Nikon

En

The Nikon Guide to Digital Photography
with the

COOLPIX 3100

DIGITAL CAMERA

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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 symbol:

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

WARNINGS

⚠ **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 batteries immediately, taking care to avoid burns. Continued operation could result in injury. After removing the batteries, 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.

⚠ **Observe caution when using the camera strap**

Never place 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 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, take the product to a Nikon-authorized service center for inspection after unplugging the AC adapter and removing the batteries.

⚠ **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:

• Before replacing the batteries, turn the camera off and make sure the power-on lamp has gone out. If you are using an AC adapter, be sure it is unplugged.

• Use a pair of rechargeable Nikon EN-MH1 NiMH batteries, one CRV3 lithium battery, two ZR6 (AA) nickel manganese batteries, or two FR6/L91 (AA) lithium batteries. Do not use other types of battery. Do not mix batteries of different types.

• When inserting batteries, do not attempt to insert them upside down or backwards.

• Do not short or disassemble batteries.

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- Do not expose batteries 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 batteries when no charge remains.
- Immediately after use, or when the product is used on battery power for an extended period, the batteries may become hot. Before removing the batteries, turn the camera off and allow the batteries to cool.
- Discontinue use immediately should you notice any changes in the batteries, 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 batteries 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 (39″) from the subject.

⚠ **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.

Cautions

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

✓ Keep dry

The device will be damaged if immersed in water or subjected to high levels of moisture.

✓ Handle the lens and all moving parts with care

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

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

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

✓ Do not drop

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

✓ 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.

✓ 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.

Notices

Notice for customers in the U.S.A.

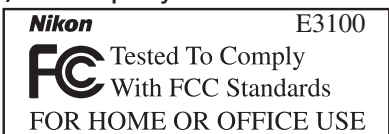**Federal Communications Commission (FCC) Radio Frequency Interference Statement**

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.

Nikon	E3100

FC Tested To Comply With FCC Standards
FOR HOME OR OFFICE USE

- 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.

Notice for customers in the State of California

WARNING: Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause birth defects or other reproductive harm. *Wash hands after handling*.

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.

ATTENTION

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Notice Concerning Prohibition of Copying or Reproduction

Note that simply being in possession of material that has been digitally copied or reproduced by means of a scanner, digital camera or other device may be punishable by law.

• Items prohibited by law from being copied or reproduced

Do not copy or reproduce paper money, coins, securities, government bonds, or local government bonds, even if such copies or reproductions are stamped "Sample."

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

Unless the prior permission of the government has been obtained, the copying or reproduction of unused postage stamps or post cards issued by the government is prohibited.

The copying or reproduction of stamps issued by the government and of certified documents stipulated by law is prohibited.

• Cautions on certain copies and reproductions

The government has issued cautions on copies or reproductions of securities issued by private companies (shares, bills, checks, gift certificates, etc.), commuter passes, or coupon tickets, except when a minimum of necessary copies are to be provided for business use by a company. Also, do not copy or reproduce passports issued by the government, licenses issued by public agencies and private groups, ID cards, and tickets, such as passes and meal coupons.

• Comply with copyright notices

The copying or reproduction of copyrighted creative works such as books, music, paintings, woodcut prints, maps, drawings, movies, and photographs is governed by national and international copyright laws. Do not use this product for the purpose of making illegal copies or to infringe copyright laws.

Before Taking Important Pictures

Before taking pictures on important occasions (such as at weddings or before taking the camera with you on a trip), take a test shot to ensure that the camera is functioning normally. Nikon will not be held liable for damages or lost profits that may result from product malfunction.

Use Only Nikon Brand Electronic Accessories

Your Nikon COOLPIX 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.

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Table of Contents

Introduction

Thank you for your purchase of a Nikon COOLPIX 3100 digital camera. This manual has been written to help you enjoy taking pictures with your Nikon digital camera. Read this manual thoroughly before use, and keep it handy when using the product.

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

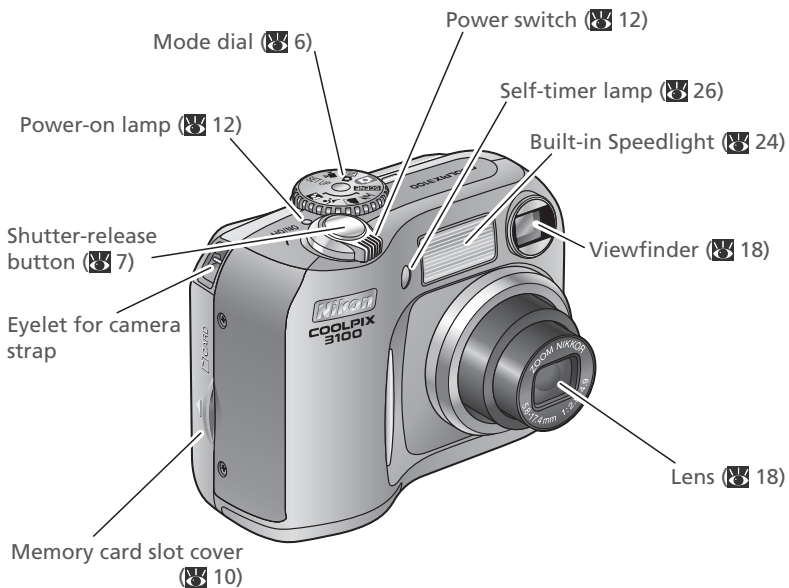|			
☑	This icon marks cautions, information you should read before use to prevent damage to your camera.	🔍	This icon marks tips, additional information you may find helpful when using your camera.
🖉	This icon marks notes, information that you should read before using your camera.	👁	This icon indicates that more information is available elsewhere in this manual or in the *Quick Start Guide*.

Before You Begin

🔍 Life-Long Learning

As part of Nikon's "Life-Long Learning" commitment to ongoing product support and education, continually-updated information is available on-line at the following sites:
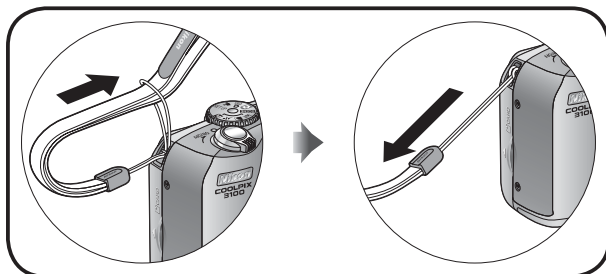• For users in the U.S.A.: *http://www.nikonusa.com/*
• For users in Europe: *http://www.europe-nikon.com/support*
• For users in Asia, Oceania, the Middle East, and Africa: *http://www.nikon-asia.com/*
Visit these sites to keep up-to-date with the latest product information, tips, answers to frequently-asked questions (FAQs), and general advice on digital imaging and photography. Additional information may be available from the Nikon representative in your area. See the URL below for contact information:
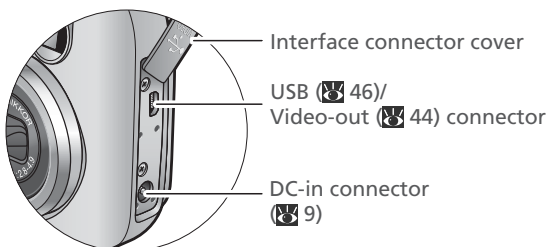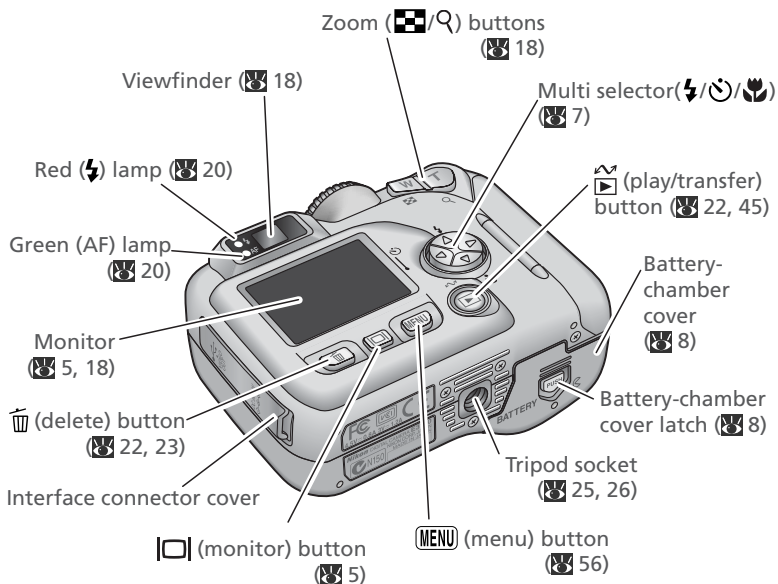
  http://www.nikon-image.com/eng/
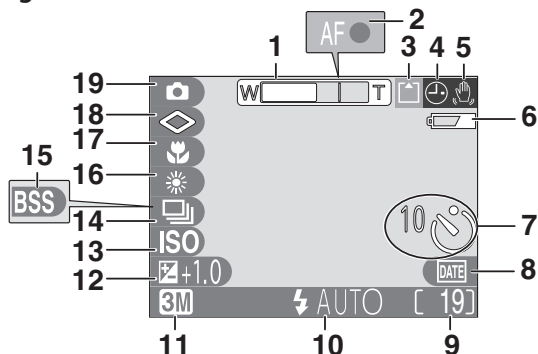
Parts of the Camera

Mode dial (🔼 6)

Power switch (🔼 12)

Power-on lamp (🔼 12)

Self-timer lamp (🔼 26)

Built-in Speedlight (🔼 24)

Shutter-release button (🔼 7)

Viewfinder (🔼 18)

Eyelet for camera strap

Lens (🔼 18)

Memory card slot cover (🔼 10)

Attaching the Camera Strap

Zoom ($\blacksquare$/Q) buttons
(🔱 18)

Viewfinder (🔱 18)

Multi selector($\frac{4}{5}$/$\circlearrowright$/$\clubsuit$)
(🔱 7)

Red ($\frac{4}{5}$) lamp (🔱 20)

$\overset{\sim}{\triangleright}$ (play/transfer)
button (🔱 22, 45)

Green (AF) lamp
(🔱 20)

Battery-chamber
cover
(🔱 8)

Monitor
(🔱 5, 18)

Battery-chamber
cover latch (🔱 8)

$\overline{\underline{\text{m}}}$ (delete) button
(🔱 22, 23)

Tripod socket
(🔱 25, 26)

Interface connector cover

$\boxed{\square}$ (monitor) button
(🔱 5)

$\boxed{\text{MENU}}$ (menu) button
(🔱 56)

Interface connector cover

USB (🔱 46)/
Video-out (🔱 44) connector

DC-in connector
(🔱 9)

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The Monitor

Shooting

1 Zoom indicator[1] 18	**10** Flash mode 24
2 Focus indicator.........................20	**11** Image quality/size indicator 58
3 Recording indicator 21	**12** Exposure compensation 62
4 "Date not set" icon[2] 15	**13** Sensitivity gain indicator[5].........25
5 Camera shake icon[3] 25	**14** Continuous shooting mode.....64
6 Battery level indicator[4]............12	**15** Best Shot Selector (BSS)...........65
7 Self-timer indicator..................26	**16** White balance.........................60
8 Date imprint indicator 63	**17** Macro close-up mode 27
9 Number of exposures remaining/ length of movie...........16, 17, 51	**18** Image sharpening 66
	19 Shooting mode 6, 16

1 Displayed when zoom buttons are pressed.
2 Appears when camera clock has not been set.
3 Appears at slow shutter speeds to warn that pictures may be blurred.
4 Appears when batteries are running low.

5 Indicates that camera has raised sensitivity automatically.

4

Playback
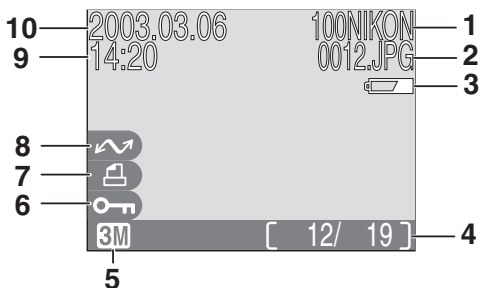
1 Current folder 23	**6** Protect icon...........................74
2 File number and type 23	**7** Print-order icon.......................48
3 Battery level indicator[1]...........12	**8** Transfer icon 75
4 Current frame number/ total number of frames 22	**9** Time of recording..............14–15
5 Image quality/size indicator 58	**10** Date of recording..............14–15

1 Appears when batteries are running low.

Before You Begin

🔍 Controlling the Monitor

To hide or display indicators in the monitor, press the |□| button. In 🄾 and M🄾 modes, you can also use the |□| button to turn the monitor off.

Monitor shows view through lens only

Monitor shows current settings and view through lens

Monitor off (🄾 and M🄾 modes only)

5
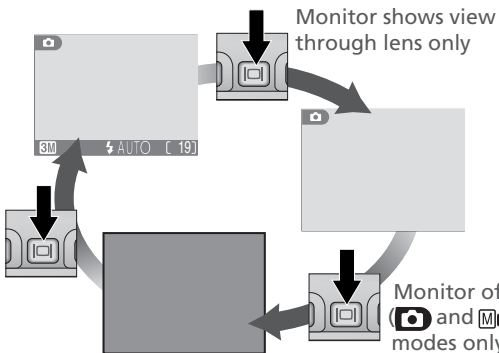
The Mode Dial

Using the mode dial, you can select from eight shooting modes and setup mode. Choose a shooting mode according to shooting conditions.
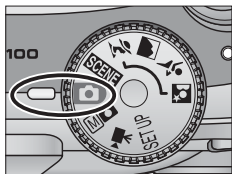
To select a mode, align the mode icon with the "⬯" mark next to the mode dial.

M⌖ Manual (🔂 17, 56)
In addition to the shooting-menu options available in auto mode, you have access to such menu items as white balance and image sharpening.

🎥 Movie (🔂 51–52)
Make silent movies up to 40s in length.

⌖ Auto (🔂 16)
A simple "point-and-shoot" mode in which the majority of camera settings are controlled by the camera. Recommended for first-time users of digital cameras.

SCENE Scene (🔂 28, 34–37)
Choose from ten "scenes" suited to different subjects or shooting conditions and let the camera do the rest.

SET UP Setup (🔂 77)
Choose this mode to display the setup menu, where you can perform such tasks as setting the camera clock and adjusting monitor brightness.

🏃 Portrait Assist
🏞 Landscape Assist
🏃 Sports Assist
🌃 Night Portrait Assist
Use framing assist to help compose pictures suited to a particular type of subject (🔂 28–33).
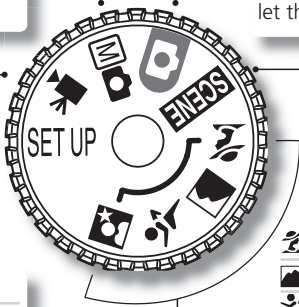
Navigating the Menus

The multi selector is used to navigate through the camera menus.

Move cursor up

Cancel and return to previous menu, or move cursor left

Make selection or move cursor right

Move cursor down
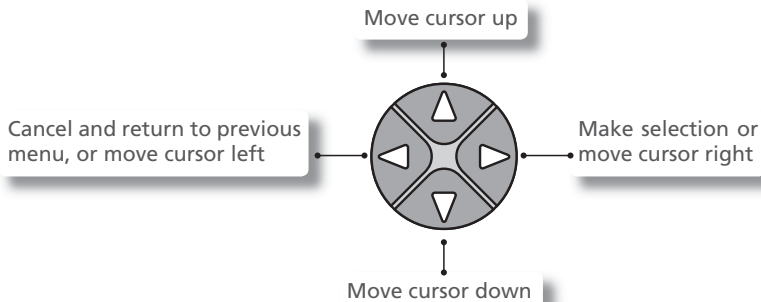
The Shutter-Release Button

Your camera has a two stage shutter-release button. The camera sets focus and exposure when the button is pressed halfway. The green (AF) lamp next to the viewfinder will light when the focus operation is complete. Focus and exposure will remain locked while the shutter-release button is pressed halfway. To take the picture, press the shutter-release button the rest of the way down.
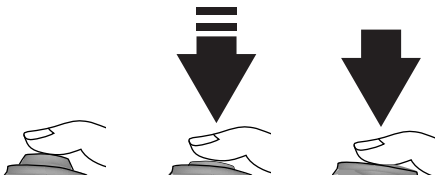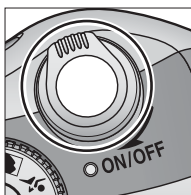
Inserting Batteries

Your camera uses:

• Nikon EN-MH1 rechargeable nickel-metal hydride (NiMH) batteries (× 2), or
• non-rechargeable CRV3 lithium batteries (× 1)
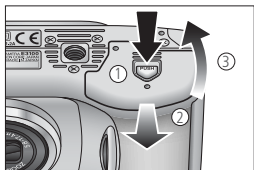
1 **Open the battery-chamber cover**
Pressing the battery-chamber latch (PUSH; ①), slide the battery-chamber cover out (②) and flip it open (③).
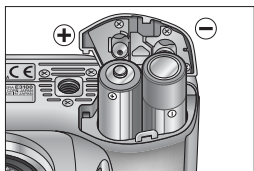
2 **Insert the batteries**
Insert the batteries as shown in the label inside the battery chamber.

