# Nikon

**DIGITAL CAMERA** 

# COOLPIX P7100

# Reference Manual





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See http://www.mpegla.com.

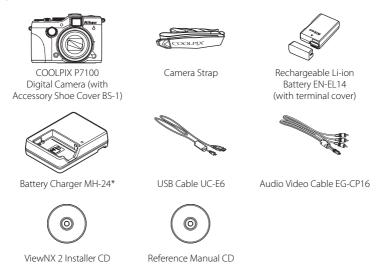
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#### **Read This First**

Thank you for purchasing the Nikon COOLPIX P7100 digital camera. Before using the camera, please read the information in "For Your Safety" (\(\subseteq\)vi) and familiarize yourself with the information provided in this manual. After reading, please keep this manual handy and refer to it to enhance your enjoyment of your new camera.

#### **Confirming the Package Contents**

In the event that any items are missing, please contact the store where you purchased the camera.



- Warranty
- \* A plug adapter is included if the camera was purchased in a country or region that requires a plug adapter. The shape of the plug adapter varies with the country or region of purchase.

**NOTE:** A memory card is not included with the camera.

#### **About This Manual**

If you want to start using the camera right away, see "The Basics of Shooting and Playback" (117).

To learn about the parts of the camera and basic operations, see "Parts of the Camera and Basic Operations" (CC 1).

#### Other Information

Symbols and Conventions

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

lcon	Description	
V	This icon indicates cautions and information that should be read before using the camera.	
Ø	This icon marks notes, information that should be read before using the camera.	
∭/ <b>ॐ</b> /ॐ	These icons indicate other pages containing relevant information;	

- SD, SDHC and SDXC memory cards are referred to as "memory cards" in this manual.
- The setting at the time of purchase is referred to as the "default setting."
- The names of menu items displayed in the camera monitor, and the names of buttons or messages displayed on a computer monitor appear in bold.
- In this manual, images are sometimes omitted from monitor and viewfinder display samples so that monitor indicators can be more clearly shown.
- Illustrations and monitor content shown in this manual may differ from the actual product.

# Information and Precautions

### **Life-Long Learning**

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

- For users in the U.S.A.: http://www.nikonusa.com/
- For users in Europe and Africa: http://www.europe-nikon.com/support/
- For users in Asia, Oceania, and the Middle East: 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. Visit the site below for contact information:

http://imaging.nikon.com/

#### **Use Only Nikon Brand Electronic Accessories**

Nikon COOLPIX cameras are designed to the highest standards and include complex electronic circuitry. Only Nikon brand electronic accessories (including battery chargers, batteries, and AC adapters) certified by Nikon specifically for use with this 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 THE CAMERA AND MAY

The use of non-Nikon electronic accessories could damage the camera and may void your Nikon warranty.

The use of third-party rechargeable Li-ion batteries not bearing the Nikon holographic seal could interfere with normal operation of the camera or result in the batteries overheating, igniting, rupturing, or leaking.

For more information about Nikon brand accessories, contact a local authorized Nikon dealer.

**Holographic seal:** Identifies this device as an authentic Nikon product.



#### **Before Taking Important Pictures**

Before taking pictures on important occasions (such as at weddings or before taking the camera 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.

#### About the User's Manual

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- Nikon will not be held liable for any damages resulting from the use of this product.
- Nikon reserves the right to change the specifications of the hardware and software described in the documentation at any time and without prior notice.
- While every effort was made to ensure that the information in the documentation is accurate and complete, we would appreciate it were you to bring any errors or omissions to the attention of the Nikon representative in your area (address provided separately).

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#### **Disposing of Data Storage Devices**

Please note that deleting images or formatting data storage devices such as memory cards or built-in camera memory does not completely erase the original image data. Deleted files can sometimes be recovered from discarded storage devices using commercially available software, potentially resulting in the malicious use of personal image data. Ensuring the privacy of such data is the user's responsibility.

Before discarding a data storage device or transferring ownership to another person, erase all data using commercial deletion software, or format the device and then completely refill it with images containing no private information (for example, pictures of empty sky). Be sure to also replace any pictures selected for the **Select an image** option in the **Welcome screen** setting ( $\square$ 104). Care should be taken to avoid injury or damage to property when physically destroying data storage devices.

# **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.



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

#### WARNINGS

#### Turn off in the event of malfunction

Should you notice smoke or an unusual smell coming from the camera or Battery Charger, unplug the Battery Charger and remove the battery immediately, taking care to avoid burns. Continued operation could result in injury. After removing or disconnecting the power source, take the equipment to a Nikon-authorized service representative for inspection.

#### Do not disassemble

Touching the internal parts of the camera or Battery Charger could result in injury. Repairs should be performed only by qualified technicians. Should the camera or Battery Charger break open as the result of a fall or other accident, take the product to a Nikonauthorized service representative for inspection, after unplugging the product and/or removing the battery.

#### Do not use the camera or **Battery Charger in the** presence of flammable gas

Using the camera in the presence of flammable gases such as propane and gasoline, as well as flammable sprays or dust could result in explosion or fire.

#### Do not look at the sun through the viewfinder

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

#### Handle the camera strap with care

Never place the strap around the neck of an infant or child.

★ Keep out of reach of children Do not keep the products within reach of children. Doing so may cause injury. Particular care should be taken to prevent infants from putting the battery or other small parts into their

mouths.

♠ Do not remain in contact with the camera, battery charger, or AC adapter for extended periods while the devices are on or in use.

Parts of the devices become hot. Leaving the devices in direct contact with the skin for extended periods may result in low-temperature burns.

# Observe caution when handling the battery

The battery may leak, overheat, or explode if improperly handled. Observe the following precautions when handling the battery for use in this product:

- Before replacing the battery, turn the product off. If you are using the Battery Charger/AC adapter, be sure it is unplugged.
- Use only a Rechargeable Li-ion Battery EN-EL14 (included). Charge the battery by inserting it in a Battery Charger MH-24 (included). For Remote Control ML-L3 (available separately), use only 3 V CR2025 lithium battery.
- When inserting the battery, do not attempt to insert it upside down or backwards
- Do not short or disassemble the battery or attempt to remove or break the battery insulation or casing.
- Do not expose the battery to flame or to excessive heat.
- Do not immerse in or expose to water.
- Replace the terminal cover when transporting the battery. Do not transport or store with metal objects such as necklaces or hairpins.
- The battery is prone to leakage when fully discharged. To avoid damage to the product, be sure to remove the battery when no charge remains.
- Discontinue use immediately should you notice any change in the battery, such as discoloration or deformation.

- If liquid from the damaged battery comes in contact with clothing or skin, rinse immediately with plenty of water.
- If leaked battery fluid gets into your eyes, rinse them out immediately with clean running water and get medical treatment.
- Do not attempt to charge batteries that are not rechargeable.

#### Observe the following precautions when handling the Battery Charger

- Keep dry. Failure to observe this precaution could result in fire or electric shock.
- Dust on or near the metal parts of the plug should be removed with a dry cloth. Continued use could result in fire.
- Do not handle the plug or go near the Battery Charger during lightning storms. Failure to observe this precaution could result in electric shock.
- Do not damage, modify, forcibly tug or bend the USB cable, place it under heavy objects, or expose it to heat or flames. Should the insulation be damaged and the wires become exposed, take it to a Nikonauthorized service representative for inspection. Failure to observe these precautions could result in fire or electric shock.

- Do not handle the plug or Battery Charger with wet hands. Failure to observe this precaution could result in electric shock.
- Do not use with travel converters or adapters designed to convert from one voltage to another or with DCto-AC inverters. Failure to observe this precaution could damage the product or cause overheating or fire.

#### 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.

## A Handle moving parts with care

Be careful that your fingers or other objects are not pinched by the lens cover or other moving parts.

#### **↑** CD-ROMs

The CD-ROMs included with this device 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 using 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 1 m (3 ft 4 in.) from the subject.

#### Do not operate the flash with the flash window touching a person or object

Failure to observe this precaution could result in burns or fire.

# Avoid contact with liquid crystal

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

# Turn the power off when using inside an airplane or the hospital

Turn the power off while inside the airplane during take off or landing. Follow the instructions of the hospital when using while in a hospital. The electromagnetic waves given out by this camera may disrupt the electronic systems of the airplane or the instruments of the hospital.

# Notices for Customers in the U.S.A.

# IMPORTANT SAFETY INSTRUCTIONS -

#### SAVE THESE INSTRUCTIONS.

#### DANGER - TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS

For connection to a supply not in the U.S.A., use an attachment plug adapter of the proper configuration for the power outlet if needed.

The power supply unit is intended to be correctly orientated in a vertical or floor mount position.

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

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this

equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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



#### **CAUTIONS**

#### Modifications

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

#### **Interface Cables**

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

# 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 USA Tel: 631-547-4200

# Notice for Customers in Canada

#### **CAUTION**

This Class B digital apparatus complies with Canadian ICES-003

#### **ATTENTION**

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada

#### **Notices for Customers in Europe**

#### CAUTIONS

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.

# DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

This symbol indicates that this product is to be collected separately.



The following apply only to users in European countries:

- This product is designated for separate collection at an appropriate collection point. Do not dispose of as household waste.
- For more information, contact the retailer or the local authorities in charge of waste management.

This symbol on the battery indicates that the battery is to be collected separately. The following apply only to users in European countries:



- All batteries, whether marked with this symbol or not, are designated for separate collection at an appropriate collection point. Do not dispose of as household waste.
- For more information, contact the retailer or the local authorities in charge of waste management.

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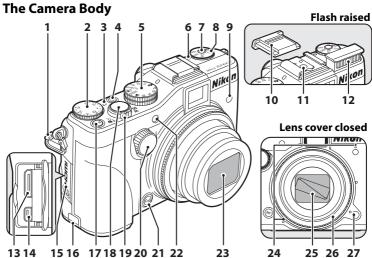
# Parts of the Camera and Basic Operations

This chapter describes the parts of the camera and also explains the main functions of each part and the basic camera operations.

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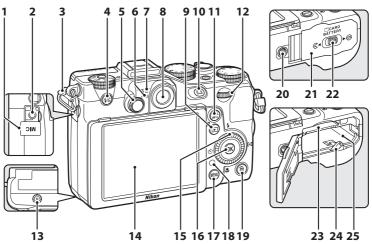
If you want to start using the camera right away, see "The Basics of Shooting and Playback" (\(\sum 17\)).

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(0 ) (1) (1) (1) (1) (1) (1) (1) (1) (1) (	Mode dial	Change the shooting mode.	28
W COOD T @	Zoom control	Rotate toward <b>T</b> ( <b>Q</b> ) (telephoto zoom position) to zoom in, and rotate toward <b>W</b> ( <b>S</b> ) (wide-angle position) to zoom out.	31
OK	Rotary multi selector	See "Using the Rotary Multi Selector" for more information.	12
	Main command dial		51,
	Sub-command dial	Adjust shutter speed or aperture value.	
LIME OUN	Quick menu dial, Quick menu button	Display or exit the quick menu.	72
MENU	MENU (menu) button	Display and hide the menu.	13
•••	Shutter- release button	When pressed halfway (i.e., if you stop pressing when you feel resistance slightly): Set focus and exposure. When pressed all the way (i.e., if you press the button all the way down): Release the shutter.	32
0.	Exposure compensation dial	Adjust the brightness (exposure compensation).	71

Control	Name	Main Function	
AE-L AF-L	유타 (AE-L/AF-L) button	Lock the exposure or focus.	107
(Fn1)	Fn1 (FUNC1) button	Combined with the zoom control: Change the zoom lens focal length. Combined with the shutter-release button: Shoot with the assigned function setting. Combined with the command dial: Change the assigned function setting.	56 107 108
Fn <sub>2</sub>	Fn2 (FUNC2) button	Change the assigned function setting.	108
	(monitor) button	Switch the monitor display.	15
(F)	Playback button	Play back images.	11, 34
- I	Delete button	Delete the last image that was saved.	36

# **Controls Used in Playback Mode**

Control	Name	Main Function	Ш
	Playback button	When the camera is turned off, press and hold this button to turn the camera on in playback mode.      Return to shooting mode.	25 11
W SS TO	Zoom control	Enlarge the image when rotated toward T (Q); display image thumbnails or the calendar when rotated toward W (\( \subseteq \subseteq \)).     Adjust the volume for voice memo and movie playback.	35 90 102
OK	Rotary multi selector	See "Using the Rotary Multi Selector" for more information.	12
	Main command dial		
Ö	Sub-command dial	Select pictures and date.	34, 35
OK	Apply selection button	Play back movies.     Switch from image thumbnail or zoomed image display to full-frame playback mode.	102 12
MENU	MENU (menu) button	Display and hide the menu.	13
- Time to the state of the stat	Delete button	Delete images.	36
AE-L AF-L	la (list by date) button	Display the list by date screen.	88
	(monitor) button	Switch the monitor display.	15
<b>↓</b>	Shutter- release button	Return to shooting mode.	-

### **Changing the Angle of the Monitor**

The angle of the monitor can be lowered down to approx. 81° or raised upward to approx. 105°. This is convenient when taking pictures with the camera held at high or low positions.





#### Notes on Monitor

- Do not apply excessive force when changing the angle of the monitor.
- The monitor cannot be moved horizontally.
- Put the monitor back in the original position when using in normal situations.

#### **Raising and Lowering the Flash**

Press the **\$** (flash pop-up) button to raise the flash.

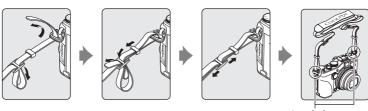
- See "Using the Flash (Flash Modes)" (QQ61) for more information on setting the flash.
- When not using the flash, lower it by gently pushing it down until it clicks.







### **Attaching the Camera Strap**

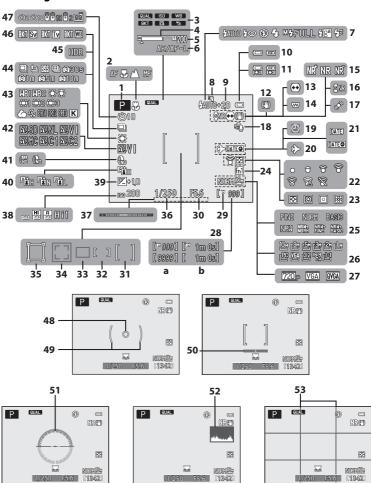


Attach the strap at two places.

#### The Monitor

 The information that is displayed on the monitor during shooting and playback changes depending on the camera's settings and state of use. Press the □ (monitor) button to hide or show the information on the monitor (□ 15).

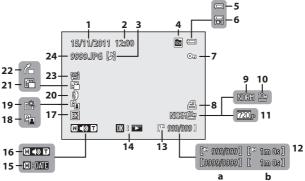
#### **Shooting Mode**



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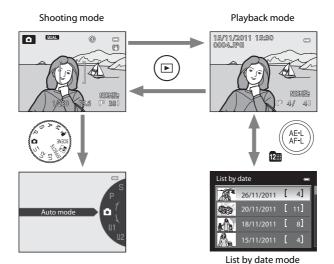
## **Basic Operations**

## **Switching Between Shooting Mode and Playback Mode**

The camera has two modes of operation: Shooting mode, which is used for taking pictures, and playback mode, which is used for viewing pictures.

Press the (playback) button to switch between shooting mode and playback mode.

• While using playback mode, you can also switch to shooting mode by pressing the shutter-release button.



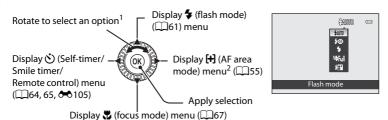
- Rotate the mode dial and align an icon to the mark to select different shooting modes (◯28, 29).
- Press the (list by date) button in playback mode to select pictures for playback by shooting date (\$\sum\$88).

#### **Using the Rotary Multi Selector**

Operate by rotating the rotary multi selector, pressing up ( $\triangle$ ), down ( $\nabla$ ), left ( $\triangleleft$ ) or right ( $\triangleright$ ) on the rotary multi selector, or pressing the 8 button.

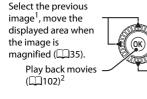
The "rotary multi selector" is also referred to as the "multi selector" in this
manual.

#### When Using Shooting Mode



- 1 Items can also be chosen by pressing up, down, left or right.
- <sup>2</sup> Displayed for P, S, A, M, Ú1, U2 and U3 modes, 
  ☑ (low noise night) mode, and EFFECTS (special effects) mode.

#### When Using Playback Mode

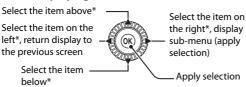


Select the next image <sup>1</sup>, move the displayed area when the image is magnified ( $\square$ 35).



- <sup>1</sup> Previous or next images can also be chosen by rotating the rotary multi selector.
- When displaying image thumbnails or when the image is magnified, this button switches the camera to full-frame playback mode.

