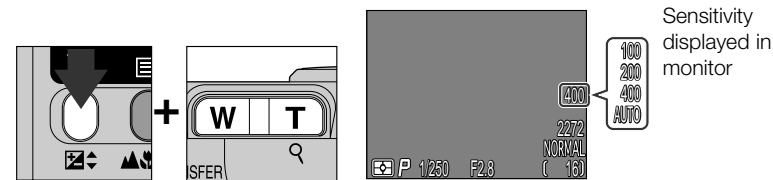
Sensitivity (ISO Equivalency)

only

Adjusting Sensitivity

In mode, the camera sets sensitivity automatically in response to lighting conditions. When the mode dial is set to , you can choose a fixed value for sensitivity from four possible settings.

| Setting | Description |
|-----------------------|--|
| AUTO (default) | Equivalent to setting of 100 under normal conditions; when lighting is poor, however, camera automatically raises sensitivity to compensate. ISO icon appears in monitor only when sensitivity raised above 100. |
| 100 | Approximately equivalent to ISO rating of 100. |
| 200 | Approximately equivalent to ISO rating of 200. |
| 400 | Approximately equivalent to ISO rating of 400. |



Sensitivity is set by pressing the zoom button while holding down the button.

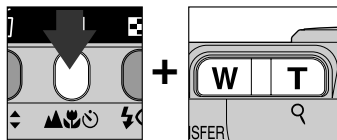


Sensitivity can also be set using the "ISO" item in the shooting menus (p. 106).

- A slight amount of mottling (noise) may appear in pictures taken at settings other than 100.
- Changes to sensitivity have no effect in or SCENE operating modes.

In mode, manual focus can be used in place of autofocus for situations in which you are unable to achieve the desired results using autofocus.

1 Press the zoom button while holding down the button.



• Manual focus display shows approximate focus distance from lens between (4cm/1.6 in.) at widest angle) and infinity.

2 Using this display as your guide, continue to press the zoom button until your subject is in focus.



• The focus distance available depend on the focus mode setting (p. 41). Note that the focus distances of 4-30cm (1.6-12 in.) are only available at (macro close-up) and (macro close-up + self-timer) at widest angle.

- Unless **Off** is selected for **Focus Options: Focus Confirmation** (p. 113), focus confirmation will turn on automatically when manual focus is in effect, and objects that are in focus will be outlined sharply in the monitor.
- Manual focus can be canceled by pressing the button.

Notes on Manual Focus

- When using the self-timer, be sure that the self-timer is selected (p. 42) before selecting a focus distance. Changing the focus mode after setting the focus distance will cancel manual focus.
- Use autofocus (p. 44) when an optional converter lens is attached (p. 132). In manual focus mode, the actual focus distance will differ from that shown in the monitor.
- When manual focus is set to the end of the manual focus indicator, the camera may be unable to focus at some zoom positions. If the camera is unable to focus at the current zoom position, the manual focus display in the monitor will turn red. Zoom the camera in or out until the manual focus display no longer appears in red.

Playing Pictures Back

This section details the operations that can be performed when the mode dial is set to .

Full-Screen Playback

Thumbnail Playback

Taking a Closer Look: Playback Zoom

Creating a Small Copy of a Picture: Small Picture

Movie Playback

Photo Information

Playback Options

Full-Screen Playback
pp. 56-57

Thumbnail Playback
p. 58


Taking a Closer Look: Playback Zoom
p. 59

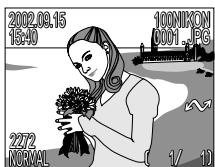
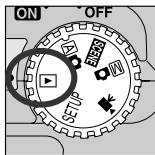
Creating a Small Copy of a Picture: Small Picture
pp. 60-61

Movie Playback
p. 62











Photo Information
pp. 63-64















Full-Screen Playback

When the mode dial is turned to , the camera enters playback mode with the most recent picture displayed in the monitor.




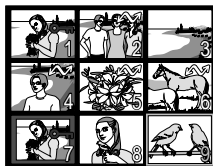
The following operations can be performed in playback mode.














| To | Press | Description | Page |
|---|---|---|------|
| View other pictures |  | Press  to view pictures recorded before the current photo,  to view pictures recorded after the current photo. Keep multi selector pressed to scroll rapidly to the desired frame number. | — |
| Hide picture information/turn monitor off |  | Press  to hide picture information. Press again to turn off the monitor display. Press yet again to display picture information. | — |
| Create a Small Picture |  | If the current picture is a photograph, pressing the  will create a small copy for electronic distribution. | 60 |
| Play movie back | QUICK  | If the current image is marked with a  icon to show that it is a movie, pressing the QUICK  button starts movie playback. Press again to pause playback. | 62 |

| To | Press | Description | Page |
|---|--|---|------|
| Delete current picture |  | A confirmation dialog will be displayed. Press  /  on the Multi selector to highlight the option and  to select.  <ul style="list-style-type: none"> • Select "No" to keep photo without deleting • Select "Yes" to delete photo | — |
| View multiple images |  | Press the  button to display up to nine pictures at a time as small thumbnail previews. | 58 |
| Zoom photo in |  | Press the  () button for an enlarged view of the current photo. | 59 |
| Display playback menu | MENU | Press the MENU button to display or hide the playback menu. | 117 |
| View photo information |  | Press the  button to display photo information. | 63 |
| Select current picture for transfer to a computer | TRANSFER  | Pictures selected for transfer are marked with a  icon. Turn this marking on or off to select the pictures that will be transferred to a computer at a later date. | 66 |


Thumbnail Playback

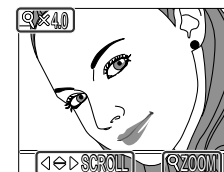
Pressing the  button in full-screen playback displays a menu of nine thumbnail images.






| To | Press | Description |
|---|---|---|
| Highlight images |  | Press  /  /  /  on the Multi selector to highlight a thumbnail. |
| View highlighted image at a larger size |  | Press the  button once to view a menu of four thumbnail images. Press again to view highlighted thumbnail full screen. Small pictures are displayed with a grey frame. |
| Delete highlighted picture |  | <p>A confirmation dialog will be displayed. Press / on Multi selector to highlight option, press  to select.</p>  <ul style="list-style-type: none"> • Select “No” to return to thumbnail playback screen without deleting the picture • Select “Yes” to delete picture |
| Select highlighted photo for transfer to computer | TRANSFER | Pictures selected for transfer are marked with a  icon. Turn this marking on or off to select the pictures that will be transferred to a computer at a later date. |

Taking a Closer Look: Playback Zoom

Use the  (T) button to zoom in on pictures displayed in full-screen playback (zoom cannot be used with movies and small picture files).



| Operation | Function |
|---|--|
|  (T) Press | Zoom picture in. Zoom increases each time button is pressed to maximum of 6.0X. While image is zoomed in, Q indicator and zoom factor are displayed in monitor |
|  (W) Press | Cancel zoom. |
|  | Scroll to another area of image. |

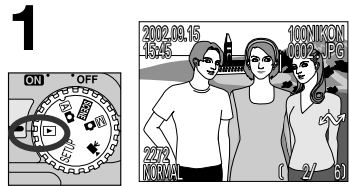
Notes on Playback Zoom

To view other pictures on the memory card, cancel zoom and use the multi selector.
Additional time may be required to display pictures taken at an image quality setting of **HI**.
Playback zoom cannot be used to view movies, copies created with small picture function, or pictures taken at a setting of **Ultra HS**.

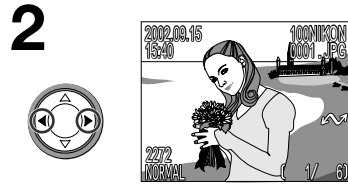
Creating a Small Copy of Picture: Small Picture

Pressing the ▼ (**SMALL PIC.**) button in full-screen playback or review creates a small copy of the current picture. Before creating a copy, choose a size using the **Small Pic.** option in the playback menu. Copies can be 640 x 480, 320 x 240, 160 x 120, 96 x 72 pixels in size and automatically have an image quality of BASIC, making them ideal for distribution by e-mail or for use in web pages.

To create a small copy of the picture currently displayed in full-screen playback or full-screen review:



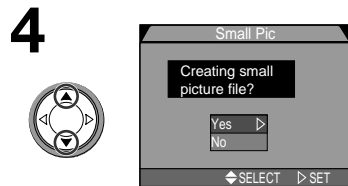
Display a picture in full frame playback or full-screen review to create a small picture file



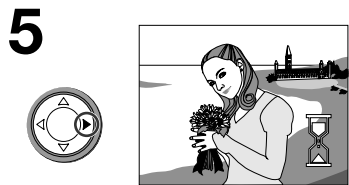
Press ◀/▶ to select a picture



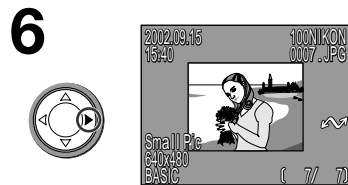
Press ▼ (**SMALL PIC.** button)



Press ▲/▼ to highlight "Yes"



Press ▶ to create a copy of the photograph at the designated Small Picture size



Press ▶ to confirm small picture

About Small Picture

Once created, copies are independent of the original: deleting a copy has no effect on the original, deleting the original no effect on the copy. Copies are stored on the memory card as independent files with names of the form "SSCNnnnn.JPG," where "nnnn" is a four-digit number assigned automatically by the camera. Print and protect attributes for copies must be set separately from the originals.

When displayed in full-screen playback, copies will occupy roughly one-quarter of the monitor and are surrounded by a gray frame. In thumbnail playback, copies are indicated by a gray border. Copies can not be viewed using playback zoom (p. 59); pressing the Q (T) button when a copy is displayed has no effect.

Restrictions on a Small Picture



Small Pictures cannot be created in the following conditions:

- When a Small Picture is being displayed in the monitor
- With an image file of **HI** image quality
- With **Ultra HS** or movie files
- When there is insufficient memory in the memory card to create a Small Picture
- In quick review, thumbnail review and thumbnail playback

Notes on Small Picture

- The COOLPIX4300 may not be able to create small copies from images taken with another make of camera.
- Copies created with the small picture function may not display correctly when viewed on other models of Nikon digital camera. You may also not be able to transfer copies from other models of Nikon digital camera to a computer.

Movie Playback

In full-screen playback, movies are indicated by a  icon in the lower left corner of the display. Movie playback is controlled by the QUICK  button.










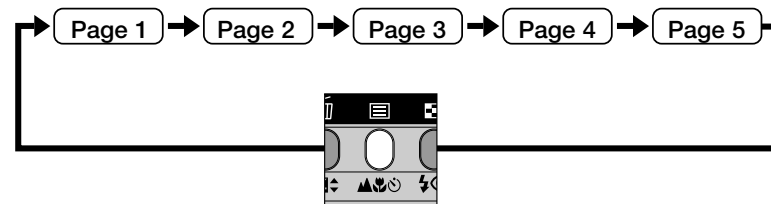
| Operation | Function |
|---|---|
| QUICK  | Start movie. While movie is in progress, press to pause movie; press again to resume movie playback. When movie ends, first frame of movie will be displayed and normal playback will resume. |
|  | While movie is paused: rewind movie one frame. |
|  | While movie is paused: advance movie one frame. |

Photo Information

Photo information superimposed on pictures displayed in full-screen playback or full screen review. There is a total of five pages of information for each photo.

Press the  (  ) button to cycle through picture information as follows:



Page 1

Page 2

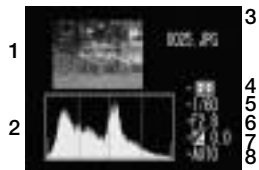
Page 3

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

- Camera type
- Firmware version
- Metering method
- Exposure mode
- Shutter speed
- Aperture
- Exposure compensation
- Focal length
- Focus mode

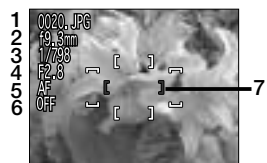
- Flash status
- Image adjustment
- Sensitivity (ISO equivalent)
- White balance
- Sharpening
- Digital zoom
- Lens-converter status
- File size

Page 4 (histogram)



- 1 Thumbnail preview (flashing border marks image highlights, or 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 Metering method
- 5 Shutter speed
- 6 Aperture
- 7 Exposure compensation
- 8 Sensitivity (ISO equivalent)

Page 5 (focus confirmation)



- 1 File number and type
- 2 Focal length
- 3 Shutter speed
- 4 Aperture
- 5 Focus mode
- 6 Noise reduction
- 7 Focus confirmation (portions of image in focus sharply outlined; active focus area shown in red)

Connections

This chapter provides information on connecting your camera to a computer and to a television or videocassette recorder (VCR).

.....
Connecting to a Computer

Connecting to a Television or VCR

*Connecting to
External Devices*

**Connecting to a
Computer**
p. 66-67

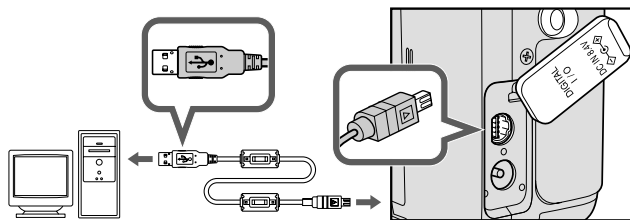
**Connecting to a
Television or VCR**
p. 68

Connecting to a Computer

Before copying pictures to your computer, you will need to install Nikon View, an application that allows you to transfer pictures from the camera memory card to a computer hard disk and view them on the computer monitor. Once you have installed Nikon View, you are ready to transfer photographs and movies to your computer. Pictures can be transferred via a direct USB connection between the camera and computer. If your computer has built-in USB interface, you can connect it to your camera using the UC-E1 cable provided.