EN-MH1/AA
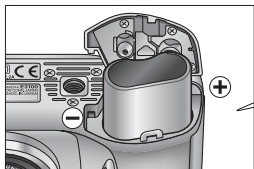
CRV3
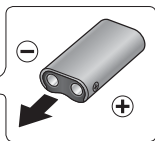
3 **Close the battery-chamber cover**
Close the battery-chamber cover (①) and slide it in until it latches (②). Be sure that the battery-chamber cover is properly latched.

✔ **Replacing Batteries**

Turn the camera off and make sure that the power-on lamp has gone out before removing or inserting batteries.

✔ **Read Battery Warnings**

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

✔ **Damaged Batteries**

The following batteries can not be used:

• Batteries with peeling or damaged insulation. Using batteries with damaged insulation could result in leakage, overheating, or rupture. Note that due to manufacturing defects even new batteries may have faulty insulation.

• Batteries with insulation that covers only the sides of the battery and not the area around the negative terminal.

• Batteries with a flat negative terminal. Do not use such batteries even if the insulation adequately covers the area around the negative terminal.
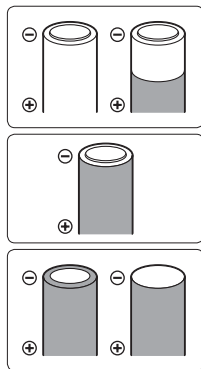
🖉 **EN-MH1 Batteries**

Using an MH-70 battery charger, charge EN-MH1 batteries before first use. Charge each pair of batteries at the same time—do not charge batteries one at a time or mix batteries with different charges. Note that EN-MH1 batteries may discharge quickly immediately after purchase or after the batteries have been left unused for an extended period. This is normal, and the batteries will retain a charge for longer periods after being used and recharged several times. For more information on charging batteries, see the documentation provided with the MH-70.

🔍 **Alternative Power Sources**

• To power the camera continuously for extended periods, use an EH-61 AC adapter (🔳 81). *Do not, under any circumstances, use another make or model of AC adapter*. Failure to observe this precaution could result in overheating or in damage to the camera.

• We recommend that you buy CRV3 lithium batteries as a back-up power source.

• The camera can also be used with a pair of ZR6 (AA) nickel-manganese batteries or FR6/L91 (AA) lithium batteries.

• Alkaline batteries can not be used.

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Inserting Memory Cards

Your Nikon digital camera stores pictures on CompactFlash™ memory cards.
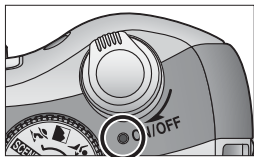
1 **Confirm that the camera is off**
The power-on lamp should be off.
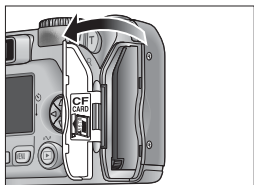
2 **Open the memory card slot cover**
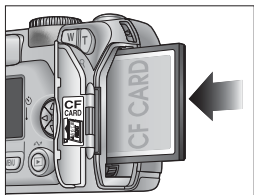
3 **Insert the memory card**
Insert the memory card in the direction of the arrow as shown in the label on the underside of the memory card slot cover. The memory card is fully inserted when the eject button is level with the top of the memory card.

> ☑ *Inserting Memory Cards*
> Insert the memory card terminals first. Inserting the card upside down or backwards could damage the camera or the card. Check to be sure the card is in the correct orientation.

Front

Direction of insertion

Terminals
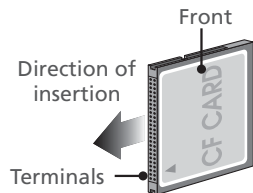
4 **Close the memory card slot cover**
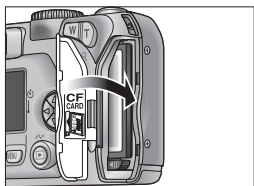
✐ Formatting Memory Cards

The memory card supplied with your camera is formatted at shipment. Other memory cards must be formatted before first use. For information on formatting memory cards, see "The Shooting Menu: CF Card Format" (🔣 67).

🔍 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 (①). Press the eject button to partially eject the card (②) and then remove the card by hand. Note that memory cards may become hot during use; observe due caution when removing memory cards.
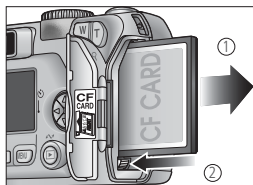
🔍 Approved Memory Cards

In addition to the card provided with your camera, the following memory cards have been tested and approved for use with your Nikon digital camera:

Nikon	EC-CF	All capacities
SanDisk	SDCFB	32 MB, 64 MB, 128 MB, 256 MB, 512 MB, 1 GB
	SDCFH Ultra	128 MB, 192 MB, 256 MB, 384 MB, 512 MB
Lexar Media	4× USB	16 MB, 32 MB, 64 MB, 128 MB, 256 MB, 512 MB
	8× USB	
	12× USB	64 MB, 128 MB, 256 MB, 512 MB
	16× USB	
	24× USB (including cards with **W**rite **A**cceleration)	
Hitachi (Renesas Technology)	Compact FLASH HB28	128 MB, 256 MB, 512 MB

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

First Steps

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Checking the Battery Level
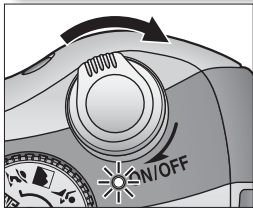
1 **Turn the camera on**
Rotate the power switch until it stops, then gently release the switch. The power-on lamp will light. Rotate the mode dial to a setting other than SET UP.
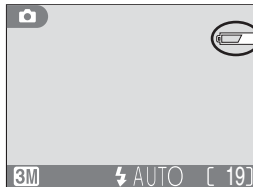
2 **Check the battery level in the monitor**

Display	Meaning
NO ICON	Batteries fully charged.
▣▭▭	Low battery. Fewer shots can be taken consecutively in "continuous" mode; if flash fires, monitor will turn off while flash recharges. Ready spare batteries.
WARNING ! ! BATTERY EXHAUSTED	Batteries exhausted. Replace with fully-charged batteries.

The red (🗲) and green (AF) lamps will blink when the "battery exhausted" warning is displayed.

🔍 **The ▶ Button**

The camera can also be turned on by pressing the ▶ button for about a second. Your most recent picture will be displayed in the monitor (👁 22).

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⚠ **Turning the Camera Off**

To turn the camera off when the power-on lamp is lit, rotate the power-on switch. Do not remove the batteries or disconnect the AC adapter until the power-on lamp has gone out.

✐ **Auto Power Off (Standby Mode)**

If no operations are performed for thirty seconds (three minutes when menus are displayed), the monitor will turn off automatically and the camera will enter standby mode to reduce the drain on the batteries (when the camera is powered by an AC adapter, the monitor will turn off after thirty minutes). While the camera is in standby mode, the power-on lamp will blink. The camera will be reactivated when you:

- Rotate the power-on switch
- Press ▣ or press the shutter-release button halfway
- Press the ▶ button to view the last picture taken
- Press the MENU button to display the menu for the current mode
- Rotate the mode dial to select a new mode

The length of time before the camera enters standby mode can be changed using the **Auto off** option in the setup menu (🐾 79).

If no operations are performed for three minutes after the camera enters standby mode, the camera will turn off automatically and the power-on lamp will go out.

✐ **The Power-on Lamp**

When the power-on lamp is	The camera is
On	On
Blinking	In standby mode
Off	Off

Basic Setup

Before using your camera for the first time, choose a language for camera menus and messages and set the camera clock to the correct time and date.
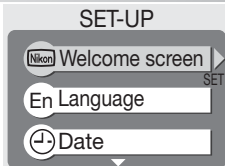
1	SET-UP Nikon Welcome screen En Language SET ⊕ Date Rotate the mode dial to SET UP and turn camera on.	**2**	SET-UP Nikon Welcome screen En Language SET ⊕ Date Highlight **Language**.
3	LANGUAGE De Deutsch En English SET Fr Français Display options.	**4**	LANGUAGE De Deutsch En English SET Fr Français Choose language from **De**utsch (German), **En**glish, **Fr**ançais (French), 日 (Japanese), or **Es**pañol (Spanish).
5	SET-UP Nikon Welcome screen En Language SET ⊕ Date Return to setup menu.	**6**	SET-UP Nikon Welcome screen En Language SET ⊕ Date Highlight **Date**.
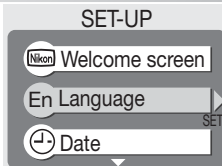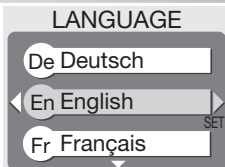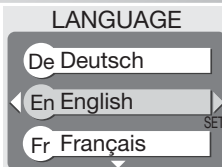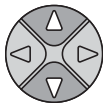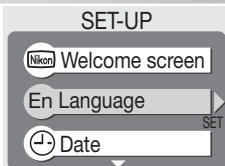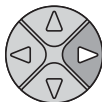
🖉 The ⊕ Icon

If the ⊕ ("date not set") icon (🐾 4) flashes in the top right corner of the monitor when the camera is in shooting mode, the date and time have not been set or the clock battery is exhausted. Set the camera clock as described above. Any pictures taken before the clock has been set will have a time stamp of "0000.00.00 00:00."

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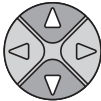
7	DATE Y M D ◄ 2003 ► . 01 . 01 00 : 00 Display DATE menu.	8	DATE Y M D ◄ 2003 ► . 01 . 01 00 : 00 Edit **Y**ear.
9	DATE Y M D 2003 . 01 . 01 00 : 00 Select **M**onth. Repeat steps 8–9 to edit remaining items.	10	DATE Y M D SET 2003 . 03 . 06 13 : 00 Highlight **Y M D**.
11	DATE D M Y SET 06 . 03 . 2003 13 : 00 Choose order in which **Y**ear, **M**onth, and **D**ay will be displayed.	12	SET-UP Nikon Welcome screen En Language SET Date ► Return to setup menu.
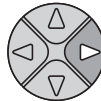
First Steps

✐ The Clock Battery

When the main batteries are installed or the camera is powered by an AC adapter, the clock battery will charge in about ten hours. When fully charged, the clock battery can provide several days of back-up power.

🔍 Setting the Clock from Nikon View (Windows XP/Mac OS X Only)

If the camera is connected with the **USB** option set to **PTP** (🗑45), Nikon View (version 6.0.0 or later) can be used to set the camera clock to the same time and date as the computer. See the *Nikon View Reference Manual* for details.

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Step 1—Select ⬤ Mode

This section details the basic steps involved in taking pictures in ⬤ (auto) mode. In this automatic, "point-and-shoot" mode, the majority of camera settings are controlled by the camera in response to shooting conditions, producing optimal results in most situations.
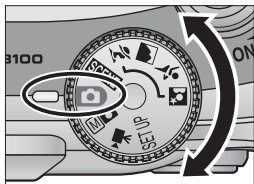
1 Rotate the mode dial to ⬤
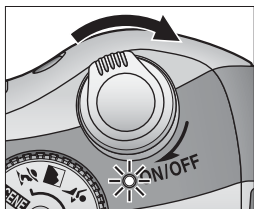
2 Turn the camera on
   The power-on lamp will light and the monitor will display a welcome screen (🔲 78). The camera is ready to shoot when the monitor shows the view through the camera lens.

Shooting mode
⬤ indicates auto mode.

Image quality/size
Choose from five options depending on how you plan to use the picture (🔲 58). The default setting is 3M.
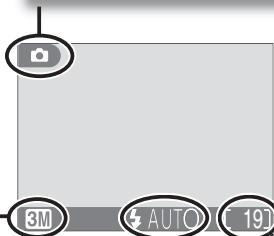
Flash mode
Choose from four modes depending on lighting and your creative intent (🔲 24). The default setting is ⚡AUTO (auto).

Number of exposures remaining
The number of pictures that can be stored on a memory card depends on the capacity of the card and the option chosen for **Image quality/size** (🔲 59).

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✐ Number of Exposures Remaining

If the number of exposures remaining is zero, the message "OUT OF MEMORY" will be displayed in the monitor. No further pictures can be taken until you:
• choose a lower **Image quality/size** setting (🔂 58)
• insert a new memory card (🔂 10)
• delete some pictures (🔂 22–23, 72–73)

🔍 M🔲 Mode

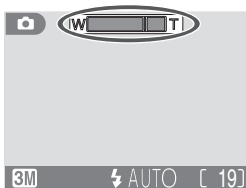M🔲 (manual) mode provides additional menu options that give you full control over such settings as white balance and image sharpening. See "The Shooting Menu" (🔂 56).
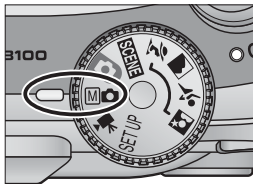
Step 2—Frame the Picture

1 Ready the camera
Hold the camera steadily in both hands. Photographs can be framed in the monitor **A** or the viewfinder **B**.

📖 *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.

Zoom out   Zoom in
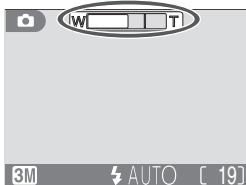
Indicator in monitor shows amount of zoom when either button is pressed

Digital zoom

2 Frame your subject
Your Nikon digital camera is equipped with two types of built-in zoom: optical zoom, in which the camera's telescoping lens can be used to magnify the subject up to 3×, and digital zoom, in which digital processing is used to further magnify the image up to 4×, for a total of 12×. Use the zoom buttons to frame your subject in the center of the monitor:

• Press the **W** button to zoom out from your subject, increasing the area visible in the frame.
• Press the **T** button to zoom in on your subject so that it fills a larger area of the frame.
• When the camera is zoomed in to maximum magnification, holding the **T** button down for about two seconds will trigger digital zoom. The zoom indicator will turn yellow, and the green (AF) lamp next to the viewfinder will blink. Use the **T** and **W** buttons to adjust zoom in the digital zoom range. To cancel digital zoom, press **W** until the zoom indicator turns white.

✐ **Digital Zoom**

In digital zoom, data from the camera's image sensor are processed digitally, enlarging the center portion of the picture 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 optical zoom are simply enlarged, producing a slightly "grainy" image. Note that the effects of digital zoom are not visible in the viewfinder—use the monitor when framing pictures with digital zoom. Digital zoom is not available when the monitor is off or when **Multi-Shot 16-1** or **Multi-Shot 16-2** is selected in the CONTINUOUS menu (❽ 64).

✐ **When Lighting Is Poor**

When lighting is poor, sensitivity is raised to compensate and the image in the monitor may be slightly mottled. This is normal and does not indicate a malfunction.

🔍 **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 useful when the image in the viewfinder does not accurately reflect what will appear in the final picture, for example when:

• your subject is less than a meter (3´3˝) from the camera
• digital zoom is in effect

Use the viewfinder when you want to save power by turning the monitor off (❽ 5), or when bright ambient lighting makes it difficult to see the display in the monitor.

Step 3—Focus and Shoot

1 **Focus**
Press the shutter-release button halfway to set focus and exposure. In 🔴 mode, the camera will automatically focus on the subject at the center of the frame. Focus and exposure will lock while the shutter-release button is pressed halfway.
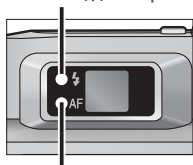
With the shutter-release button pressed halfway, check focus and flash. Focus is indicated by the green AF (autofocus) lamp next to the viewfinder and by the focus indicator in the monitor. Flash status is indicated by the red ⚡ (flash-ready) lamp next to the viewfinder.

Red (⚡) lamp

Green (AF) lamp

Focus indicator

Red (⚡) lamp	**On**	Flash will fire when picture is taken.
	Blinks	Flash charging. Briefly lift finger from shutter-release button, then try again.
	Off	Flash off or not required.
Green (AF) lamp/ focus indicator	**On**	Subject in focus.
	Flashes	Camera unable to focus on subject at center of frame. Using focus lock, focus on another subject at same distance, then recompose picture and shoot.

2 **Take the picture**
Press the shutter release button the rest of the way down to take the picture. To prevent blur, press the shutter-release button down smoothly.

✓ **During Recording**

While pictures are being recorded to the memory card, a ▣ (recording) or ⧖ (wait) icon will be displayed in the monitor. You can continue to take pictures until the ⧖ icon is displayed. *Do not turn the camera off, eject the memory card, or remove or disconnect the power source while the* ▣ *or* ⧖ *icon is displayed*. Cutting power or removing the memory card in these circumstances could result in loss of data or in damage to the camera or card.

🖉 **Getting Good Results with Autofocus**

Autofocus performs best when there is contrast between the subject and the background and the subject is evenly lit. It does not perform well if the subject is very dark or moving rapidly, if there are objects of sharply differing brightness in the scene (e.g., the sun is behind your subject and their features are in deep shadow), or if there are several objects at different distances from the camera at the center of the frame (e.g., your subject is inside a cage).