#### **When Displaying Menus**

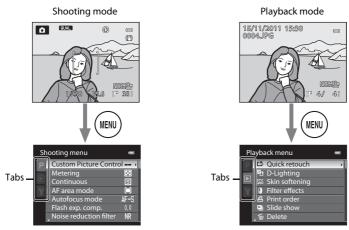




<sup>\*</sup> Items above or below can also be chosen by rotating the rotary multi selector.

#### Using Menus (the MENU Button)

When the **MENU** button is pressed while the shooting screen or playback screen is displayed, the menu for the current mode is displayed. Once the menu is displayed, various settings can be changed.



#### P tab:

Displays the settings that can be changed for the current shooting mode ( $\square$ 29). Depending on the current shooting mode, the tab icon that is displayed will be different.

- (auto): Tabs are not displayed.
- IIII (scene): Scene menu tab (III) 39)
- ☑ (special effects): Special effects menu tab (□ 48)
- 2 (low noise night): Low noise night menu tab (\$\square\$50)
- P, S, A, M: Shooting menu tab (\$\square\$54)
- U1, U2, U3: U1, U2, U3 specialized menu tab (\$\infty\$58), shooting menu tab on the second level
- 🖫 (movie): Movie menu tab (◯◯101)

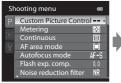
#### **▶** tab:

Displays the settings that can be changed for the current playback mode (\(\sum\_{89}\)). Depending on the current playback mode, the tab icon that is displayed will be different.

#### Y tab:

Displays the setup menu, where you can change a number of general settings.

#### **Switching Between Tabs**



Press the rotary multi selector ◀ to highlight the tab.



Press the rotary multi selector  $\triangle$  or  $\nabla$  to select a tab, and press the  $\bigcirc$ button or  $\triangleright$ .

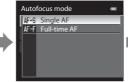


The selected menu is displayed.

#### **Selecting Menu Items**



Press the rotary multi selector ▲ or ▼ to select an item, and then press ▶ or the ฬ button.



Press  $\triangle$  or  $\nabla$  to select an item and then press the  $\bigcirc$  button.



When you finished changing settings, press the MENU (menu) button to exit the menu.

# Displayed When the Menu Contains Two or More Pages



The scroll bar is displayed to indicate the current page.

### Switching the Monitor Display (the | | Button)

To switch between the information displayed on the monitor during shooting and playback, press the | | (monitor) button.



#### **Shooting Mode**



Display the picture and the shooting information.

Display the picture only.



#### **Playback Mode**



Display the picture and photo information.

Display the picture only.

(excluding movies) Display a histogram<sup>3</sup>, tone level and shooting information<sup>4</sup>.

- 1 Available when the mode dial is set to P, S, A, M, U1, U2 or U3. The shutter does not click when the subject is not in focus and the AF/access lamp does not light up.
- 2 You can check for loss of contrast detail in highlights and shadows from the histogram that is displayed, or the blinking display for each tone level. These provide guidelines when adjusting the picture brightness with functions such as exposure compensation. When the tone level to check is selected by pressing the rotary multi selector  $\triangleleft$  or  $\triangleright$ , the area of the picture that corresponds to the chosen tone level blinks.
- 3 The histogram is a bar graph that shows the brightness distribution in the picture. The horizontal axis corresponds to pixel brightness, with dark tones to the left and bright tones to the right. The vertical axis shows the number of pixels.
- 4 The shooting information displayed includes the shooting mode P, S, A or M, shutter speed, aperture value, image guality, image size, ISO sensitivity, white balance, exposure compensation, COOLPIX Picture Control, and the current frame number/total number of frames.

## ✓ Holding Down the □ Button and ☒ (Monitor Brightness Boost Indicator)

Hold down the  $\square$  button to set the monitor to the maximum brightness. To return the brightness to its original level, hold down the  $\square$  button again or turn off the camera. When the brightness is set to the maximum with the  $\square$  button,  $\square$  (monitor brightness boost indicator) is displayed on the monitor.

# Virtual Horizon, Histogram and Framing Grid Displays for Shooting

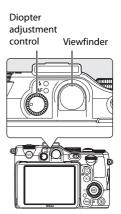
- The display options for the monitor can be changed in **Photo info** (\$\infty\$74) of **Monitor settings** in the setup menu. A virtual horizon, histogram and framing grid are available as the display options.
- The setting for virtual horizon display can be changed in **Virtual horizon display** of **Monitor settings** in the setup menu ( $\square$ 104). The default setting is **Circle**.

#### **Using the Viewfinder**

Use the viewfinder to frame pictures when bright light makes it difficult to see the monitor.

When the image in the viewfinder is difficult to see, adjust by rotating the diopter adjustment control while looking through the viewfinder.

 Take care not to scratch your eye with your fingertips or nails.



#### Notes on the Viewfinder

As the area visible in the viewfinder may differ from that of the final picture, use the monitor to frame pictures in the following situations:

- When shooting at ranges of about 2 m (6 ft 7 in.) or less at the maximum telephoto zoom position
- When the digital zoom is applied (QQ31)
- When shooting at an **Image size** (☐,77) of 62 3648×2432, 169 3584×2016 or 11 2736×2736



# The Basics of Shooting and Playback

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## **Shooting**

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# Playback

Step 5 Play Back Images	34
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# **Preparation 1 Charge the Battery**

1 Prepare the included Battery Charger MH-24.

If a plug adapter\* is included with your camera, attach the plug adapter to the plug on the Battery Charger. Push the plug adapter firmly until it is securely held in place. Once the two are connected, attempting to forcibly remove the plug adapter could damage the product.

\* The shape of the plug adapter varies according to the country or region in which the camera was purchased.





The Battery Charger comes with the plug adapter attached in Argentina, Brazil and Korea.



**2** While pushing in the battery (1), set it into the Battery Charger (2).





- **3** Plug the Battery Charger into an electrical outlet.
  - CHARGE lamp starts blinking when charging starts.
  - A fully-exhausted battery charges in about one hour and 30 minutes.
  - When charging is complete, the CHARGE lamp stops blinking.
  - See "Understanding CHARGE Lamp" (QQ19).
- **4** When charging is complete, remove the battery and then disconnect the Battery Charger from the electrical outlet.



### **Understanding CHARGE Lamp**

Status	Description
Blinks	Battery charging.
On	Battery fully charged.
Flickers	<ul> <li>The battery is set incorrectly. Disconnect the Battery Charger from the electrical outlet, remove the battery, and then reset the battery to lie flat in the Battery Charger.</li> <li>Operating temperature range exceeded. Charge the battery indoors while the ambient temperature is 5°C to 35°C (41°F to 95°F).</li> <li>The battery is faulty. Immediately disconnect the Battery Charger from the electrical outlet, and stop charging. Take the battery and Battery Charger to your retailer or Nikonauthorized service representative.</li> </ul>

### Notes on Battery Charger

- Be sure to read and follow the warnings of "For Your Safety" (\(\sum\_{\text{v}}\)') thoroughly before using the Battery Charger.
- Be sure to read and follow the warnings for "The Battery Charger" ( 4) thoroughly before using the battery.

# Notes on Battery

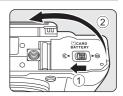
- Be sure to read and follow the warnings of "For Your Safety" (\(\sup vi\)) thoroughly before using the battery.
- Be sure to read and follow the warnings for "The Battery" (2-3) thoroughly before using the battery.

# AC Power Supply

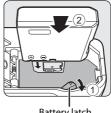
- If the AC Adapter EH-5b and the Power Connector EP-5A (available separately) (\$\infty\$103) are used, power is supplied to the camera from an electrical outlet, enabling taking and playing back pictures.
- Do not, under any circumstances, use an AC Adapter other than the EH-5b or a Power Connector
  other than the EP-5A. Failure to observe this precaution could result in overheating or in damage
  to the camera.

# **Preparation 2 Insert the Battery**

Open the battery-chamber/memory card slot cover.



- Insert the battery.
  - Use the battery to push the orange battery latch in the direction shown (1), and fully insert the battery (2).
  - · When the battery is fully inserted, the battery latch locks it in place.



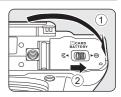


Battery latch

Inserting the Battery Correctly

Inserting the battery upside down or backwards could damage the camera. Be sure to confirm that the battery is in the correct orientation.

3 Close the battery-chamber/memory card slot cover.



#### **Removing the Battery**

Before opening the battery-chamber/memory card slot cover, turn the camera off (25) and confirm that the power-on lamp and the monitor are off.

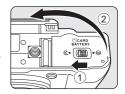
To eject the battery, open the battery-chamber/memory card slot cover and slide the orange battery latch in the direction shown (1). Then, remove the battery straight (2).



# High Temperature Caution

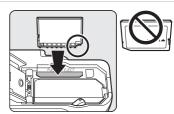
# **Preparation 3 Insert a Memory Card**

- 1 Confirm that the power-on lamp and the monitor are turned off and open the batterychamber/memory card slot cover.
  - Be sure to turn off the camera before opening the cover.

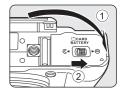


- **2** Insert the memory card.
  - Slide the memory card until it clicks into place.
  - Inserting the Memory Card Correctly

Inserting the memory card upside down or backwards could damage the camera or the memory card. Be sure to confirm that the memory card is in the correct orientation.



3 Close the battery-chamber/memory card slot cover.



# Formatting a Memory Card

- The first time you insert a memory card that has been used in another device into this camera, be sure to format it with this camera.
- All data stored on a memory card is permanently deleted when the card is formatted. Be sure to make copies of any data you wish to keep before formatting the memory card.
- To format a memory card, insert the memory card into the camera, press the **MENU** button and select **Format card** from the setup menu (CL104).

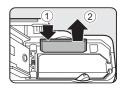
# Note on Memory Cards

Refer to the documentation included with the memory card, as well as "The Memory Cards" ( $\overset{\leftarrow}{\wp}$ 5) in "Caring for the Products".

#### **Removing Memory Cards**

Before opening the battery-chamber/memory card slot cover, turn the camera off and confirm that the power-on lamp and the monitor are off.

Press the memory card in lightly with your finger (1) to partially eject it, and then pull it out straight (2).



# High Temperature Caution

The camera, battery, and memory card may be hot immediately after using the camera. Observe caution when removing the battery or memory card.

# **Internal Memory and Memory Cards**

Camera data, including images and movies, can be saved in either the camera's internal memory (approximately 94 MB) or on a memory card. To use the camera's internal memory for shooting or playback, first remove the memory card.

# **Approved Memory Cards**

The following Secure Digital (SD) memory cards have been tested and approved for use in this camera.

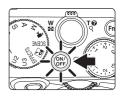
 When recording a movie onto a memory card, a memory card with an SD speed class of Class 6 or higher is recommended. If the transfer speed of the card is slow, the movie recording may end unexpectedly.

	SD memory cards <sup>1</sup>	SDHC memory cards <sup>2</sup>	SDXC memory cards <sup>3</sup>
SanDisk	2 GB	4 GB, 8 GB, 16 GB, 32 GB	64 GB
TOSHIBA	2 GB	4 GB, 8 GB, 16 GB, 32 GB	64 GB
Panasonic	2 GB 4 GB, 8 GB, 1 16 GB, 32 GI	4 GB, 8 GB, 12 GB, 16 GB, 32 GB	48 GB, 64 GB
Lexar	-	4 GB, 8 GB, 16 GB, 32 GB	-

- 1 Before using a card reader or similar device, check that the device supports 2 GB cards.
- 2 SDHC-compliant. Before using a card reader or similar device, check that the device supports SDHC.
- 3 SDXC-compliant. Before using a card reader or similar device, check that the device supports SDXC.
- Contact the manufacturer for details on the above cards.

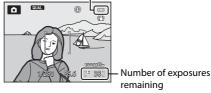
# **Step 1 Turn the Camera On**

- **1** Press the power switch to turn on the camera.
  - If you are turning the camera on for the first time, see "Setting the Display Language, Date, and Time" (2)26.
  - The lens extends, and the monitor is turned on.



**2** Check the battery level and number of exposures remaining.

# Battery level indicator



#### **Battery Level**

Display	Description	
	Battery level high.	
	Battery level low. Prepare to charge or replace the battery.	
<b>1</b> Battery exhausted.	Cannot take pictures. Charge or replace the battery.	

### **Number of Exposures Remaining**

The number of exposures remaining is displayed.

- When a memory card is not inserted, **III** is displayed and pictures are recorded to the internal memory (approx. 94 MB).
- The number of pictures that can be stored depends on the remaining capacity of the internal memory or memory card, the image quality, and the image size (\$\sum 78\$).
- The number of exposures remaining shown in the illustration differs from the actual value.

### **Turning the Camera On and Off**

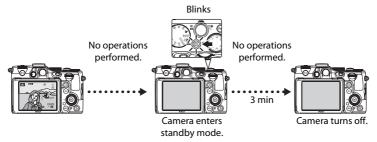
- When the camera is turned on, the power-on lamp (green) lights and the monitor is turned on (the power-on lamp turns off when the monitor is turned on).
- To turn off the camera, press the power switch. Both the monitor and the power-on lamp are turned off.

# Power Saving Function (Auto Off)

If no operations are performed for a while, the monitor will turn off, the camera will enter standby mode, and the power-on lamp will blink. If no operations are performed for another three minutes, the camera will turn off automatically.

To turn on the monitor again in standby mode, perform either one of the following operations.

- Press the power switch, shutter-release button or the **b** button.
- Rotate the mode dial.



- The time that elapses before the camera enters standby mode can be changed using the Auto off setting in the setup menu (\(\sum \)104).
- By default, the camera enters standby mode in about one minute when you are using shooting mode or playback mode.
- If you are using the optional AC Adapter EH-5b, the camera enters standby mode after 30 minutes.
   This setting cannot be changed.

### Setting the Display Language, Date, and Time

Dialogs for language selection and camera clock setting are displayed the first time the camera is turned on.





- **2** Press ▲ or ▼ to choose **Yes** and press the ® button.
  - To cancel setting, select No.



- **3** Press **4** or **>** to select your home time zone (Time zone), and press the **®** button.
  - See "Daylight Saving Time" (□□27) for more information





4 Press ▲ or ▼ to choose the date display order and press the ® button or ▶.



Date and time

15

London

# 5 Press ▲, ▼, ◀ or ▶ to set date and time, and press the ଔ button.

- To choose an item: Press 
   or 

   ⟨ selected in the following order: D (day) → M (month) → Y (year) → hour → minute).
- To set the contents: Press ▲ or ▼. Date and time can also be set by rotating the command dial.
- After finishing the setting, the lens extends and the shooting screen is displayed.

### **Daylight Saving Time**

If daylight saving time is in effect, press the multi selector

▲ to enable the daylight saving time function while setting the region in step 3.

is displayed at the top of the monitor.

Press  $\nabla$  to disable the daylight saving time function.



# Changing the Language Setting and the Date and Time Setting

- In the **Time zone** setting of **Time zone and date** in **Y** setup menu, when the daylight saving time function is enabled, the camera's clock is set forward by one hour, and when disabled, set back by one hour. When the **→** travel destination is set, the camera automatically calculates the time difference between the travel destination and the **♠** home time zone, and saves images using the date and time of the travel destination.
- If you exit without setting the date and time, blinks when the shooting screen is displayed. Use
  the **Time zone and date** setting in the setup menu (1104) to set the date and time.

### The Clock Battery

- The camera's clock is powered by a backup battery that is separate from the camera's main battery.
- The backup battery charges after about ten hours of charging when the main battery is inserted into the camera or when the camera is connected to an optional AC adapter, and can store the set date and time for several days.
- If the camera's backup battery becomes exhausted, the date and time setting screen is displayed
  when the camera is turned on. Set the date and time again. See step 2 of "Setting the Display
  Language, Date, and Time" (\$\sum\_2\$26) for more information.

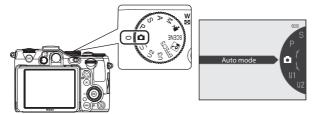
### Imprinting the Shooting Date in Printed Images

- Set the date and time before shooting.
- You can imprint the shooting date in images as they are captured by setting **Print date** in the setup menu (Q104).
- If you want the shooting date to be printed without using the **Print date** setting, print using the included ViewNX 2 software (\sum 92).

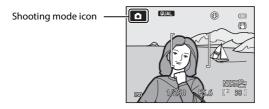
# **Step 2 Select a Shooting Mode**

### Rotate the mode dial to select the shooting mode.

The following describes how to take pictures in (auto) mode as an example.
 Rotate the mode dial to .



 The camera switches to (auto) mode and the shooting mode icon changes to .



- See "The Monitor" ( $\square$ 8) for more information.