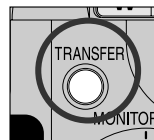
Connect the UC-E1 USB cable as shown below.


- Use the flat connector for connection to the computer, and connect the other end of the cable to the camera's USB connector. See the *Quick Start Guide* for details on connecting camera to a computer or transferring pictures to a computer.



The TRANSFER button

Pictures can also be transferred using the TRANSFER button on the camera.




- When the TRANSFER button on the camera is pressed, pictures with  markings are transferred to computer.
- The display in the camera monitor changes as follows:



- When all marked pictures have been transferred, the message "TRANSFER COMPLETED" will be displayed in the camera monitor.

Mac OS X

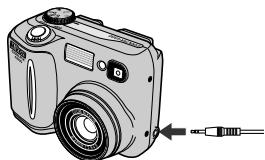
Pictures can not be transferred using the camera TRANSFER button in Mac OS X 10.1.2. Use the  button in Nikon View to transfer pictures. Before using the camera TRANSFER button to transfer pictures in Mac OS X version 10.1.3 or later, set the **USB** option in the camera SET-UP menu to **PTP** (p. 93)

Connecting to a Television or VCR

Using the video cable provided with your camera, you can connect the COOLPIX4300 to a television or VCR.

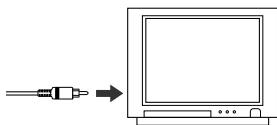
1 Connect the video cable to the camera

- Insert the black plug on the video cable into the camera's video output connector.



2 Connect the video cable to the video device

- Connect the yellow plug to the video-in jack on the television or VCR.



3 Tune the television to the video channel

4 Turn the camera on

- The television will perform the functions normally performed by the camera monitor, and the camera monitor will turn off.



Use an AC Adapter

To eliminate drain on the batteries during extended playback, connect the camera to an optional EH-21 AC adapter/battery charger or EH-53 AC adapter.



Choosing a Video Mode (p. 93)

The **Video Mode** item in the SETUP menu 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.

Menu Guide

This chapter is divided into the following five sections:

Index to Menu Options

An overview of the options available in the camera menus.

Using Camera Menus

This section describes basic menu options.

The Set-Up Menu

This menu is used for basic camera setup.

The Shooting Menu

This menu contains a number of options for fine-tuning shooting settings.

The Playback Menu

The playback menu contains options for managing images stored on memory cards.

Camera Menu Options

Index to Menu Options
pp. 70-75

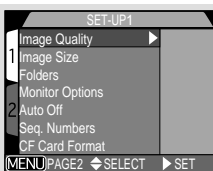
Using Camera Menus
pp. 76-78

The Set-Up Menu
pp. 79-95

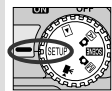
The Shooting Menu
pp. 96-116

The Playback Menu
pp. 117-129

Index to Menu Options

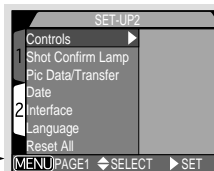


SET-UP 1



Set Mode dial to SETUP.

SET-UP menu contains two pages of options.



SET-UP 2



Press the MENU button or Multi selector to switch between SET-UP menu 1 and 2.



Image Quality
Select the image quality (except HI) used for all modes (p. 81)

FINE
NORMAL
BASIC

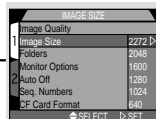


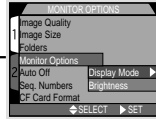
Image Size
Choose image size used for all modes (p. 82)

2272 1280
2048 1024
1600 640



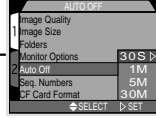
Folders
Select folder for storage. Create, rename, and delete folders (p. 83)

Options ▶ New/Rename/Delete
NIKON
(Folder name)



Monitor Options
Turn monitor and picture review on and off, control monitor display (p. 87)

Display Mode ▶ Monitor On/Review Only/
Preview Only/Monitor Off
Brightness ▶ (5 levels)



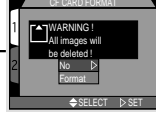
Auto Off
Specify amount of time before camera enters sleep mode to save power (p. 88)

30 S
1 M
5 M
30 M



Seq. Numbers
Control automatic file naming (p. 89)

On
Off
Reset



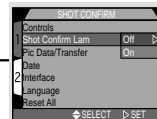
CF Card Format
Format memory cards for use in the COOLPIX 4300 (p. 90)

WARNING!
All images will be deleted! ▶ **No**
Format



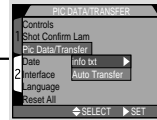
Controls
Set camera to "remember" settings in effect when camera is turned off
Turn digital zoom on or off (p. 90)

save ▶ On/Off
save ▶ On/Off
save ▶ On/Off
Digital Zoom ▶ On/Off



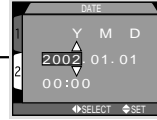
Shot Confirm Lamp
Control visual shutter release confirmation lamp (p. 91)

Off
On



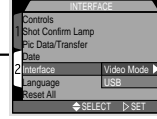
Pic Data/Transfer
Save photo information in text format; turn transfer marking on or off (p. 91)

info.txt ▶ On/Off
Auto Transfer ▶ On/Off



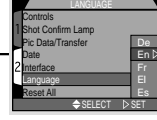
Date
Set date and time (p. 92)

Year/Month/Day/Hour/Minute
Display order



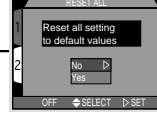
Interface
Choose USB protocol used when camera is connected to a computer or select the video standard to use for playback on TV (p. 92)

Video Mode ▶ NTSC/PAL
USB ▶ PTP/Mass Storage



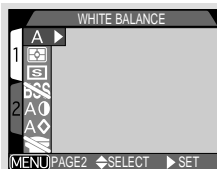
Language
Select language for menu and message display (p. 94)

De
En
Fr
Es



Reset All
Reset all settings to default values (p. 95)

No
Yes

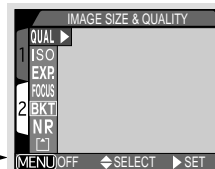


Shooting Menu 1

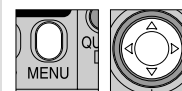


Set Mode dial to **M**. Press the MENU button to select.

Shooting menu contains two pages of options.



Shooting Menu 2



Press the MENU button or Multi selector to switch between the Shooting menus.



White Balance

Select the white balance to match lighting conditions (p. 97)

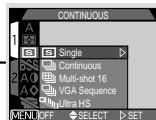
- A** Auto
- WB** White Bal Preset
- F** Fine
- I** Incandescent
- FL** Fluorescent
- CL** Cloudy
- SL** Speedlight



Metering

Select metering mode (p. 99)

- M** Matrix
- S** Spot
- CW** Center-Weighted
- SA** Spot AF Area



Continuous

Take pictures one at a time, in sequence, or in a collage (p. 100)

- S** Single
- C** Continuous
- MS** Multi-shot 16
- V** VGA Sequence
- UHS** Ultra HS



Best Shot Selector

Use when pictures could be blurred by inadvertent camera movement (p. 102)

- BSS** Off
- BSS** On



Image Adjustment

Adjust brightness or contrast of image (p. 103)

- A** AUTO
- N** Normal
- +C** More Contrast
- C** Less Contrast
- +L** Lighten Image
- L** Darken Image
- BW** Black & White

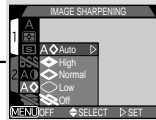


Image Sharpening

Heighten or reduce the sharpness of outlines in your pictures (p. 104)

- A** Auto
- H** High
- N** Normal
- L** Low
- S** Off



Lens

Select type of optional lens converter or Slide Copy Adapter (p. 105)

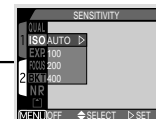
- N** Normal
- W** Wide Adapter
- T1** Telephoto 1
- T2** Telephoto 2
- F1** Fisheye 1
- SCA** Slide Copy Adptr



Image Quality and Size

Set image quality and size used for all modes (p. 81, 82)

- Image Quality** ▶ HI/FINE/NORMAL/BASIC
- Image Size** ▶ 2272/2048/1600/1280/1024/640



Sensitivity

Increase sensitivity to take pictures in low light without flash (p. 106)

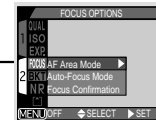
- AUTO**
- 100**
- 200**
- 400**



Exposure Options

Set exposure mode, turn AE Lock and Auto Bracketing on or off, set exposure compensation (p. 106)

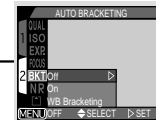
- Exposure Mode** ▶ P/M
- AE Lock** ▶ Off/On/Reset
- EXP. +/-** ▶ -2.0 to +2.0



Focus Options

Select AF Area, change Autofocus mode, confirm focus, distance unit displayed (p. 111)

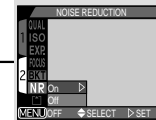
- AF Area Mode** ▶ Auto/Manual/Off
- Auto-Focus Mode** ▶ Continuous AF/Single AF
- Focus Confirmation** ▶ MF/On/Off



Auto Bracketing

Automatically vary exposure or white balance over a series of pictures (p. 114)

- Off**
- On** ▶ 3, ±0.3/3, ±0.7/3, ±1.0/5, ±0.3/5, ±0.7/5, ±1.0
- WB Bracketing**



Noise Reduction

Reduce "noise" in pictures taken with slow shutter speeds or high sensitivity settings (p. 116)

- On**
- Off**



CF Card Format

Format memory cards for use in the COOLPIX 4300 (p. 90)

- WARNING!** All images will be deleted!
- No Format**

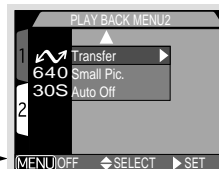


Playback Menu 1

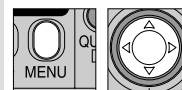


Set Mode dial to . Press the MENU button to select.

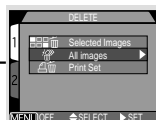
Playback menu contains two pages of options.



Playback Menu 2



Press the MENU button or Multi selector to switch between the Playback menus.



Delete
Delete selected images using thumbnail display; delete all images or the settings of Print-order files (p. 118)

- Selected Images**
- All Images**
- Print Set**



Folders
Select folder for storage. Create, rename, and delete folders (p. 121)

- Options** ▶ New/Rename/Delete
- All Folders**
- NIKON**
- (Folder name)



Slide Show
Start slide show for images in the designated folder; set frame interval from as 2, 3, 5 or 10 sec. (p. 122)

- Start**
- Frame Intvl** ▶ 2S/3S/5S/10S



Protect
Protect selected images from being erased (p. 124)

- (Select image and set Protect)



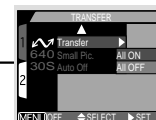
Hide Image
Hide pictures during playback (p. 125)

- (Select image and set Hide Image)



Print Set
Select images for printing from thumbnail display (p. 126)

- 1 (Select image and set number of prints)



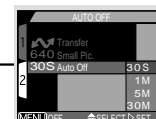
Transfer
Mark all pictures for transfer or remove marks from all pictures (p. 128)

- All ON**
- All OFF**



Small Pic.
Set a Small Picture image size suitable for e-mail and Web distribution (p. 129)

- 640 x 480**
- 320 x 240**
- 160 x 120**
- 96 x 72**



Auto Off
Set time delay for Auto-Off function (p. 88)

- 30 S**
- 1 M**
- 5 M**
- 30 M**

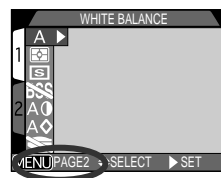
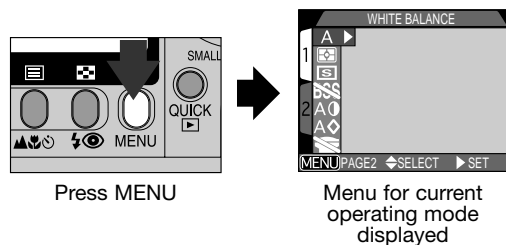
Using Camera Menus

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. No menu is available in and movie mode.

| Mode | Menu | Description | Page |
|-------|---------------|--|------|
| SETUP | SET-UP | Basic camera setup (image quality and size setting, formatting CF memory cards, setting the time and date, etc.) | 79 |
| | SHOOTING MENU | Advanced shooting options (white balance, metering, etc.) | 96 |
| SCENE | SCENE | Select the scene from a menu of 12 creative shooting situations. | 34 |
| | PLAYBACK MENU | Playback options such as deleting selected pictures or selecting images for transfer to your computer, etc. | 117 |

Viewing the Menus

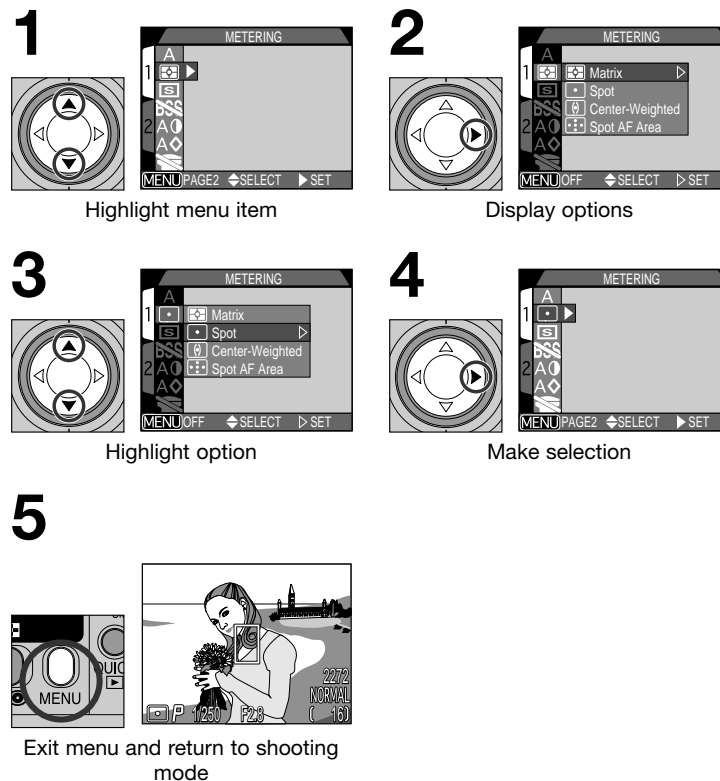
When the camera is on, the menu for the current operating mode except and movie can be displayed by pressing the **MENU** button.