🔍 **Focusing on Off-Center Subjects: Focus Lock**

If your subject is not at the center of the frame when the shutter-release button is pressed halfway, your picture may be out of focus. To focus on an off-center subject:
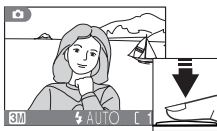
❶ Focus

Position the subject in the center of the frame and press the shutter-release button halfway.
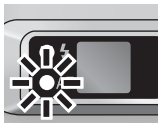
❷ Check the green (AF) lamp and focus indicator

With the shutter-release button pressed halfway, check that the green (AF) lamp and focus indicator glow steadily, indicating that the subject is in focus. Focus and exposure will remain locked while the shutter-release button is pressed halfway.
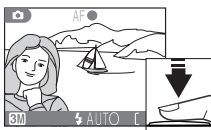
❸ Recompose the picture

Keeping the shutter-release button pressed halfway, recompose your picture. 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.

❹ Take the picture

Press the shutter-release button the rest of the way down to shoot.

Basic Photography

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Step 4—View the Results

1 Press the ▶ button
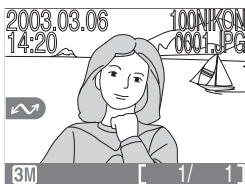
2 **View pictures in the monitor**
Your most recent picture will be displayed in the monitor. To view additional pictures, press the multi selector down or right to view pictures in the order recorded, up or left to view pictures in reverse order. To scroll quickly to a particular frame number without viewing the intervening pictures, press and hold the multi selector.

To cancel full-screen playback and return to shooting mode, press the ▶ button again.
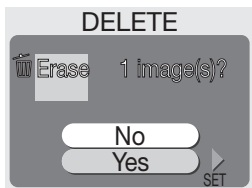
🔍 *Deleting Unwanted Pictures*
To delete the picture displayed in the monitor, press the 🗑 button. A confirmation dialog will be displayed. Press the multi selector up or down to highlight **YES** and then press the multi selector to the right. To exit without deleting the picture, highlight **NO** and press the multi selector to the right.

2003.03.06
14:20

100NIKON
0001.JPG

3M   [1/   1]

DELETE

🗑 Erase   1 image(s)?

No
Yes
SET

Done

🗑
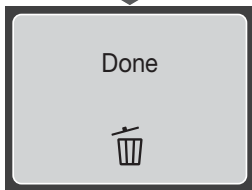
Deleting Your Last Shot

At any time during shooting, you can press the 🗑 button to delete the last picture taken. The confirmation dialog shown at right will be displayed. Delete the picture as described opposite under "Deleting Unwanted Pictures."

```
        DELETE
🗑 Erase    1 image(s)?

        No
        Yes
                  SET
```
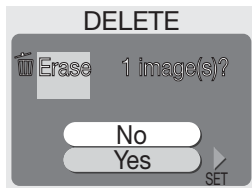
Playback Tip

Pictures are displayed briefly at low resolution while being read from the memory card. This makes it possible to scroll rapidly through the pictures in memory without waiting for each image to be displayed at full resolution.

The first and last pictures in memory are linked. Pressing the multi selector up or left when the first picture in memory is displayed will take you to the last picture. Pressing the multi selector down or right when the last picture is displayed takes you to the first picture.

Image File and Folder Names

On the memory card, pictures are identified by file names with three parts: a four letter identifier, a four-digit file number assigned automatically by the camera in ascending order, and a three-letter extension (e.g., "DSCN0001.JPG").

	Picture type	Identifier	Extension	🐾
Original	Still picture	DSCN	.JPG	22
	Movie	DSCN	.MOV	53
Copy	Copy created using **Pic. enhance menu** option	FSCN	.JPG	41
	Small copy	SSCN	.JPG	42
	Cropped copy	RSCN	.JPG	43

When a picture is viewed in the monitor, the file number and extension appear in the top right corner of the display. The identifier is not displayed, but is visible when the picture is transferred to a computer.

Pictures are stored in folders created automatically by the camera and named with a three-digit folder number followed by "NIKON" (e.g., "100NIKON"). Folders can hold up to 200 pictures; if you take a picture when the current folder contains 200 pictures, a new folder will be created by adding one to the current folder number. If you take a picture when the current folder contains a picture numbered 9999, a new folder will be created and file numbering will begin again from 0001. If file numbering reaches 9999 when the memory card contains a folder numbered 999, no further pictures can be taken until the memory card has been formatted (🐾 67) or a new memory card inserted.
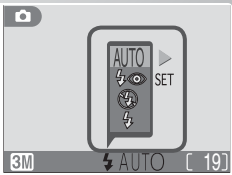
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When Lighting Is Poor: Using the Flash

The following flash modes are available:

Mode	How it works	When to use it
AUTO Auto	Flash fires when light-ing is poor.	Best choice in most situations.
4 ⊚ Auto with red-eye reduction	Flash fires several times at low intensity before main flash, reducing "red-eye."	Use for portraits (works best when subject is well within range of flash and looking at pre-flash). Not recom-mended when quick shutter response is required.
⊕ Flash Cancel (off)	Flash will not fire even when lighting is poor.	Use to capture natural lighting under dim light or where use of flash is pro-hibited. If ✋ (camera shake) icon ap-pears, care should be taken to avoid blurring.
4 Anytime Flash (fill flash)	Flash fires whenever picture is taken.	Use to "fill-in" (illuminate) shadows and back-lit subjects.
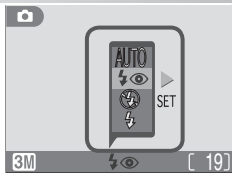
To select the flash mode:

1 Display flash-mode menu.

2 Highlight desired mode (to exit with-out changing mode, wait two sec-onds or press multi selector to left).

3 Exit menu. Flash mode shown by icon at bottom of monitor.

🖉 **Sensitivity (ISO Equivalency)**

"Sensitivity" is a measure of how quickly the camera responds to light. Your Nikon digital camera normally has a sensitivity roughly equivalent to film with an ISO 50 rating. When lighting is poor and the flash is off (🚫), the camera will automatically increase sensitivity, permitting faster exposures and minimizing blur caused by inadvertent camera movement (camera shake). An ISO icon will appear in the monitor to warn that the picture may be slightly mottled.
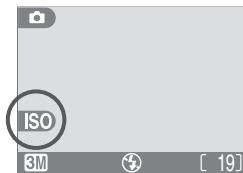
🖉 **The 🖐 (Camera Shake) Icon**

When lighting is poor and the flash is off (🚫), shutter speeds will slow and pictures may be blurred. If the shutter speed required for exposure is very slow, a 🖐 (camera shake) warning will appear in the monitor. Use of a tripod or support is recommended.
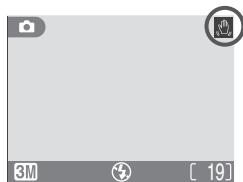
🖉 **Flash Range**

Flash range varies with zoom position. When the camera is zoomed all the way out, the flash has a range of 0.4–3.0 m (1´4˝–9´10˝). The range at maximum zoom is 0.4–1.7 m (1´4˝–5´7˝).

🖉 **Close-Ups**

The flash may not be able to light the entire subject at distances of less than 40 cm (1´4˝). When taking close-ups, play each picture back after shooting to check the results.

🖉 **Flash Mode Selection**

Depending on the mode selected, the flash mode may change automatically when you choose a new shooting mode (🔢 30–37, 51). In 🅼▢ (manual) mode, the camera "remembers" the current flash mode setting even when the camera is turned off. The most recent setting will automatically be restored whenever the mode dial is set to 🅼▢, unless the **Reset all** option in the setup menu is used to restore default settings (🔢 80). In ▢ (auto) mode, the camera only stores the flash mode if the flash fires at a setting of 🟡 👁 (auto with red-eye reduction). If AUTO is not selected before the camera is turned off, the flash will be set to 🟡 👁 the next time the camera is turned on. Otherwise the flash mode will automatically be set to AUTO.

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Taking a Self-Portrait: Using the Self-Timer

When the self-timer is on, pictures are taken ten seconds after the shutter-release button is pressed. This can be used to allow you to appear in your own pictures or to prevent close-up or low-light shots from being blurred by the camera movement that occurs when the shutter-release button is pressed. When using this option, you should either mount the camera on a tripod (recommended) or rest it on a flat, level surface.

1	2
Display self-timer menu.	Highlight **☉ON** (to exit without changing mode, wait two seconds or press multi selector to left).

3	4
Exit menu. Self-timer icon is displayed in monitor.	Frame picture and start timer. Count-down timer shows number of seconds remaining until picture is taken.
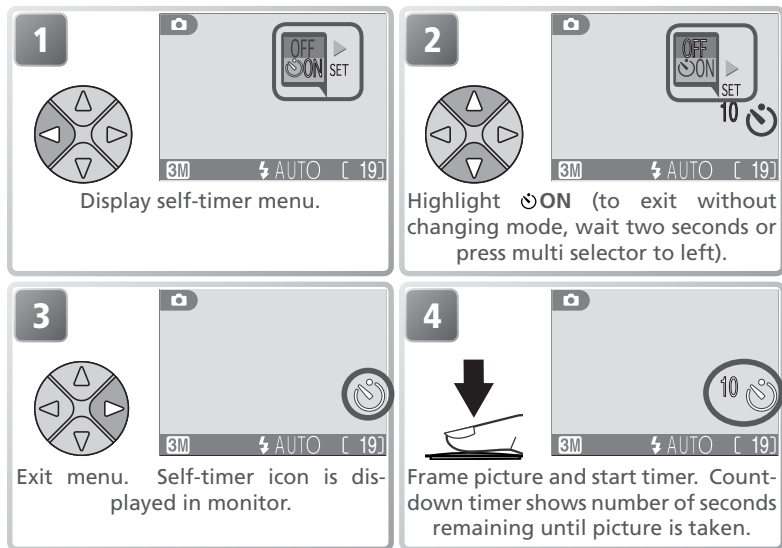
Focus and exposure lock when the shutter-release button is pressed. The self-timer lamp on the front of the camera will blink until one second before the picture is taken, staying lit during the final second to warn that the shutter is about to be released.
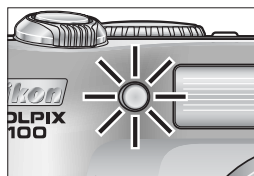
✐ The Self-Timer

The self-timer is not available in some shooting modes (📖 32, 37, 51).

🔍 Stopping the Self-Timer

To stop the timer before the picture is taken, press the shutter-release button.

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Easy Close-ups: Macro Close-up Mode

Macro close-up mode is used for taking close-up shots of small objects at very short distances (minimum 4 cm/1.6″).

1 Display macro close-up menu.	**2** Highlight 🌷**ON** (to exit without changing setting, wait two seconds or press multi selector to left).
3 Exit menu. 🌷 icon appears in monitor when camera is in macro close-up.	**4** Frame picture. If camera is zoomed out until 🌷 icon turns green, camera can focus at distance of 4 cm/1.6″.
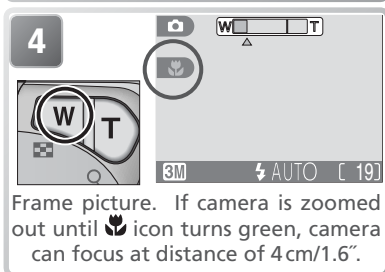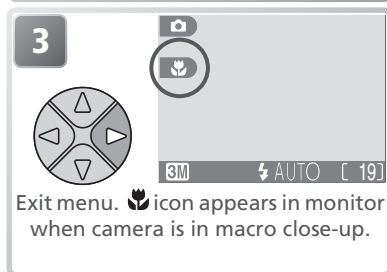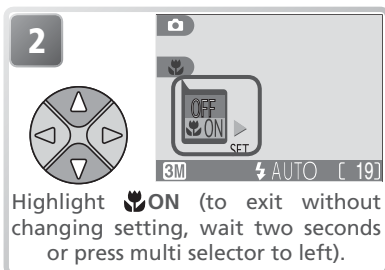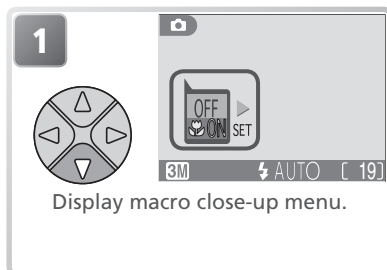
🖉 Macro Close-up Mode

Macro close-up is not available in some shooting modes (🐾 31, 32, 34–37).

At short ranges, the viewfinder does not show the image that will appear in the final picture. Use the monitor for close-ups.

In macro close-up mode, the camera focuses continuously, even when the shutter-release button is not pressed halfway.

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Assist and Scene Modes

Your Nikon digital camera offers a choice of ten "scene" and four "assist" modes. In these modes, camera settings are automatically optimized for the selected subject type, sparing you the necessity of adjusting settings one-by-one.

Assist Modes

Assist modes are chosen by rotating the mode dial to the desired mode. Framing assist options are available to help you compose your shots.

	Mode	Description	🕮
🍷	Portrait assist	Use for portraits in which the main subject stands out clearly while background details are softened.	30
🏔	Landscape assist	Use to enhance outlines, colors, and contrast in sky-scapes, forests, and other landscape shots, or to take portraits that feature a landmark in the background.	31
🏃	Sports assist	Use for sports shots that freeze motion in rapidly-moving subjects.	32
🌃	Night portrait assist	Use for portraits taken against a dimly-lit backdrop.	33

Scene Modes

Scene modes are selected by rotating the mode dial to **SCENE** and selecting the desired scene from a menu.

	Mode	Description	🕮
🎉	Party/Indoor	Use to capture background details or the effects of candlelight and other indoor lighting.	35
🏖	Beach/Snow	Use for bright subjects such as snowfields, beaches, and sunlit expanses of water.	35
🌅	Sunset	Use to preserve the deep hues seen in sunsets and sunrises.	35
🌆	Dusk/Dawn	Use to preserve the colors seen in the weak natural light before sunrise and after sunset.	35
🌃	Night landscape	Use when taking landscape shots at night.	36
🌷	Close up	Use to capture vivid colors in close-up shots of flowers, insects, and other small objects.	36
🏛	Museum	Use where flash photography is prohibited.	36
🎆	Fireworks show	Use to capture the expanding burst of light from a firework.	37
📄	Copy	Use to copy text and line drawings.	37
🔆	Back light	Use when light is coming from behind your subject, throwing their features into shadow.	37

Framing Assist

The four assist modes offer a selection of framing assist options that allow you to compose pictures with the help of framing guides displayed in the monitor. To use framing assist, rotate the mode dial to the desired mode and follow the steps below.

Assist modes

1	PORTRAIT
MENU	SET

After selecting mode, display framing assist menu (to display menu selection screen, press multi selector to left; 56).

2	Portrait close-up
	SET

Choose composition type. Current selection shown by large icon and caption.

3	
	3M 4 ⊙ [19]

Make selection and return to shooting mode. Framing guide appears in monitor.

4	
	3M 4 ⊙ [19]

When taking pictures, position subject or subjects in framing guide as described on following pages.

🖉 Using the Guides
Your subject does not have to fit exactly in the framing guides. *When framing pictures, pay attention to your surroundings; be careful not to trip and fall*.

🖉 Assist Modes
Depending on your subject, assist modes may not always produce the desired results. If results are not to your satisfaction, choose 🔘 (auto) or M🔘 (manual) and try again.

29

📸 Portrait Assist

📸 (portrait assist) mode helps you frame portraits in which the main subject stands out clearly while background details are softened, lending the composition a sense of depth (the degree of softening depends on the amount of light available). A framing assist menu helps you frame off-center subjects and compose tall or wide shots and two-person portraits.

📸 PORTRAIT

No guides are displayed in monitor. Camera focuses on subject in center of frame; focus lock can be used to focus on off-center subjects.

📷 Portrait right

Use to compose shot with subject centered in right half of frame. Camera will focus on subject in framing guide.

📷 Portrait couple

Use to compose shot with two subjects positioned side-by-side. Camera will focus on closest subject.

📷 Portrait left

Use to compose shot with subject centered in left half of frame. Camera will focus on subject in framing guide.

📷 Portrait close-up

Use to compose shot with your subject's face positioned in top half of frame. Camera will focus on face area in framing guide.
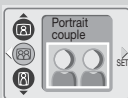
📷 Portrait figure

Use to compose shot with camera held as shown at right and subject's face in top half of frame. Camera will focus on face area in framing guide.

✐ Flash Mode Selection in 📸 Mode

Flash mode defaults to ⚡👁 (auto with red-eye reduction). Other modes can be selected.

30

Landscape Assist

(landscape assist) mode helps you frame vivid landscape shots that enhance outlines, colors, and contrast. A framing assist menu helps you frame not only natural landscapes but also cityscapes and portrait shots featuring a landmark in the background.

LANDSCAPE

No guides are displayed in monitor. Use to focus on distant objects through foreground objects such as windows or a screen of branches. Focus is fixed at infinity.