### **Available Shooting Modes**

#### (Auto) mode

□38

Shoot with basic camera operations.

#### SCENE (Scene) mode

□39

When one of the scene modes is selected, pictures are captured using settings that are optimized for the selected scene. In scene auto selector mode, the camera automatically selects the optimum scene mode for simpler shooting.

#### **EFFECTS** Special effects mode

**1**46

Effects can be applied to pictures during shooting. Ten different effects are available

#### Low noise night mode

**49** 

Shoot with the ISO sensitivity controlled automatically to a high level and without the flash, to capture the atmosphere of a low-lit scene.

#### P.S.A.M modes

<u></u> 51

Choose these modes for greater control over shutter speed and aperture value.

#### U1, U2, U3 User settings modes

**1**57

Up to three setting combinations that are frequently used for shooting can be saved in U1, U2 and U3. The saved settings can be immediately retrieved for shooting simply by rotating the mode dial to U1, U2 or U3.

#### **県** (Movie) mode

**1**98

Movies can be recorded with sound.

### Note on the Flash

When the flash is lowered, the flash setting is fixed at off and ③ is displayed at the top of the monitor. In situations where a flash is needed, such as in dark locations or when the subject is backlit, be sure to raise the flash (ДД7).

# Features That Are Available in Shooting Mode

- The functions of the multi selector ▲ (♣), ▼ (♣), ▼ (♠) or ▶ (♣) can be set.
   See "Features That Can Be Set Using the Multi Selector" (□60) for more information.
- See "Features That Can Be Set Using the Exposure Compensation Dial" for more information on exposure compensation (\$\superscript{\Pi}\$71).
- See "Features That Can Be Set with the Quick Menu" for more information on available quick menu (CQ 73).
- Press the MENU button to display the menu for the selected shooting mode. See "Shooting Features" (\$\sum\_3\$7) for more information about the settings available in the menu for the current shooting mode.

# **Step 3 Frame a Picture**

# **1** Ready the camera.

- Keep your fingers, hair, strap and other objects away from the lens, flash, AF-assist illuminator and microphone.
- To shoot in the "tall" orientation, hold the camera so that the flash is above the lens.





# **2** Frame the picture.

- Position the main subject near the center of the monitor.
- See "Using the Viewfinder" (116) for more information.



# ISO Sensitivity

**(SO)** (ISO sensitivity,  $\square$  8) may be displayed on the shooting screen. When **(SO)** is displayed, the ISO sensitivity is automatically raised.

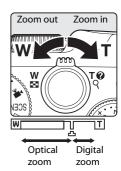
### **Using a Tripod**

- In the following situations, use of a tripod is recommended to avoid the effects of camera shake:
  - When shooting in a dark location or with the flash mode (QQ61) set to (9) (off)
  - When shooting in the telephoto zoom position
- To take a picture with the camera attached to a tripod, set Vibration reduction in the setup menu (2104) to Off.

### **Using the Zoom**

Rotate the zoom control to activate the optical zoom.

- To zoom in so that the subject fills a larger area of the frame, rotate toward T (telephoto zoom position).
- To zoom out so that the area visible increases in the frame, rotate toward W (wide-angle position).
- A zoom indicator is displayed at the top of the monitor when the zoom control is rotated.



#### **Digital Zoom**

When the camera is already at the maximum optical zoom position, rotating the zoom control toward  $\mathbf{T}$  (telephoto zoom position) triggers the digital zoom. Digital zoom can magnify the subject up to about 4x beyond the maximum magnification of the optical zoom.



 The focus will be at the center of the frame and the focus area will not be displayed when the digital zoom is in effect.

# Digital Zoom and Interpolation

Unlike the optical zoom, the digital zoom uses a digital imaging process known as interpolation to magnify images, resulting in slight deterioration of image quality depending on the image size (\$\sup\$77) and digital zoom magnification.

Interpolation is applied at zoom positions beyond 4. When the zoom is increased beyond the 4. position, interpolation is initiated and the zoom indicator also turns yellow.

Additionally,  $\triangle$  moves right as the image size becomes smaller, allowing you to confirm the zoom position that can be used to capture still images without image degradation before shooting at the current image size setting.



Using **Digital zoom** in the setup menu (

104), it is possible to restrict the magnification of the
digital zoom to a range where images do not deteriorate, or to set the digital zoom so that it does
not operate.

### **✓** More Information

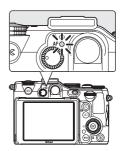
- See "Zoom memory" (QQ56) for more Information.
- See "Zoom speed" (QQ 106) for more Information.

# **Step 4 Focus and Shoot**

- Press the shutter-release button halfway, i.e., press the button slightly until you feel resistance.
  - When you press the shutter-release button halfway, the camera sets the focus and exposure (shutter speed and aperture value). Focus and exposure remain locked while the shutter-release button is pressed halfway.
  - The camera automatically focuses on the subject in the center focus area. When the subject is in focus, the focus area lights in green, and the AF/access lamp next to the viewfinder lights.
  - When the digital zoom is in effect, the camera focuses on the subject at the center of the screen, and the focus area is not displayed. When the subject is in focus, the AF/access lamp lights in green.
  - When the shutter-release button is pressed halfway and the focus area blinks red or the AF/access lamp flickers, the camera is unable to focus. Change the composition and press the shutter-release button halfway again.







- **2** Press the shutter-release button all the way, i.e., press the button the rest of the way down.
  - The shutter is released and the picture is recorded.
  - If you press the shutter-release button with too much force, the camera may shake, causing images to be blurred. Press the button gently.



# **V** During Recording

- While the AF/access lamp or the indicator showing the number of exposures remaining is blinking, images are being recorded. Do not open the battery-chamber/memory card slot cover. Cutting the power or removing the memory card in these circumstances could result in loss of data or in damage to the camera or card.
- Depending on the settings or shooting conditions, the image recording time may take longer than usual (2:11).

### Autofocus

Autofocus may not perform as expected in the following situations. In some rare cases, the subject may not be in focus despite the fact that the active focus area or AF/access lamp lights in green.

- · Subject is very dark
- Objects of sharply differing brightness are included in the scene (e.g. the sun behind the subject makes that subject appear very dark)
- No contrast between the subject and surroundings (e.g. a portrait subject, wearing a white shirt, is standing in front of a white wall)
- Several objects are at different distances from the camera (e.g., an animal inside a cage)
- Subjects that repeat the same pattern (e.g., as window blinds or buildings lined with windows of the same shape)
- Subject is moving rapidly

In these situations, try pressing the shutter-release button halfway to refocus several times, or focus on another subject and use focus lock. When using focus lock, be sure that the distance between the camera and the subject with which focus was locked is the same as that for the actual subject. The camera can also be focused using manual focus ( $\clubsuit$ 2).

# The Subject Is Too Close to the Camera

If the camera does not focus, try shooting with ₩ (macro close-up) (□68) in the focus mode, or Close-up (□42) scene mode.

### AF-assist Illuminator

In dark places, the AF-assist illuminator ( $\square$ 105) may light when the shutter-release button is pressed halfway.

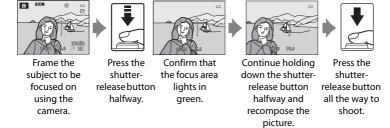
### To Make Sure You Do Not Miss a Shot

If you are concerned that you might miss a shot, press the shutter-release button all the way without first pressing it halfway.

### Focus Lock

Use focus lock to focus on off-center subjects when center is selected for AF area mode.

- Be sure that the distance between the camera and the subject does not change.
- When the shutter-release button is pressed halfway, the exposure is locked.

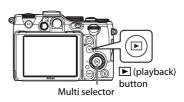


Instead of pressing the shutter-release button halfway, you can also press the  $\cancel{E}$  (AE-L/AF-L) button to shoot with focus lock ( $\square$ 107) (except for **Scene auto selector** ( $\square$ 40) in scene mode).

# **Step 5 Play Back Images**

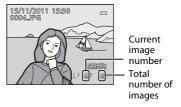
# **1** Press the **▶** (playback) button.

 When you switch from shooting mode to playback mode, the last image saved will be displayed in full-frame playback mode.



# **2** Use the multi selector to view previous or next images.

- To view previous images: ▲ or ◀
- To view next images: ▼ or ▶
- Images can also be selected by rotating the multi selector or command dial.
- To return to shooting mode, press the **b** button again or press the shutter-release button
- To play back images that are saved in the internal memory, remove the memory card. is displayed around "Current image number/total number of images" on the playback screen.



### Viewing Pictures

- Press the □ button to hide or show the shooting information and photo information on the monitor (□15).
- When the orientation of the camera is changed during playback, the displayed images are rotated automatically (except when fast forward/rewind is performed).
- Pictures taken using face detection (\$\sumset\$45) or pet detection (\$\sumset\$45) will be rotated automatically when displayed in full-frame playback mode according to the orientation of the face (except for pictures taken when **Continuous** in the shooting menu or **Auto bracketing** in the quick menu (\$\sumset\$73) was set).
- Images may be displayed at low resolution immediately after switching to the previous or next image.

### More Information

- See "Features Available in Playback Mode (Playback Menu)" (QQ89) for more information.
- See "Selecting Pictures for Playback by Date (List by Date Mode)" (QQ88) for more information.

### **Changing How Images Are Displayed**

When using playback mode, you can change how images are displayed by rotating the zoom control toward  $\mathbf{W}$  ( $\mathbf{E}$ )/ $\mathbf{T}$ ( $\mathbf{Q}$ ).

#### Plavback Zoom







Display position guide

Image is displayed in fullframe playback mode.

- To adjust the zoom ratio, rotate the zoom control toward  $\mathbf{W}$  ( $\mathbf{E}$ )/ $\mathbf{T}$  ( $\mathbf{Q}$ ). Images can be zoomed up to 10x.
- To view a different area of the image, press the multi selector ▲. ▼. ◄. or ▶.
- Pictures taken using face detection ( $\square$ 85) or pet detection ( $\square$ 45) are enlarged at the center of the face that was detected during shooting (except for pictures taken when **Continuous** in the shooting menu (\$\overline{\omega}\$54) or **Auto bracketing** in the guick menu ( $\square$ 73) was set). If the camera detected multiple faces when the image was captured, use  $\triangle$ ,  $\nabla$ ,  $\triangleleft$ , and  $\triangleright$  to display a different face. Change the zoom ratio and press  $\triangle$ ,  $\nabla$ ,  $\triangleleft$ , or  $\triangleright$  to zoom in on an area of the image where there are no faces.
- You can crop the image and save the displayed area of the image as a separate file by pressing the **MENU** button (**a**19).
- Press the **60** button to return to full-frame playback mode.

### Thumbnail Playback, Calendar Display



mode







Image thumbnail display (4, 9, 16 and 72 images per screen)

Calendar display

- You can view several images on one screen, making it easy to find the image you want.
- You can change the number of images displayed by rotating the zoom control toward **W** ( $\blacksquare$ )/**T** ( $\bigcirc$ ).
- Rotate the multi selector or press ▲, ▼, ◀, or ▶ to select an image and then press the **(N)** button to display that image in full-frame playback mode.
- When 72 images are displayed, rotate the zoom control toward **W** ( to switch to calendar display.
- While using calendar display mode, rotate the multi selector or press ▲, ▼, ◄, or to select a date and then press the button to display the first image captured on that day.

# **Step 6 Delete Unwanted Images**

1 Press the m button to delete the image currently displayed on the monitor.



- Press the multi selector ▲ or ▼ to select **Yes** and press the (N) button.
  - Deleted images cannot be recovered.
  - To cancel, press ▲ or ▼ to select No and press the ⋈ button

When **Delete button options** in the setup menu (104) is set to **Press twice to delete**, the image can be deleted by pressing the m button again while a confirmation message for deleting an image is displayed.



### Notes on Deletion

- Deleted images cannot be recovered. Transfer important images to a computer before deleting
- Protected images (\$\sum\_89\$) cannot be deleted.
- When pictures taken with an Image quality (\$\sum\_75\$) setting of NRW (RAW) + Fine, NRW (RAW) + Normal or NRW (RAW) + Basic are deleted with the m button, both the NRW (RAW) and JPEG images that were recorded at the same time are deleted. To delete only NRW (RAW) images or JPEG images, select Erase selected NRW images or Erase
  - selected JPEG images in Delete of the playback menu (QQ89).

### Deleting the Last Image Captured While in Shooting Mode

When using shooting mode, press the **t** button to delete the last image that was saved.

# Deleting Multiple Images

To delete multiple images, select **Delete** from the playback menu (QQ89).

# Selecting Certain Types of Images for Deletion

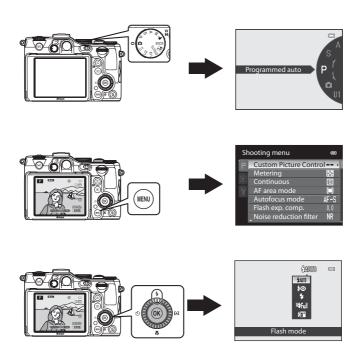
Switch to list by date mode (Q 88) to delete a picture shot on a specified date.



# **Shooting Features**

This chapter describes each of the camera's shooting modes and the features that are available when using shooting mode.

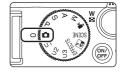
By referring to this information, you will learn how to select different shooting modes and adjust settings according to the shooting conditions and the kind of images you want to capture.



# (Auto) Mode

Shooting with basic camera operations is available.

• The camera focuses at the center area of the frame.



# Changing (Auto) Mode Settings

- See "Features That Can Be Set Using the Multi Selector" (QQ60) for more information on flash mode ( $\square$ 61), self-timer ( $\square$ 64), smile timer ( $\square$ 65), remote control ( $\square$ 60) and focus mode ( $\square$ 67).
- See "Features That Can Be Set Using the Exposure Compensation Dial" for more information on exposure compensation ( $\square$ 71).
- See "Features That Can Be Set with the Quick Menu" for more information on available quick menu ( $\square$ 73).

# **Scene Mode (Shooting Suited to Scenes)**

Press the **MENU** button and display the scene menu to select one of the following scenes. Pictures are captured using settings that are optimized for the selected scene.



Scene auto selector (QQ40)	■ Night landscape (□142)
<b>Ź</b> Portrait (◯◯40)	₩ Close-up (◯◯ 42)
■ Landscape (□□40)	<b>11</b> Food (QQ43)
❖ Sports (◯◯41)	<u> </u>
₩ Night portrait (Ш41)	Fireworks show (QQ43)
<b>※</b> Party/indoor (◯◯41)	☐ Black and white copy (☐☐43)
<b>₽</b> Beach ( <b>1</b> 41)	省 Backlighting (🕮 44)
Snow (□ 42)	▶ Panorama assist (□ 45)
<b>≅</b> Sunset (◯◯42)	₩ Pet portrait (Щ45)
ដ Dusk/dawn (🔲 42)	

# View a Description (Help Information) of Each Scene

Select the desired scene from the scene menu and rotate the zoom control ( $\square 4$ ) to view a description of that scene (help). To return to the original screen, rotate the zoom control toward T(?) again.

# **Changing Scene Mode Settings**

- "Features That Can Be Set Using the Multi Selector" (\$\sum\_60\$) vary with scene mode. See "List of the Default Settings" (\$\sum\_69\$) for more information.
- See "Features That Can Be Set Using the Exposure Compensation Dial" for more information on exposure compensation (\$\sumsymbol{\Pi}\$71).
- See "Features That Can Be Set with the Quick Menu" for more information on available quick menu (\$\sum 73\$).

# Features That Cannot Be Used Simultaneously

#### Characteristics of Each Scene

- Use of a tripod is recommended in scenes with which ⚠ is indicated. Set
   Vibration reduction in the setup menu (□104) to Off when using a tripod to
   stabilize the camera.
- For scene modes that use the flash, be sure to press the **♦ (**flash pop-up) button to raise the flash before shooting (□7).

#### Scene auto selector

When you frame a picture, the camera automatically selects the optimum scene for simpler shooting.

**Z**: Portrait, **T**: Landscape, **L**: Night portrait, **L**: Night landscape, **W**: Close-up, **L**: Sacklighting, **L**: Other scenes

- When the camera automatically selects a scene mode, the shooting mode icon changes to that for the scene mode currently enabled.
- Depending upon shooting conditions, the camera may not select the desired scene mode. Should this occur, switch to (auto) mode ( 28) or select the optimum scene mode for the subject manually.
- The digital zoom is not available.

#### Portrait

Use this mode for portraits.

- The camera detects and focuses on a face (see "Using Face Detection" (\$\sum\_{85}\$) for more information).
- After the skin softening feature makes the subject's skin appear smoother, the camera records the image (QB86).
- If no faces are detected, the camera focuses on the subject at the center of the frame.
- The digital zoom is not available.



#### Landscape

Use this mode for vivid landscapes and cityscapes.