If “MENU/PAGE2” appears at the lower left corner of the menu, pressing the **MENU** button again will display the menu’s second page. When “MENU/OFF” is displayed, pressing the **MENU** button returns you to shooting or playback mode.

Making a Selection

Use the Multi selector to make a selection.



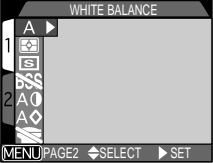
- To return to the previous menu after making a selection, press the Multi selector to the left or right.
- The view through the lens is visible behind the and SCENE menus. To take pictures while the menu is displayed, press the shutter-release button.

The Set-Up Menu

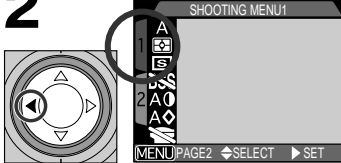
Accessing Multi-Page Menus

To move between pages in a multi-page menu:


- 1**



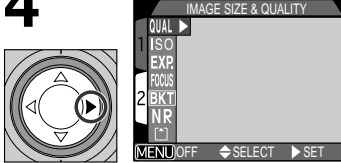
Position cursor in main menu
- 2**



Highlight page tab
- 3**




Highlight page number
- 4**



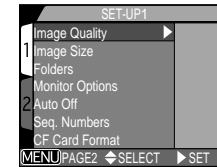
Display selected page

- You can also jump from the first page to the second page of a multi-page menu by pressing the MENU button once.

This section details the options available in the SET-UP menu, where you make changes to basic camera settings. Some of the options in the setup menu can also be accessed from the  and playback menu.

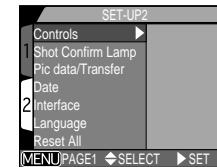
The setup menu contains two pages of options:

SET-UP 1 menu



| | |
|-----------------|----------|
| Image Quality | P. 81 |
| Image Size | P. 82 |
| Folders | P. 83-86 |
| Monitor Options | P. 87 |
| Auto Off | P. 88 |
| Seq. Number | P. 89 |
| CF Card Format | P. 90 |

SET-UP 2 menu

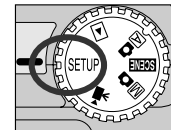


| | |
|-------------------|----------|
| Controls | P. 90 |
| Shot Confirm Lamp | P. 91 |
| Pic data/Transfer | P. 91-92 |
| Date | P. 92 |
| Interface | P. 92-94 |
| Language | P. 94 |
| Reset All | P. 95 |

To View the SET-UP menu

The SET-UP menu is displayed automatically when the mode dial is turned to SETUP.

To end display of the SET-UP menu, set the mode dial other than SETUP or turn the camera off.



Making Effective Use of Memory: The Image Size & Quality Menu

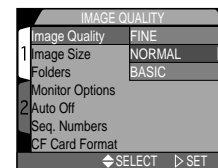
Together, image quality and size determine how much space each picture occupies on the memory card. This in turn determines the total number of pictures that can be stored. To get an idea of how different settings for image size and quality affect the number of images that can be stored on a memory card, view the following table, which shows the approximate number of pictures that can be stored on 16 MB, 64 MB, and 128 MB cards at different combinations of image size and quality.

| | 16 MB Card | | | | | |
|--------|-------------|------|------|------|------|------|
| | 2272 | 2048 | 1600 | 1280 | 1024 | 640 |
| HI | 1 | — | — | — | — | — |
| FINE | 8 | 10 | 16 | 24 | 37 | 86 |
| NORMAL | 16 | 19 | 31 | 47 | 69 | 144 |
| BASIC | 32 | 37 | 59 | 86 | 121 | 229 |
| | 64 MB Card | | | | | |
| | 2272 | 2048 | 1600 | 1280 | 1024 | 640 |
| HI | 5 | — | — | — | — | — |
| FINE | 33 | 40 | 65 | 100 | 151 | 347 |
| NORMAL | 65 | 78 | 125 | 190 | 278 | 578 |
| BASIC | 130 | 151 | 236 | 347 | 488 | 918 |
| | 128 MB Card | | | | | |
| | 2272 | 2048 | 1600 | 1280 | 1024 | 640 |
| HI | 10 | — | — | — | — | — |
| FINE | 66 | 80 | 130 | 200 | 303 | 695 |
| NORMAL | 132 | 158 | 252 | 381 | 558 | 1158 |
| BASIC | 260 | 303 | 474 | 695 | 997 | 1840 |

* Figures are approximate. The file size of JPEG-compressed images varies with the scene recorded.

Image Quality

To reduce the amount of memory that each shot occupies, pictures taken at settings other than HI are compressed as they are saved to the memory card. Compression selectively reduces the quality of the image; the more the picture is compressed, the more noticeable this loss of quality is likely to be. The actual effect depends on the size of the picture when printed or displayed and on the type of subject.



| Option | Compression ratio (approx.) | File format | Description |
|--------|-----------------------------|-------------|---|
| HI | No compression | TIFF | Maximum image quality. Use when fidelity is of paramount importance. Only available at image size of 2272 x 1704. |
| FINE | 1:4 | JPEG | Fine image quality, suitable for enlargements or high-quality prints. |
| NORMAL | 1:8 | JPEG | Normal image quality, suited to most applications. |
| BASIC | 1:16 | JPEG | Basic image quality, suitable for pictures that will be distributed by e-mail or used in web pages. |

You can control the amount of compression using the image quality sub-menu. Image quality settings can be accessed from the SET-UP menu and the “Image Size & Quality” sub-menu in the shooting menu (p. 96). Changes to image quality in any of these menus apply to all modes. Note, however, that image quality setting of “HI” cannot be selected with the SETUP menu and “HI” becomes “FINE” in and SCENE modes, reverting to “HI” when the mode dial is turned to .



Viewing the Current Image Quality and Size

The current image quality and size settings are displayed in the monitor as shown at right.

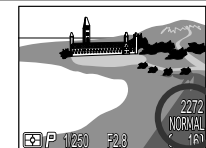
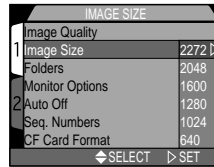


Image Size

Image size is measured in pixels. At a given image quality setting, smaller image sizes require less space to store, making them suitable for electronic distribution. Consequently, the larger the image, the larger prints can be made without loss of detail.



| Option | Size (pixels) | Print size |
|--------|---------------|---------------------------|
| 2272 | 2272 x 1704 | 19 x 14cm (7.5 x 5.5 in.) |
| 2048 | 2048 x 1536 | 17 x 13cm (7 x 5 in.) |
| 1600 | 1600 x 1200 | 14 x 10cm (5.5 x 4 in.) |
| 1280 | 1280 x 960 | 11 x 8cm (4.5 x 3 in.) |
| 1024 | 1024 x 768 | 9 x 7cm (3.5 x 3 in.) |
| 640 | 640 x 480 | 5 x 4cm (2 x 1.5 in.) |

Image size can be adjusted from the SET-UP menu and the “Image Size & Quality” sub-menu in the **M** shooting menu (p. 96). Changes to image size in any of these menus apply to all modes.

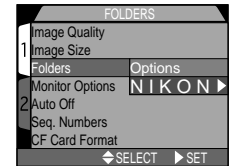


Print Size

The size of images when printed depends on the resolution of the printer (the higher the resolution, the smaller the final print size). The approximate size given above assume a resolution of around 300 dpi (dots per inch).

Organizing Your Pictures: The Folders Menu

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

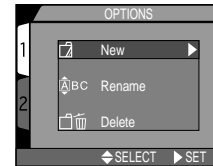


Creating, Renaming and Deleting Folders: Options

The folder options menu can be used to create, rename or delete folders.

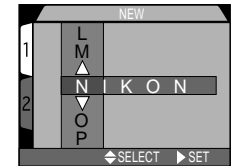
— Creating New Folders —

1



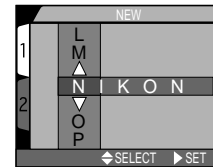
Highlight “New”

2



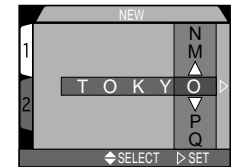
Press ►

3



Press ◀/▶ to highlight letter

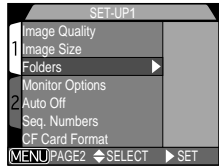
4



Press ▲/▼ to 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.

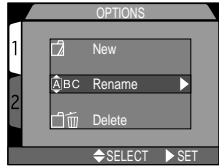
5



Highlight last letter and press ► to create new folder.

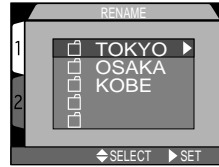
— Renaming Existing Folders —

1



Highlight “Rename”

2



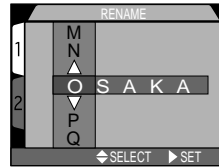
Press ► to display list of folders

3



Highlight folder name

4

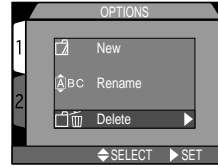


Press ►

- Edit name as described in steps 3-5 of “Creating New Folders” on preceding page.

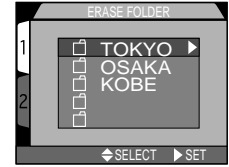
— Deleting Folders —

1



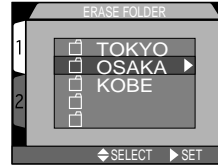
Highlight “Delete”

2



Press ► to display list of folders

3



Highlight folder name

- Folder NIKON is not available for deletion.

4



Press ►

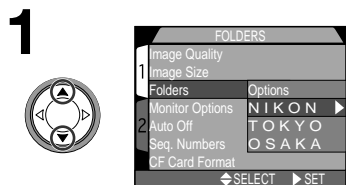
- Select “No” to return to SET-UP menu without deleting folder
- Select “Yes” to delete selected folder.

Hidden and Protected Images

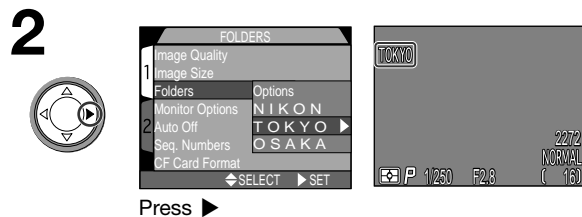
If the selected folder contains hidden (p. 125) or protected (p. 124) images, the folder will not be deleted. Any images it contains that are neither hidden nor protected will, however, be deleted.

— Choosing a Folder —

Once additional folders have been created, you can select the folder that will be used for playback or to store pictures in all modes. The folder can be chosen using the **Folders** sub-menu in SETUP mode or **Folders** item in the playback menu. Until a new folder is selected, all subsequent images will be stored in this folder, which will also be used for playback.



Highlight folder name.



Press ►

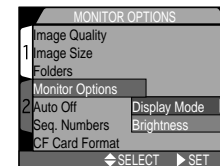
- Folder name is shown in monitor. (No folder name is displayed when NIKON is selected.)

Ultra HS

With each sequence of pictures taken at **Ultra HS** (p. 100), the camera creates a new folder in which all pictures in the sequence are stored. Each folder will have a name consisting of “N_” followed by a three-digit number assigned automatically by the camera. Folders can be deleted or selected for playback from the **Folders** menu, but folders created at a setting of **Ultra HS** cannot be selected for storing additional images.

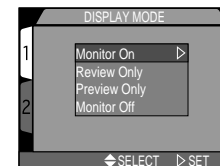
Monitor Options

The **Monitor Options** sub-menu is used to specify when the monitor will turn on automatically and to set monitor brightness.