Scenic view

Use to compose landscapes with sky in top third of frame, distant objects in middle third, and closer objects in bottom third. Match top of skyline with wavy yellow guide.

Architecture

Use to photograph buildings. A grid is displayed in the monitor to help keep verticals and horizontals aligned with the frame.

Group right

Use to compose portraits with portrait subjects to right and landmark or other object in background at left of frame. Both portrait subject and background object will be in focus.

Group left

Use to compose portraits with portrait subjects to left and landmark or other object in background at right of frame. Both portrait subject and background object will be in focus.

Flash Mode Selection in Mode

The flash turns off ( ) automatically in mode.

Macro Close-up Mode

Macro close-up turns off automatically in mode.

31

🏃 Sports Assist

🏃 (sports assist) mode is used for dynamic action shots that capture moving objects. The assist menu lets you freeze the action in a single shot or record motion in a series of pictures.

🔲 SPORTS

While shutter-release button is held down, pictures are recorded at rate of about 3 frames every 2 seconds (rate of shooting will slow when 🕐 icon is displayed). Focus, exposure, and white balance are determined by first shot in each series. Camera focuses continuously, even when shutter-release button is not pressed.

🏃 Sport spectator

Shutter-release button can be pressed in one motion without pausing halfway to check focus. Use at ranges of 3 m (9′10″) or more when subject is moving unpredictably, leaving you no time to compose pictures. Camera focuses continuously, even when shutter-release button is not pressed.
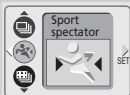
🏃 Sport composite

Each time shutter-release button is pressed, camera takes 16 shots in about two seconds and arranges them in four rows to form a single picture. Focus, exposure, and white balance are determined by first shot in each series.

📝 **Flash Mode Selection in 🏃 Mode**

The flash turns off (🚫) automatically in 🏃 mode.

📝 **The Self-Timer**

The self-timer turns off automatically in 🏃 mode.

📝 **Macro Close-up Mode**

Macro close-up turns off automatically in 🏃 mode.

32

■ Night Portrait Assist

■ (night portrait assist) mode is used for taking portrait shots at night, when it provides a natural balance between the main subject and the background. Pictures taken at slow shutter speeds are adjusted to improve quality, slightly increasing processing time; to prevent blurring, mount the camera on a tripod or rest it on a flat, stable surface. For more information on framing assist options, see "🎭 Portrait Assist" (👁 30).
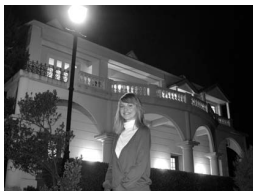
🖉 **Flash Mode Selection in ■ Mode**
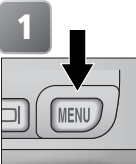
Flash mode is automatically set to ⚡ 👁 (auto with red-eye reduction).

SCENE Scene Mode
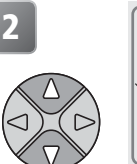
SCENE (scene) mode offers a menu of ten "scenes," each corresponding to a common situation, such as a backlit subject, sunset, or interior shot. Camera settings are automatically adjusted to suit the selected scene, sparing you the necessity of adjusting each setting separately. To take pictures in scene mode, rotate the mode dial to SCENE and follow the steps below.

Scene mode

<table>
<tr>
<td>

1

Display scene menu (to display menu selection screen, press multi selector to left; 🔊 56).

Party/Indoor

SET

</td>
<td>

2

Choose scene. Current selection shown by large icon and caption.

Beach/Snow

SET

</td>
</tr>
<tr>
<td>

3

Make selection and return to shooting mode. Selected scene shown by icon at top left corner of monitor.

3M   ⚡ AUTO [19]

</td>
<td>

4

Take pictures.

3M   ⚡ AUTO [19]

</td>
</tr>
</table>

Depending on the scene selected, restrictions may apply to flash mode (⚡; 🔊 24), macro close-up (🌷; 🔊 27), or the self-timer (🕐; 🔊 26). These restrictions are noted on the pages that follow.

🖉 The 🖐 (Camera Shake) Icon

When the 🖐 icon appears in the monitor, pictures may be blurred. In this section, the precautions that you can take to avoid blur are indicated by stars:

★   hold camera in both hands and brace elbows against your body

★★ use a tripod or rest the camera on a flat, level surface.

34

The following scenes are available:

🎆 Party/Indoor

Use for shots that include details of the background, or to capture the effects of candlelight and other indoor background lighting.

★

| 🔆 | 🔆👁 | 🌷 | **OFF** | ⏱ | No restrictions |

🏖 Beach/Snow

Vividly captures the brightness of such subjects as snowfields, beaches, or sunlit expanses of water. Flash mode automatically set to **AUTO**; other modes can be selected.

| 🔆 | No restrictions | 🌷 | **OFF** | ⏱ | No restrictions |

🌇 Sunset

Preserves the deep hues seen in sunsets and sunrises.

★

| 🔆 | 🚫 | 🌷 | **OFF** | ⏱ | No restrictions |

🌆 Dusk/Dawn

Preserves the colors seen in the weak natural light before sunrise or after sunset.

★

Pictures taken at slow shutter speeds are processed to improve quality, slightly increasing time before pictures are saved to memory card.

| 🔆 | 🚫 | 🌷 | **OFF** | ⏱ | No restrictions |

35

▨ Night landscape

A slow shutter speed is used to produce stunning night landscapes. Focus is fixed at infinity.

★ ★

Pictures taken at slow shutter speeds are processed to improve quality, slightly increasing time before pictures are saved to memory card.

| ✦ | 🚫 | 🌷 | **OFF** | ⏱ | No restrictions |

🌷 Close up

Use to capture vivid colors in close-up shots of flowers, insects, and other small objects, with the background artistically blurred. Flash mode automatically set to **AUTO**; other modes can be selected.

★

Camera focuses continuously, even when shutter-release button is not pressed halfway. Minimum focus distance varies with zoom position. To focus on objects as close as 4 cm/1.6″ to the lens, adjust zoom until the macro close-up icon (🌷) in monitor turns green.

| ✦ | No restrictions | 🌷 | **ON** | ⏱ | No restrictions |

🏛 Museum

Flash turns off (🚫) automatically. Use this mode indoors where flash photography is prohibited (for example, in museums and art galleries) or in other indoor settings in which you do not want to use the flash.

★

- The Best Shot Selector (BSS; 🖐 65) turns on automatically, reducing the effects of inadvertent camera movement.
- Macro close-up turn off automatically; other modes can be selected.
- Photography may be prohibited altogether in some settings. Be sure to obtain permission first.

| ✦ | 🚫 | 🌷 | No restrictions | ⏱ | No restrictions |

✦ **Fireworks show**

Slow shutter speeds are used to capture the expanding burst of light from a firework. The camera responds more rapidly to the shutter-release button, ensuring that you can capture the start of the burst. ⭐ ⭐

- Focus is fixed at infinity.
- Follow the firework as it ascends and press the shutter-release button all the way down at the start of the burst.

🔦	🚫	🌷	**OFF**	⏱	**OFF**

▢ **Copy**

Provides clear pictures of text or drawings on a white board or in printed matter such as a business card.

- Flash and macro close-up turn off automatically; other modes can be selected.
- Colored text and drawings may not show up well in the final picture.

🔦	No restrictions	🌷	No restrictions	⏱	No restrictions

▨ **Back light**

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.

🔦	🔦	🌷	**OFF**	⏱	No restrictions

🖉 **Scene Mode**

Depending on your subject, scene mode may not always produce the desired results. If results are not to your satisfaction, choose 📷 (auto) or M📷 (manual) and try again.

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Viewing Pictures on the Camera

Viewing Multiple Pictures: Thumbnail Playback

Pressing the ▦ (**W**) button in full-screen playback displays the pictures on the memory card in "contact sheets" of four thumbnail images. The following operations can be performed while thumbnails are displayed:
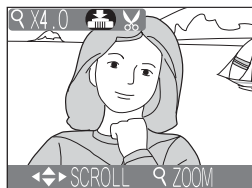

To	Press	Description
Highlight pictures	(multi selector)	Press multi selector up, down, left, or right to highlight pictures.
Change number of pictures displayed	▦ (**W**)/ ⊕ (**T**)	With four thumbnails displayed, press ▦ (**W**) button once to view nine thumbnails. Press ⊕ (**T**) to "zoom in" from nine thumbnails to four thumbnail-view or, when four thumbnails are displayed, to view highlighted picture full screen.
Delete highlighted picture	🗑	Confirmation dialog will be displayed. Press multi selector up or down to highlight option, press to right to select.

DELETE

🗑 Erase 1 image(s)?

No
Yes SET
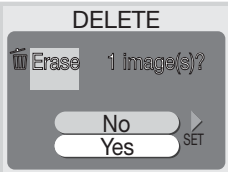
Taking a Closer Look: Playback Zoom

Use the Q button to zoom in on still images displayed in full-screen playback. While the picture is zoomed in, you can save a cropped copy of the picture that contains only the portion of the image visible in the monitor. Playback zoom and cropping are not available when the current picture is a movie or a copy created using the small picture option (🔊 42, 53). Cropped and edited copies can not be further cropped.

To	Press	Description
Zoom in	Q (**T**)	Zoom increases each time button is pressed, to a maximum of 6×. While image is zoomed in, Q icon and zoom ratio are displayed in top left corner of monitor.
View other areas of picture		Use multi selector to scroll to areas of picture not visible in monitor. To use multi selector to view other pictures, cancel zoom.
Zoom out	▣ (**W**)	Zoom decreases each time button is pressed. To cancel zoom, zoom picture out until entire picture is displayed.
Crop picture	Shutter button	Press shutter-release button to create new picture containing only portion of picture visible in monitor. Confirmation dialog will be displayed; press multi selector up or down to highlight option, press to right to select.
Delete picture	🗑	Confirmation dialog will be displayed. Press multi selector up or down to highlight option, press to right to select.

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The Picture Enhance Menu

Using the options in the picture enhance menu, you can create reduced or cropped copies of the picture displayed in the monitor. You can also produce a copy in black-and-white or sepia or create a retouched copy by adding soft-focus effects. To view the picture enhance menu:

1
COOLPIX
PLAYBACK MENU ›SET
PIC. ENHANCE MENU
MENU OFF
Display menu selection screen.

2
COOLPIX
PLAYBACK MENU
PIC. ENHANCE MENU ›SET
MENU OFF
Select PIC. ENHANCE MENU.

3
PIC. ENHANCE MENU
Pic. enhance menu ›SET
Small pic
Photo trim
Display options.
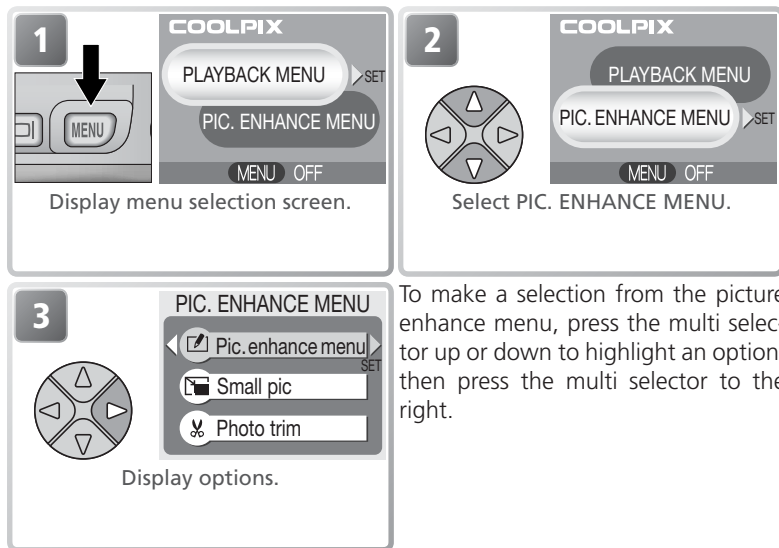
To make a selection from the picture enhance menu, press the multi selector up or down to highlight an option, then press the multi selector to the right.

Copies are independent of the original image: deleting the copy has no effect on the original, deleting the original no effect on the copy. The copy will be created with the same transfer marking and date and time of creation as the original; print and protect attributes will be off.

🖉 Movies
Pressing the MENU button with a movie displayed in full-screen playback or highlighted in the thumbnail list will display a menu selection screen containing PLAYBACK MENU and MOVIE TRIM MENU options (🎬 54). The PIC. ENHANCE MENU will not be available.

🖉 Viewing Copies on Other Cameras
Copies may not display or transfer correctly when viewed on other models of Nikon digital camera.
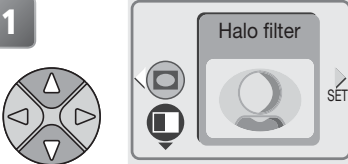
Retouching Pictures

Selecting **Pic. enhance menu** from the picture enhance menu displays the following retouch options:
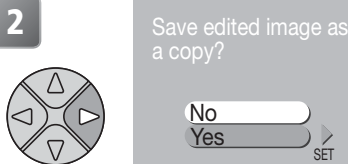
Option	Description
⬭ **Halo filter**	Creates copy of picture in which objects in center remain in focus, while other areas of the picture are lightened and softened.
▮ **Monochrome filter**	Creates copy of picture in black-and-white.
▥ **Sepia filter**	Creates copy of picture in sepia.

1 Highlight option. Current selection shown by large icon and caption.

Halo filter

SET

2 Confirmation dialog displayed. Select **Yes** to create retouched copy, **No** to exit without creating copy.

Save edited image as a copy?

No
Yes

SET

To view the new, retouched copy, press the multi selector down until the copy is displayed. The copy will be displayed after the last picture recorded. Copies are stored as NORMAL-quality JPEG files (compression ratio 1 : 8) with names of the form "FSCN*nnnn*.JPG," where "nnnn" is a four-digit number assigned automatically by the camera.

🖉 Picture Enhance
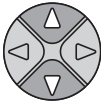
Picture enhance options can not be used with resized copies, cropped copies, or with copies created using the options in the PIC. ENHANCE MENU.
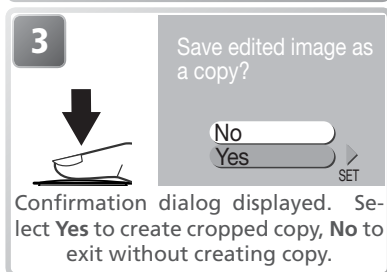
Small Picture

To create a small copy of a picture, select **Small pic** from the picture enhance menu or press the shutter-release button while a still image is displayed in full-screen playback. The following resize options are available:

Option	Size (pixels)	Description
🔲 **640 × 480**	640 × 480	Copy can be displayed full-screen on television or 13″ monitor with no drop in quality.
🔲 **320 × 240**	320 × 240	Suited to display on web pages. Small file size reduces time needed to display picture in web browser.
🔲 **160 × 120**	160 × 120	Copy can be sent and received quickly as e-mail attachment. Where application supports display of JPEG images, picture can be viewed in message window.

1
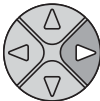
SMALL PIC

◀ 🔲 640 × 480 ▶
SET
🔲 320 × 240
🔲 160 × 120

Highlight option.

2

Save edited image as a copy?

No
Yes
SET

Confirmation dialog displayed. Select **Yes** to create resized copy, **No** to exit without creating copy.

To view the new, resized copy, press the multi selector down until the copy is displayed. The copy will be displayed after the last picture recorded (in thumbnail playback, small pictures are indicated by a gray border). To reduce file size, copies are stored on the memory card as BASIC-quality JPEG files (compression ratio 1 : 16). Copies are stored in separate files on the memory card with names of the form "SSCN*nnnn*.JPG," where "nnnn" is a four-digit number assigned automatically by the camera.
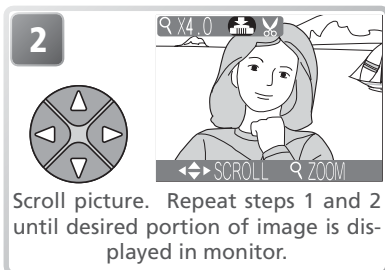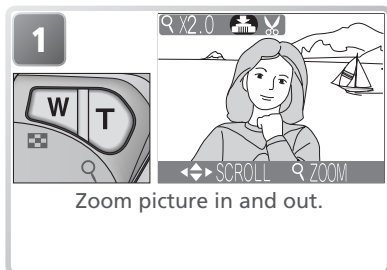
Copies can not be viewed or cropped using playback zoom.

🖉 Small Picture

Small pictures can not be created from resized copies, cropped copies, or from copies created using the options in the PIC. ENHANCE MENU.

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Cropping Pictures

When **Photo trim** is selected from the picture enhance menu, the current picture will be displayed full screen.

1

Zoom picture in and out.

2

Scroll picture. Repeat steps 1 and 2 until desired portion of image is displayed in monitor.

3

Save edited image as a copy?

No
Yes

Confirmation dialog displayed. Select **Yes** to create cropped copy, **No** to exit without creating copy.

To view the new, cropped copy, press the multi selector down until the copy is displayed. The copy will be displayed after the last picture recorded.