 When the shutter-release button is pressed halfway, the AF/ access lamp always lights in green.



#### Sports \$

Use this mode when shooting sporting events. The camera captures a series of still images that allow you to clearly see detailed movements in a moving subject.

- The camera focuses at the center area of the frame.
- To capture a series of images, hold down the shutterrelease button all the way. Up to 90 pictures are shot at a rate of about 1.2 frames per second (fps) (when image quality is set to **Normal** and image size is set to 107 3648×2736).
- The camera focuses the subject even when the shutter-release button is not pressed halfway. You may hear the sound of the camera focusing.
- Focus, exposure, and hue are fixed at the values determined with the first shot in each
- The frame rate with continuous shooting may vary depending upon the current image quality setting, image size setting, the memory card used, or shooting condition.

### Night portrait

Use this mode for portraits taken at sunset or at night.

- The camera detects and focuses on a face (see "Using Face Detection" ( $\square$ 85) for more information).
- After the skin softening feature makes facial skin tones softer, the camera records the image ( $\square$ 86).
- If no faces are detected, the camera focuses on the subject at the center of the frame.
- Shoot pictures with the flash raised.
- · The digital zoom is not available.

#### Party/indoor

Suitable for taking pictures in parties. Captures the effects of candlelight and other indoor background lighting.

- The camera focuses at the center area of the frame.
- When shooting in a dark location, hold the camera steadily to avoid the effects of camera shake. To take a picture with the camera attached to a tripod, set **Vibration reduction** in the setup menu ( $\square$ 104) to **Off**.



#### Beach

Captures the brightness of such subjects as beaches or sunlit expanses of water.

The camera focuses at the center area of the frame.





#### Snow

Captures the brightness of sunlit snow.

• The camera focuses at the center area of the frame.



#### Sunset

**1** 

Preserves the deep hues seen in sunsets and sunrises.

• The camera focuses at the center area of the frame.



#### **B** Dusk/dawn



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

 When the shutter-release button is pressed halfway, the AF/ access lamp always lights in green.



#### ■ Night landscape



Slow shutter speeds are used to capture the atmosphere of a night landscape.

 When the shutter-release button is pressed halfway, the AF/ access lamp always lights in green.



#### Close-up

Use this mode to photograph flowers, insects, and other small objects at close range.

- The focus mode (□67) setting is changed to (□ (macro close-up) and the camera automatically zooms to the closest position to the subject where the camera can shoot.
- You can move the focus area that the camera focuses on.
   Press the ® button and then rotate the multi selector or press ▲, ▼, ◄, or ▶ to move the focus area. To adjust the following settings, press the ® button to temporarily cancel focus area selection, and then adjust each setting.
   Flash mode or self-timer
- The camera focuses the subject even when the shutter-release button is not pressed halfway. You may hear the sound of the camera focusing.



#### **TI** Food

Use this mode when taking pictures of food.

- The focus mode (□67) setting is changed to (macro close-up) and the camera automatically zooms to the closest position to the subject where the camera can shoot.
- You can adjust the hue by pressing the multi selector ▲ or
   ▼. The hue adjustment setting is saved in the camera's
   memory even after the camera is turned off.
- You can move the focus area that the camera focuses on.
  Press the 
   ⊕ button and then rotate the multi selector or
  press 
   △, ▼, ◄, or ▶ to move the focus area. To adjust the
  following settings, press the 
   ⊕ button to temporarily cancel
  focus area selection, and then adjust each setting.
  - Hue or self-timer
- The camera focuses the subject even when the shutterrelease button is not pressed halfway. You may hear the sound of the camera focusing.







#### m Museum

Use indoors where flash photography is prohibited (for example, in museums and art galleries) or in other settings in which you do not want to use the flash.

- The camera focuses at the center area of the frame.
- The camera captures up to ten images while the shutterrelease button is pressed all the way, and the sharpest image in the series is automatically selected and saved (BSS (Best Shot Selector) (□54)).

#### Fireworks show



Slow shutter speeds are used to capture the expanding burst of light from fireworks.

- The camera focuses at infinity.
- When the shutter-release button is pressed halfway, the AF/ access lamp always lights in green.



#### ☐ Black and white copy

Provides clear images of text or drawings on a white board or in print.

- The camera focuses at the center area of the frame.
- When shooting nearby object, shoot with (macro close-up) in the focus mode (267).



#### **Backlighting**

Use when light is coming from behind the subject, throwing features or details into shadow.

On or Off can be selected in HDR (high dynamic range) composition on the screen that is displayed when Backlighting scene mode is selected.

- Off (default setting): The flash fires to prevent the backlit subject from being hidden in shadow.
  - Shoot pictures with the flash raised.
  - The camera focuses at the center area of the frame.
  - Press the shutter-release button all the way to shoot a single picture.



- The MDR icon is displayed on the shooting screen. If there are very bright areas and very dark areas in the frame, the MDR icon lights in green.
- The camera focuses at the center area of the frame.
- When the shutter-release button is pressed all the way, the camera shoots pictures continuously and saves the following two images.



- HDR composite image (loss of detail is reduced in highlights and shadows)
- The second image saved is an HDR composite image. If only one image can be saved, an image processed by D-Lighting is the only image saved.
- Once the shutter-release button is pressed all the way, hold the camera steady without
  moving it until a still picture is displayed. After taking a picture, do not turn the camera
  off before the monitor switches to the shooting screen.
- Use of a tripod is recommended. Set **Vibration reduction** in the setup menu (\(\sum 104\)) to **Off** when using a tripod to stabilize the camera.
- Smear (23) that occurs on the monitor after shooting will not be recorded with images.
- The digital zoom is not available.





#### □ Panorama assist □



Use this mode when shooting a series of pictures that can later be joined on a computer to form a single panorama.

- Press the multi selector ▲, ▼, ◀ or ▶ to select the direction in which pictures are to be joined and press the ⋈ button.
- After shooting the first picture, shoot the necessary number of pictures while confirming the seams. To finish shooting, press the 🔞 button.
- Transfer pictures to a computer and use the included Panorama Maker 5 software (□92, ←4) to join them in a single panorama.
   See "Using Panorama Assist" (←3) for more information.

#### 🙀 Pet portrait

Use this mode for shooting pictures of dogs or cats.

- Select Single or Continuous (three pictures are shot continuously).
  - **Single**: One picture is captured at a time.
  - Continuous (default setting): When the camera focuses on the detected face in Pet portrait auto release (default setting) mode, three pictures are shot



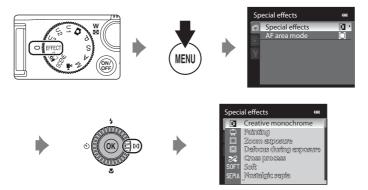
- The camera detects and focuses on the face of a dog or cat. When the subject is in focus, the shutter is released automatically (Pet portrait auto release (default setting)).
- Up to five pet faces are detected simultaneously.
- If a pet's face is not detected, press the shutter-release button halfway to focus on the subject at the center of the frame.
- Press the multi selector ◀ (🌖) to change the pet portrait auto release settings.
  - **Pet portrait auto release** (default setting): When the camera focuses on the detected face, the shutter is released automatically. When **Pet portrait auto release** is set, the ☑ icon is displayed on the shooting screen.
  - **OFF**: Press the shutter-release button to release the shutter.
- In the following situations, **Pet portrait auto release** is automatically switched to **OFF**.
  - When pet portrait auto release is repeated five times
  - When remaining capacity of the internal memory or memory card is low To continue shooting with pet portrait auto release, press the multi selector ◀ (ఄ) to set again.
- The digital zoom is not available.
- Under some shooting conditions such as pet-to-camera distance, speed of moving pets, direction in which the pets are facing, and brightness of the faces, the camera may be unable to detect a dog or cat, or a border is displayed around something other than a dog or cat.



# **Special Effects Mode (Applying Effects When Shooting)**

The effect can be applied to pictures during shooting. One of the 10 special effects is selected to shoot.

To select an effect, press the **MENU** button to display the special effects menu.



- Special effects can also be selected by rotating the sub-command dial while pressing the **Fn**1 button in the shooting screen.
- The focus area for autofocus differs depending on the setting of **AF area mode** that can be selected in the **1** tab after pressing the **MENU** button.
- When **AF area mode** is set to **Auto** (default setting), the camera has nine focus areas, and automatically selects the focus areas containing the subject closest to the camera. When the subject is in focus, the focus area (active focus area) lights in green (maximum of nine areas).

# **Characteristics of Each Special Effect**

Option	Description
Creative monochrome (default setting)	Create monochrome photographs by adjusting the grainy feel and contrast. Also, the normal color image can be converted into black and white (solarization).  Rotate the main command dial to adjust grainy feel.  Rotate the sub-command dial to adjust contrast.
Painting	Create images with the ambience of paintings.

### Special Effects Mode (Applying Effects When Shooting)

Option	Description		
Zoom exposure*	When the shooting mode icon lights in green, create dynamic pictures radiated out from the center by zooming from <b>W</b> (wideangle position) to <b>T</b> (telephoto zoom position) after the shutter is open and until it is closed.  • The zoom is fixed at <b>W</b> (wide-angle) end.  • The shutter speed is fixed at one second.  • Rotate the main command dial to switch zooming magnifications (2x or 3x (default setting)).  • The desired shooting effect is not produced when the subject is bright and the shutter speed cannot be slowered.		
Defocus during exposure*	When the shooting mode icon lights in green, create pictures by varying focus slightly between the shutter-release button being pressed and the picture being shot.  The desired shooting effect is not produced when the subject is bright and the shutter speed cannot be slowered.		
Cross process	Create images with an unusual hue by converting a positive color image into negative or negative color image into positive.  Rotate the main command dial to select hue.  Rotate the sub-command dial to set peripheral light intensity to on or off.		
Soft	Soften the image by adding a slight blur to the overall image.		
Nostalgic sepia	Add a sepia tone and reduces the contrast to simulate the qualities of an old photograph.		
High key	Give the overall image a bright tone.		
Low key Give the overall image a dark tone.			
Selective color	Create a black and white image in which only the specified color remains.  Rotate the main command dial to select a color to be retained.		

<sup>\*</sup> Use of a tripod is recommended. **Vibration reduction** in the setup menu (\(\sum 104\)) is fixed at **Off**.

### **Changing Special Effects Mode Settings**

- Features that can be set using the main command dial and sub-command dial differ depending on the special effects ( $\square$ 47).
- Features that can be set using the multi selector (\$\sum\_{60}\$) vary with special effects. See "List of the Default Settings" (QQ69) for more information.
- See "Features That Can Be Set Using the Exposure Compensation Dial" for more information on exposure compensation ( $\square$ 71).
- See "Features That Can Be Set with the Quick Menu" for more information on available guick menu ( $\square$ 73).
- See "Options Available in the Special Effects Menu" (below) for more information on functions that can be set using the **MENU** button.

# **Options Available in the Special Effects Menu**

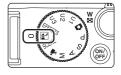
In the special effects mode, the following option settings can be changed.

Select special effects mode → MENU button → 💋 tab (□13)

Option	Description	
AF area mode	Choose how the focus area is determined from Face priority, Auto (default setting), Manual, Center (spot), Center (normal), or Center (wide).  • The AF area mode can also be selected by pressing the multi selector ▶ ([+]).	<b>∂=0</b> 48

# **Low Noise Night Mode (Shooting Low-lit Scenes)**

The ISO sensitivity is controlled automatically to a high level. This allows you to capture the atmosphere of a low-lit scene and shoot pictures with a low amount of noise without using the flash. It also reduces the effects of camera shake and subject movement when shooting at the telephoto zoom position.



- The ISO sensitivity is set automatically within the range of ISO 400 to 12800.
- To use the flash, raise the flash.
- The focus area for autofocus differs depending on the setting of **AF area mode** that can be selected in the **☑** tab after pressing the **MENU** button.
- When AF area mode is set to Auto (default setting), the camera has nine focus
  areas, and automatically selects the focus areas containing the subject closest to
  the camera. When the subject is in focus, the focus area (active focus area) lights
  in green (maximum of nine areas).

# Notes on Low Noise Night Mode

- Although vibration is reduced even in low-lit environments, a tripod is recommended when not
  using a flash. Set Vibration reduction (
  105) to Off when using a tripod to stabilize the camera.
- The picture taken may be grainy, because the shooting is performed with ISO sensitivity set to a high level.
- The appropriate exposure may not be obtained (overexposure) in clear sunlight, because the shooting is always performed at ISO 400 or higher.
- The camera may be unable to focus in extremely dark environments.
- The slowest shutter speed is restricted to 1/4 second.
- In low noise night mode, the available image size (□73) is 2048×1536 or smaller.

# Built-in ND Filter

When the subject is too bright, set **Built-in ND filter** in the setup menu ( $\square$ 104) to reduce the light and shoot.

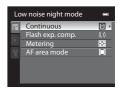
# **More Information**

### **Changing Low Noise Night Mode Settings**

- See "Features That Can Be Set Using the Multi Selector" (\$\infty\$60) for more information on flash mode (\$\infty\$61), self-timer (\$\infty\$64)/smile timer (\$\infty\$65)/ remote control (\$\infty\$60), focus mode (\$\infty\$67) and AF area mode.
- See "Features That Can Be Set Using the Exposure Compensation Dial" for more information on exposure compensation (\$\sumsymbol{\Pi}\$71).
- See "Features That Can Be Set with the Quick Menu" for more information on available quick menu (\$\sum 73\$).
- See "Options Available in the Low Noise Night Mode Menu" (below) for more information on functions that can be set using the **MENU** button.

### Options Available in the Low Noise Night Mode Menu

In the low noise night mode, the following option settings can be changed.



Select low noise night mode → MENU button → 🛂 tab (📖 13)

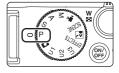
The settings of **Continuous**, **Flash exp. comp.** and **Metering** in low noise night menu are stored in the camera's memory independently and is not applied to the settings in any other shooting mode. When the camera is turned off or switched to another shooting mode, **AF area mode** is reset to **Auto**.

Option	Description	Ш
Continuous	Continuous shooting can be set. Choose <b>Single</b> or <b>Continuous</b> .	<b>6−6</b> 45
Flash exp. comp.	Adjust the flash output.	<b>∂−6</b> 52
Metering	Choose how the camera meters the brightness of the subject. Determines the exposure (combination of shutter speed and aperture value) according to the measured brightness.	<b>6−6</b> 44
AF area mode	Set how the camera selects the AF area mode to Face priority, Auto (default setting), Manual, Center (spot), Center (normal), Center (wide) or Subject tracking.  • The AF area mode can also be selected by pressing the multi selector ▶ ([+]).	<b>6−6</b> 48

Features That Cannot Be Used Simultaneously

# P, S, A, M Modes (Setting the Exposure for Shooting)

Pictures can be shot with greater control by setting the quick menu (\$\sum\_{73}\$) or shooting menu (\$\sum\_{54}\$) items in addition to setting the shutter speed or aperture value manually according to shooting conditions and requirements.



 The focus area for autofocus differs depending on the setting of AF area mode that can be selected in the P, S, A or M tab after pressing the MENU button.

When **AF area mode** is set to **Auto** (default setting), the camera has nine focus areas, and automatically selects the focus areas containing the subject closest to the camera. When the subject is in focus, the focus area (active focus area) lights in green (maximum of nine areas).

The procedure for shooting pictures at the desired brightness (exposure) by adjusting the shutter speed or aperture value is called "determine exposure". The sense of dynamism and amount of background defocus in pictures to be shot vary depending on the combinations of shutter speed and aperture value even if the exposure is the same.

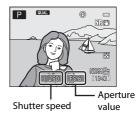
Rotate the command dial to set the shutter speed and aperture value.





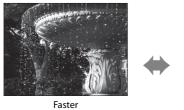


Sub-command dial



	Exposure mode	Shutter speed (QQ83)	Aperture value (QQ 52)
Р	Programmed auto (\$\subseteq\$53)	Automatically adjusted (flexible program is enabled by the main command dial).	
S	Shutter-priority auto (◯◯ 53)	Adjusted by the main command dial.	Automatically adjusted.
Α	Aperture-priority auto (◯◯ 53)	Automatically adjusted.	Adjusted by the sub-command dial.
М	Manual (🎞 53)	Adjusted by the main command dial.	Adjusted by the sub-command dial.

### **Adjusting the Shutter Speed**



1/1000 s



Slower 1/30 s

### **Adjusting the Aperture Value**



Larger aperture (Small f-number) f/2.8



Smaller aperture (Large f-number) f/8

# Aperture and zoom

The aperture value (f-number) indicates the lens brightness. Large apertures (expressed by small f-numbers) let more light into the camera, and small apertures (large f-numbers) let less light. The aperture value of this camera zoom lens can be changed depending on the zoom position. When zooming to the wide-angle position and telephoto zoom position, the aperture values are f/ 2.8 and f/5.6, respectively.