Controlling the Monitor: Display Mode

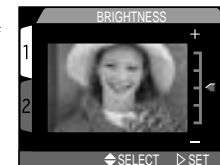
This option is used to specify the conditions under which the monitor will turn on automatically, and to specify whether or not pictures are displayed in the monitor after shooting.



| Option | Monitor on at startup | Picture review |
|--------------|-----------------------|----------------|
| Monitor On | Yes | On |
| Review Only | No | On |
| Preview Only | Yes | Off |
| Monitor Off | No | Off |

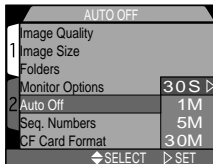
Adjusting Monitor Brightness: Brightness

This option controls monitor brightness. Press ▲/▼ on the Multi selector to increase or decrease the brightness of the monitor by moving the arrow at the right side of the display up or down. Once you have adjusted brightness to your satisfaction, press ► on the Multi selector to put the change into effect.



Conserving Battery Power: Auto Off

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



Sleep Mode

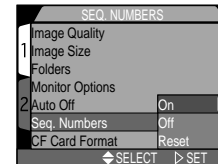
In sleep mode, all camera functions are deactivated and the camera itself is effectively off, consuming almost no power. The camera can be reactivated by pressing the Multi selector or any other buttons on the camera back (except TRANSFER button), by rotating the mode dial, or by pressing the shutter release button halfway.

Using an AC Adapter

When the camera is powered by the AC adapter (available separately), the camera will remain on for thirty minutes if no operations are performed, regardless of the setting in the **Auto Off** menu.

File Numbering: Seq. Number

The camera assigns each picture a file name consisting of “DSCN” followed by a four-digit number assigned automatically by the camera (e.g., “DSCN0001.JPG”). This option controls how files are numbered.



| Option | Description |
|--------|---|
| On | When this option is selected, the camera assigns all subsequent file 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 numbering will continue from the last number used. |
| Off | The camera does not store the last file number used. When another memory card is inserted or a new file is created, numbering starts from the lowest number available. |
| Reset | Clears the current file number from memory. Sequential file numbering begins again from the lowest number available on the current memory card. |

File Numbering

File numbering starts over from 0001 if a picture is taken when the current folder contains a file numbered 9999. The camera will create a new folder by adding one to the current folder number (for example, if the current folder is “100NIKON,” the new folder will be named “101NIKON”). Each folder can hold up to 200 pictures. If file numbering reaches 9999 when the card contains a folder numbered 999, no more pictures can be stored on the card, even if sufficient memory remains. Insert a new memory card or format the current card.

Resetting File Numbering to 0001

To reset file numbering to 0001, insert an empty memory card or format the current memory card before selecting Reset. Note that formatting the memory card deletes all data it may contain, including hidden and protected images.

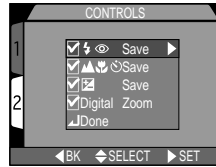
CF Card Format

The memory card provided with your camera is formatted at shipment. If you purchase additional memory cards for added storage, you will however need to format the cards before first use to ensure that they work properly in your camera. Formatting memory cards is also an effective way of deleting all pictures on the card.



Storing Camera Settings: Controls

In **M/** mode, the first three items in the “Controls” menu determine what camera settings remain in effect when the camera is turned off. If an item is checked, the setting in effect at the time the camera was turned off will be restored the next time the camera is turned on. Any items that are not checked will be restored to default settings when the camera is turned on.



| Option | Setting Affected | Default |
|---------------------|-----------------------|-----------|
| | Flash mode | Auto |
| | Focus mode | Autofocus |
| | Exposure compensation | ±0.0 |
| Digital Zoom | Digital zoom | On |

The fourth item, **Digital Zoom**, is used to turn digital zoom on and off in **A/**, **SCENE** and **M/** mode. If it is checked, digital zoom functions normally (p. 46). If this item is not checked, digital zoom cannot be used, and pressing the **T** zoom button at the maximum optical-zoom position has no effect.

To check an item, or remove the checked mark from an item that has been already been checked, highlight the item and press **▶** on the Multi selector. Highlight **Done** and press **▶** on the Multi selector to put the changes into effect.

Confirming Shutter Release: Shot Confirm Lamp

If **On** is selected for this option, the red-eye reduction lamp will light to confirm that the shutter has been released. The red-eye reduction lamp will not light if the flash has fired.

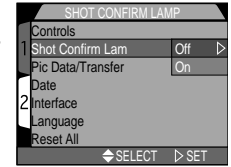
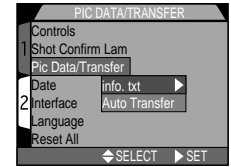


Photo Information and Transfer Setting: Pic Data/Transfer

The “Pic Data/Transfer” sub-menu contains options for storing information about the camera status at the time when the picture was taken as a text file and for turning on/off the transfer mark associated with pictures and movies as they are taken.

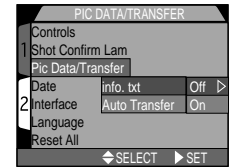


Recording Photo Information: info.txt

While **On** is selected in the **info.txt** menu, the following information about each image recorded is stored in an independent text file (“info.txt”):

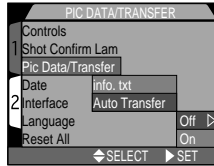
- File number and type
- Camera type and firmware version
- Metering method
- Exposure mode
- Shutter speed
- Aperture
- Exposure compensation
- Focal length and digital zoom
- Image adjustment
- Sensitivity (ISO equivalency)
- White balance
- Sharpening
- Date of recording
- Image size and quality
-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

The info.txt file is stored 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. Images are listed in the order recorded, separated by a blank line.



Making Pictures for Transfer: Auto Transfer

When you connect the camera to a computer running Nikon View and press the TRANSFER button, any images that have been marked for transfer will automatically be copied to the computer. The transfer menu controls whether images are marked for transfer as they are taken. The following options are available:



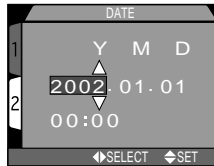
| Option | Description |
|--------------------------------|--|
| Off | Pictures and movies are not marked for transfer. |
| On (Default setting) | Pictures and movies are marked for transfer as they are taken. |

Transferring More than 999 pictures

No more than 999 pictures can be transferred at one time using the TRANSFER button. To copy more pictures, use Nikon View. See the *Nikon View Reference Manual* (on CD) for details.

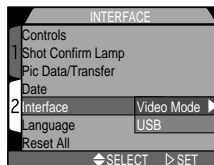
Date

The Date option is used to set the camera to the current date and time. For more information, see “Introduction: First Steps: 5 Set the Date and Time” (p. 21-22).



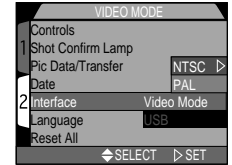
Interface

Choose standard for video output or USB protocol used when camera is connected to a computer.




Choosing a video standard: Video Mode

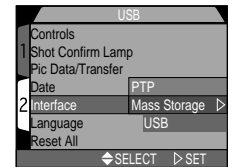
The **Video Mode** menu is used to select the standard used for video output. Adjust this setting to match the standard used in any video device to which you connect the camera.





| Option | Description |
|-------------|---|
| NTSC | Use when connecting the camera to NTSC devices. |
| PAL | Use when connecting the camera to PAL devices. |

Readying the Camera for Transfer: USB

Before pictures can be copied to a computer via direct USB connection, you will need to select a USB setting according to your computer's operating system and whether pictures will be transferred using the camera TRANSFER button or the  button in Nikon View. The following options are available: **PTP** (Picture Transfer Protocol) and **Mass Storage**. The default setting is **Mass Storage**.



| Operating system | Pictures transferred using: | |
|--|--|---|
| | Camera TRANSFER button | Nikon View  button |
| Windows XP Home Edition Windows XP Professional | Choose Mass Storage or PTP . | |
| Mac OS X 10.1.3 or later | Choose PTP . | Choose Mass Storage or PTP . |
| Mac OS X 10.1.2 | —* | |
| Windows 2000 Professional Windows Millennium Edition (Me) Windows 98 Second Edition (SE) | Choose Mass Storage . | |

* Pictures cannot be transferred using camera TRANSFER button in Mac OS X 10.1.2. Use Nikon View  button to transfer pictures.

Windows 2000 Professional, Windows Millennium Edition (Me), Windows 98 Second Edition (SE), Mac OS 9

Do not select **PTP** when connecting the COOLPIX4300 to a computer running one of the above operating systems (there is no need to change the USB setting when using the camera for the first time, as **Mass Storage** is selected at shipment).

If you have already changed the USB setting to **PTP**, be sure to select **Mass Storage** before connecting the camera to your computer.

If you have connected the camera to a computer running one of the above operating systems with **PTP** selected in the USB menu, disconnect the camera as described below. Be sure to select **Mass Storage** in the USB menu before reconnecting the camera.

Windows 2000 Professional

A dialog will be displayed welcoming you to the **Found New Hardware Wizard**. Click **Cancel** to close the dialog, and then disconnect the camera.

Windows Millennium Edition (Me)

After displaying a message stating that the hardware information database is being updated, the computer will start the **Add New Hardware Wizard**. Click **Cancel** to exit the wizard, and then disconnect the camera.

Windows 98 Second Edition (SE)

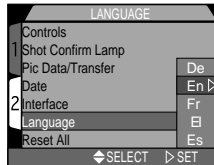
The **Add New Hardware Wizard** will be displayed. Click **Cancel** to exit the wizard, and then disconnect the camera.

Mac OS 9

A dialog will be displayed stating that the computer is unable to use the driver needed for the **Nikon Digital Camera E4300_PTP** USB device. Click **Cancel** to close the dialog, and then disconnect the camera.

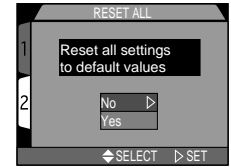
Language

This option is used to choose the language in which camera menus and messages are displayed. For more information, see “Introduction: First Steps: 4 Choose a Language” (p. 20).



Restoring Default Settings: Reset All

The “Reset All” option in the SET-UP menu is used to restore settings for all modes to their default values.



| Option | Description |
|--------|--|
| No | Exist menu leaving settings unchanged. |
| Yes | Restore settings to default values. |

Choosing “Yes” restores the following options to their default values:

The shooting menu

| Setting | Default |
|-----------------------|-----------|
| White Balance | Auto |
| Metering | Matrix |
| Continuous | Single |
| BSS | Off |
| Image Adjustment | Auto |
| Image Sharpening | Auto |
| Lens | Normal |
| Sensitivity | Auto |
| AE Lock | Off |
| Exposure Compensation | 0 |
| AF Area Mode | Auto |
| Auto-Focus Mode | Single AF |
| Focus Confirmation | MF |
| Auto Bracketing | Off |
| Noise Reduction | Off |

All other settings are unaffected.

The SET-UP menu

| Setting | Default |
|-------------------|----------------|
| Folders | NIKON |
| Display Mode | On |
| Brightness | Middle |
| Auto Off | 30 S |
| Controls | All options on |
| Shot Confirm Lamp | Off |

The Playback menu

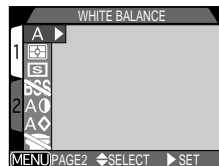
| Setting | Default |
|-----------------------------|-------------|
| Folders | All Folders |
| Frame Interval (Slide Show) | 3 S |
| Auto Off | 30 S |

The Shooting Menu

The shooting menu is available only in mode, and only when the camera is in shooting mode.

The Shooting menu contains two pages of advanced shooting options:

SHOOTING MENU 1



| | |
|--------------------|------------|
| WHITE BALANCE | P. 97-98 |
| METERING | P. 99 |
| CONTINUOUS | P. 100-101 |
| BEST SHOT SELECTOR | P. 102 |
| IMAGE ADJUSTMENT | P. 103 |
| IMAGE SHARPENING | P. 104 |
| LENS | P. 105-106 |

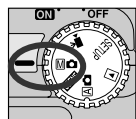
SHOOTING MENU 2



| | |
|---------------------------|------------|
| QUAL IMAGE SIZE & QUALITY | P. 80-82 |
| ISO SENSITIVITY | P. 106 |
| EXP. EXPOSURE OPTIONS | P. 106-110 |
| FOCUS FOCUS OPTIONS | P. 111-113 |
| AUTO BRACKETING | P. 114-115 |
| NOISE REDUCTION | P. 116 |
| CF CARD FORMAT | P. 90 |

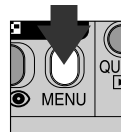
To view the shooting menu:

1



Select (shooting menu).

2



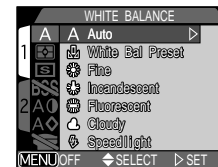
Press MENU button to display shooting menu.

Keeping Colors True: White-Balance

White Balance is used to preserve natural colors under different types of lighting.

Choosing a White Balance Setting

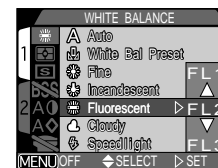
In shooting mode, white balance can be chosen from the white-balance menu (in other modes, white balance is adjusted automatically according to the type of scene).



| Option | Description |
|------------------|--|
| A 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 pictures indoors under incandescent light. |
| Fluorescent | Use when taking pictures indoors under fluorescent light. |
| Cloudy | Use for pictures taken outdoors under overcast skies. |
| Speedlight | White balance adjusted to match light produced by flash. |

Fine-Tuning White Balance

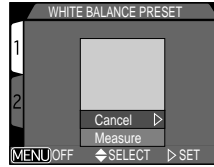
At settings other than **A** (auto) and (preset), white balance can be “fine-tuned” by highlighting the desired setting and selecting an adjustment from a sub-menu. Adjustments range from -3 to +3 in increments of one; raising white balance tends to give images a blue cast, while lowering white balance 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 | Description |
|--------|------------------------------|
| 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 pictures taken under a lamp with a red shade look as though they had been taken under white light).