Cropped pictures are stored as NORMAL-quality JPEG files (compression ratio 1:8). Depending on the size of the original and the zoom ratio at the time the copy was created, copies will be 2,048 × 1,536, 1,600 × 1,200, 1,280 × 960, 1,024 × 768, 640 × 480, 320 × 240, or 160 × 120 pixels in size. Copies are stored in separate files on the memory card with names of the form "RSCN*nnnn*.JPG," where "nnnn" is a four-digit number assigned automatically by the camera.

Pictures can also be cropped as described in "Taking a Closer Look: Playback Zoom" (🖼 39).

🖉 Photo Trim

Resized copies, cropped copies, and copies created using the options in the PIC. ENHANCE MENU can not be cropped.

Viewing Pictures on TV

Using the EG-CP11 video cable included with your camera, you can connect the camera to a television or video-cassette recorder (VCR).

Choosing a Video Mode
The **Video mode** item in the camera setup menu offers a choice of NTSC and PAL standards (🔊 80). Be sure that the standard selected matches that used in the device.
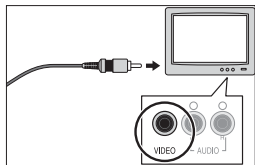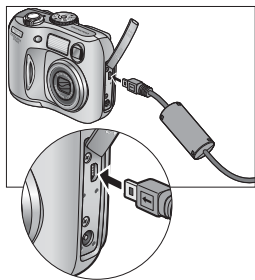
1 Turn the camera off
Turn the camera off before connecting or disconnecting the video cable.

2 Connect the video cable
Open the interface cover and insert the black plug into the camera's interface connector, the yellow plug into the video-in jack on the television or VCR.

3 Tune the television to the video channel
If in doubt, consult the documentation for your television or VCR.

4 Turn the camera on
Press the ▶ button for about a second to turn the camera on. The camera monitor will remain off and the television will display the image normally shown in the monitor. If the camera is connected to a VCR, images can be recorded to video tape.

Viewing Pictures on a Computer

Using the UC-E6 USB cable and Nikon View software provided with your camera, you can view your photographs and movies on a computer. Before you can transfer (copy) pictures to your computer, you will need to install Nikon View. For more information on installing Nikon View and transferring pictures to your computer, see the *Quick Start Guide* and the *Nikon View Reference Manual*.

Before Connecting the Camera

Pictures can be copied from the camera to the computer by:
• Pressing the 🖻 button on the camera (🔲 75)
• Clicking the 🔃 button in Nikon View

Which method you will use depends on your computer's operating system and the USB option selected in the camera setup menu. After consulting the following table, select the appropriate option using the **USB** item in the camera setup menu. The default option is **Mass Storage**.
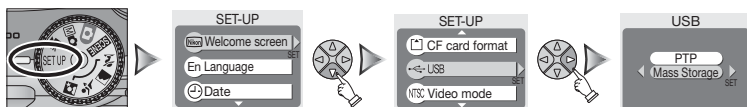
Operating system	Pictures transferred using:	
	Camera 🖻 button	Nikon View 🔃 button
Windows XP Home Edition Windows XP Professional	Choose **Mass Storage** or **PTP**.	
Mac OS X 10.1.3 or later	Choose **PTP**.	Choose **Mass Storage** or **PTP**.
Mac OS X 10.1.2	—*	
Windows 2000 Professional Windows Millennium Edition (Me) Windows 98 Second Edition (SE) Mac OS 9 (9.0–9.2)	Choose **Mass Storage**.	

* Pictures can not be transferred using camera 🖻 button in Mac OS X 10.1.2. Use Nikon View 🔃 button to transfer pictures.

More on Playback

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Connecting the USB Cable

Turn the computer on and wait for it to start up. After confirming that the camera is off, connect the UC-E6 USB cable as shown below. Connect the camera directly to the computer; do not connect the cable via a USB hub or keyboard.

UC-E6 USB cable
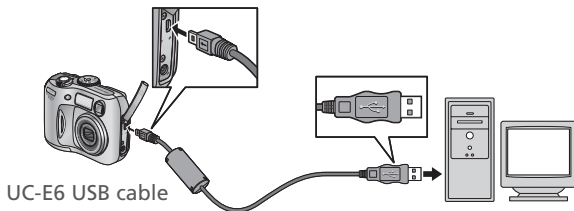
You can now turn the camera on and transfer pictures as described in the *Quick Start Guide*.

Windows 2000 Professional, Windows Millennium Edition (Me), Windows 98 Second Edition (SE), Mac OS 9 (9.0–9.2)

Do NOT select **PTP** when connecting the camera to a computer running one of the above operating systems. 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** 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 (9.0–9.2)
A dialog will be displayed stating that the computer is unable to use the driver needed for the "Nikon Digital Camera E3100_PTP" USB device. Click **Cancel** to close the dialog, and then disconnect the camera.

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Disconnecting the Camera

If **PTP** is selected in the **USB** menu, you can turn the camera off and disconnect the USB cable once transfer is complete. If you have not changed the **USB** option in the camera setup menu from its default setting of **Mass Storage**, you must remove the camera from the system as shown below before turning the camera off or disconnecting the cable.

Windows XP Home Edition/Windows XP Professional

Click the "Safely Remove Hardware" icon ( ) in the taskbar and select **Safely remove USB Mass Storage Device** from the menu that appears.

Windows 2000 Professional

Click the "Unplug or Eject Hardware" icon ( ) in the taskbar and select **Stop USB Mass Storage Device** from the menu that appears.

Windows Millennium Edition (Me)

Click the "Unplug or Eject Hardware" icon ( ) in the taskbar and select **Stop USB Disk** from the menu that appears.

Windows 98 Second Edition (SE)

In My Computer, click with the right mouse button on the removable disk corresponding to the camera and select **Eject** from the menu that appears.
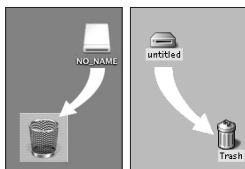
Mac OS X

Drag the "NO_NAME" camera volume into the Trash.

Mac OS 9
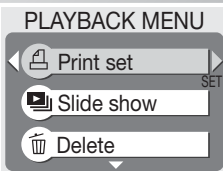
Drag the "untitled" camera volume into the Trash.

Mac OS X   Mac OS 9

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Printing Pictures

Pictures taken with your Nikon digital camera can be printed and enjoyed in the same way as pictures taken with a film camera. Using the **Print set** option in the camera playback menu, you can specify the pictures to be printed, the number of prints, and the information to be included with each print. The pictures can then be printed by inserting the camera memory card into any device that supports Digital Print Order Format (DPOF), be it your personal photo printer or your photofinisher's print system.

To create a digital print order, press the MENU button during playback and select PLAYBACK MENU from the menu selection screen (🖼 68), then follow the steps below.
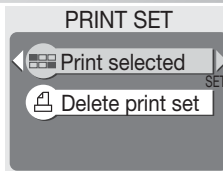
1 PLAYBACK MENU ◀ 凸 Print set ▶ 　 ▣ Slide show　SET 　 🗑 Delete Highlight **Print set**.	**2** PRINT SET ◀ ▦ Print selected ▶ 　 凸 Delete print set　SET Display PRINT SET menu.
3 PRINT SET ◀ ▦ Print selected ▶ 　 凸 Delete print set　SET Highlight **Print selected**.	**4** PRINT SELECTION 　　1　2　3 　　4　5　6 **W T** Set　▣ Done Pictures on memory card displayed as thumbnail images.
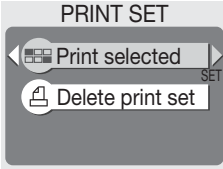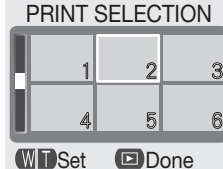
🔍 **"Delete print set"**

To cancel the current print order, highlight **Delete print set** in the PRINT SET menu and press the multi selector to the right. Print marking will be removed from all pictures in the current print order; the pictures themselves will not be deleted.

48

5	PRINT SELECTION
	1 2 3 4 5 6 **W T** Set Done Highlight picture.

6	PRINT SELECTION
W T	1 2 3 4 5 6 **W T** Set Done Select highlighted picture. Selected pictures marked by icon.

7	PRINT SELECTION
W T	1 2 3 4 5 6 **W T** Set Done

Use zoom buttons to specify number of prints (up to 9). To deselect picture, press **W** button when number of prints is 1. Repeat steps 5–7 to select additional pictures. To exit without altering print order, press MENU button.

8

PRINT SET

Done

SET

☑ Date   :ON
☑ Info   :ON

Done
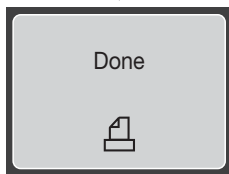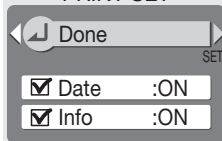
Press ▶ to complete print order and display menu of print options.
• To print date of recording on all pictures in print order, highlight **Date** and press multi selector to right. Check will appear in box next to item.
• To print shutter speed and aperture on all pictures in print order, highlight **Info** and press multi selector to right. Check will appear in box next to item.
• To deselect checked item, highlight and press multi selector to right.
To complete print order and return to playback, highlight **Done** and press multi selector to right. To exit without altering print order, press MENU button.

49

✐ **Print Set**

If you display the PRINT SET menu after creating a print order, the **Date** and **Info** options will be reset.

🔍 **"Date"**

If **Date** is selected, the date of recording will appear on pictures printed using DPOF. The date is based on the photo information recorded with the picture, and will not be correct if the camera clock was set incorrectly when the picture was taken (👿 14–15). The date will not be printed if the print system does not support the DPOF date function.
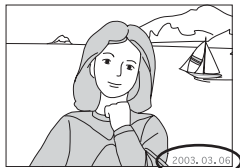
The date stamp recorded when **Date** or **Date and time** is selected for **Date imprint** (👿 63) forms a permanent part of the image and will appear whenever the pictures are printed, even if the printer does not spport the DPOF date function. **Print set** can not be used to print the time and date of recording on pictures recorded when **Date** or **Date and time** is selected for **Date imprint**.

50

🎥 Recording Movies

To record silent movies up to forty seconds in length:
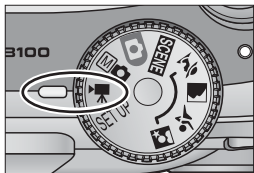
1 Rotate the mode dial to 🎥
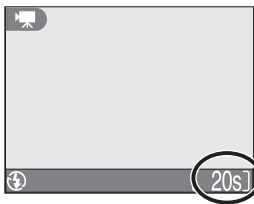
2 Turn the camera on
The exposure count display in the monitor shows the length of the movie that can be recorded.
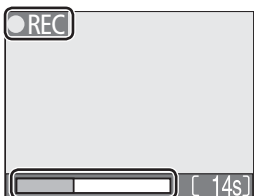
3 Start recording
Press the shutter-release button all the way down to start recording. During recording, a ●**REC** icon will be displayed and progress will be shown by the indicator at the bottom of the monitor.

4 End recording
Press the shutter-release button all the way down a second time to end recording. Recording will end automatically after forty seconds (twenty seconds when **TV movie (640)** is selected; 🕫 52) or when no more memory is available on the memory card.

Movies

🖉 Flash Mode Selection in 🎥 Mode

The flash turns off (🚫) automatically when movie mode is selected.

🖉 Digital Zoom

Digital zoom can not be used while recording is in progress.

51

The type of movie recorded can be selected from the following options:

Option	Description
Small movie (320) (default option)	Movies are recorded at a rate of 15 frames per second. Each frame has a size of 320 × 240 pixels.
TV movie (640)	Movies are recorded at a rate of 15 frames per second. Vertical interlacing is used to achieve a size of 640 × 480 pixels, suitable for television playback. The maximum length for movies recorded using this option is 20 s.
B/W movie (320)	Movies are recorded in black and white at a rate of 15 frames per second. Each frame has a size of 320 × 240 pixels; file size is the same as for small movies.
Sepia movie (320)	Movies are recorded in sepia at a rate of 5 frames per second. Each frame has a size of 320 × 240 pixels; file size is the same as for small movies.

1

MOVIE

Small movie (320)
TV movie (640) SET
B/W movie (320)
Sepia movie (320)

Display MOVIE menu.

2

MOVIE

Small movie (320)
TV movie (640) SET
B/W movie (320)
Sepia movie (320)

Highlight option.

3

Return to shooting mode.

[20s]
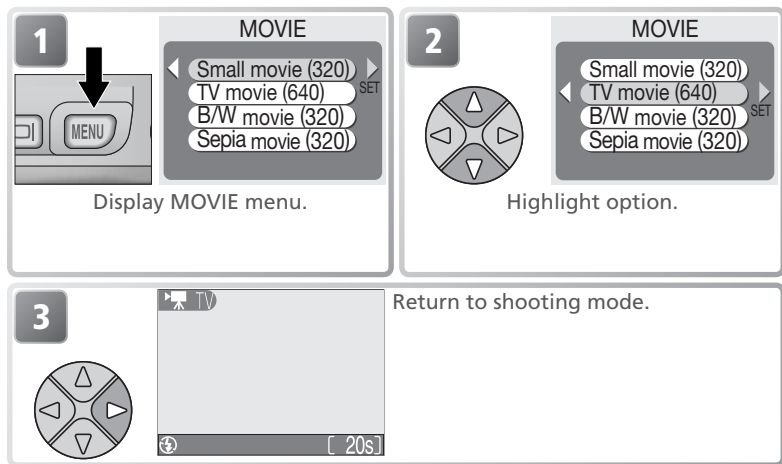
🖉 **Movies**

Movies are recorded as Quick Time movie files with the extension ".MOV" and can be played back on a computer after transfer.

Viewing Movies
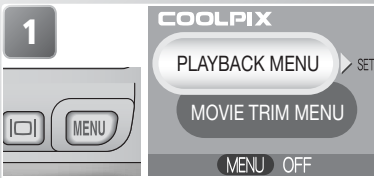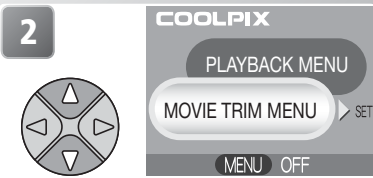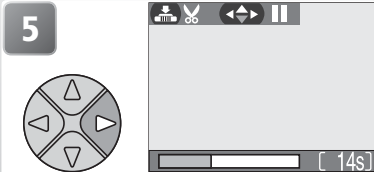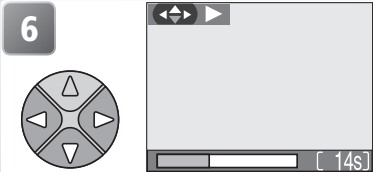
During playback, movies are indicated by a ⚞ icon. When displayed full screen in the monitor, movies can be played back using the zoom buttons and the multi selector. Movies can not be played back when thumbnails are displayed.

```
2003.03.06        100NIKON
14:20             0001.MOV



⚞     (W) ■ (T) ▶[ 20s]
```
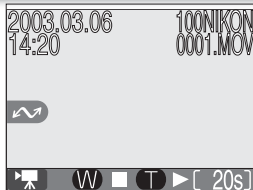
To	Press	Description
Start playback	⊗ (**T**)	When movie ends, final frame is displayed for about one second, followed by still image of first frame.
Stop playback	⊞ (**W**)	Stop movie and return to single-image playback.
Pause/resume playback		Pressing multi selector down while movie is in progress pauses display. To resume, press multi selector down again.
Rewind		Press and hold to rewind movie.
Fast forward		Press and hold to fast forward through movie. Playback ends at last frame; once playback has ended, first frame of movie will be displayed.
Rewind movie one frame		When movie is paused, press multi selector once to left to rewind movie one frame.
Advance movie one frame		When movie is paused, press multi selector once to right to advance movie one frame. If last frame of movie is displayed, pressing multi selector to right ends movie playback and displays first frame of movie.

Movies

53

Editing Movies

To cut the beginning or end from a movie, press the menu button after displaying the movie full frame or highlighting it in thumbnail playback (to skip directly to step 6, display a movie in single-frame playback and press the shutter-release button).

1 COOLPIX / PLAYBACK MENU › SET / MOVIE TRIM MENU / MENU OFF / Display menu selection screen.	**2** COOLPIX / PLAYBACK MENU / MOVIE TRIM MENU › SET / MENU OFF / Highlight MOVIE TRIM MENU.
3 Mark new start/stop with shutter press / Begin trim › / Cancel SET / Confirmation dialog displayed.	**4** Mark new start/stop with shutter press / Begin trim › / Cancel SET / Highlight **Begin trim** (to exit without trimming movie, highlight **Cancel** and press multi selector to right).
5 [14s] / Begin movie playback.	**6** [14s] / Using multi selector to pause, re-wind, and advance movie, display first frame you want to keep.

🖉 Editing Movies

Any sections cut from a movie are permanently deleted and can not be recovered. Be sure that the cropped portion of the movie does not contain frames you would like to keep. Movies can not be trimmed to a length of less than five frames.

54

7

🗑️ ✂️ ◄◆► ❚❚

[8s]

Delete all frames before current frame. If movie is paused, press multi selector down to resume playback.