• When Fixed aperture ( $\square$ 106) is set to **On**, zooming can be performed with minimum changes in the aperture value.

### Built-in ND Filter

When the subject is too bright, set **Built-in ND filter** in the setup menu ( $\square$ 104) to reduce the light and shoot.

# U1, U2 or U3 (User Setting) Mode

Even when the mode dial is set to U1, U2 or U3 (user setting) mode, you can shoot in P (Programmed auto), S (Shutter-priority auto), A (Aperture-priority auto) or M (Manual). The setting combinations (user settings) that are frequently used for shooting can be saved in U1, U2 and U3 ( $\clubsuit$ 58).

#### P (Programmed auto) (5-5)

Use for automatic control of the exposure by the camera.

 Different combinations of shutter speed and aperture value can be selected without changing the exposure by rotating the main command dial ("flexible program"). While flexible program is in effect, a flexible program mark (\*) is displayed next to the mode indicator (P) in the upper left of the monitor.



 To cancel flexible program, rotate the main command dial until the flexible program mark (XX) is no longer displayed, or press the AE-L/AF-L button while pressing the Fn1 button. Selecting another shooting mode, or turning off the camera, also cancels flexible program.

### S (Shutter-priority auto) (5-5)

Use to shoot fast moving subjects with a fast shutter speed, or use to emphasize the movements of a moving subject with a slow shutter speed.

 The shutter speed can be adjusted by rotating the main command dial.



### A (Aperture-priority auto) (5-5)

Use to blur the background or bring both the foreground and background into focus.

 The aperture value can be adjusted by rotating the sub-command dial.



#### M (Manual) (♣7)

Use to control the exposure according to shooting requirements.

 When adjusting the aperture value or shutter speed, the degree of deviation from the exposure value measured by the camera is displayed in the exposure indicator. The degree of deviation in the exposure indicator is displayed in EVs (–3 to +3 EV in increments of 1/3 EV).



Exposure indicator

- When the degree of deviation of the exposure value is below –2 EV or above +2 EV, the exposure indicator is displayed in red.
- The shutter speed can be adjusted by rotating the main command dial and the aperture value can be adjusted by rotating the sub-command dial.

# Changing P, S, A, M Modes

- See "Features That Can Be Set Using the Multi Selector" (☐60) for more information on flash mode (☐61), self-timer (☐64)/smile timer (☐65)/ remote control (☐60) and focus mode (☐67), AF area mode.
- See "Features That Can Be Set Using the Exposure Compensation Dial" for more information on exposure compensation (271).
- See "Features That Can Be Set with the Quick Menu" for more information on available guick menu (\$\sum\_73\$).
- See "Options Available in the Shooting Menu" (below) for more information on functions that can be set using the **MENU** button.

### **Options Available in the Shooting Menu**

In the P, S, A, M mode, the following option settings can be changed.



### Select P, S, A, M mode $\rightarrow$ MENU button $\rightarrow$ P, S, A, M tab ( $\square$ 13)

Option	Description	
Custom Picture Control	Allow you to store the settings customized in COOLPIX Picture Controls, which can set picture editing options for recording images according to the shooting scene or your preferences.	<b>∂−0</b> 43
Metering	Select the method that the camera uses to measure the brightness of the subject. The camera adjusts the exposure, which is a combination of shutter speed and aperture value, based on the brightness measurement. The default setting is <b>Matrix</b> .	<b>6→</b> 044
Continuous	Select the mode used for taking a series of pictures from Single, Continuous, Continuous flash, BSS ( $\square$ 43), Multi-shot 16, and IntvI timer shooting. The default setting is Single (i.e., only one picture is captured at a time). Allow you to shoot up to 90 pictures at a rate of about 1.2 frames per second while Continuous is selected and the shutter-release button is fully held down (when image quality is set to Normal and image size is set to 104 3648×2736).	<b>∂-6</b> 45

# P, S, A, M Modes (Setting the Exposure for Shooting)

Option	Description	Ш
AF area mode	Set how the camera selects the AF area mode to Face priority, Auto (default setting), Manual, Center (spot), Center (normal), Center (wide) or Subject tracking.  • The AF area mode can also be selected by pressing the multi selector ► ([+]).	<b>6→</b> 048
Autofocus mode	When <b>Single AF</b> (default setting) is selected, the camera focuses only while the shutter-release button is pressed halfway. When <b>Full-time AF</b> is selected, the camera focuses even when the shutter-release button is not pressed halfway. You may hear the sound of the camera focusing.	<b>6~</b> 052
Flash exp. comp.	Flash compensation is used to adjust the flash output, changing the brightness of the main subject relative to the background. The default setting is <b>0.0</b> .	<b>6</b> €52
Noise reduction filter	Set the strength of the noise reduction function that is normally performed when recording the picture. The default setting is <b>Normal</b> .	<b>≈</b> 53
Long exposure NR	At slow shutter speeds, pictures may be affected by "noise" in the form of randomly-spaced, brightly-colored dots concentrated in dark parts of the image. Reduce noise at slow shutter speeds. The default setting is <b>Auto</b> .	<b>6−</b> 053
Distortion control	Choose whether to correct the peripheral distortion that occurs due to the intrinsic characteristics of lenses. Enabling distortion control reduces the size of the frame, as compared to when distortion control is not enabled. The default setting is <b>Off</b> .	<b>6-6</b> 54
Wide-angle converter	Set the option to <b>On</b> when using the Wide-angle Converter WC-E75A (available separately). The default setting is <b>None</b> .	<b>&gt;</b> 54
Flash control	Set the built-in flash to off even when you are not using a Speedlight (external flash unit) attached to the camera's accessory shoe. The default setting is <b>Auto</b> .	<b>€</b> 55
Active D-Lighting	Prevent loss of contrast details in highlights and shadows when shooting images. The default setting is <b>Off</b> .	<b>6−6</b> 56

### P, S, A, M Modes (Setting the Exposure for Shooting)

Option Description			
Zoom memory	When the zoom control is operated while pressing the Fn¹ button, the camera changes in steps to the focal length (equivalent to 35mm [135] format of angle of view) of the zoom lens that is set in advance.  • The default setting is on ✔ for all the check boxes.	<b>6-6</b> 57	

# U1, U2 and U3 (User Setting Modes)

Up to three setting combinations that are frequently used for shooting (user settings) can be saved in U1, U2 and U3. Shooting is possible in P (Programmed auto), S (Shutter-priority auto), A (Aperture-priority auto) or M (Manual).

Rotate the mode dial to U1, U2 or U3 to retrieve the settings saved in **Save user settings**.

- Frame the subject and shoot with these settings, or change the settings as required.
- The setting combinations that are retrieved when the mode dial is rotated to U1, U2 or U3 can be changed as many times as you want in Save user settings.
- See 558 for more information on the Save user settings.



- See "Features That Can Be Set Using the Multi Selector" (\$\sum 60\$) for more information on flash mode (\$\sum 61\$), self-timer (\$\sum 64\$)/smile timer (\$\sum 65\$)/ remote control (\$\sum 60\$) and focus mode (\$\sum 67\$), AF area mode
- See "Features That Can Be Set Using the Exposure Compensation Dial" for more information on exposure compensation (271).
- See "Features That Can Be Set with the Quick Menu" for more information on available quick menu (\$\sum 73\$).
- See "Available Specialized Menu for **U1**, **U2** or **U3**" (\$\subseteq\$ 58) and "Options Available in the Shooting Menu" (\$\subseteq\$ 54) for more information on functions that can be set using the **MENU** button.

## Available Specialized Menu for U1, U2 or U3

Following settings can be changed in U1, U2 or U3 mode.



### Set to U1, U2 or U3 mode $\rightarrow$ MENU button $\rightarrow$ U1, U2 or U3 tab ( $\square$ 13)

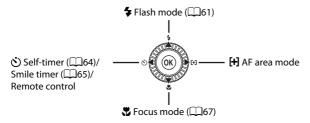
Option	Description	ш
Save user settings	The current settings are stored.	<b>6</b> €58
Reset user settings	The settings saved to <b>U1</b> , <b>U2</b> or <b>U3</b> are reset.	
Shooting mode	Choose the standard shooting mode (default setting is <b>P</b> ). The current flexible program (when set to <b>P</b> ), shutter speed (when set to <b>S</b> or <b>M</b> ) or aperture value (when set to <b>A</b> or <b>M</b> ) settings are also saved.	
Focal length (35mm equiv.)  Set the zoom position for when the mode dial is set. Choose 28 mm (default setting), 35 mm, 50 mm, 85 mm, 105 mm, 135 mm, 200 mm or Current zoom position.		-
Photo info	Set the information displayed on the monitor when the mode dial is set. This setting is not applied to the setup menu settings.	<b>6−6</b> 74
Virtual horizon display	Set the virtual horizon display for when the mode dial is set. This setting is not applied to the setup menu settings.	<b>6-6</b> 74
Initial monitor display	Set the information displayed on the monitor when the mode dial is set (default setting is <b>Show info</b> ).	15
Flash mode	Set the flash mode for when the mode dial is set.	61
Focus	Set the focus mode for when the mode dial is set. The current focus distance is also saved when the focus mode is <b>MF</b> (manual focus).	67

# U1, U2 and U3 (User Setting Modes)

Option	Description		
AF area mode	Set the AF area mode for when the mode dial is set. The current focus area position is saved when AF area mode is set to <b>Manual</b> .		
AF assist	Enable or disable the AF assist mode for when the mode dial is set. This setting is not applied to the setup menu settings.	<b>∂=</b> 078	

## **Features That Can Be Set Using the Multi Selector**

Press the multi selector  $\blacktriangle$  ( $\clubsuit$ ),  $\blacktriangleleft$  ( $\diamondsuit$ ),  $\blacktriangledown$  ( $\clubsuit$ ), or  $\blacktriangleright$  ( $\clubsuit$ ) while shooting to operate the following functions.



#### **Available Functions**

Available functions differ according to the shooting mode as follows.

• See "List of the Default Settings" ( 69) for more information on the default settings in each shooting mode.

	Function	۵	SCENE	EFFECTS	٢٥	P, S, A, M, U1, U2, U3	嘌
4	Flash mode (QQ61)	~			~	~	-
	Self-timer (QQ64)	~			~	~	-
$\odot$	Smile timer (QQ65)	~	3	3	~	~	-
	Remote control <sup>1</sup>	~			~	~	~
#	Focus mode (QQ67)	~			~	~	~
[+]	AF area mode <sup>2</sup>				~	~	-

Use the Remote Control ML-L3 (available separately) to release the shutter ( ←105). It is convenient for taking self-portraits of group shots and effectively eliminating blur caused by camera shake that occurs when the shutter-release button is pressed.

<sup>&</sup>lt;sup>2</sup> Set the method of how to change the focus area for autofocus (□54). Set **Multi selector** right press to **Off** in the setup menu (□104) if you do not want to display the selected focus area when the multi sector b is pressed.

<sup>3</sup> The setting varies with scene mode or special effects. See "List of the Default Settings" (□69) for more information.

# **Using the Flash (Flash Modes)**

You can shoot pictures with a flash by raising the built-in flash. You can set a flash mode that suits the shooting conditions.

- **1** Press the  $\clubsuit \& \text{ (flash pop-up)}$  button to raise the flash ( $\square 7$ ).
  - When the flash is lowered, the flash mode is fixed at **(9)** (off).
- 2 Press ▲ (**\$** flash mode) on the multi selector.



Saumo

\$AUTO

- **3** Press the multi selector to select the desired mode and press the **(M)** button.
  - See "Available Flash Modes" (\$\square\$62\$) for more information.

  - When ♣♠ (slow sync) or ♣♠ (rear-curtain sync) is selected for flash mode, the flash mode can be switched by pressing ▶ before pressing the ♠️ button.
  - If the button is not pressed within a few seconds, the selection is set and the setting menu disappears.
  - When \$400 (auto) is applied, \$400 is only displayed for a few seconds even if monitor indicators (□15) are turned on.

Flash mode

# **4** Frame the subject and take a picture.

- The flash lamp indicates the status of the flash when the shutter-release button is pressed halfway.
  - On: The flash will fire when you press the shutterrelease button all the way.
  - Blinking: The flash is charging. The camera cannot take pictures.
  - Off: The flash will not fire when a picture is taken.
- If the battery is low, the monitor will be turned off while the flash is charging.



### Lowering the Flash

When not using the flash, gently push to lower the flash until it clicks shut  $(\square 7)$ .

### Effective Range of the Built-in Flash

The built-in flash has a range of about 0.3 to 9.0 m (1 ft to 29 ft) for wide-angle position, and about 0.3 to 4.5 m (1 ft to 14 ft) for telephoto zoom position (when **ISO sensitivity** is set to **Auto**).

#### **Available Flash Modes**

#### **SAUTO** Auto

Flash fires automatically when lighting is dim.

#### 4 Auto with red-eye reduction

Best choice for portraits. Reduces red-eye effect caused by flash in portraits (QQ63).

#### Off

Flash does not fire.

- Available when the scene mode is (scene auto selector) or an optional Speedlight (external flash unit) is attached.
- Use of a tripod is recommended to avoid the effects of camera shake when shooting in a dark location.

#### Fill flash

The flash fires when a picture is taken, regardless of how bright the subject is. Use to "fill-in" (illuminate) shadows and backlit subjects.

#### M4 Manual

Flash is forcibly fired at the flash output that is set for the built-in flash.

- Choose the flash output from M\$Full (full flash), M\$1/2, M\$1/4, M\$1/8, M\$1/16, M\$1/32 and M\$1/64. For example, when M\$1/16 is chosen, the flash is 1/16 of the full flash.
- Not available when a Speedlight flash unit (available separately) is attached.

#### Slow sync / ♣ Rear-curtain sync

Slow svnc:

Fill flash is combined with a slow shutter speed.

Suitable for portraits of human subjects shot at night or under dim light. Flash illuminates main subject; slow shutter speeds are used to capture background.

· Rear-curtain sync:

Fill flash fires just before the shutter closes, creating the effect of a stream of light behind moving subjects.

### Flash Mode Setting

- The setting varies with shooting mode. See "Available Functions" (\$\sum\_{60}\$) and "List of the Default Settings" (\$\sum\_{60}\$) for more information.
- This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" (□80).
- The changed flash mode setting applied in the following situations is saved in the camera's memory even after the camera is turned off.
  - When shooting mode P, S, A or M or special effects mode is used
  - When 5 (auto with red-eye reduction) is selected in 🗖 (Auto) mode



#### Auto with Red-eye Reduction

This camera uses advanced red-eye reduction ("In-Camera Red-Eye Fix").

Pre-flashes are fired repeatedly at low intensity before the main flash, reducing the red-eye effect. If the camera detects "red-eve" when a picture is taken, Nikon's own In-Camera Red-Eve Fix processes the image before it is recorded.

Note the following when taking pictures:

- Because pre-flashes are fired, there is a slight lag between when the shutter-release button is pressed and when the picture is shot.
- The time required to save the picture increases slightly.
- Advanced red-eye reduction may not produce the desired results in some situations.
- In extremely rare instances, areas not subject to red-eye may be affected by advanced red-eye reduction processing. In these cases, choose another mode and try again.
- The red-eye reduction process when NRW (RAW) images (\$\sum\_75\$) are recorded consists only of the pre-flashing before the main flash (including the JPEG image that is recorded at the same time). When **Red-eye reduction** in the setup menu ( $\square$ 104) is set to **Pre-flash off**, the shutter is released immediately when the shutter-release button is pressed all the way.

External Flash Unit

You can attach the following Nikon Speedlights on the camera's accessory shoe ( $\square$ 2) to take pictures.

- Speedlights SB-400, SB-600, SB-700, SB-800, SB-900
- Wireless Speedlight Commander SU-800

### **Using the Self-timer**

The self-timer is suitable for taking group pictures and reducing the vibration when the shutter-release button is pressed.

When using the self-timer, use of a tripod is recommended. Set **Vibration reduction** in the setup menu ( $\square$ 104) to **Off** when using a tripod to stabilize the camera.

**1** Press **◄** (**७** self-timer) on the multi selector.



# 2 Use the multi selector to select **3 10s** (or **3 2s**) and press the **4 b** button.

- To change the time for self-timer, press ▶ before pressing the button.
- **3** 10s (ten seconds): suitable for group pictures.
- 🕇 **2s** (two seconds): suitable for preventing camera shake



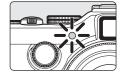
- When the shooting mode is set to **Pet portrait** in scene mode, **★** (pet portrait auto release) is displayed (△45). The self-timer **♦ 10s** and **♦ 2s** are not available.
- The mode selected for the self-timer is displayed.
- If the button is not pressed within a few seconds, the selection is set and the setting menu disappears.
- **3** Frame the picture and press the shutter-release button halfway.
  - Set the focus and exposure.