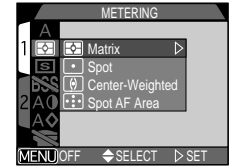
| Option | Description |
|----------------|--|
| Cancel | Recalls the most recent setting for preset white balance from memory and sets white balance to this value. |
| Measure | To measure a new value for white balance, place a white object, such as a piece of paper, under the lighting that will be used in the final picture. 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 preset white balance (camera will zoom out and shutter will be released, but no picture will be recorded). |







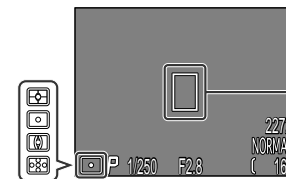
At setting other than **Auto**, the current white-balance setting is indicated by an icon in the monitor.

Measuring Light: Metering

The “metering method” is the method your camera uses to measure light when determining exposure. In **M** shooting mode, “METERING” menu offers a choice of four metering methods:



| Method | How It Works | When to Use It |
|---|--|--|
|  Matrix | Meters 256 areas of frame producing optimal exposure for whole image | Best choice in most circumstances. |
|  Spot | Meters only area shown by square in center of the monitor (1/32 of total frame). | Ensures central subject will be correctly exposed regardless of background illumination. |
|  Center-Weighted | Meters whole frame; but central 1/4 has an 80% weighting. | Use for portraits; adjusts exposure according to lighting at the center of the frame, but still preserves background details. |
|  Spot AF Area | Camera measures light in current focus area only | Useful when you want to use spot metering with manual or automatic focus-area selection (p. 112) to meter an off-center subject. |

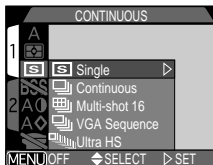







The current metering method is indicated by icons in the monitor.

Spot metering target

Taking Pictures in a Sequence: Continuous

The “Continuous” menu determines whether the camera takes one picture each time the shutter release button is pressed, or records a continuous sequence of pictures while the shutter release button is held down.



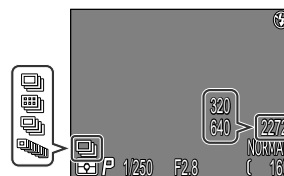
| Option | Description |
|---|---|
|  Single | Camera records one picture each time the shutter release button is pressed all the way down. |
|  Continuous | Camera records pictures at a rate of about four frames every three seconds (1.3 fps)* while shutter-release button is held down. Not available at HI image quality. |
|  Multi-shot 16 | Each time the shutter-release button is pressed, the camera takes sixteen consecutive “thumbnail” images 568 x 426 pixels in size and combines them into a collage measuring 2272 x 1704 pixels. This option is available only at a size of 2272 x 1704 and FINE , NORMAL , or BASIC image quality. |
|  VGA Sequence | Camera takes series of pictures 640 x 480 pixels in size. Image quality (p. 81) is set to NORMAL , allowing pictures to be taken at approximately two frames per second while shutter release button is held down. |
|  Ultra HS | Camera records up to seventy NORMAL -quality pictures 320 x 240 pixels in size (QVGA) at a rate of about thirty frames per second while shutter-release button is held down. Each sequence of pictures is stored in its own folder. |

* Rate of 1.3 fps is for image size of **2272 x 1704**. Shooting will slow when memory buffer fills.

- At settings other than **Single**, the flash is set to **Off** (🚫) and will not fire even when lighting is poor (p. 48).
- At settings other than **Single**, the focus, exposure and white-balance settings used for the first image apply to all other images in the same series.

Ultra HS

- Setting of **Ultra HS** only takes 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.
- At a setting of **Ultra HS**, the zoom indicator in the monitor moves from **S** (start) to **E** (end) as recording progresses. The exposure-count display shows the number of seventy-pictures sequences that can be recorded.
- With each sequence of pictures taken at **Ultra HS**, the camera creates a new folder in which all pictures in the sequence are stored. Each folder will have a name consisting of “N_” followed by a three-digit number assigned automatically by the camera. Pictures can be played back by selecting the appropriate folder or **All Folders** from the playback **Folders** menu.
- **Ultra HS** are only available when the monitor is on. If the monitor is off, the camera will revert to **Single** until the monitor is turned on.



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

Getting Sharper Pictures: BSS (Best-Shot Selector)

The “Best Shot Selector” (BSS) is recommended for situations in which inadvertent camera movement can produce blurred pictures, for example when:

- the camera is zoomed in or a teleconverter is used for telephoto photography
- you are taking close-up shots at short range
- the flash can not be used although lighting is poor

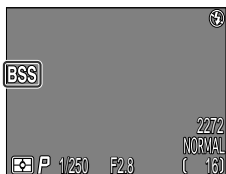


BSS may not produce the desired results with a moving subject or if you change the composition while the shutter release button is pressed all the way down.

| 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 photo 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 picture in the series. |

Restrictions on BSS

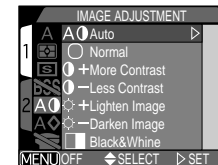
BSS can not be used in combination with bracketing, noise reduction, or **CONTINUOUS** settings other than **Single**. The flash can not be used when BSS is in effect.










When BSS is on, a BSS icon appears in the monitor.

Adjusting Contrast and Brightness: Image Adjustment

This option is used to adjust brightness and contrast according to the shooting situation or how the picture will be used.



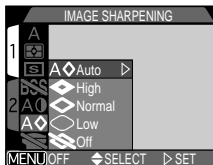
| Option | Description |
|---|--|
|  Auto | Camera automatically adjusts brightness and contrast according to shooting conditions. |
|  Normal | Same brightness and contrast adjustment on all images, useful for images to be edited on computer. |
|  + More Contrast | Image contrast enhanced. Use when shooting landscapes, low-contrast subjects, or under overcast skies. |
|  - Less Contrast | Image contrast reduced. Use when bright light creates strong shadows on subject. |
|  + Lighten Image | Lightens mid-tones in image, without affecting detail in highlights and shadows. Use for printers or monitors that tend to produce dark images. |
|  - Darken Image | Darkens me-tones in image, without affecting detail in highlights and shadows. Use for printers or monitors that tend to produce light images. |
|  Black & White | Pictures recorded in black-and-white. Black-and-white images require the same amount of memory as color images, but show a higher level of detail. Monitor shows view through lens in black-and-white. |



An image-adjustment icon appears in the monitor at settings other than **Normal** and **Auto**.

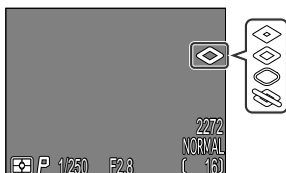
Making Edges More Distinct: Image Sharpening

This option controls whether pictures are processed for increased sharpness, and to what degree. Because this processing takes place only as the pictures are being saved to the memory card, the effects of sharpening can not be previewed in the monitor before shooting.



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

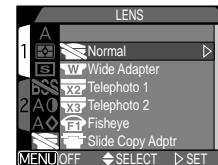
When taking pictures that will later be retouched, choose settings of **Normal** or **Low**.



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

Setting for Optional Lens Converters: Lens

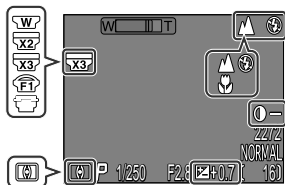
The lens menu is used to select combinations of settings suited to different converter lenses (available separately). For complete information on use and handling, see the documentation provided with your converter lens.



| Option | Use with | Description |
|------------------|----------------------------------|--|
| Normal | — | No modifications are made to settings. Use this option when no lens converter is attached. |
| Wide Adapter | WC-E24*1 WC-E63*1 WC-E68*2 | <ul style="list-style-type: none"> • Camera zooms out to widest angle (p. 26) • Flash disabled (p. 48) • Zooms in to maximum optical-zoom position, adjustable after setting (p. 26) |
| Telephoto 1 | TC-E2*1 | <ul style="list-style-type: none"> • Camera zooms in to maximum optical-zoom position (p. 26) • Optical zoom (p. 26) adjustable between maximum to middle position. • Flash disabled (p. 48) |
| Telephoto 2 | TC-E3ED*1 | <ul style="list-style-type: none"> • Zoom fixed at maximum optical zoom position (p. 26) • Flash disabled (p. 48) |
| Fisheye 1 | FC-E8*1 | <ul style="list-style-type: none"> • Zoom fixed at widest angle (p. 26) • Focus fixed at infinity (p. 41) • Metering method fixed at center-weighted (p. 99) • Flash disabled (p. 48) • Self-timer can be set (p. 42) |
| Slide Copy Adptr | ES-E28*1 | <ul style="list-style-type: none"> • Zoom set to 1.2X digital zoom and adjustable between 1.2-4X (p. 46) • Focus mode fixed at macro close-up (p. 41) • Flash disabled (p. 48) • Image adjustment set to –Less Contrast (p. 103) • Exposure compensation set to +0.7 EV, adjustable (p. 110) • Self-timer can be set (p. 42) • Take picture while the monitor is on |

*1 UR-E4 step down ring lens adapter (available separately) required.

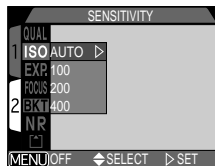
*2 UR-E4 and UR-E7 step down ring lens adapters (both available separately) required.



Lens converter icon appears in the monitor at settings other than **Normal**.

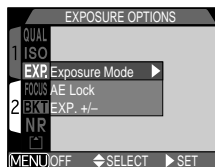
Modifying Sensitivity from a Menu: Sensitivity

The sensitivity menu mirrors the sensitivity (ISO equivalency) value set with the $\left[\begin{smallmatrix} \blacktriangle \\ \blacktriangledown \end{smallmatrix} \right]$ button in combination with the zoom button (p. 53). As with the $\left[\begin{smallmatrix} \blacktriangle \\ \blacktriangledown \end{smallmatrix} \right]$ button, sensitivity can be set to AUTO, 100, 200 or 400. Choosing a new sensitivity value from the “Sensitivity” sub-menu changes the value selected with the $\left[\begin{smallmatrix} \blacktriangle \\ \blacktriangledown \end{smallmatrix} \right]$ and zoom button, while changing the sensitivity value with the $\left[\begin{smallmatrix} \blacktriangle \\ \blacktriangledown \end{smallmatrix} \right]$ button changes the value selected in the “Sensitivity” sub-menu.



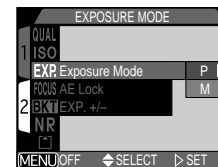
Exposure Options

The exposure options sub-menu provides control over exposure.



— Exposure Mode —

When the mode dial is set to $\left[\begin{smallmatrix} M \\ \text{Camera} \end{smallmatrix} \right]$, you can choose the exposure mode, either **P** or **M**, from the **Exposure Mode** sub-menu.

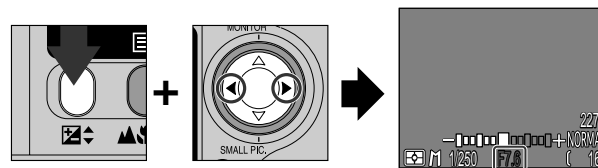


M: Manual

In manual exposure mode, you control both shutter speed and aperture.

Choosing an Aperture

In manual exposure mode, aperture is chosen by pressing $\left[\begin{smallmatrix} \blacktriangle \\ \blacktriangledown \end{smallmatrix} \right]$ on the Multi-selector while holding down the $\left[\begin{smallmatrix} \blacktriangle \\ \blacktriangledown \end{smallmatrix} \right]$ button.




Press $\left[\begin{smallmatrix} \blacktriangle \\ \blacktriangledown \end{smallmatrix} \right]$ for maximum aperture (small f number), $\left[\begin{smallmatrix} \blacktriangle \\ \blacktriangledown \end{smallmatrix} \right]$ for minimum aperture (large f number).

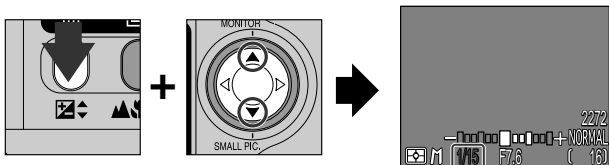
Note on minimum aperture

Filter is applied to adjust the light entering the camera when the aperture is set to its minimum with the COOLPIX4300. Because of this, the minimum aperture setting may not yield wider depth-of-field as expected from the aperture value displayed in the monitor.

If the aperture you have selected would result in the picture being over- or under-exposed, the aperture value displayed in the monitor will flash when the shutter release button is pressed halfway.

Choosing a Shutter Speed

In manual exposure mode, shutter speed is chosen by pressing ▲/▼ on the Multi selector while holding down the  button. Options range from 8 sec. to 1/1000 sec. in increments equivalent to 1 EV (one step). In addition, a shutter speed of “BULB” up to 60 sec. is available for long-time exposures.

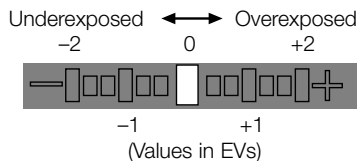


Press ▲ for slower shutter speeds, ▼ for faster shutter speeds.

In manual exposure mode, the amount the picture would be over- or underexposed at the selected combination of aperture and shutter speed is displayed in the monitor.