8

◄◆► ►

[8s]
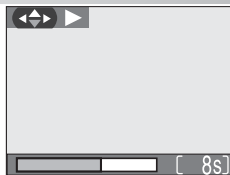
Display last frame you want to keep.

9

Save trimmed movie?

No
Review movie ▷ SET
Yes

Delete all frames after current frame. Confirmation dialog will be displayed.

10

Save trimmed movie?

No
Review movie ▷
Yes SET

Highlight **Review** (select **Yes** and press multi selector to right to skip to Step 13, **No** to exit without editing movie).

11

◄◆► ❚❚ W ☐

[5s]
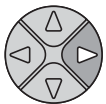
View edited movie (use multi selector to pause, rewind, and advance, or press ☐/W to end playback).

12
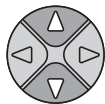
Save trimmed movie?

No
Review movie SET
Yes ▷

Highlight **Yes** (to exit without editing movie, highlight **No** and press multi selector to right).

13
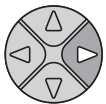
WARNING!
PLEASE WAIT FOR
THE CAMERA TO FINISH
RECORDING
⏳

Save edited movie to memory card. Sections cut from beginning and end of movie are discarded.

Movies

55
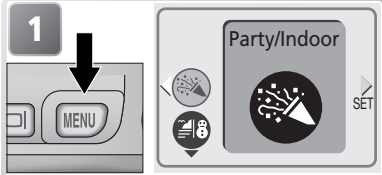
Using the Shooting Menu

The shooting menu contains the following options:

Option	Description	🕮
Image quality/size	Choose image size and quality.	58–59
White balance (M🄰 mode only)	Match white balance to your light source.	60–61
Exp. +/–	Adjust exposure for very bright, very dark, or high-contrast subjects.	62
Date imprint	Imprint pictures with the date and/or time of recording.	63
Continuous (M🄰 mode only)	Take pictures one at a time or in a sequence.	64
BSS (M🄰 mode only)	Turn the Best Shot Selector (BSS) on or off.	65
Image sharpening (M🄰 mode only)	Control how much outlines in your pictures are sharpened.	66
CF card format	Format memory cards for use in the camera.	67
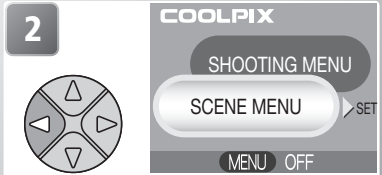
In 🄰 (auto) and M🄰 (manual) modes, the shooting menu is displayed when the MENU button is pressed. To display the shooting menu in SCENE (scene) or assist (🏃, 🏔, 🌹, 🎨) modes:
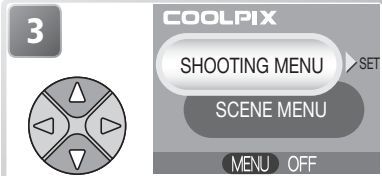
1
Display scene (SCENE mode) or framing assist (🏃, 🏔, 🌹, 🎨 modes) menu.

Party/Indoor

2
COOLPIX
SHOOTING MENU
SCENE MENU → SET
MENU OFF
Display menu selection screen.
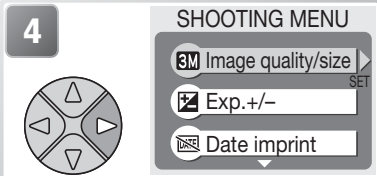
3
COOLPIX
SHOOTING MENU → SET
SCENE MENU
MENU OFF
Highlight SHOOTING MENU.

4
SHOOTING MENU
🔳 Image quality/size
SET
🄴 Exp.+/–
📅 Date imprint
Display shooting menu.

56

In 🎥 (movie) mode, pressing the MENU button displays the movie menu (🎥 52). The shooting menu is not available.

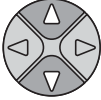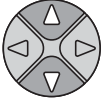To make a selection from the shooting menu:

1	SHOOTING MENU
	🎞 Image quality/size
	🔲 Exp.+/–
	📅 Date imprint

Highlight menu item.

2	EXP.+/–
	+ 0.3
	🔲 0
	– 0.3

Display options.

3	EXP.+/–
	+ 0.7
	🔲 + 0.3
	0

Highlight option (to return to previous step, press multi selector to left).

4	SHOOTING MENU
	🎞 Image quality/size
	🔲 Exp.+/–
	📅 Date imprint

Make selection. To exit menu and return to shooting mode, press MENU button.

The Shooting Menu

57

Image Quality/Size

Pictures taken with a digital camera are recorded as image files. The size of the files, and with it the number of images that can be recorded on the memory card, depends on the *size* and *quality* of the images. Before shooting, choose image quality and size according to how you plan to use the picture.

IMAGE QUALITY/SIZE

8M*	High (2048*)
8M	Normal (2048)
2M	Normal (1600)

SET

Option	Size (pixels)	Quality*	Description	Print size (cm)†
8M* **High (2048*)**	2,048 × 1,536	FINE (1:4)	High quality, suitable for enlargements or high-quality prints.	17 × 13 (7″ × 5″)
8M **Normal (2048)**	2,048 × 1,536	NORMAL (1:8)	Suited to print sizes of up to A4 (roughly 10″ × 8″).†	17 × 13 (7″ × 5″)
2M **Normal (1600)**	1,600 × 1,200	NORMAL (1:8)	Suited to print sizes ranging from large photo album size to A5 (roughly 8″ × 6″).†	13 × 10 (5″ × 4″)
PC **PC screen (1024)**	1,024 × 768	NORMAL (1:8)	Suited to printing at smaller sizes (for example, in a letter or report), or to display on computer monitors 17″ or larger.	9 × 7 (3.5″ × 2.5″)
TV **TV screen (640)**	640 × 480	NORMAL (1:8)	Can be displayed full-screen on a television or 13″ monitor. Suited to distribution by e-mail or the web.	5 × 4 (2″ × 1.5″)

* To reduce the amount of memory each shot occupies, pictures are compressed as they are saved to the memory card. Compression selectively reduces the quality of the image. The more a picture is compressed, the more noticeable this loss of quality is likely to be. The figures in parentheses show the approximate compression ratio for each setting.

† All figures are approximate. Dimensions in "Description" column assume a printer resolution of approximately 200 dpi, dimensions in "Print size" column a resolution of approximately 300 dpi.

If in doubt, choose **Normal (2048)** or **Normal (1600)**. Pictures can be reduced or cropped when played back in the monitor after shooting (👁 40).

58

The following table shows the approximate number of pictures that can be stored on 16- and 32-megabyte memory cards at different image quality/size settings.

Image quality/size	16-MB card	32-MB card
High (2048*)	10	20
Normal (2048)	19	39
Normal (1600)	31	62
PC screen (1024)	69	138
TV screen (640)	147	287

* All figures are approximate. File size of pictures depends on scene recorded, producing wide variations in number of images that can be stored.

Image Quality/Size and Number of Exposures Remaining

The figure shown in the monitor for the number of exposures remaining is only an approximation. The file size of compressed images varies with the scene recorded, producing wide variations in the number of pictures that can be stored on the memory card.

Image Size

Smaller images create smaller files suited to transmission by e-mail or use in web pages. When printed at larger sizes, however, small images will be rough and uneven in appearance.

Print Size

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

Image Quality/Size

The current image quality/size setting is shown by an icon at the bottom left corner of the monitor.

White Balance (M📷 Only)

White balance is used to preserve natural colors under different types of lighting. In 📷 (auto), scene, and assist modes, white balance is set automatically by the camera in response to lighting conditions and the selected scene. In M📷 (manual) mode, you can choose white balance from the following options:

WHITE BALANCE

A Auto
PRE White bal. preset
☀ Daylight
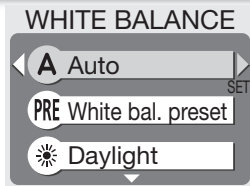
Option	Description
A Auto	White balance automatically adjusted to suit lighting conditions. Best choice in most situations.
PRE White bal. preset	Gray object used as reference to set white balance under unusual lighting conditions.
☀ Daylight	White balance adjusted for direct sunlight.
Incandescent	Use under incandescent lighting.
Fluorescent	Use under most types of fluorescent lighting.
Cloudy	Use when taking pictures under overcast skies.
⚡ Speedlight	Use with the flash.

Preset White Balance

Preset white balance is used 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). When PRE (**White bal. preset**) is selected from the white-balance menu, the camera will zoom in and the menu shown above at right will be displayed in the monitor.

WHITE BAL PRESET

◀ Cancel ▶
Measure SET

Option	Description
Cancel	Recalls the most recent value for preset white balance from memory and sets white balance to this value.
Measure	To measure a new value for white balance, place a gray object, such as a piece of cardboard, 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 white balance (shutter will be released and camera will return to original zoom position, but no picture will be recorded).

📷 White Balance

At settings other than auto, white balance is shown by an icon in the monitor.

3M   ⚡ AUTO [19]

61
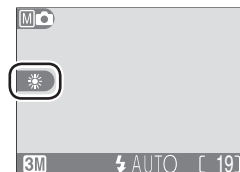
Exp. +/−

The **Exp. +/−** (*exposure compensation*) menu is used to alter exposure from the value suggested by the camera, making pictures brighter or darker. Exposure can be adjusted in the range −2.0 to +2.0 EV.

EXP.+/−

+ 0.3

0

SET

− 0.3
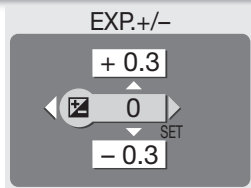
Choosing an Exposure Compensation Value

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

Exposure Compensation

At settings other than 0, exposure compensation is shown in the monitor.
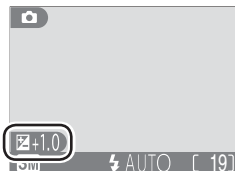
Date Imprint

The *date imprint* option is used to imprint the date or the date and time of recording on pictures as they are recorded to the memory card. It can not be used to imprint a date stamp on pictures after recording.

DATE IMPRINT

▣ Off

🅳 Date

🅳🕒 Date and time

SET
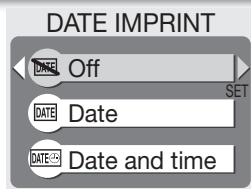
Option	Description
▣ **Off**	Time and date do not appear on pictures.
🅳 **Date**	Date is imprinted at bottom right corner of all pictures taken while this option is in effect.
🅳🕒 **Date and time**	Date and time are imprinted at bottom right corner of all pictures taken while this option is in effect.

🖉 Image Quality/Size

Data imprinted at an **Image quality/size** setting of **TV screen (640)** may be difficult to read. Choose a setting of **PC screen (1024)** or larger when using the date imprint option.

🔍 Date Imprint

Imprinted data forms a permanent part of the image and will appear whenever the image is printed, regardless of whether the date option is chosen in the **Print set** menu. At settings other than **Off**, a **DATE** icon is displayed in the monitor during shooting. Check before shooting to make sure that the camera clock is set to the correct time and date.
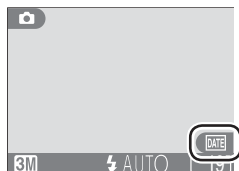
The date is recorded in the order selected in the DATE menu. You will not be able to select **Date** or **Date and time** if the camera clock has not been set.

🔍 Print Set

The **Print set** option can be used to print the date and time of recording on images taken with **Off** selected in the DATE IMPRINT menu (📖 48–50).

The Shooting Menu

63

Continuous ([M][icon] Only)

Use the options in this menu to capture a fleeting expression on a portrait subject, photograph a subject that is moving unpredictably, or capture motion in a series of pictures.

CONTINUOUS

- [S] Single
- [icon] Continuous
- [icon] Multi-Shot 16-1

SET

Option	Description
[S] **Single**	Camera takes one picture each time shutter-release button is pressed.
[icon] **Continuous**	Camera takes pictures continuously while shutter-release button is held down. Pictures are recorded at rate of about three frames every two seconds. Rate of recording will drop when [icon] icon is displayed.
[icon] **Multi-Shot 16-1**	Each time shutter-release button is pressed, camera takes sixteen consecutive images 400×300 pixels in size and arranges them in four rows to form a single picture.
[icon] **Multi-Shot 16-2**	Camera takes pictures at a rate of about fifteen frames per second while shutter-release button is held down. Shooting ends after seven seconds or when you release shutter-release button. From these pictures, camera selects sixteen frames at regular intervals and arranges them in four rows to form a single picture 1,600 × 1,200 pixels in size. Remaining images are discarded.

[pencil icon] Restrictions on Camera Settings

At settings other than **Single**, the flash turns off automatically and focus, exposure, and auto white balance for all photos are determined by the first picture in each series. When **Multi-Shot 16-1** or **Multi-Shot 16-2** is selected, digital zoom can not be used and **Image quality/size** is fixed at **Normal (1600)**. **Multi-Shot 16-1** and **Multi-Shot 16-2** can not be selected when digital zoom is in effect. BSS is available only at a setting of **Single**.

[icon] Continuous

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

[icon]

3M   [icon]   [19]

64

Best Shot Selector (⌨ Only)

When the "Best Shot Selector" (BSS) is on, the camera takes pictures as long as the shutter-release button is held down, to a maximum of ten. These images are then compared and the sharpest picture (the picture with highest level of detail) saved to memory card. BSS is recommended for situations in which inadvertent camera movement can produce blurred pictures, for example when:

BEST SHOT SELECTOR

◄ BSS Off ►
SET
BSS On

• the camera is zoomed in
• lighting is poor and the flash can not be used
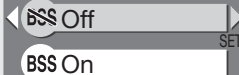
Option	Description
BSS **Off**	BSS off; camera functions normally.
BSS **On**	BSS on. Flash turns off automatically and focus, exposure, and auto white balance for all photos are determined by the first picture in each series.

✐ Notes on BSS

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.

✐ "Continuous" and BSS

CONTINUOUS is automatically set to **Single** when BSS is on. Choosing another option for CONTINUOUS cancels BSS.

✐ The Self-Timer

BSS will not take effect when the self-timer is on, even if **On** is selected in the BEST SHOT SELECTOR menu.

🔍 BSS

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

⌨

BSS

3M   ⚡   [19]

65

Image Sharpening (M◻ Only)

The camera automatically processes pictures to emphasize the borders between light and dark areas of the picture, making edges seem sharper. As this processing takes place after shooting, its effects can not be previewed in the monitor, but they will be visible in the final picture. In M◻ (manual) mode, the image-sharpening menu gives you control over the amount of sharpening performed.

```
IMAGE SHARPENING
◄ A◇ Auto        ►
                 SET
  ◆ High
  ◇ Normal
```
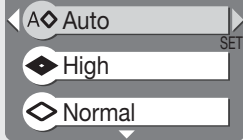
Option	Description
A◇ **Auto**	Camera sharpens edges for optimal results; amount of sharpening varies from shot to shot.
◇ **High**	Pictures processed to increase sharpness, making edges more distinct.
◇ **Normal**	Camera performs same standard level of sharpening on all images.
◇ **Low**	Sharpening reduced below normal level.
◇ **Off**	No sharpening performed.

🖉 **Taking Pictures for Retouching on a Computer**

When taking pictures that will later be retouched, choose **Off**.

🖉 **Image Sharpening**

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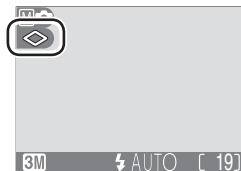
CF Card Format

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.
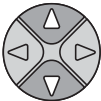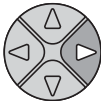
CF CARD FORMAT
WARNING!
All images will be deleted!
No
Format   SET

Before Formatting

Formatting memory cards permanently deletes all data they contain, including protected pictures and any other data that may be on the card. Before formatting, be sure to transfer to a computer any pictures you would like to keep (45–47).

Selecting **CF card format** displays the confirmation dialog shown above. To format the memory card:

1

CF CARD FORMAT
WARNING!
All images will be deleted!
No
Format   SET

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

2

FORMATTING

⌛

Begin formatting. While formatting is in progress, message shown above will be displayed.

✔ *During Formatting*

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

Using the Playback Menu

The playback menu contains the following options:

Option	Description	🔆
Print set	Select pictures for printing on a DPOF-compatible device; specify number of copies and information to be included on prints.	48–50
Slide show	View pictures on the memory card in an automatic slide show.	69–71
Delete	Delete all or selected pictures.	72–73
Protect	Protect selected pictures from accidental deletion.	74
Auto transfer	Mark all or selected pictures for transfer to a computer; turn auto transfer marking on or off.	75–76

To display the playback menu:

1	COOLPIX PLAYBACK MENU ›SET PIC. ENHANCE MENU MENU OFF Display menu selection screen.	2	PLAYBACK MENU ◄ 凸 Print set ► SET 🖼 Slide show 🗑 Delete ▼ Display playback menu.