# 4 Press the shutter-release button all the way.

- The self-timer starts, and the number of seconds remaining before the shutter is released is displayed. The self-timer lamp blinks while the timer is counting down. About one second before the shutter is released, the lamp stops blinking and remains lit.
- When the shutter is released, the self-timer turns **OFF**.
- To stop the timer before a picture is taken, press the shutter-release button again.









### **Smile Timer (Shooting Smiling Faces)**

When this mode is selected, the camera detects smiling faces and automatically releases the shutter even if you don't press the shutter-release button.

- This function can be used when the shooting mode is 
   a(auto), P, S, A, M,
   U1, U2, U3, 
   (low noise night), scene mode Portrait or Night portrait.
- 1 Press ◀ (🌣 self-timer) on the multi selector.
  - Change any flash mode, exposure, or shooting menu settings before pressing the ♂ button.



- 2 Use the multi selector to choose (smile timer), and press the ௵ button.
  - If the button is not pressed within a few seconds, the selection is set and the setting menu disappears.



- **3** Frame the picture and wait for the subject to smile without pressing the shutter-release button.
  - When the camera detects a face, a yellow double border (focus area) is displayed around that face. When the camera has focused on that face, the double border will turn green for a moment and focus is locked.



- Up to three faces are detected. When more than one face is detected, the face closest
  to the center of the frame is framed by a double border and the others by single
  borders.
- If the camera detects that the face framed by the double border is smiling, the shutter is automatically released.
- Each time the shutter is released, automatic shooting using face detection and smile detection is repeated.
- **4** Shooting ends.
  - To cancel smile detection and stop shooting, return to step 1 and select OFF.

#### Features That Can Be Set Using the Multi Selector

#### Notes on Smile Timer

- The digital zoom is not available.
- When the smile timer is selected, the monitor is not turned off even when the □ button is pressed
   (□15).
- Under some shooting conditions, faces and smiling faces may not be detected properly.
- See "Viewing Pictures Taken Using Face Detection" (QQ85) for more information.
- The smile timer cannot be used simultaneously with certain shooting modes. See "Available Functions" (\(\subseteq\) 60) and "List of the Default Settings" (\(\subseteq\) 69) for more information.
- This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" (\$\sum\_{180}\$) for more information.

### When the Self-timer Lamp Blinks

When the camera detects a face, the self-timer lamp blinks. The lamp flickers immediately after the shutter is released.

# Releasing the Shutter Manually

The shutter can also be released by pressing the shutter-release button. If no faces are detected, the camera focuses on the subject at the center of the frame.

### **✓** More Information

See "Autofocus" (QQ33) for more information.

### **Using Focus Mode**

Choose a focus mode according to the desired scene.

**1** Press  $\nabla$  ( $\nearrow$  focus mode) on the multi selector.



- **2** Use the multi selector to choose the desired focus mode and press the **(B)** button.
  - See "Available Focus Modes" (\$\omega\$68) for more information.
  - If the **®** button is not pressed within a few seconds, the selection is set and the setting menu disappears.
  - When AF (autofocus) is applied, AF is only displayed for a few seconds even if monitor indicators (□15) are turned on.





#### **Available Focus Modes**

#### AF Autofocus

The camera automatically adjusts the focus according to the distance to the subject. Use when the distance from the subject to the lens is 50 cm (1 ft 8 in.) or more, or 80 cm (2 ft 8 in.) or more at the maximum telephoto zoom position.

#### Macro close-up

Use for close-ups of flowers or small objects.

How close you can be to the subject while shooting depends on the zoom ratio. When the zoom ratio is set to a position where  $\Theta$  and the zoom indicator light in green, the camera can focus on subjects as close as 7 cm (2.8 in.) from the lens. At the maximum wide-angle zoom position (the zoom position  $\triangle$ ), the camera can focus on subjects as close as 2 cm (0.8 in.) from the lens.

#### ▲ Infinity

Use when shooting distant scenes through window glass or when shooting landscapes. When the shutter-release button is pressed halfway, the AF/access lamp always lights in green. However, the camera may not be able to focus on nearby objects. The flash mode is set to **3** (off).

#### MF Manual focus

The focus can be adjusted for any subject that is a distance of 2 cm (0.8 in.) to infinity from the lens ( $\bullet \bullet$ 2). The closest distance at which the camera can focus varies depending on the zoom position.

This function can be used when the shooting mode is P, S, A, M, U1, U2, U3,

 ☑ (low noise night), special effects mode or scene mode Sports.

### Note on Shooting with the Flash

When shooting with \( \frac{1}{4} \) (macro close-up), the flash may be unable to light the entire subject at distances of less than 30 cm (1 ft).

### Focus Mode Setting

- The setting varies with the shooting mode. See "Available Functions" (☐60) and "List of the Default Settings" (☐69) for more information.
- This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" (\(\subseteq\) 80) for more information.
- For shooting modes P, S, A or M or special effects mode, the changed focus mode setting is stored in the camera's memory even after the camera is turned off.

### Macro Close-up

When using P, S, A, M, U1, U2 or U3 mode if **Autofocus mode** in the shooting menu ( $\square$ 54) is set to **Full-time AF**, or when using  $\P$  (movie) mode if **Autofocus mode** in the movie menu ( $\square$ 101) is set to **Full-time AF**, the camera will adjust focus even if the shutter-release button is not pressed halfway.

When using other shooting modes, **Full-time AF** is turned on automatically when macro mode is turned on.

You may hear the sound of the camera focusing.

### Infinity

If you set focus mode to infinity while using  $\square$  (auto) mode, P, S, A, M, U1, U2 or U3 mode,  $\square$  (low noise night) mode or special effects mode, the focus area is not displayed on the screen.

### **List of the Default Settings**

The default settings in each shooting mode are described below.

• Similar information about scene mode can be found on the next page.

Shooting mode	Flash mode <sup>1</sup> (ДД61)	Self-timer (◯◯164)	Focus mode (QQ67)	AF area mode (\$\square\$55)
(auto) (()38)	\$AUTO	OFF	AF <sup>2</sup>	-
EFFECTS (special effects) ( 46)	\$AUTO <sup>3</sup>	OFF <sup>4</sup>	AF	<b>□</b> <sup>5</sup>
(low noise night)	<b>\$</b> AUTO	OFF	AF	
P, S, A, M (Д)51)	<b>\$</b> AUTO	OFF	AF	<b>(=)</b>
U1, U2, U3 (user setting) (\(\subseteq 57\)	\$AUTO	OFF	AF	<b>(=)</b>
<b>東</b> (movie) (口98)	<b>3</b> 6	OFF <sup>7</sup>	AF <sup>2</sup>	-

When the flash is lowered, the flash mode is fixed at **③** (off). When using the built-in flash, **⑤** (off) cannot be selected. When using a flash unit (available separately), M\$ (manual) cannot be selected.

 The setting applied in shooting modes P, S, A and M is saved in the camera's memory even after the camera is turned off (except for self-timer).

 $<sup>^2</sup>$  **AF** (autofocus), **\(\mathbb{K}\)** (macro close-up) or  $\( \Delta \)$  (infinity) can be selected.

<sup>3</sup> The flash is fixed at **③** (off) when in **Painting** or **Zoom exposure**. When **Defocus during exposure** is selected, **⑤** (off) or **∮** (slow sync) can be selected.

<sup>&</sup>lt;sup>4</sup> Smile timer cannot be selected.

<sup>&</sup>lt;sup>5</sup> (subject tracking) cannot be selected.

The AF area mode is fixed at **Center (normal)**, when **Zoom exposure** is selected.

<sup>&</sup>lt;sup>6</sup> The setting cannot be changed.

<sup>&</sup>lt;sup>7</sup> Ouick-response remote can be selected

#### Features That Can Be Set Using the Multi Selector

Default settings in scene mode are described below.

	Flash mode (QQ61)	Self-timer (◯◯164)	Focus mode (QQ67)	AF area mode ( 55)
<b>(</b> ( 40)	<b>\$</b> AUTO¹	OFF <sup>2</sup>	AF <sup>3</sup>	-
<b>2</b> (Q)40)	<b>\$</b> ⊚	OFF	AF <sup>3</sup>	-
<b>4</b> 0)	<b>③</b> <sup>3</sup>	OFF <sup>2</sup>	▲3	-
<b>4</b> (QQ41)	<b>③</b> <sup>3</sup>	OFF <sup>3</sup>	AF <sup>4</sup>	-
<b>₽</b> * (◯◯ 41)	<b>\$⊚</b> <sup>5</sup>	OFF	AF <sup>3</sup>	-
<b>※</b> (QQ41)	<b>\$⊚</b> 6	OFF <sup>2</sup>	AF <sup>3</sup>	-
<b>₽</b> (∭41)	<b>\$</b> AUTO	OFF <sup>2</sup>	AF <sup>3</sup>	-
<b>8</b> (□142)	<b>\$</b> AUTO	OFF <sup>2</sup>	AF <sup>3</sup>	-
<b>≟</b> (◯◯42)	<b>③</b> <sup>3</sup>	OFF <sup>2</sup>	AF <sup>3</sup>	-
<b></b> (QQ42)	<b>③</b> <sup>3</sup>	OFF <sup>2</sup>	<b>▲</b> <sup>3</sup>	-
<b>4</b> 2)	<b>③</b> ³	OFF <sup>2</sup>	<b>▲</b> <sup>3</sup>	-
<b>%</b> (QQ42)	<b>\$</b> AUTO	OFF <sup>2</sup>	₩3	-
<b>TI</b> (QQ43)	<b>③</b> <sup>3</sup>	OFF <sup>2</sup>	₩3	-
<b><u></u></b> (Q43)	<b>③</b> ³	OFF <sup>2</sup>	AF <sup>7</sup>	-
<b>⊚</b> (□143)	<b>③</b> <sup>3</sup>	OFF <sup>8</sup>	<b>▲</b> <sup>3</sup>	-
<b>4</b> 3)	<b>\$</b> AUTO	OFF <sup>2</sup>	<b>AF</b> <sup>7</sup>	-
<b>4</b> 4)	<b>\$</b> / <b>3</b> <sup>9</sup>	OFF <sup>2</sup>	AF <sup>3</sup>	-
<b>∺</b> (□45)	<b>\$</b> AUTO	OFF <sup>2</sup>	<b>AF</b> <sup>10</sup>	-
<b>%</b> (QQ45)	<b>③</b> <sup>3</sup>	<b>ਛ</b> 11	<b>AF</b> <sup>7</sup>	-

<sup>1 \$</sup>AUTO (auto) and (3) (off) can be selected. When \$AUTO (auto) is selected, the camera automatically selects the flash mode appropriate for the scene it has selected.

### 

<sup>&</sup>lt;sup>2</sup> Self-timer or remote control can be selected.

<sup>&</sup>lt;sup>3</sup> The setting cannot be changed.

<sup>&</sup>lt;sup>4</sup> **AF** (autofocus) or **MF** (manual focus) can be selected.

<sup>&</sup>lt;sup>5</sup> The setting cannot be changed. The flash mode setting is fixed at fill flash with slow sync and red-eye reduction.

<sup>&</sup>lt;sup>6</sup> May switch to slow sync with red-eye reduction flash mode.

<sup>&</sup>lt;sup>7</sup> **AF** (autofocus) or **♥** (macro close-up) can be selected.

<sup>&</sup>lt;sup>8</sup> Quick-response remote can be selected.

<sup>&</sup>lt;sup>9</sup> When HDR is set to Off, the flash mode is fixed at \$\forall (fill flash). When HDR is set to On, the flash mode is fixed at \$\forall (off).

<sup>&</sup>lt;sup>10</sup> **AF** (autofocus), **♣** (macro close-up) or **▲** (infinity) can be selected.

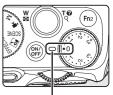
<sup>&</sup>lt;sup>11</sup> The self-timer is not available. Pet portrait auto release ( $\square$ 45) can be set to on or off.

# Features That Can Be Set Using the Exposure Compensation Dial

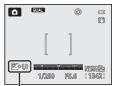
### **Adjusting Brightness (Exposure Compensation)**

When exposure compensation is set for shooting, the brightness of the overall image can be adjusted to make it brighter or darker.

- 1 Select the compensation value by rotating the exposure compensation dial.
  - To make the subject brighter: adjust the exposure compensation value to the "+" side.
  - To make the subject darker: adjust the exposure compensation value to the "-" side.
  - When set to a value other than 0.0, the Mark and compensation value are displayed on the monitor and the exposure compensation dial mark turns on when shooting.



Exposure compensation dial mark



Exposure compensation value

**2** Press the shutter-release button to take a picture.

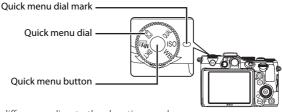
### Exposure Compensation Value

- When the shooting mode is the Fireworks show scene mode (□ 43) or M (manual) mode (□ 7), the exposure compensation cannot be used.
- When recording a movie, the compensation value is not adjusted even when the exposure compensation dial is rotated.

# **Features That Can Be Set with the Quick Menu**

When the quick menu dial is rotated while shooting, the quick menu is displayed for the function that is selected with the mark. When the guick menu is displayed, the quick menu dial mark turns on.

- The guick menu is also displayed by pressing the guick menu button.
- To exit the guick menu, press the guick menu button or the shutter-release button.



Available functions differ according to the shooting mode.

Dial position	Function	۵	P, S, A, M, U1, U2, U3	SCENE	EFFECTS	<u>0</u> 2	県
QUAL	Image quality/Image size (◯◯ 73)	~	~	~	~	<b>&gt;</b>	-
	Movie options (QQ 73)	-	-	-	-	-	~
ISO	ISO sensitivity (QQ73)	-	~	-	-	-	_
WB	White balance (QQ 73)	-	~	-	-	<b>~</b>	~
BKT	Auto bracketing (QQ73)	-	~	_	-	-	_
My	My Menu (🎞 73)	-	~	_	-	-	_
<b>13</b>	Picture Control (QQ 73)	-	~	_	-	-	_



### Features That Cannot Be Used Simultaneously

# **Available Quick Menu**

Option	Description	
QUAL Image quality/ Image size	Set the image quality (compression ratio) and image size to be recorded ( $\square$ 74). The default setting of image quality is <b>Normal</b> , and of image size is	74
QUAL Movie options	Set the desired type of movie. The default setting is <b>720 HD 720p (1280×720)</b> .	<b>6–6</b> 42
ISO ISO sensitivity	Higher ISO sensitivity allows you to take pictures of darker subjects. Additionally, even with subjects of similar brightness, pictures can be taken at faster shutter speeds, and blurring caused by camera shake and subject movement can be reduced. When ISO sensitivity is set to <b>Auto</b> (default setting), the camera sets the ISO sensitivity automatically.  • In M (manual) mode, ISO sensitivity is fixed at ISO 100 if <b>Auto</b> , <b>High ISO sensitivity auto</b> , <b>ISO 100-200</b> or <b>ISO 100-400</b> is selected.	<b>→</b> 30
WB White balance	Adjust colors in the image closer to the colors as they appear to the eye. Although <b>Auto (normal)</b> (default setting) can be used under most types of lighting, you can apply the white balance setting suited to the sky conditions or light source to achieve better results if the default setting results are unsatisfactory.  • The preset value for preset manual applies commonly to the <b>P</b> , <b>S</b> , <b>A</b> , <b>M</b> , <b>U1</b> , <b>U2</b> and <b>U3</b> shooting modes.	<b>6</b> €32
BKT Auto bracketing	Continuous shooting can be performed while changing the exposure (brightness) automatically with the shutter speed (Tv) or ISO sensitivity (Sv), or multiple images can be recorded while varying the white balance (WB). The default setting is <b>OFF</b> .	<b>6−6</b> 36
Mg My Menu	Display only the menu items that are frequently used for shooting.  ■ Options that are displayed in My Menu can be changed from <b>Customize My Menu</b> in the setup menu (□104).	<b>∂−0</b> 90
Picture Control	Change the settings for image recording according to the shooting scene or your preferences. The default setting is <b>Standard</b> .	<b>6−6</b> 38

# **Changing the Image Quality and Image Size**

Display the shooting screen ightharpoonup QUAL (Quick menu dial) ( $\square$ 72) ightharpoonup Image quality/Image size

The image quality (compression ratio) and image size can be selected for recording.

- 1 Choose the type of image quality (☐75) by pressing the multi selector ◀ or ▶.
  - Items can also be chosen by rotating the main command dial.
  - To change the image quality only, choose the type of image quality, and then press the quick menu button.
  - To continue and change the image size, press the multi selector ▼.