Display shows values between -2 and +2 EV in increments of 1/3 EV.




Long-time exposure (up to 60 sec.)

- When the shutter speed is set to **BULB** (manual exposure mode only), the shutter will remain open while the shutter release button is pressed (maximum exposure 60 sec.). To reduce blurring caused by camera shake, we recommend that you use a remote shutter release (the MC-EU1 Remote Cord, available separately, functions as a remote shutter-release cable) and a tripod.

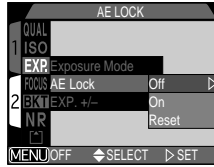


Shutter speed limitations

- At a **CONTINUOUS** setting of **Ultra HS** (p. 100), the lowest available shutter speed is 1/30 sec. At setting of  movie (p. 50), shutter speed cannot be set to a value slower than 1/15 sec. **BULB** is only available at a setting of **Single** (p. 100).
- Note that if the shutter is open for more than 1/4 sec. at any setting, mottling (noise) may appear in the final picture. At speeds of 1/4 sec. Or slower, the shutter speed indicator in the monitor turns yellow.

— Taking Multiple Pictures with the Same Exposure: AE Lock —





This option is used to take a series of photographs with the same exposure and white balance.



| Option | Description |
|--------|---|
| Off | Restores normal exposure, sensitivity and white balance. |
| On | First picture taken after On is selected sets exposure for all subsequent pictures. If white balance is set to A (auto), white balance for first picture applies to all other pictures in series. While AE lock is in effect, flash will be set to Off (🚫). |
| Reset | Clears existing exposure, sensitivity and white balance settings. First picture taken after this option is selected sets exposure, sensitivity and auto white balance for all subsequent pictures. |

While AE lock is in effect, **AE-L** (AE Lock) and **WB-L** (White-Balance Lock) icons appear in the monitor. If **Reset** is chosen or white balance, focus mode, shutter speed or aperture adjusted, these icons will turn yellow to indicated that exposure will be reset with the next shot.

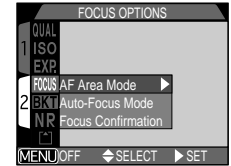
— Modifying Exposure Compensation from a Menu: Exp. +/- —

The **Exp. +/-** item in the EXPOSURE OPTIONS menu mirrors the exposure compensation value set with the  button and Multi selector (p. 51). As with the  button, exposure compensation can be set to values between +2.0 EV and -2.0 EV in increments of 1/3 EV. Choosing a new exposure compensation value from the **Exp. +/-** sub-menu changes the value selected with the  button, while changing exposure compensation with the  button changes the value selected in the **Exp. +/-** sub-menu.




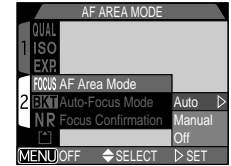
Focus Options

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



— Focus-Area Selection: AF Area Mode —

This setting determines how the camera will choose the focus area in  mode. The following options take effect while the monitor is on (when the monitor is off or digital zoom is activated, AF Area Mode is automatically set to Off):

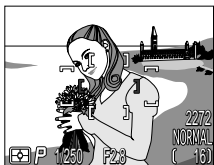


| Option | Description |
|--------|---|
| Auto | Camera automatically selects focus area containing subject closest to camera. Active focus area displayed in red when shutter release button pressed halfway. This setting is useful when you have little time to compose pictures. |
| Manual | User selects focus area manually. This option can be used in place of focus lock when subject is not at center of final composition. |
| Off | Center focus area is used. No focus areas appear in monitor. This option can be used in combination with focus lock to focus on off-center subject (p. 45). |

Manual Focus-Area Selection

At SCENE-mode settings of **Portrait** and **Close Up** (p. 36, 37), or when **Manual** is selected in the **AF Area Mode** sub-menu for **M/** mode, the focus target can be chosen from one of five focus areas. This makes it possible to focus on an off-center subject without using focus lock.

The focus area can be selected using the Multi selector.



Center focus area selected.



Use Multi selector to select new focus area.

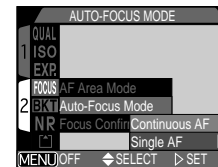
- Any of five focus areas can be selected.

Spot AF Area Metering

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.

— Auto-Focus Mode —

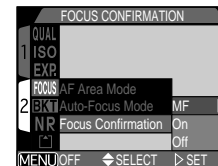
In **M/** mode, you can choose the autofocus mode used when the monitor is on (when the monitor is off, single autofocus is used, regardless of the setting in the autofocus mode sub-menu, p. 44).



| 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 autofocus lamp before shooting. |
| Single AF (default setting) | 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. |

— Focus Confirmation —

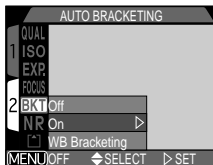
Use focus confirmation when you want to know exactly what areas of the frame will be in focus before you take the final picture. Focus confirmation affects only the view through the lens shown in the monitor; no indicators of focus appear in the final picture.



| Option | Description |
|------------|---|
| MF | Areas in focus will be sharply outlined in the monitor when manual focus is used (p. 54). |
| On | As above, but for all focus modes. |
| Off | No indication of focus is given. |

Auto Bracketing

In situations where it might be difficult to obtain a proper exposure, auto bracketing lets you shoot the same subject at three or five different exposures. In WB Bracketing, the white balance is bracketed in three shots.



| Option | Description |
|---------------|---|
| Off | Bracketing is off and normal exposure control is used. |
| On | Auto bracketing is performed with the selected number of bracketing shots and with a compensated EV value offset from the automatically metered exposure. |
| WB Bracketing | The white balance is bracketed when you press the shutter release button fully giving three shots made up of one with the selected white balance, a reddish image and a bluish image. The time required to save bracketed images to the memory card is three times that required for a normally recorded image. |

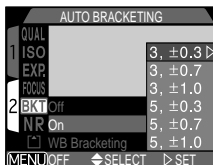
Restrictions on Bracketing

Autoexposure bracketing can not be used when: **BSS** (p. 102), **AE-Lock** (p. 110), or **Noise Reduction** (p. 116) is on, **Multi-shot 16** or **Ultra HS** is selected for **Continuous** (p. 100), or **Movie** (p. 50) is selected.

White-balance bracketing can not be used when: **BSS** or **Noise Reduction** is on, image quality is set to **HI** (p. 81), or a setting other than **Single** is chosen for **Continuous**.

— On —

Each time you press the shutter release button, either three or five shots are taken ranging from over exposed EV values to under exposed EV values. When photographing a high-contrast image, the image with the desired exposure can be selected from the set of bracketed shots.



| Number of shots, compensated EV value | Bracketing order |
|---------------------------------------|---------------------------|
| 3, ± 0.3 | 0, +0.3, -0.3 |
| 3, ± 0.7 | 0, +0.7, -0.7 |
| 3, ± 1.0 | 0, +1.0, -1.0 |
| 5, ± 0.3 | 0, +0.7, +0.3, -0.3, -0.7 |
| 5, ± 0.7 | 0, +1.3, +0.7, -0.7, -1.3 |
| 5, ± 1.0 | 0, +2.0, +1.0, -1.0, -2.0 |

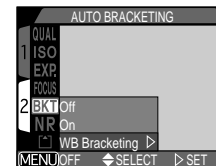
To perform auto bracketing or white balance bracketing in Continuous or VGA Sequence mode (p. 100), hold down the shutter release button fully. A selected number of consecutive shots are taken, after which the sequence stops automatically.



The exposure compensation indication (BKT) along with the compensated EV value for the next shot are displayed in the monitor when the bracketing is set.

— WB Bracketing —

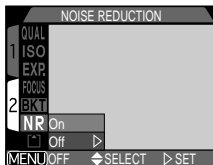
White balance is bracketed when you press the shutter release button fully, giving three shots made up of one shot with the selected white balance, one reddish image and one bluish image.



When you select white balance bracketing, the **WB BKT** (White Balance Bracketing indication) appears in the monitor.

Avoiding “Grainy” Photographs: Noise Reduction

At shutter speeds slower than 1/4 sec., “noise” in the form of randomly-space, brightly-colored pixels may appear in pictures, particularly in shadows. To reduce noise at slow shutter speeds, select **On** from the noise reduction menu.



| Option | Description |
|------------|--|
| On | The effect of noise on the recorded image is minimized. |
| Off | Noise reduction is canceled and normal exposure control is used. |

Recording Time

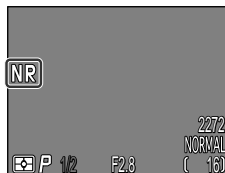
Turning noise reduction on more than doubles the amount of time needed to save pictures to the memory card.

Restrictions on Noise Reduction

Noise reduction cannot be used in combination with **BSS** (p. 102), **Auto Bracketing** (p. 114), or **Continuous** setting other than **Single** (p. 100).

Confirming Noise Reduction

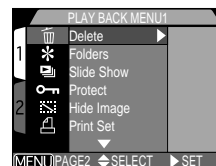
While **Noise Reduction** is in effect and the shutter speed is below 1/4 sec., an **NR** icon appears in the monitor.





The Playback Menu

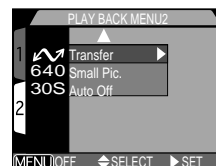
The playback menu contains the following two pages of options for managing the pictures on the memory card:




Playback menu 1



| | | |
|---|------------|--------|
|  | Delete | P. 118 |
|  | Folders | P. 121 |
|  | Slide Show | P. 122 |
|  | Protect | P. 124 |
|  | Hide Image | P. 125 |
|  | Print Set | P. 126 |

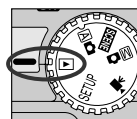
Playback menu 2



| | | |
|---|-------------------|--------|
|  | Transfer | P. 128 |
|  | 640 Small Picture | P. 129 |
|  | 30S Auto Off | P. 88 |

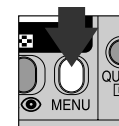
To view the playback menu:

1



Select 

2



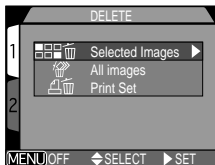
Press MENU button to display playback menu

See p. 69 for more information on using camera menus.

Deleting Pictures and Print Orders: Delete

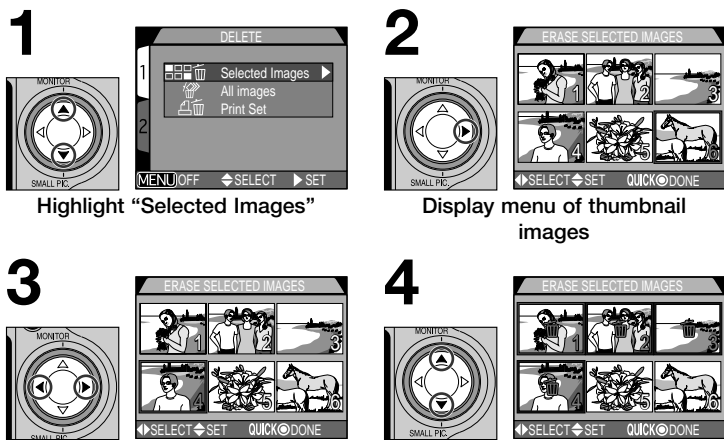
The Delete menu contains the following options:

| Option | Description |
|------------------------|---|
| Selected Images | Delete selected photographs and movies. |
| All Images | Delete all pictures. |
| Print Set | Cancel the current print order. |



— Deleting Selected pictures and Movies: Selected Images —

To delete selected pictures and movies:



Highlight “Selected Images”

Display menu of thumbnail images

Highlight image

Press Multi selector 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 $\blacktriangle/\blacktriangledown$ on the Multi selector. To exit without deleting images, press MENU button.

5

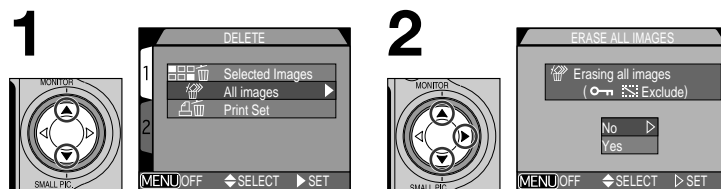


Press **QUICK** button to display a confirmation dialog.

- Press $\blacktriangle/\blacktriangledown$ on the Multi selector to highlight option, press \blacktriangleright to put choice into effect.
- Select “Yes” to delete all selected images.
- Select “No” to return to playback menu without deleting images.

— Deleting All Pictures and Movies: All Images —

To delete all pictures on the CF memory card:



Highlight “All Images”

- Confirmation dialog is displayed.


Press $\blacktriangle/\blacktriangledown$ to highlight option, press \blacktriangleright to put choice into effect:

- Select “Yes” to delete all images on memory card (protected images will not be deleted).
- Select “No” to return to playback menu without deleting images.

Before Deleting Pictures

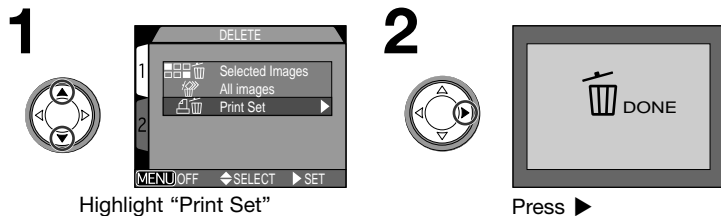
Once deleted, pictures can not be recovered. Be sure that any pictures you would like to keep have been transferred to your computer.