68
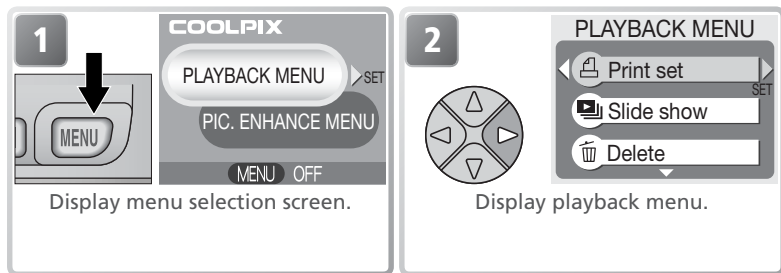
Slide Show

This option is used to play pictures back in an automated "slide show" with about three seconds between each picture.

SLIDE SHOW

▣▤▥ Select all

▦▦▦ Select image(s)

SET

Option	Description
▣▤▥ **Select all**	View all pictures in order recorded.
▦▦▦ **Select image(s)**	View specified pictures in order selected.

Viewing All Pictures in the Order Recorded

1

SLIDE SHOW

◀ ▣▤▥ Select all ▶

▦▦▦ Select image(s)

SET

Highlight **Select all**.

2

SLIDE SHOW

Pause ⇨ ◀✦▶

◀ ▶ Start ▶

SET

☐ Loop

Starting screen displayed.

3

SLIDE SHOW

Pause ⇨ ◀✦▶

◀ ▶ Start ▶

SET

☐ Loop

Highlight **Start**.

4

Begin slide show.
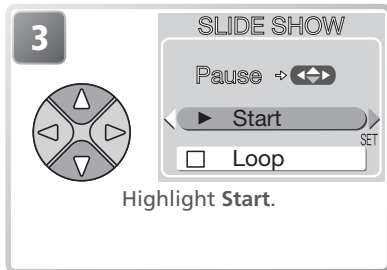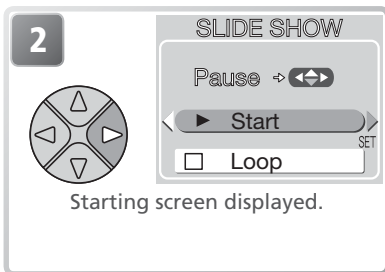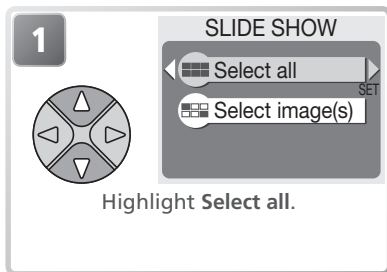
"Loop"

If **Loop** is selected in the starting screen, the slide show will repeat automatically. To select or deselect the loop option, highlight **Loop** and press the multi selector to the right. A check mark next to **Loop** indicates that the loop option is selected.

SLIDE SHOW

Pause ⇨ ◀✦▶

▶ Start

☑ Loop

69
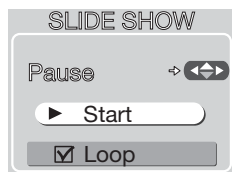
Viewing Chosen Images in the Order Selected

1	SLIDE SHOW
	☰ Select all
	⊞ Select image(s) SET
Highlight **Select image(s)**.	

2	SELECT IMAGE(S)
	1 2 3
	4 5 6
	W T Set ▶ Done
Pictures on memory card displayed as thumbnail images.	

3	SELECT IMAGE(S)
	1 2 3
	4 5 6
	W T Set ▶ Done
Highlight picture.	

4	SELECT IMAGE(S)
	1 1 2 3
	4 5 6
	W T Set ▶ Done
Select highlighted picture. Selected picture marked by number showing position in slide show.	

5	SELECT IMAGE(S)
	1 1 2 3
	⇒ 2 4 5 3 6
	W T Set ▶ Done
Rotate selected picture 90° right (→). Press again to rotate 90° left (←), again to return to original orientation.	

6	Repeat steps 3–5 to select additional pictures. Pictures will be played back in order selected. To deselect picture, highlight and press **W** button. Remaining pictures in selection will be renumbered. To exit without changing selection, press (MENU) button.

7	SLIDE SHOW
	Pause ➔ ◄◆►
	▶ Start SET
	☐ Loop
Starting screen displayed. Start slide show as described in steps 3–4 of "Viewing All Pictures in the Order Recorded."	

The following operations can be performed during the show:

To	Press	Description
Pause slide show	△ ◁ ▷ ▽	Menu shown at right will be displayed. Highlight **Restart** and press multi selector to right to resume show. Highlight **End** and press multi selector to right to end show.
Skip to next frame	△ ◁ ▷ ▽	Press multi selector to right to skip to next slide. Hold multi selector down to fast forward through show.
Return to previous frame	△ ◁ ▷ ▽	Press multi selector to left to return to previous slide. Hold multi selector down to rewind through show.
End slide show	(MENU)	End slide show and return to playback.

SLIDE SHOW

End ▷
Restart)SET

71

Delete

The delete menu contains the following options:

Option	Description
🗑 **Erase selected images**	Delete selected pictures.
🗑 **Erase all images**	Delete all pictures.

DELETE

🗑 Erase selected images
SET
🗑 Erase all images

Deleting Selected Pictures

1

DELETE

🗑 Erase selected images
SET
🗑 Erase all images

Highlight **Erase selected images**.

2

ERASE SELECTED IMAGES

| 1 | 2 | 3 |
| 4 | 5 | 6 |

W T Set ▶ Done

Pictures on memory card displayed as thumbnail images.

3

ERASE SELECTED IMAGES

| 1 | 2 | 3 |
| 4 | 5 | 6 |

W T Set ▶ Done

Highlight picture.

4

ERASE SELECTED IMAGES

| 1 🗑 2 | 3 |
| 4 | 5 | 6 |

W T Set ▶ Done

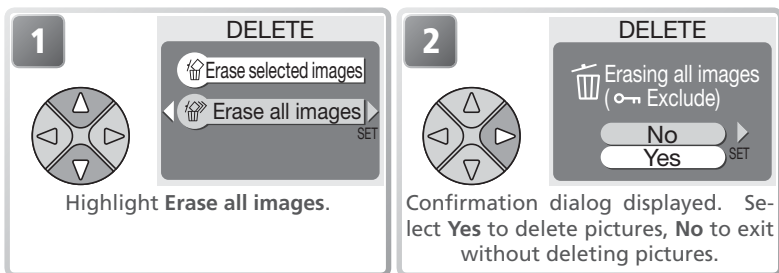Select highlighted picture. Selected pictures marked by 🗑 icon.

5 Repeat steps 3 and 4 to select additional pictures. To deselect picture, highlight and press **W** or **T** button. To exit without deleting pictures, press MENU button.

72

6

DELETE

🗑 Erase   1 image(s)?

No
Yes   SET

Confirmation dialog displayed. Select **Yes** to delete pictures, **No** to exit without deleting pictures.
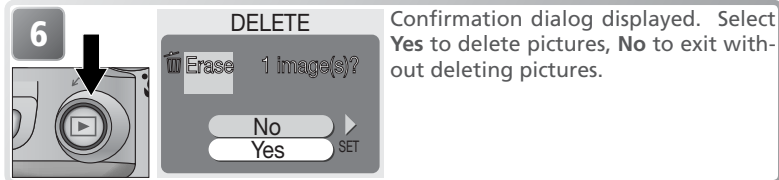
Deleting All Pictures

To delete all unprotected pictures on the memory card:

1

DELETE

🗑 Erase selected images
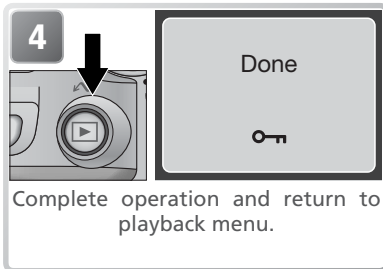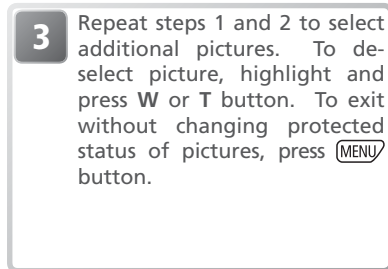🗑 Erase all images
SET

Highlight **Erase all images**.

2

DELETE

🗑 Erasing all images
(⊶ Exclude)

No
Yes   SET

Confirmation dialog displayed. Select **Yes** to delete pictures, **No** to exit without deleting pictures.
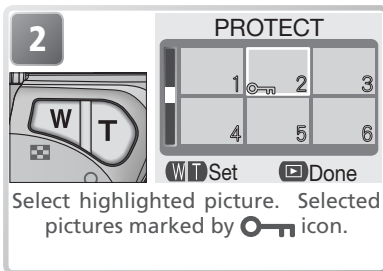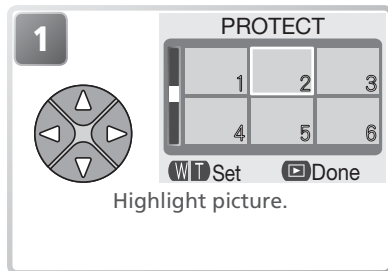

✐ **Before Deletion**

Once deleted, pictures can not be recovered. Be sure that any pictures you would like to keep have been transferred to a computer (🖥 45–47).

✐ **Protected Pictures**

Pictures marked with a ⊶ icon are protected and can not be deleted (🖥 74).

73

Protect

This option is used to protect pictures from accidental deletion. Protected files can not be deleted by pressing the 🗑 button or using the options in the **Delete** menu. Note, however, that protected pictures *will* be deleted when the memory card is formatted.

PROTECT

| 1 | 2 | 3 |
| 4 | 5 | 6 |

W T Set   ▶ Done

1 ![directional pad]	PROTECT 1 2 3 4 5 6 W T Set ▶ Done Highlight picture.	**2** ![W T buttons]	PROTECT 1 2 3 4 5 6 W T Set ▶ Done Select highlighted picture. Selected pictures marked by ⚿ icon.

3 Repeat steps 1 and 2 to select additional pictures. To deselect picture, highlight and press **W** or **T** button. To exit without changing protected status of pictures, press MENU button.	**4** ![playback button] Done ⚿ Complete operation and return to playback menu.

Auto Transfer

This option is used to mark pictures for transfer to a computer and to turn automatic transfer marking on and off.

AUTO TRANSFER

◄ ⌁ All on ►

⌁ All off

⊞ Select image(s)

SET
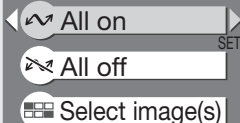
Option	Description
⌁ **All on** (default option)	All pictures on memory card are marked for transfer. Pictures taken while this option is in effect will be marked for transfer.
⌁ **All off**	Remove transfer marking from all pictures on memory card. Pictures taken while this option is in effect will not be marked for transfer.
⊞ **Select image(s)**	Mark selected pictures for transfer.

🖉 **Transferring More than 999 Pictures**

No more than 999 pictures can be marked for transfer. If the memory card contains more than 999 pictures, transfer all pictures using Nikon View. See the *Nikon View Reference Manual* (on CD) for details.

🖉 **Hidden Pictures**

Some Nikon digital cameras allow you to hide pictures during playback. Hidden pictures can be viewed on the COOLPIX 3100 but can not be selected for transfer.

🔍 **The ⌁ Icon**

Pictures that have been selected for transfer are identified by a ⌁ icon.

2003.03.06
14:20
100NIKON
0001.JPG

⌁

3M [1/ 4]
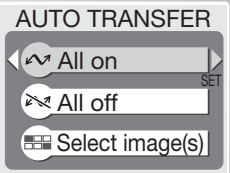
1
2
3
4
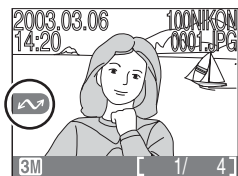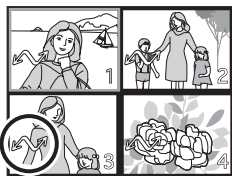
Full-screen playback   Thumbnail playback

When you connect the camera to a computer via the UC-E6 USB cable and press the ⌁ button to transfer pictures, only pictures marked with a ⌁ icon will be transferred. Note that the camera ⌁ button can not be used to transfer pictures in Mac OS X version 10.1.2. Use Nikon View to transfer pictures.
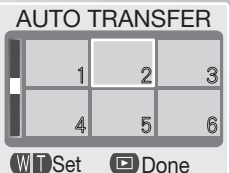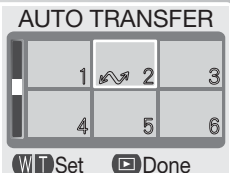
75

Marking Selected Pictures for Transfer

1
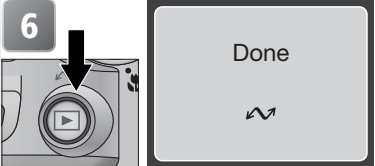
AUTO TRANSFER

◄ ↗ All on ▶

✕ All off

▦ Select image(s)

SET

Highlight **Select image(s)**.

2

AUTO TRANSFER

1 2 3

4 5 6

W T Set   ▣ Done

Pictures on memory card displayed as thumbnail images.

3

AUTO TRANSFER

1 2 3

4 5 6

W T Set   ▣ Done

Highlight picture.

4

AUTO TRANSFER

1 ↗ 2 3

4 5 6

W T Set   ▣ Done

Select highlighted picture. Selected pictures marked by ↗ icon.

5 Repeat steps 3 and 4 to select additional pictures. To de-select picture, highlight and press **W** or **T** button. To exit without changing transfer status of pictures, press MENU button.

6

Done

↗

Complete operation.

### 🖉 Marking Pictures for Transfer with Other Cameras

Pictures selected for transfer with another model of Nikon camera can not be transferred when the memory card is inserted in the COOLPIX 3100. Use the COOLPIX 3100 to reselect the pictures.

Using the Setup Menu

The setup menu contains the following options:

Option	Description	![symbol]
Welcome screen	Choose the welcome screen displayed when the camera is turned on.	78
Language	Choose a language for camera menus and messages.	14–15
Date	Set the camera clock.	14–15
Brightness	Adjust monitor brightness.	79
Volume	Turn the camera speaker on or off.	79
Auto off	Choose how long the monitor will remain on before turning off automatically to save power.	79
CF card format	Format memory cards for use in the camera.	67
USB	Choose **PTP** or **Mass Storage** according to your computer's operating system.	45
Video mode	Select the video mode from NTSC and PAL.	80
Reset all	Restore camera settings to default values.	80

When you rotate the mode dial to SET UP (setup), the setup menu will be displayed in the monitor. To make a selection from the setup menu, use the multi selector as described in "The Shooting Menu" (📖 56).

The Setup Menu
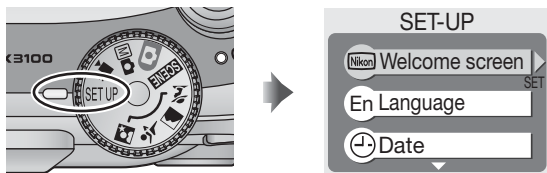
🔍 **"Language" and "Date"**

The **Language** and **Date** options are described in "First Steps" (📖 14–15).

🔍 **"CF Card Format"**

The **CF card format** option is described in "The Shooting Menu" (📖 67).

🔍 **"USB"**

The **USB** option is described in "Viewing Pictures on a Computer" (📖 45).

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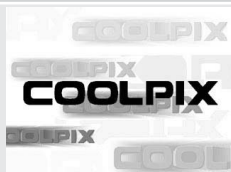# Welcome Screen

This option is used to choose the welcome screen displayed when the camera is turned on.

WELCOME IMAGE SELECT

◀ Disable welcome
Coolpix
Welcome image ▶ SET

Option	Description
Disable welcome	No welcome screen is displayed when camera is turned on.
Coolpix	Image shown at right is displayed when camera is turned on.
Welcome image	Select this option to choose welcome screen from pictures currently stored on camera memory card. Highlight picture using multi selector, press ▶ to select. To exit without changing welcome screen, press MENU button.

WELCOME SCREEN

1	2	3
4	5	6

▶ Done
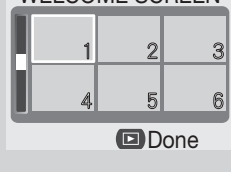
📖 Small Pictures and Cropped Copies

Resized copies created with the small picture and cropping options can only be selected for the welcome screen if they are 640 × 480 pixels or larger.

🔎 "Welcome Image"

When **Welcome image** is selected, the chosen picture will appear at startup even when the memory card containing the image is removed from the camera. If you select **Welcome image** after choosing a custom welcome screen, the confirmation dialog shown at right will be displayed. Select **Yes** to choose a new picture for the welcome screen, **No** to exit leaving the welcome screen unchanged.

WELCOME IMAGE SELECT

Replace original image?

No
Yes SET

78

Brightness

Press the multi selector up or down to increase or decrease the brightness of the monitor by moving the arrow to the left of the display up or down. Press the multi selector left or right to return to the setup menu.

BRIGHTNESS

Volume

This option is used to enable or disable the sounds played when an error occurs or when you turn the camera or monitor on, select a new mode, make a selection from menus, or release the shutter.