- **2** Choose the type of image size ( $\square$ 77).
  - Image size cannot be selected when NRW (RAW) is selected for Image quality.
  - The number of exposures remaining for the selected image size is displayed.
  - Press the multi selector ▲ to return to the image quality setting.



Numbers of exposures remaining

- **3** After completing the settings, press the quick menu button or the **®** button.
  - The monitor display reverts to shooting screen.

### **Available Image Quality**

Lower compression ratios result in higher quality pictures, but also larger file sizes, limiting the number of pictures that can be recorded.

	Option	Description
FINE	Fine	Fine image quality than <b>Normal</b> , suitable for enlargement or high quality prints. File format: JPEG, compression ratio of about 1:4
NORM	Normal (default setting)	Normal image quality, suitable for most applications. File format: JPEG, compression ratio of about 1:8
BASIC	Basic	Basic image quality is lower than with <b>Normal</b> , suitable for pictures attached to e-mails or used on web pages. File format: JPEG, compression ratio of about 1:16
NRW+ FINE	NRW (RAW) + Fine*	Two images are recorded at the same time: one NRW (RAW) image and one fine-quality JPEG image.
NRW+ NORM	NRW (RAW) + Normal*	Two images are recorded at the same time: one NRW (RAW) image and one normal-quality JPEG image.
NRW+ BASIC	NRW (RAW) + Basic*	Two images are recorded at the same time: one NRW (RAW) image and one basic-quality JPEG image.
NRW	NRW (RAW)*	Raw data from the image sensor are saved. Create JPEG image files after shooting using NRW (RAW) processing in the playback menu (\$\subset\$189).  • When NRW (RAW) is selected, Image size is reset to 1848×2736. File format: NRW (RAW)

<sup>\*</sup> NRW (RAW) images cannot be chosen in scene mode, special effects mode (except for **Zoom exposure** and **Defocus during exposure**) or low noise night mode.

#### Changing the Image Quality and Image Size

### COOLPIX P7100 NRW (RAW) Images

- The extension of the picture taken is ".NRW."
- NRW (RAW) images cannot be printed. Creating JPEG images with NRW (RAW) processing
  enables the images to be printed using PictBridge compatible printers or in digital photo labs.
- No editing other than NRW (RAW) processing can be performed for images in the NRW (RAW) format. To edit such images, first create JPEG images using NRW (RAW) processing ( 17), and then edit the JPEG images.
- ViewNX 2 needs to be installed on the computer to be able to view NRW (RAW) images on the computer. Capture NX 2 is also compatible with NRW (RAW) images.
- Install ViewNX 2 on a computer using the included ViewNX 2 CD-ROM. (See "Using ViewNX 2" (\interpol) \interpol

For more information on using ViewNX 2, refer to the on-screen instructions and help information contained in ViewNX 2

### Image Quality Setting

- The setting for image quality is shown by an icon displayed on the monitor during shooting and playback (\$\subset\$0 to 10).
- The setting is also applied to other shooting modes (except for shooting modes U1, U2 and U3).
- . NRW (RAW) images cannot be recorded in the following shooting modes.
  - Scene mode
  - Special effect mode (except for **Zoom exposure** and **Defocus during exposure**)
  - Low noise night mode

When the mode is changed to scene mode or special effect mode (except for **Zoom exposure** and **Defocus during exposure**) from other shooting modes, the image quality is changed according to situation as follows.

- When NRW (RAW) is set, the image quality is changed to Normal.
- When **NRW (RAW) + Fine, NRW (RAW) + Normal** or **NRW (RAW) + Basic** is set, the image quality is changed to **Fine, Normal** or **Basic**, respectively.
- The digital zoom cannot be used when Image quality is set to NRW (RAW), NRW (RAW) + Fine, NRW (RAW) + Normal or NRW (RAW) + Basic.
- This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" (\(\subseteq\) 80) for more information.

### Recording of NRW (RAW) and JPEG Images at the Same Time

- The NRW (RAW) image and the JPEG image that are recorded at the same time have the same file number but their own file extensions, "NRW" and "JPG" ( \$\infty\$99).
- When playing back on the camera, only the JPEG image is displayed.
- Note that when the JPEG image is deleted by pressing the m button, the NRW (RAW) image that
  was recorded at the same time is also deleted.

#### **More Information**

- See "Number of Exposures Remaining" (\$\sum578\$) for more information.
- See "File and Folder Names" ( 99) for more information.

### **Available Image Size**

You can set the JPEG image size (amount of pixels) for pictures recorded with an image quality of **Fine**, **Normal** or **Basic**.

The larger the image, the larger the size at which it can be printed or displayed without becoming noticeably "grainy," limiting the number of pictures that can be recorded.

Conversely, small image sizes are suitable for pictures attached to e-mails or used on web pages. However, printing small images in large print sizes results in the image turning "grainy."

	Options*	Description
<u>10m</u>	3648×2736 (default setting)	Record pictures with finer detail than those shot at 18th 3264×2448 or 15th 2592×1944.
[8M	3264×2448	Good balance between file size and quality; suitable in most
[5 <u>M</u>	2592×1944	situations.
[3M	2048×1536	S II II 100
[2M	1600×1200	Smaller than 1 <sup>th</sup> 3648×2736, th 3264×2448 and the state of the state
L <sup>1</sup> M	1280×960	
PC	1024×768	Record pictures of a size suitable for display on devices such as a computer monitor.
YGA	640×480	Record pictures suitable for display on a television with a screen aspect ratio of 4:3, or for e-mail attachment.
<b>3</b> 2	3648×2432	Record pictures with the same aspect ratio (3:2) as those shot with 35mm [135] format film cameras.
16:9 7 <sub>M</sub>	3584×2016	Record pictures with the same aspect ratio (16:9) as wide screen TV.
[1:1	2736×2736	Record square pictures.

<sup>\*</sup> The total number of pixels captured, and the number of pixels captured horizontally and vertically.

Example: 4 3648×2736 = 10 megapixels, 3648×2736 pixels

### Image Size Setting

- The setting for the image size is shown by an icon displayed on the monitor during shooting and playback (28 to 10).
- The setting is also applied to other shooting modes (except for low noise night mode, and shooting modes U1, U2 and U3).
- In low noise night mode, the available image size is <sup>™</sup> 2048×1536 or smaller.
- The size of JPEG images can be chosen when you create JPEG images from NRW (RAW) images using **NRW (RAW) processing** (♣17) (up to a maximum of 3648 × 2736 pixels).
- Image size for the JPEG image can be set when NRW (RAW) + Fine, NRW (RAW) + Normal or NRW (RAW) + Basic is selected. However, note that 은 3648×2432, 발 3584×2016 and 년 2736×2736 cannot be selected.
- This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" (\(\subseteq 80\)) for more information.



### Number of Exposures Remaining

The following table lists the approximate number of pictures that can be stored in the internal memory and on a 4 GB memory card, at each combination of **Image size** (QQ77) and **Image quality** (\$\sum\_{75}\$) settings. Note that the number of exposures that can be stored differs depending on the composition of the image (due to JPEG compression). In addition, this number may differ depending on the make of memory card, even if the capacity of the memory card is the same.

Image size	Image quality	Internal memory (94 MB)	Memory card <sup>1</sup> (4 GB)	Print size <sup>2</sup> (cm/in.)
3648×2736 (default setting)	Fine Normal Basic NRW (RAW)	19 38 75 5	780 1,540 3,010 230	31 × 23/12 × 9 <sup>3</sup>
<sup>8™</sup> 3264×2448	Fine Normal Basic	24 48 93	970 1,910 3,710	28 × 21/11 × 8
<u></u> 2592×1944	Fine Normal Basic	38 74 140	1,520 2,980 5,610	22 × 16/8.5 × 6.5
<sup>3™</sup> 2048×1536	Fine Normal Basic	60 116 216	2,410 4,640 8,620	17 × 13/7 × 5
[ <sup>2</sup> M 1600×1200	Fine Normal Basic	96 183 319	3,830 7,310 12,700	14 × 10/5 × 4
[ <sup>1</sup> ] 1280×960	Fine Normal Basic	144 263 433	5,740 10,400 17,200	11 × 8/4 × 3
<u></u> 1024×768	Fine Normal Basic	216 378 606	8,620 15,000 24,100	9 × 7/3.5 × 2.5
<u>VGA</u> 640×480	Fine Normal Basic	433 673 866	17,200 26,800 34,400	5 × 4/2 × 1.5
<sup>82</sup> 3648×2432	Fine Normal Basic	22 43 84	870 1,720 3,350	31 × 21/12 × 8
16:9 7 <sub>M</sub> 3584×2016	Fine Normal Basic	26 53 102	1,070 2,110 4,090	30 × 17/12 × 6.5
[ <sup>1</sup> ] 2736×2736	Fine Normal Basic	26 51 99	1,030 2,040 3,950	23 × 23/9 × 9

#### Changing the Image Quality and Image Size

- 1 If the number of exposures remaining is 10,000 or more, "9999" is displayed.
- 2 The print size at an output resolution of 300 dpi. Print sizes are calculated by dividing the number of pixels by the printer resolution (dpi) and multiplying by 2.54 cm (1 in.). However, even with the same image size setting, images printed at higher resolutions print smaller than the size indicated, and those printed at lower resolutions print larger than the size indicated.
- 3 The print size of NRW (RAW) images differs according to the image size of the NRW (RAW) processed images (��17).

# Printing Images of Size 1:1

Change the printer setting to "Border" when printing images with the size set to 1:1. The images may not be printed in 1:1 ratio depending on the printer.

See the instruction manual of the printer or check with the authorized print dealer for further details.

# **Features That Cannot Be Used Simultaneously**

Some shooting settings cannot be used in combination with other functions.

Restricted function	Setting	Description
Flash mode	Focus mode (\$\square\$67)	When ▲ (infinity) is selected for shooting, the flash is not available.
	Continuous (D54)	When BSS or Multi-shot 16 is selected for shooting, the flash is not available.     When continuous is selected for shooting, the builtin flash is not available (□84).     The built-in flash is fixed at ∜ (fill flash) when Continuous flash is selected for shooting. The Speedlight (external flash unit) cannot be used (□84).
	Auto bracketing (\$\square\$73)	The built-in flash is not available.
	Wide-angle converter (QQ 55)	The flash is not available when <b>On</b> is set for shooting.
	Flash control (\$\square\$55)	When <b>Flash control</b> is set to <b>Built-in off, ∲</b> (auto with red-eye reduction), <b>M</b> (manual), <b>∮</b> (slow sync) and <b>∮</b> (rear-curtain sync) flash modes cannot be selected.
Self-timer/Smile timer/Remote control	AF area mode (◯◯ 55)	When <b>Subject tracking</b> is selected for shooting, the self-timer/smile timer/remote control are not available.
	Smile timer (◯◯165)	When shooting with the smile timer, the mode is changed to <b>AF</b> (autofocus).
Focus mode	Continuous (\$\square\$54)	▲ (infinity) cannot be used when <b>Continuous flash</b> is set for shooting.
	AF area mode (\$\sum_55\$)	When <b>Subject tracking</b> is selected for shooting, <b>MF</b> (manual focus) is not available.
Image quality	Continuous (\$\sumsymbol{\Pi}\$54)	When <b>Multi-shot 16</b> is selected for shooting, <b>Image quality</b> is fixed at <b>Normal</b> .
lmage size	Image quality (∭75)	Image size is fixed at <sup>™</sup> 3648×2736 when NRW (RAW) is selected for Image quality.     Image size for a JPEG image can be set when NRW (RAW) + Fine, NRW (RAW) + Normal or NRW (RAW) + Basic is selected. However, <sup>™</sup> 3648×2432, <sup>™</sup> 3584×2016 and <sup>™</sup> 2736×2736 cannot be selected.
	Continuous (\$\square\$54)	Image size is fixed at [ (2560×1920 pixels) when Multi-shot 16 is selected for shooting.
ISO sensitivity	Continuous (\$\sumsymbol{\Pi}\$54)	When shooting in <b>Multi-shot 16</b> , <b>ISO sensitivity</b> is set automatically according to the brightness when shooting mode <b>P</b> , <b>S</b> or <b>A</b> is used. The setting for ISO sensitivity is fixed at 400 for shooting mode <b>M</b> .

Restricted function	Setting	Description
White balance	Picture Control (\$\sum_73\$)	White balance is fixed at Auto (normal) when Monochrome is selected for shooting.
Wille Dalarice	Wide-angle converter (◯◯ 55)	When <b>On</b> is selected for shooting, <b>Preset manual</b> is not available.
Picture Control	Active D-Lighting (\$\square\$55\$)	When using <b>Active D-Lighting</b> for shooting, <b>Contrast</b> in manual adjustment cannot be adjusted.
Metering	AF area mode (\$\sum_555)	When AF area mode is set to Auto, Center (spot), Center (normal) or Center (wide) while Metering is set to Spot AF area, the Metering setting automatically changes to Matrix.     When AF area mode is set to Subject tracking while Metering is set to Spot or Spot AF area the Metering setting automatically changes to Matrix.
	Active D-Lighting (\$\square\$55\$)	<b>Metering</b> is reset to <b>Matrix</b> when <b>Active D-Lighting</b> is set to any mode other than <b>Off</b> .
Continuous/ Auto bracketing	Continuous (∭54)/Auto bracketing (∭73)	Continuous and auto bracketing are not available simultaneously. <b>Auto bracketing</b> is reset to <b>OFF</b> when <b>Continuous</b> is set to any mode other than <b>Single</b> .  The setting for <b>Continuous</b> is reset to <b>Single</b> when <b>Auto bracketing</b> is set to any mode other than <b>OFF</b> .
	Self-timer (\$\sum_64\)/ Smile timer (\$\sum_65\)/Remote control (\$\sum_60\))	Continuous and the self-timer/remote control are not available simultaneously.     Continuous or auto bracketing and smile timer are not available simultaneously.
	Image quality (◯◯175)	BSS, Multi-shot 16 or White balance bracketing cannot be used when Image quality is set to NRW (RAW), NRW (RAW) + Fine, NRW (RAW) + Normal or NRW (RAW) + Basic.
	Picture Control (\$\sum 73\$)	White balance bracketing cannot be used when Monochrome is selected for shooting.
	Long exposure NR (QQ55)	When <b>On</b> is selected for <b>Long exposure NR</b> , <b>Multi-shot 16</b> is not available.
	Wide-angle converter (◯◯ 55)	<b>Continuous flash</b> cannot be used when <b>On</b> is set for shooting.

Restricted function	Setting	Description
AF area mode	Focus mode (∭67)	When a setting other than <b>Subject tracking</b> is selected and ▲ (infinity) is selected as the focus mode for shooting, the camera focuses at infinity regardless of the applied AF area mode option.      When set to MF (manual focus), the AF area mode cannot be set.
	Picture Control (\$\square\$73\$)	When <b>Picture Control</b> is set to <b>Monochrome</b> while AF area mode is set to <b>Subject tracking</b> , the AF area mode setting automatically changes to <b>Auto</b> .
Long exposure NR	Continuous (\$\square\$54)	When <b>Multi-shot 16</b> is selected for shooting, the Long exposure NR is not available.
Active D-Lighting	ISO sensitivity (◯☐73)	When ISO sensitivity is set to High ISO sensitivity auto, 3200 or Hi 1, Active D-Lighting is not available. When High ISO sensitivity auto, 3200 or Hi 1 is selected, Active D-Lighting is reset to Off.
	Image quality (\$\square\$75\$)	Print date is not available when Image quality is set to NRW (RAW), NRW (RAW) + Fine, NRW (RAW) + Normal or NRW (RAW) + Basic.
Print date	Continuous (\$\square\$54)	When <b>Continuous</b> , <b>Continuous flash</b> or <b>BSS</b> is selected for shooting, print date is not available.
	Auto bracketing (\$\square\$73)	Print date is not available.
Photo info	Smile timer (◯◯165)	The virtual horizon is not displayed when shooting with the smile timer.
i noto imo	AF area mode (\$\square\$55)	The virtual horizon and histogram are not displayed when shooting with <b>Subject tracking</b> .
Motion detection	Smile timer (◯◯165)	Motion detection is disabled when shooting with the smile timer.
Motion detection	AF area mode (\$\sum_55\$)	Motion detection is disabled when shooting with <b>Subject tracking</b> .
Sound settings	Continuous (\$\square\$54\$)	Shutter sound is disabled when <b>Continuous</b> , <b>Continuous flash</b> , <b>BSS</b> , or <b>Multi-shot 16</b> is selected in the shooting menu.
	Auto bracketing (\$\square\$73)	Shutter sound is disabled.
Blink warning	Smile timer (\$\sum_65\$)/ Continuous (\$\sum_54\$)/Auto bracketing (\$\sum_73\$)	Blink warning does not take effect when using the smile timer, <b>Continuous</b> is set to a setting other than <b>Single</b> , or auto bracketing is set.