Hidden and Protected Pictures

Pictures marked with a  icon are protected and can not be selected for deletion. Pictures hidden with the **Hide Image** (p. 125) option are not displayed in the **Delete: Selected Images** menu and cannot be deleted.

— Deleting the Current Print Order: Print Set —

To delete print-order set in **Print Set** menu in the playback menu:



Marking Movie Files for Transfer

Please note that the transfer icon will be removed from movie files marked for transfer when the Print Set is deleted by selecting Print Set from the Delete option within the playback menu. Transfer settings for movie files must then be reset.

Selecting a Folder for Playback: Folders

The "Folders" item in the playback menu can be used to select pictures in all folders for playback or pictures in a selected folder.

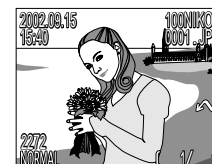


1 Highlight desired folder



To view pictures in all folders, select "All Folders".

2 Press



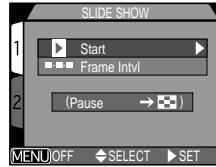
The most recent picture in the selected folder is displayed.

Each series of seventy pictures taken at a setting of **Ultra HS** is stored in a separate folder with a name consisting of **N_** followed by a three-digit number assigned by the camera. To view pictures taken at this setting, select the appropriate folder from the **Folders** menu.

See p. 83 for more information on **Folder Options**.

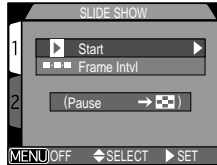
Automated Playback: Slide Show

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



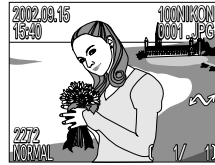
Starting a Slide Show

1



Highlight "Start"

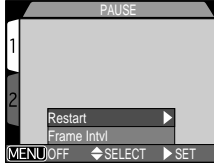
2



Press **▶** to start slide show

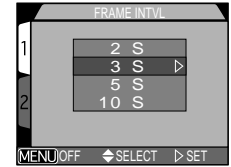
- Images are displayed one-by-one in order recorded, starting from oldest picture on card. Movies will be played back as still images of showing first frame of movie.

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

| To | Press | 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 ▶ on the Multi selector.  |
| End slide show | MENU | Press the MENU button to end the slide show and return to full-screen playback. |

Changing the Display Interval

The slide show menu shown opposite 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 display interval, highlight **Frame Intvl** and press **▶** on the Multi selector. The menu of interval settings shown at right will be displayed; highlight the desired setting and press **▶** on the Multi selector.



Frame Interval

Owing to differences in the file size of the pictures 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.

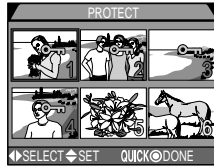
Small Pictures and hidden images are not displayed in a slide show.

Auto Off

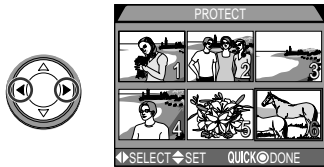
If the slide show lasts for more than half an hour, **Auto Off** (p. 88) will take effect after thirty minutes and the monitor will turn off automatically.

Safeguarding Valuable Images: Protect

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

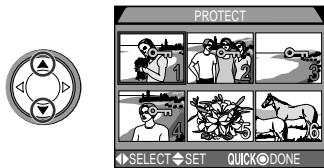


1 Highlight image



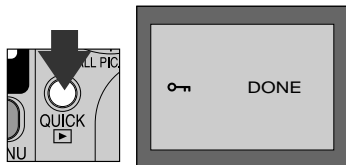
2 Press ▲/▼ to select image

- Selected images are marked by icon. Repeat steps 1 and 2 to select additional images. To deselect image, highlight and press ▲/▼ on the Multi selector.



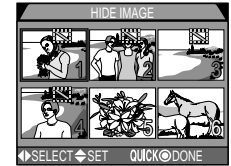
3 Press QUICK button to complete operation

- To exit “Protect” menu without changing protected status of images, press MENU button.



Hiding Images During Playback: Hide Image

When creating a slide show or showing pictures to an audience, you may want to use the **Hide Image** option to hide some of the pictures in the current folder. Hidden images are only visible in the **Hide Image** menu. They cannot be deleted in full-screen playback or from the **Delete** sub-menu.

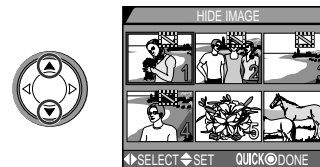


1 Press ◀/▶ to highlight desired thumbnail



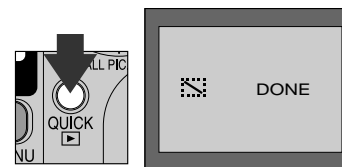
2 Press ▲/▼ to select image to be hidden

- Selected images are marked by icon. Repeat steps 1 and 2 to select more images.
- To deselect, highlight and press ▲/▼ on the Multi selector.



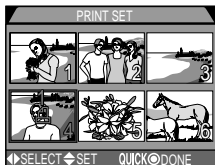
3 Press QUICK button to complete operation

- To exit **Hide Image** menu without changing protected status of images, press MENU button.

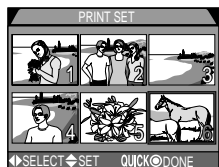


Ordering Prints: Print-Set

Selecting **Print Set** from the playback menu displays the menu shown at right. Here you can specify pictures 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.

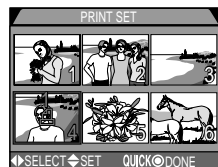


1




Highlight image

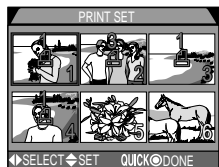
2



Press ▲ to select image

- Selected images are marked by .

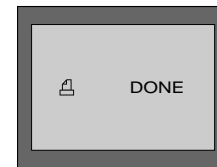
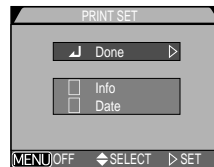
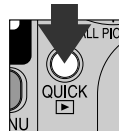
3







Use Multi selector to specify number of prints

- Press ▲ to increase (maximum 9), ▼ to decrease.
- To deselect image, press ▼ 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 **QUICK**  button to complete operation and display menu of print options; to highlight option, press ▲/▼

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

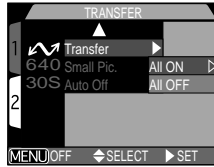


Deleting the Print Order

To delete the current print order when it is no longer needed, select **Print Set** from the **Delete** menu (p. 118).

Marking All Images for Transfer: Transfer

By default, photos and movies are automatically marked for transfer when they are recorded. The playback “Transfer” option is used when you want to remove transfer marking from all images, or to select all pictures for transfer after turning transfer marking off.



| Option | Description |
|---------|--|
| All ON | Mark all pictures on the memory card for transfer to a computer. |
| All OFF | Remove transfer marking from all pictures on the memory card. |

Marking image files for transfer

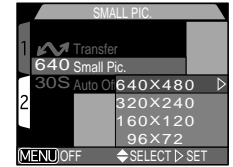
Up to 999 images on a memory card can be marked for transfer. Image files of any file number can be transferred. To transfer 1000 or more images, use the Nikon View, not the TRANSFER button. See the *Nikon View Reference Manual* (on CD) for details.


Marking Pictures for Transfer with Other Cameras

Pictures selected for transfer with another model of Nikon digital camera can not be transferred when the memory card is inserted in the COOLPIX4300. Use the COOLPIX4300 to reselect the images.

Selecting Small Picture Size: Small Pic.

Image size of the Small Pictures can be set to 640 x 480, 320 x 240, 160 x 120 or 96 x 72 pixels. Choosing a new Small Picture size from the “Small Pic.” sub-menu changes the size of the small picture created by pressing the ▼ SMALL PIC. button of the Multi selector, and the size of small pictures created there after will be recorded in the newly selected size.



| Image size | Small Picture size (pixels) |
|---|-----------------------------|
| Large  Small | 640 x 480 |
| | 320 x 240 |
| | 160 x 120 |
| | 96 x 72 |

- Smaller the image size, faster the time it takes to distribute the images by e-mail and the web.
- The image quality of the Small Picture is set to BASIC.

See p. 60 for more information on creating Small Pictures

Technical Notes

This section provides information on:

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Optional Accessories

Learn what optional accessories are available for the COOLPIX4300.

Caring for the Camera and Battery

Read this section for tips on cleaning and storing your camera.

Web Resources

Where to get help on line.

Troubleshooting

Read this section for help when your camera does not function as expected.

Specifications

Technical data for the COOLPIX4300.

**Optional
Accessories**
pp. 132-133

**Caring for the
Camera and Battery**
p. 134-136

Web Resources
p. 137

Troubleshooting
p. 138-143

Specifications
pp. 144-146

Optional Accessories

At the time of writing, the following optional accessories were available for the COOLPIX4300. Contact your retailer or local Nikon representative for details.

| | |
|--|--|
| AC adapters/ battery chargers | <ul style="list-style-type: none"> • EH-21 AC adapter/battery charger • EH-53 AC adapter • MH-53 battery charger • MH-53C battery charger (plugs into vehicle cigarette-lighter socket) |
| Rechargeable battery | EN-EL1 rechargeable Li-ion battery |
| Carrying case | CS-E885 Soft Case |
| CompactFlash memory card adapter | EC-AD1 PC-card adapter |
| Lens Adapter | <ul style="list-style-type: none"> • UR-E4 step down ring lens adapter • UR-E7 step down ring lens adapter |
| Lens Converter and Slide copying adapter (UR-E4 step down ring lens adapter required) | <ul style="list-style-type: none"> • WC-E63 Wideangle converter • WC-E68 (UR-E4 and UR-E7 required) • TC-E2 (2x)/TC-E3ED (3x) Telephoto converter • FC-E8 fisheye lens converter • ES-E28 slide-copying adapter |
| Remote release cable | MC-EU1 remote cord |
| Monitor hood | HL-E885 LCD Hood |
| Macro light | MACRO COOL-LIGHT SL-1 (UR-E4 required) |



Note on using remote release cable

The remote cord does not function when the camera is set to Movie, Continuous or VGA Sequence.



Use Only Nikon Brand Electronic Accessories

Your Nikon COOLPIX digital camera is designed to the highest standards and includes complex electronic circuitry. Only Nikon brand electronic accessories (including battery chargers, batteries, and AC adapters) certified by Nikon specifically for use with your Nikon digital camera are engineered and proven to operate within the operational and safety requirements of this electronic circuitry. The use of non-Nikon electronic accessories could damage your camera and may void your Nikon warranty. For more information about Nikon brand accessories, contact your local authorized Nikon dealer.



Approved Memory Cards

The following memory cards have been tested and approved for use in the COOLPIX4300:

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

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



A Note on Electronically Controlled Cameras

In extremely rare instances, unusual characters may appear in the monitor and the camera may stop functioning. In most cases, this phenomenon is caused by a strong external static charge. Turn the camera off, remove and replace the battery, and turn the camera on again. If you are using an AC adapter, disconnect and reconnect the adapter, and turn the camera on again. If the camera continues to malfunction after performing the above operation, contact retailer or Nikon representative. Note that performing the above operation may eliminate data not recorded to the CF memory card at the time the camera stopped functioning. Data already recorded to the CF memory card will not be affected.

Caring for the Camera and Battery

To ensure continued enjoyment of your Nikon Product, observe the following precautions when using or storing the device:

✓ **Keep dry**

This product is not waterproof, and may malfunction if immersed in water or exposed to high levels of humidity. Rusting of the internal mechanism can cause irreparable damage.

✓ **Do not drop**

The product may malfunction if subjected to strong shocks or vibration.

✓ **Handle all moving parts with care**

Do not apply force to the lens or to the battery, card, or connector. These parts are especially susceptible to damage.

✓ **Avoid sudden changes in temperature**

Sudden changes in temperature, such as occur when entering or leaving a heated building on a cold day, can cause condensation inside the device. To prevent condensation, place the device in a carrying case or a plastic bag before exposing it to sudden changes in temperature.

✓ **Turn the product off before removing or disconnecting the power source**

Do not unplug the product or remove the battery while the product is on, or while images are being recorded or deleted from memory. Forcibly cutting power to the product in these circumstances could result in loss of data or in damage to the internal circuitry or memory. To prevent an accidental interruption of power, avoid carrying the product from one location to another while the AC adapter is connected.

✓ **Keep away from strong magnetic fields**

Do not use or store this device in the vicinity of equipment that generates strong electromagnetic radiation or magnetic fields. Strong static charges or the magnetic fields produced by equipment such as radio transmitters could interfere with the monitor, damage data stored on the memory card, or affect the product's internal circuitry.

Storage

When the camera will not be used for an extended period, return the lens section to its original position and remove the battery and store it in a cool, dry place. To prevent mold or mildew, store the camera in a dry, well-ventilated area. For long-term storage, place the camera in a plastic bag containing a desiccant (note that desiccant gradually loses its capacity to absorb moisture and should be replaced at regular intervals). Do not store your camera with naphtha or camphor moth balls or 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 (for example, near a space heater or in a closed vehicle on a hot day) or below -10°C (14°F)
- are subject to humidities of over 60%

To prevent mold or mildew, take the camera out of storage at least once a month. Turn the camera on and release the shutter a few times before putting the camera away again.