VOLUME

On
Off
SET

Auto Off

When operated on battery power, the camera will enter standby mode if no operations are performed for the length of time selected in the AUTO OFF menu. Choose from thirty seconds (**30 s**, the default setting), one minute (**1 m**), five minutes (**5 m**), or thirty minutes (**30 m**). Regardless of the option chosen in the AUTO OFF menu, the monitor will remain on for three minutes when menus are displayed. When powered by an AC adapter, the camera will enter standby mode if no operations are performed for thirty minutes.

AUTO OFF

30 s
1 m
5 m
30 m
SET

79
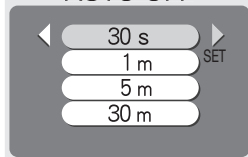
Video Mode

Before connecting your camera to a video device such as a television or VCR (🖼 44), choose a video mode setting that matches the video standard used in the device. Your Nikon digital camera supports NTSC and PAL standards.

VIDEO MODE

◀ NTSC ▶
PAL SET

Reset All

Select this option to restore the settings listed below to their original state.

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

RESET ALL

Reset all settings
to default values

No ▶
Reset SET

The following settings are affected:

Setting	Default	Setting	Default
🏃 Portrait assist	PORTRAIT	Image quality/size	Normal (2048)
🏔 Landscape assist	LANDSCAPE	White balance	Auto
🏃 Sports assist	SPORTS	Exp. +/–	±0
🌃 Night portrait assist	NIGHT PORTRAIT	Date imprint	Off
		Continuous	Single
SCENE Scene	Party/Indoor	Best Shot Selector	Off
▶🎬 Movie	Small movie (320)	Image sharpening	Auto
Flash mode	Auto*	Auto transfer	All on
Self-timer	Off	Welcome screen	Coolpix
Macro close-up	Off	Brightness	3
* 🔆 👁 may be selected in 🔲 mode.		Volume	On
		Auto off	30 s

Choosing **Reset** also clears the current file number (🖼 23) from memory. Numbering will continue from the lowest number available on the memory card. All other settings are unaffected.

🔎 Resetting File Numbering to 0001

To reset file numbering (🖼 23) to 0001, select **Reset All** after either deleting all pictures (🖼 73) or formatting the memory card (🖼 67).

Optional Accessories

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

Rechargeable battery	Additional EN-MH1 NiMH batteries are available from your retailer or local Nikon representative
Battery charger	MH-70 battery charger for EN-MH1 batteries
AC adapter	EH-61 AC adapter
Carrying case	CS-CP14 soft case
CompactFlash™ memory card adapters	EC-AD1 PC-card adapter
Optional Speedlight	SB-30 Speedlight
Flash bracket	SK-9 flash bracket for SB-30 Speedlights

When mounted on the SK-9 flash bracket as shown below, the compact Nikon SB-30 Speedlight can be used for wireless sync flash photography, supplementing the camera's built-in flash (set the SB-30 to Wireless Slave A). For more information, see the instructions provided with the SB-30.

COOLPIX 3100

SB-30

SK-9

Technical Notes

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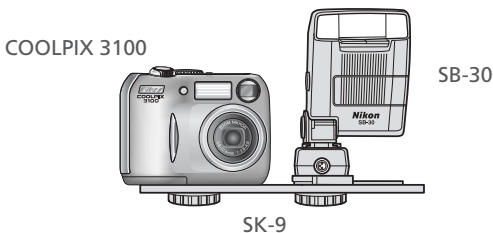
Caring for Your Camera

Cleaning

Lens
One key to cleaning the lens is to not touch it with your fingers. Remove dust or lint with 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 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
Remove dust or lint with a blower. To remove fingerprints and other stains, clean the monitor with a soft, dry cloth, being careful not to apply pressure.

✔ *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.

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.

✐ 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 using 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 smear may appear in movies.
- Images in the monitor may be difficult to see in a bright light.
- The monitor is lit by an LED backlit. Should the monitor begin to dim or flicker, contact your Nikon service representative.

Storage

Turn the camera off when not in use and check that the power-on lamp is off before putting the camera away. To prevent mold or mildew, store the camera in a dry, well-ventilated area. If you will not be using the product for long periods, remove the batteries to prevent leakage and store the camera in a plastic bag containing a desiccant. Do not store the camera case (available separately) in a plastic bag, as this may cause the material to deteriorate. Note that desiccant gradually loses its capacity to absorb moisture and should be replaced at regular intervals. Do not store your camera with naptha 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 below –10 °C (14 °F) or above 50 °C (122 °F; for example near a space heater or in a closed vehicle on a sunny day)
• 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.

Store the batteries in a cool, dry place.

🖉 Batteries

• When turning the camera on, check that the batteries are charged. The monitor will display a warning when batteries are low.
• Carry a fresh CRV3 battery as a replacement when taking pictures on important occasions. You may find it difficult to purchase replacement batteries on short notice.
• On cold days, the capacity of batteries tends to decrease. Be sure that the batteries are fully charged before heading outside to take pictures in cold weather. Keep spare batteries in a warm place and exchange as necessary. Once warmed, a cold battery may recover some of its charge.

• If the battery terminals are dirty, wipe them off with a clean, dry cloth before use.
• Repeatedly recharging NiMH batteries before they are fully exhausted may result in a "memory" effect, causing the batteries to lose their charge quickly. The batteries will return to normal after being fully discharged and recharged.
• NiMH batteries gradually lose their charge when left unused. We recommend that you charge NiMH batteries immediately before use.
• Used batteries are a valuable resource. Please recycle used batteries in accordance with local regulations.

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Error Messages

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

Display	Problem	Solution	☼
⊕ (Flashes)	Clock not set.	Set clock to current date and time.	15
WARNING!! BATTERY EXHAUSTED	Batteries exhausted.	Turn camera off and replace batteries.	8
AF● (● flashes red)	Camera cannot focus.	Use focus lock to focus on another subject at same distance, then recompose picture.	21
🖐	Slow shutter speed. Pictures may be blurred.	Use flash, or steady camera using tripod, by placing camera on level surface, or by holding camera in both hands with elbows against torso.	18, 24–25
WARNING!! Please wait for camera to finish recording ⧗	Camera turned off or ▶ button pressed during recording.	Message clears from display automatically when recording is complete.	21
MONITOR OFF	Monitor has been left on for an extended period, activating internal circuit protection.	Use viewfinder or turn camera off and wait a few minutes before turning camera on again.	—
NO CARD PRESENT 🂠	Camera can not detect memory card.	Turn camera off and confirm that memory card is correctly inserted.	10–11
🂠 CARD IS NOT FORMATTED FORMAT NO ▷	Memory card has not been formatted for use in camera.	Press multi selector up to highlight **FORMAT** and press to right to format card, or turn camera off and replace card.	67, 10–11
THIS CARD CANNOT BE USED 🂠 WARNING!! This CF card cannot be read 🂠	Error accessing memory card.	• Use approved card. • Check that connectors are clean. If card is damaged, contact retailer or Nikon representative.	11 —

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Display	Problem	Solution	⏱
OUT OF MEMORY ⏺	*Camera in shooting mode*: Insufficient memory to record pictures at current settings.	• Choose lower image quality/ size. • Delete pictures. • Insert new memory card.	58–59 22–23, 72–73 10
	Camera connected to computer: Not enough space on memory card to record information need for transfer.	Disconnect camera, delete unwanted pictures, and try again.	22–23, 72–73
IMAGE CANNOT BE SAVED ⏺	• Memory card has not been formatted for use in camera, or error occurred while saving picture.	• Reformat memory card.	67
	• Camera has run out of file numbers.	• Insert new memory card or delete pictures.	10, 22, 23, 72–73
	• Camera can not copy picture using small picture, crop, or picture enhance options.	• Copies can not be created from movies or from other copies.	41–43
CARD CONTAINS NO IMAGES	No pictures on memory card.	Press ▶ button to return to shooting mode.	22
FILE CONTAINS NO IMAGE DATA	File created by computer or different make of camera.	View file on computer or correct make of camera.	—
COMMUNICATIONS ERROR	USB cable disconnected or memory card removed while pictures are being transferred to computer.	If error appears in computer monitor, click **OK** to exit Nikon View. Turn camera off, reconnect cable or replace memory card, then turn camera on and transfer pictures.	45–47
	USB option set incorrectly.	Turn camera off and disconnect cable, then choose new USB setting in camera setup menu and reconnect camera. If error persists, use Nikon View ⟳ button to transfer pictures.	45

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Error Messages

Display	Problem	Solution	👁
NO IMAGES ARE MARKED FOR TRANSFER	No pictures selected for transfer when ▶ button pressed to transfer pictures to computer.	Disconnect camera and select at least one picture for transfer, then begin transfer again.	47, 75–76
TRANSFER ERROR	Error occurred when pictures were transferred to computer.	Check that camera is connected and that batteries are fully charged.	12, 46
LENS ERROR	Error has occurred during lens operation.	Turn camera off and then on again. If error persists, contact retailer or Nikon representative.	—
SYSTEM ERROR	Error has occurred in camera's internal circuitry.	Turn camera off, unplug optional AC adapter (if using), remove and reinsert batteries, and turn camera on. If error persists, contact retailer or Nikon representative.	8–9, 12

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 right-most column for information on solving the problems listed here.

✐ 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 batteries, and turn the camera on again, or, if you are using an AC adapter (available separately), disconnect and reconnect the adapter, and turn the camera on again. In the event of continued malfunction, contact your retailer or Nikon representative. Note that disconnecting the power source as described above may result in the loss of any data not recorded to the memory card at the time the problem occurred. Data already recorded to the memory card will not be affected.

Problem	Possible cause	👁
Monitor is blank	• Camera is off.	12
	• Batteries are not correctly inserted or battery-chamber cover is not properly latched.	8
	• Batteries are exhausted.	12
	• EH-61 AC adapter (available separately) is not properly connected.	—
	• Camera is in sleep mode. Press ▯ button or press shutter-release button halfway.	13
	• Monitor is off. Press ▯ button.	5
	• USB cable is connected.	—
	• Video cable is connected.	—
Camera turns off without warning	• Batteries are low.	12
	• Batteries are cold.	83
No indicators appear in monitor	• Indicators are hidden. Press ▯ button until indicators are displayed.	5
Monitor is hard to read	• Ambient lighting is too bright: move to a darker location or use viewfinder.	19
	• Monitor brightness needs adjustment.	79
	• Monitor is dirty: clean monitor.	82

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Troubleshooting

Problem	Possible cause	🔅
No picture is taken when shutter-release button is pressed	• Camera is in playback mode.	22
	• Batteries are exhausted.	12
	• Red (⚡) lamp flickers: flash is charging.	20
	• Green (AF) lamp flickers: camera unable to focus.	20
	• Message "CARD IS NOT FORMATTED" appears in monitor: memory card is not formatted for use in your camera.	10–11, 67
	• Message "NO CARD PRESENT" appears in monitor: no memory card in camera.	10–11
	• Message "OUT OF MEMORY" appears in monitor: insufficient memory to record picture at current **Image quality/size** setting.	58
Pictures are too dark (underexposed)	• Flash is off.	24
	• Flash window is blocked.	18
	• Subject is outside range of flash.	25
	• Exposure compensation is too low.	62
Pictures are too bright (overexposed)	• Exposure compensation is too high.	62
Pictures are out of focus	• Subject was not in focus area when shutter-release button was pressed halfway.	20
	• Green (AF) lamp flickers: camera unable to focus.	20
Pictures are blurred	• Camera shook during shot. Blurring caused by camera shake can be reduced by:	
	◆ Using the flash	24
	◆ Using the Best Shot Selector (BSS)	65
	◆ Using the self-timer with a tripod	26
Randomly-spaced bright pixels ("noise") appear in image	• Shutter speed too slow. Noise can be reduced by:	
	◆ Using the flash	24
	◆ Selecting 🌃 (night portrait assist) mode, or selecting **SCENE** (scene) mode and choosing 🌆 **Dusk/Dawn** or 🌃 **Night landscape**	33, 35, 36
Colors are unnatural	• White balance does not match light source.	60

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Problem	Possible cause	👪
Flash does not fire	• Flash is off. Note that flash turns off automatically when:	24
	◆ The mode dial is set to 🏔 (landscape assist), 🏃 (sports assist), or 🎬 (movie), or to **SCENE** (scene) mode with any of 🌅 **Sunset**, 🌃 **Night landscape**, 🏛 **Museum**, 🎆 **Fireworks show**, or 🌄 **Dusk/Dawn** selected in scene menu	31, 32, 51, 35–36,
	◆ **Continuous** is set to option other than **Single**	64
	◆ BSS is on	65
Picture can not be played back	• Picture has been overwritten or renamed by computer or other make of camera.	—
Copy can not be created using small picture, crop, or edit options	• Picture is a movie.	53
	• Picture was created with small picture, crop, or edit option.	41–43
	• There is not enough free space on memory card to store new copy.	16–17
Can not zoom in on picture	• Picture is a movie.	53
	• Picture was created with small picture option.	42
	• Picture has been cropped to size less than 320 × 240	43
Nikon View does not start when camera is connected or memory card inserted in card reader or card slot	• Camera is off.	12–13
	• EH-61 AC adapter (available separately) is not properly connected, or batteries are exhausted.	9, 12
	• UC-E6 USB cable is not correctly connected, or card not properly inserted in card reader or card slot.	10–11, 46
	• **USB** item in setup menu set to **PTP** when camera connected to computer running Windows 2000 Professional, Windows Millennium Edition (Me), Windows 98 Second Edition (SE), or Mac OS 9.	45
	• Camera is not registered in Device Manager (Windows only).	—
	See *Nikon View Reference Manual* (on CD) for further information.	

Technical Notes

Specifications

Type	E3100 digital camera
Effective pixels	3.2 million
CCD	½.7″ high-density CCD; total pixels: 3.34 million
Image size (pixels)	• 2,048 × 1,536 (2048) • 1,600 × 1,200 (1600) • 1,024 × 768 (1024) • 640 × 480 (640)
Lens	3 × Zoom Nikkor
Focal length	F=5.8–17.4 mm (35-mm [135] camera-format equivalent: 38–115 mm)
f/-number	f/2.8–f/4.9
Construction	Seven elements in six groups
Digital zoom	4 × (35-mm [135] camera-format equivalent: 460 mm)
Autofocus (AF)	Contrast-detect through-the-lens (TTL) AF
Focus range	30 cm (1′)–∞; macro mode 4 cm/1.6″ (W)–∞
Focus-area selection	Center with five-area selection in frame assist mode
Viewfinder	Real-image zoom viewfinder with LED indication
Magnification	0.34–0.94 ×
Frame coverage	Approximately 82% horizontal and 82% vertical
Monitor	1.5″, 110,000-dot, low temperature polysilicon TFT LCD monitor with five-level brightness adjustment
Frame coverage (shooting mode)	Approximately 97% horizontal and 97% vertical
Storage	
Media	Type I CompactFlash™ (CF) cards
File system	Compliant with **D**esign Rule for **C**amera **F**ile System (DCF), Exif 2.2, and Digital Print Order Format (DPOF)
File formats	Compressed: JPEG-baseline-compliant Movies: Quick Time
Exposure	
Metering	256-segment matrix metering linked to AF area
Exposure control	Programmed auto exposure with exposure compensation (–2.0–+2.0 EV in steps of ⅓ EV)
Range (ISO 100 equivalent)	W: +4–+17.5 EV T: +5.5–+16 EV
Shutter	Mechanical and charge-coupled electronic shutter
Speed	4–⅓,₀₀₀ s

Aperture	Electronically-controlled preset aperture
Range	Two steps (f/2.8 and f/5.6 [W])
Sensitivity	Approximately equivalent to ISO 50 (auto gain of two to four times)
Self-timer	Ten-second duration
Built-in Speedlight	
Range (approx.)	0.4–3.0 m/1´4˝–9´10˝ (W) 0.4–1.7 m/1´4˝–5´7˝ (T)
Flash control	Sensor flash system
Interface	USB
Video output	Can be selected from NTSC and PAL
I/O terminals	DC in; video out/digital I/O
Power sources	• Two rechargeable Nikon EN-MH1 NiMH batteries • One CRV3 lithium battery • Two ZR6 (AA) nickel manganese batteries • Two FR6/L91 (AA) lithium batteries • EH-61 AC adapter
Approximate battery life	80 min (EN-MH1)/150 min (CRV3). Measured at standard temperature (20 °C/68 °F) with fully-charged batteries under standard Nikon test conditions: zoom adjusted with each shot, flash used in approximately one third of shots, image type set to **Normal**.
Dimensions (W × H × D)	87.5 × 65 × 38 mm (3.44˝ × 2.56˝ × 1.50˝)
Approximate weight	150 g (5.3 oz) without battery or memory card
Operating environment	
Temperature	0–40 °C (32–104 °F)
Humidity	Less than 85% (no condensation)

🔍 Design Rule for Camera File System (DCF)

Your camera conforms to the Design Rule for Camera File System (DCF), a standard widely used in the digital camera industry to ensure compatibility among different makes of camera.

🔍 Exif Version 2.2

Your camera supports Exif (Exchangeable Image File Format for Digital Still Cameras) version 2.2, a standard that allows information stored with pictures to be used for optimal color reproduction when images are output on Exif-compliant printers.

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