Hints and Tips for Handling Batteries

Some tips to ensure that your camera is always ready to shoot:

- When you turn the camera on, check the battery-level displayed in the monitor to determine whether the battery needs to be replaced. A warning will be displayed when the battery needs to be replaced.
- Ready a spare battery and keep it fully charged when taking photographs on important occasions. Depending on your location, you may find it difficult to purchase replacement batteries on short notice.
- On cold days, the capacity of batteries tends to decrease. Be sure the battery is fully charged before taking photographs outside in cold weather. Keep a spare battery in a warm place and exchange the two as necessary. Once warmed, a cold battery may recover some of its charge.
- Should the battery terminals become dirty, wipe them off with a clean, dry cloth before use.

Cleaning

Lens

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 with a soft cloth, using a spiral motion that starts in the center of the lens and works out to the edges.

Monitor

Do not apply pressure to the monitor, as this could cause damage or malfunction. Dust or lint adhering to the monitor can be removed with a blower brush. Stains can be removed by rubbing the surface lightly with a soft cloth or chamois leather.

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.

Avoid Contact with Liquid Crystal

Should the monitor break, care should be taken to avoid injury due to broken glass and to prevent the liquid crystal from the monitor touching the skin or entering the eyes or mouth.

Notes on the Monitor

The monitor may contain a few pixels that are always lit or that do not light. This is a characteristic common to all TFT LCD monitors and does not indicate a malfunction. Images recorded with the product will not be affected. When you frame bright subjects, vertical comet-like streaks that whiten toward either end may appear in the monitor. This phenomenon, known as “smear,” does not appear in the final photograph and does not indicate a malfunction. Some smearing may appear in movies.

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 the Europe: <http://www.nikon-euro.com/>
- For users in the 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/>

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 | Page |
|--|---|------|
| Monitor is blank | • Camera is off. | 17 |
| | • Battery is not correctly inserted or battery-chamber cover is not fully closed. | 25 |
| | • Battery is exhausted. | 18 |
| | • AC adapter (available separately) is not properly connected. | 88 |
| | • Camera is in sleep mode. Press shutter release button halfway. | 27 |
| | • Monitor is off. Press ▲ on Multi selector to turn monitor on. | 68 |
| No indicators appear in monitor | • Indicators are hidden. In shooting mode, press ▲ on Multi selector until indicators are displayed. | 27 |
| | • Slide show is in progress. | 122 |
| Monitor is hard to read | • Monitor brightness requires adjustment. | 87 |
| | • Monitor is dirty. | 136 |
| No picture is taken when shutter release button is fully pressed | • Camera is in playback or SETUP mode. | 40 |
| | • Battery is exhausted. | 25 |
| | • Number of exposures remaining is zero: not enough memory remaining. | 25 |
| | • Autofocus lamp flickers: camera unable to focus. | 28 |
| | • Flash-ready lamp blinks rapidly: flash is charging. | 28 |
| | • Message “MEMORY CARD IS NOT FORMATTED” appears in monitor: memory card is not formatted for use in COOLPIX4300. | 90 |
| | • Message “NO MEMORY CARD” appears in monitor: no memory card in camera. | 19 |









| Problem | Possible Cause | Page |
|---------------------------------------|--|-----------|
| Pictures are too bright (overexposed) | • Exposure compensation is too high. | 51 |
| Pictures are too dark (underexposed) | • Flash is off. | 49 |
| | • Flash window blocked. | 26 |
| | • Subject is outside range of flash. | 145 |
| | • Exposure compensation is too low. | 51 |
| Pictures are out of focus | • Subject was not in focus area when shutter release button pressed halfway. | 28 |
| | • Autofocus lamp flickers: camera unable to focus. | 28 |
| Pictures are blurred | • Camera shook during shot. | 26 |
| | • When lighting is poor: – Use the flash | 48 |
| | You do not want to or can not use the flash when: – Use Best-Shot Selector (BSS) | 102 |
| | – Use the self-timer – Use a tripod | 42 |
| Flash does not fire | • Flash is set to Flash Cancel. | 48 |
| | • Flash is off. Note that flash turns off automatically when: – Camera is in  (landscape),  (sunset),  (night landscape),  (museum),  (fireworks show),  (close up) or  (movie) mode | 36-38, 40 |
| | – Focus is set to ▲ (infinity) | 41 |
| | – Setting other than “Single” selected in “Continuous” sub-menu | 100 |
| | – Setting other than “Normal” selected in “Lens” sub-menu | 105 |
| | – “AE Lock” option in “Exposure Options” sub-menu is on | 110 |
| | • Best-Shot Selector (BSS) is on | 102 |
| | • Battery level is low. | 25 |



| Problem | Possible Cause | Page |
|---|---|----------------|
| Pictures can not be played back | <ul style="list-style-type: none"> Picture has been overwritten or renamed by a computer or another make of camera. | — |
| Image does not appear on the television screen | <ul style="list-style-type: none"> Video cable not correctly connected. Television not tuned to video channel. Video Mode setting does not match video device. | 68 68 93 |
| Nikon View does not start when camera connected or memory card inserted in card reader or card slot | <ul style="list-style-type: none"> Camera is off. AC adapter (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. <p>See <i>Nikon View Reference Manual</i> for further information on troubleshooting Nikon View.</p> | 18 66 |

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 | Page |
|--|--|--|------|
| WARNING!! Remove Lens Cap! | Camera turned on with lens cap in place. | Turn camera off and remove lens cap. | 24 |
|  (Flashes) | Clock calendar not set. | Set clock calendar to current data and time. | 22 |
| WARNING!! BATTERY EXHAUSTED | Battery exhausted. | Turn camera off and replace battery. | 25 |
| WARNING! Mode dial is not in the proper position | Mode dial is positioned between two modes. | Adjust mode dial to select desired mode. | 15 |
| WARNING!! No menu in AUTO mode Please use another mode | MENU button pressed in  mode. | Turn mode dial to setting other than  or  mode before using the menus. | 15 |
| WARNING!! No menu in  mode | MENU button pressed in  mode. | | |
|  WARNING!! Please wait for camera to finish recording | Camera turned off or new mode selected while images are being recorded to memory card. | Message clears from display automatically when camera finishes writing data to card. | 29 |
|  NO CARD PRESENT | Camera cannot detect memory card. | Turn camera off and confirm that memory card is correctly inserted. | 18 |
|  THIS CARD CANNOT BE USED | Error accessing memory card. | Use approved memory card. | 133 |

| Display | Problem | Solution | Page |
|--|---|--|------------------------|
|  WARNING!! This CF card cannot be read | Error accessing memory card. | Use approved memory card. | 133 |
|  MEMORY CARD IS NOT FORMATTED Format No  | Memory card has not been formatted for use in COOLPIX4300. | Press  on Multi selector to highlight "Format" and press  to format card, or turn camera off and replace card. | 90 |
|  OUT OF MEMORY | Error occurs during shooting: Insufficient memory to record further pictures at current settings. | <ul style="list-style-type: none"> • Reduce image quality or size. • Delete pictures. • Insert new card. | 81, 82 118 18 |
| | 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 pictures and try again. | 118 |
|  IMAGE CANNOT BE SAVED | <ul style="list-style-type: none"> • Memory card has not been formatted for use in COOLPIX4300. • Error encountered while saving picture. • Camera has run out of folder or file numbers. • Small picture cannot be created with the image. | • Reformat memory card. | 90 |
| | | • Select "Off" or "Reset" in "Seq. Numbers" menu. | 89 |
| | | • Select image other than small picture or movie. | 60 |
| CARD CONTAINS NO IMAGES | memory card contains no pictures. | • Camera in review mode: half-press shutter release button to return to shooting mode. | 30 |
| | | • Mode dial set to  (playback mode): turn mode dial to another setting. | 15 |


| Display | Problem | Solution | Page |
|--|--|--|--------------------------|
| 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. | 121, 125 |
| FILE CONTAINS NO IMAGE DATA | File created by computer or different make of camera. | <ul style="list-style-type: none"> • Delete file. • Reformat memory card. | 118 90 |
| THE FOLDER CANNOT BE DELETED | Folder contains hidden or protected pictures. | Folder can only be deleted if all images it contains are neither hidden nor protected pictures. | 121 |
| COMMUNICATIONS ERROR | USB cable disconnected or memory card removed while pictures are being transferred to computer. | If error message displayed in computer monitor, click OK to exit Nikon View. Turn camera off, reconnect cable or replace memory card, then turn camera on. | 66 |
| | Protocol selected in USB menu does not match that used by computer operating system, causing error when TRANSFER button is pressed to transfer pictures. | Turn camera off and disconnect USB cable, then change USB selection in camera setup menu and reconnect camera. If error reoccurs, use Nikon View  button to transfer pictures. | 93 |
| NO IMAGES ARE MARKED FOR TRANSFER | No images marked with  icon when TRANSFER button pressed to transfer images to computer. | Disconnect camera and mark at least one image for transfer before connecting camera again. | 32, 57, 58, 128 |
| TRANSFER ERROR | Error has occurred during image transfer. | Check that the camera is properly connected and that the battery is fully charged. | 67 |
| SYSTEM ERROR | Error has occurred in camera's internal circuitry. | Turn camera off, unplug optional AC adapter (if using), remove and re-insert battery. If error persists, contact retailer or Nikon representative. | 17, 18 |



Specifications

| | |
|--|--|
| Type | E4300 digital camera |
| Effective pixels | 4.0 million |
| CCD | 1/1.8-inch high-density CCD; total pixels: 4.13 million |
| Image size (pixels) | <ul style="list-style-type: none"> • 2272 x 1704 • 2048 x 1536 • 1600 x 1200 • 1280 x 960 • 1024 x 768 • 640 x 480 Four Small Picture sizes selectable (640 x 480, 320 x 240, 160 x 120 or 96 x 72 pixels) |
| Lens | • 3x Zoom Nikkor |
| Focal length | • F = 8-24 mm (35 mm [135] camera format equivalent: 38-114 mm) |
| f/-number | • f/2.8-f/4.9 |
| Construction | • Nine elements in eight groups |
| Digital zoom | 4.0x |
| Autofocus (AF) | Contrast-detect through-the-lens (TTL) AF |
| Focus range measured from lens) | • 30 cm (1 ft.)-∞ at widest angle (W), 60 cm (2 ft.)-∞ at telephoto (T) |
| Focus-area selection | • Macro mode (Autofocus): 4 cm (1.6 in.)-∞ at widest angle (W), 30 cm (1 ft.)-∞ at telephoto (T) Five-area multi AF and spot AF available |
| Viewfinder | Real-image zoom optical viewfinder with LED indication |
| Frame coverage | Approximately 80% |
| Monitor | 1.5-inch 110,000-dot, low-temperature polysilicon TFT LCD with brightness adjustment |
| Frame coverage | Approximately 97% vertical and 97% horizontal |
| Storage Media | Type I CompactFlash™ (CF) cards |
| File system | Compliant with Design rule for Camera File systems (DCF), Exif 2.2, Digital Print-Order Format (DPOF) |
| File format | Compressed: JPEG-baseline-compliant; (FINE-, NORMAL-, and BASIC-quality images) Uncompresses: TIFF-RGB (HI-quality images) Movies: QuickTime |

| | |
|----------------------------------|--|
| Exposure Metering | Four-mode through-the-lens (TTL) metering <ul style="list-style-type: none"> • 256-segment Matrix • Spot • Center-Weighted • AF Spot |
| Exposure control | Programmed auto, manual, exposure compensation (-2.0 - +2.0 EV in steps of 1/3 EV), autoexposure bracketing, AE lock |
| Range (ISO equivalent) | <ul style="list-style-type: none"> • W: EV -3 to +15 • T: EV -1.4 to +16.6 |
| Shutter Speed | Mechanical and charge-coupled electronic shutter 8-1/1000 sec.; Bulb (up to 60 sec. in M mode) |
| Aperture Range | Electronically controlled preset aperture Two steps (f/2.8 and f/7.6 [W]) |
| Sensitivity | ISO equivalent approximately 100, 200, 400 or Auto |
| Self-timer | Ten- or three-second duration |
| Built-in Speedlight Range | W: 0.4 to 3.7 m (1.3 to 12.1 ft.) T: 0.4 to 2.3 m (1.3 to 7.5 ft.) |
| Flash control | Sensor flash system |
| Interface | USB |
| Video output | User can choose from NTSC and PAL |
| I/O terminals | <ul style="list-style-type: none"> • DC input • Data output (USB) |
| Power sources | <ul style="list-style-type: none"> • Rechargeable Nikon EN-EL1 lithium-ion battery (supplied) or six-volt 2CR5 (DL245) lithium battery (available separately) • EH-21 AC adapter/battery charger (available separately) • EH-53 AC adapter (available separately) |
| Battery life (EN-EL1) | Approximately 90 minutes (as measured at room temperature [20°C/68°F] under standard Nikon test conditions: zoom adjusted with each shot, flash used in approximately one third of photographs, image quality set to NORMAL, image size 2272 x 1704) |

| | |
|---|---|
| Tripod socket | 1/4 (ISO1222) |
| Dimensions (W x H x D) | 95 x 69 x 52 mm (3.7 x 2.7 x 2.0 in.) |
| Weight | Approximately 230 g (8.1 oz.) without battery and memory card |
| Operating environment Temperature Humidity | 0 - 40°C (32 - 104°F) Under 85% (no condensation) |

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