Restricted function	Setting	Description
	Smile timer (◯◯ 65)	The digital zoom cannot be used when shooting with the smile timer.
	Focus mode (\$\sum 67\$)	The digital zoom cannot be used when <b>MF</b> (manual focus) is selected.
Digital zoom	Image quality (ДД75)	The digital zoom cannot be used when Image quality is set to NRW (RAW), NRW (RAW) + Fine, NRW (RAW) + Normal or NRW (RAW) + Basic.
	Continuous (\$\square\$54)	The digital zoom cannot be used when <b>Multi-shot 16</b> is selected for shooting.
	AF area mode (\$\sum_55\$)	The digital zoom cannot be used when shooting with <b>Subject tracking</b> .
	Wide-angle converter (◯◯ 55)	The digital zoom cannot be used when <b>On</b> is selected for shooting.

### The Control Range of the Shutter Speed (P, S, A, M Modes)

The control range of the shutter speed differs depending on the ISO sensitivity setting. Additionally, the control range changes in the following continuous shooting settings.

Se	tting	Control range
ISO sensitivity (□□73) <sup>1</sup>	Auto <sup>2</sup> , ISO 100-200 <sup>2</sup> , ISO 100-400 <sup>2</sup> , ISO 100, 200, 400,	1/2000 to 8 s ( <b>P</b> , <b>S</b> mode) 1/4000 <sup>3</sup> to 8 s ( <b>A</b> mode) 1/4000 <sup>3</sup> to 60 s ( <b>M</b> mode)
	High ISO sensitivity auto <sup>2</sup>	1/2000 to 2 s ( <b>P</b> , <b>S</b> mode) 1/4000 <sup>3</sup> to 2 s ( <b>A</b> mode) 1/4000 <sup>3</sup> to 60 s ( <b>M</b> mode)
	ISO 800	1/2000 to 8 s ( <b>P</b> , <b>S</b> mode) 1/4000 <sup>3</sup> to 8 s ( <b>A</b> mode) 1/4000 <sup>3</sup> to 15 s ( <b>M</b> mode)
	ISO 1600	1/2000 to 4 s ( <b>P</b> , <b>S</b> mode) 1/4000 <sup>3</sup> to 4 s ( <b>A</b> , <b>M</b> mode)
	ISO 3200	1/2000 to 1/2 s ( <b>P</b> , <b>S</b> mode) 1/4000 <sup>3</sup> to 1/2 s ( <b>A</b> , <b>M</b> mode)
	Hi 1	1/2000 to 1/8 s ( <b>P</b> , <b>S</b> mode) 1/4000 <sup>3</sup> to 1/8 s ( <b>A</b> , <b>M</b> mode)
Continuous (QQ 54)	Continuous, BSS, Continuous flash	1/2000 to 1/2 s ( <b>P</b> , <b>S</b> mode) 1/4000 <sup>3</sup> to 1/2 s ( <b>A</b> , <b>M</b> mode)
	Multi-shot 16	1/2000 to 1/30 s

 $<sup>\</sup>overline{1}$  The ISO sensitivity setting is restricted depending on the continuous shooting setting ( $\square$ 80).

 $<sup>^{2}</sup>$  In **M** mode, the ISO sensitivity is fixed at ISO 100.

<sup>&</sup>lt;sup>3</sup> A shutter speed of 1/4000 second is available only when the zoom is at the wide-angle position and the aperture value is set to f/8 (minimum aperture).

### **Operation of Flash during Continuous Mode**

The operation of the built-in flash and the Speedlight flash units (available separately from Nikon) are restricted as shown below, depending on the continuous setting that is applied.

Continuous mode	Built-in flash	Flash units*
Single	Available	Available
Continuous	Off	Available
Continuous flash	Available	Not available
BSS	Off	Not available
Multi-shot 16	Off	Not available
Intvl timer shooting	Available	Available
Auto bracketing	Off	Available

When a flash unit (available separately) is mounted on the camera's accessory shoe, the built-in flash is automatically set to **③** (off).

\* When shooting using continuous or auto bracketing with the flash mode set to **\$** (auto with red-eye reduction) ( $\square$ 61, 62), only the pre-flash element of red-eye reduction is performed.

# Notes on Digital Zoom

- The digital zoom cannot be used with certain shooting modes.
- When the digital zoom is in effect, selectable options for AF area mode or metering mode is restricted (♣79).

# **Using Face Detection**

In the following shooting modes, the camera uses face detection to automatically focus on human faces. If the camera detects more than one face, a double border is displayed around the face that the camera will focus on, and single borders are displayed around the other faces.



Shooting mode	Number of faces that can be detected	Focus area (double border)
Face priority is selected for AF area mode (6–648)		
Scene auto selector, Portrait, Night portrait scene mode (\$\sum_39\$)	Up to 12	The face closest to the camera
☑ (Smile timer) (ДД65)	Up to 3	The face closest to the center of the frame

- When using **Face priority**, if you press the shutter-release button halfway while no faces are detected or while framing a shot with no faces in it, the camera automatically selects one or more of the nine focus areas containing the subject closest to the camera.
- When Scene auto selector is selected, the focus area changes depending on which scene the camera selects.
- If no faces are detected when the shutter-release button is pressed halfway in Portrait or Night
  portrait scene mode, the camera will focus on the subject at the center of the frame.

#### Notes on Face Detection

- The camera's ability to detect faces depends on a variety of factors, including whether or not the subject is facing the camera. Additionally, the camera may be unable to detect faces in the following situations:
  - When faces are partially hidden by sunglasses or otherwise obstructed
  - When faces take up too much or too little of the frame
- When the frame includes more than one face, the faces detected by the camera and the face on
  which the camera focuses depend upon a variety of factors, including the direction in which the
  subject is facing.
- In some rare cases, such as those described in "Autofocus" (\$\sum\_3\$), the subject may not be in focus
  even though the double border turns green. If the camera does not focus, try "Focus Lock"
  (\$\sum\_3\$3).

### Viewing Pictures Taken Using Face Detection

- During playback, the camera automatically rotates images according to the orientation of the
  faces that were detected at the time of shooting. Pictures taken when using **Continuous** (
   —54)
  or **Auto bracketing** (
   —73) are not rotated.
- When zooming in on an image displayed in full-frame playback mode by rotating the zoom
  control toward T (Q), the image is enlarged at the center of the face that was detected during
  shooting (□35). Pictures taken when using Continuous (□45) or Auto bracketing (□473) are
  not displayed in this way.

# **Using Skin Softening**

In the following shooting modes, the camera detects up to three human faces when the shutter is released, and processes the image to make facial skin tones softer before saving the image.

• Scene auto selector ( 40), Portrait ( 40) or Night portrait ( 41) in scene mode

Skin softening can also be applied to saved images ( $\square$ 89).

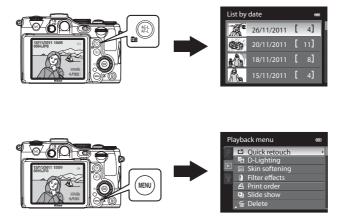
# Notes on Skin Softening

- It may take more time to save images.
- Under some shooting conditions, the desired skin softening results may not be achieved, and skin softening may be applied to areas of the image where there are no faces.



# **Playback Features**

This chapter describes how to select certain types of images for playback as well as some of the features available when playing back images.



# Selecting Pictures for Playback by Date (List by Date Mode)

In list by date mode, pictures taken on the same date can be played back.

Press the (list by date) button during playback to display the list by date screen.

• Press the (list by date) button again to return to the normal playback mode.



List by date

26/11/2011

8]

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Use the multi selector to select a date and then press the 
button to play back images captured on the selected date.

- The first picture taken on the selected date is displayed.
- To select a different date, rotate the zoom control toward W (►).



- (delete) button: Delete all images captured on the selected date.
- MENU button: If you select the tab (list by date menu) from the shooting date selection screen, you can select one of the following features in the playback menu (\$\subset\$89\$) and apply that feature to images captured on the selected date.
  - → Print order, slide show, delete, protect, hide image
- When viewing images in full-frame playback mode, if you press the **MENU** button to display the menu and then select the **to** tab (list by date menu), you can then select a feature from the playback menu (□89).

### Notes on List by Date Mode

- Up to 29 dates can be selected. If images exist for more than 29 dates, all images saved earlier than most recent 29 dates will be combined under **Others**.
- The 9,000 most recent images can be displayed in list by date mode.
- Pictures taken when the camera's date is not set are treated as images captured on January 1, 2011.

# Features Available in Playback Mode (Playback Menu)

When viewing images in full-frame playback mode or thumbnail playback mode, you can configure the following functions by pressing the **MENU** button to display the menu, and then selecting the  $\blacktriangleright$  tab or  $\blacktriangleright$  tab ( $\bigcirc$ 13).



Option	Description	Ф
<b>Ľ</b> Quick retouch <sup>1</sup>	Create retouched copies in which contrast and saturation have been enhanced.	<b>∂−</b> 011
<b>□</b> D-Lighting <sup>1</sup>	Create copies with enhanced brightness and contrast, brightening dark portions of an image.	<b>6</b> 11
딸 Skin softening <sup>1</sup>	When this feature is enabled, the camera detects faces in pictures taken and creates a copy with softer facial skin tones.	<b>6−6</b> 12
	Apply a variety of effects using digital filter. The available effects are <b>Soft</b> ; <b>Selective color</b> , <b>Cross screen</b> , <b>Fisheye</b> , <b>Miniature effect</b> and <b>Painting</b> .	<b>∂=0</b> 13
<b>△</b> Print order <sup>2</sup>	When using a printer to print images saved on the memory card, the print order function can be used to select which images are printed, and how many copies of each image are printed.	<b>6</b> 60
Slide show <sup>2</sup>	Images saved in the internal memory or on a memory card are played back in an automatic slide show.	<b>6</b> 63
<b>च</b> Delete²	Delete an image. Multiple images can be deleted.	<b>6–6</b> 64
<b>O</b> ■ Protect <sup>2</sup>	Protect selected images from accidental deletion.	<b>6</b> €66
⚠ Rotate image	Specify the orientation in which saved images are displayed in playback mode.	<b>66</b> 66
<b>№</b> Hide image <sup>2</sup>	Hide the selected images so that they cannot be played back on the camera monitor.	<b>66</b> 66
Small picture <sup>1</sup>	Create a small copy of the picture taken. This feature is useful for creating copies for display on Web pages or email attachments.	<b>6−6</b> 14

#### Features Available in Playback Mode (Playback Menu)

Option	Description	
<b>♣</b> Voice memo	Use the camera's microphone to record voice memos and attach them to the picture taken. Playback and deletion of voice memos can also be performed.	<b>6</b> 67
∰ Copy <sup>3</sup>	Copy images between the internal memory and a memory card.	<b>68</b>
■ Black border <sup>1</sup>	Create a new picture surrounded by a black border.	<b>6</b> 15
<b>∕</b> Straighten <sup>1</sup>	Compensate for the slanting of pictures taken.	<b>6</b> 16
<b>NRW</b> NRW (RAW) processing <sup>1</sup>	Create JPEG-format copies by performing RAW processing within the camera for NRW (RAW) images (\$\square\$75) without having to use a computer.	<b>6−6</b> 17

See "Editing Still Images" (♣69) and "The Playback Menu" (♣60) in the Reference Section for more information about each function.

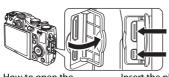
When using list by date mode, press the MENU button from the list by date screen (\$\sum\_88\$) to apply the same function to all images captured on the selected date.

<sup>&</sup>lt;sup>3</sup> This function is not displayed when using list by date mode.

# Connecting the Camera to a TV, Computer, or Printer

You can enhance your enjoyment of images and movies by connecting the camera to a TV, computer, or printer.

 Before connecting the camera to an external device, make sure the remaining battery level is sufficient and turn the camera off. For information about the connection methods and subsequent operations, refer to the documentation included with the device in addition to this document.



HDMI mini connector (Type C)

USB/audio/video output connector

How to open the terminal cover

Insert the plug straight.

#### Viewing images on a TV





You can view the camera's images and movies on a TV. Connection method: Connect the video and audio plugs of the included Audio Video Cable EG-CP16 to the TV's input jacks. Alternatively, connect a commercially available HDMI cable (Type C) to the TV's HDMI input jack.

#### Viewing and organizing images on a computer





If you transfer images to a computer, you can perform simple retouching and manage image data in addition to playing back images and movies.

Connection method: Connect the camera to the computer's USB input jack with the included USB Cable UC-E6.

 Before connecting to a computer, install ViewNX 2 on the computer using the included ViewNX 2 Installer CD. See 94 for more information about using the ViewNX 2 Installer CD and transferring images to a computer.

#### Printing images without using a computer





If you connect the camera to a PictBridge-compatible printer, you can print images without using a computer.

Connection method: Connect the camera directly to the printer's USB input jack with the included USB Cable UC-E6.

# **Using ViewNX 2**

ViewNX 2 is an all-in-one software package which enables you to transfer, view, edit and share images.

Install ViewNX 2 using the ViewNX 2 Installer CD.



### **Installing ViewNX 2**

#### **Compatible Operating Systems**

#### Windows

- Windows 7 Home Basic/Home Premium/Professional/Enterprise/Ultimate
- Windows Vista Home Basic/Home Premium/Business/Enterprise/Ultimate (Service Pack 2)
- Windows XP Home Edition/Professional (Service Pack 3)

#### Macintosh

• Mac OS X (version 10.5.8, 10.6.7)

Refer to the Nikon website for the latest information on operating system compatibility.

- 1 Start the computer and insert the ViewNX 2 Installer CD into the CD-ROM drive.
  - Mac OS: When the **ViewNX 2** window is displayed, double-click the **Welcome** icon.

# 2 Select a language in the language selection dialog to open the installation window.

- If the desired language is not available, click Region Selection to choose a different region and then choose the desired language (the Region Selection button is not available in the European release).
- Click **Next** to display the installation window.



#### **3** Start the installer.

- We recommend clicking Installation Guide in the installation window to check the installation help information and system requirements before installing ViewNX 2.
- Click **Typical Installation (Recommended)** in the installation window.
- Follow the on-screen instructions to install the software.

### **4** Exit the installer when the installation completion screen is displayed.

- Windows: Click Yes
- Mac OS: Click OK

The following software is installed:

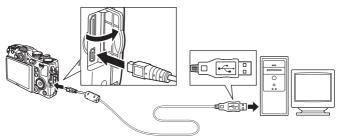
- ViewNX 2 (consisting of the three modules below)
  - Nikon Transfer 2: For transferring images to the computer
  - ViewNX 2: For viewing, editing, and printing transferred images
  - Nikon Movie Editor: For basic editing of transferred movies
- Panorama Maker 5 (for creating a single panorama photo using a series of images shot in panorama assist scene mode)
- · QuickTime (Windows only)
- **5** Remove the ViewNX 2 Installer CD from the CD-ROM Drive.

#### Transferring Images to the Computer

Choose how images will be copied to the computer.

Choose one of the following methods:

• **Direct USB connection**: Turn the camera off and ensure that the memory card is inserted in the camera. Connect the camera to the computer using the included USB Cable UC-F6 and then turn the camera on.

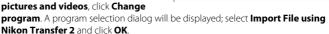


- SD card slot: If your computer is equipped with an SD card slot, the card can be inserted directly in the slot.
- **SD card reader**: Connect a card reader (available separately from third-party suppliers) to the computer and insert the memory card.

If a message is displayed prompting you to choose a program, select Nikon Transfer 2.

 When using Windows 7 If the dialog shown at right is displayed, follow the steps below to select Nikon

Transfer 2. 1 Select Nikon Transfer 2 for **Import** pictures and videos. Under Import



2 Double-click Import File.

If the memory card contains a large number of images, it may take a while for Nikon Transfer 2 to start. Wait until Nikon Transfer 2 starts.



Connecting the USB Cable

# **2** Transfer images to the computer.

- Confirm that the name of the connected camera or removable disk is displayed in the "Source" panel in the Nikon Transfer 2 "Options" area (1).
- Click Start Transfer (2).



 At default settings, all the images on the memory card will be copied to the computer.

# **3** Terminate the connection.

- If the camera is connected to the computer, turn the camera off and then disconnect the USB cable.
- If you are using a card reader or card slot, choose the appropriate option in the computer operating system to eject the removable disk corresponding to the memory card and then remove the card from the card reader or card slot.

### **Viewing Images**

#### Start ViewNX 2.

- Images are displayed in ViewNX 2 when transfer is complete.
- Consult online help for more information on using ViewNX 2.



# Starting ViewNX 2 Manually

- Windows: Double-click the ViewNX 2 shortcut on the desktop.
- Mac OS: Click the ViewNX 2 icon in the Dock.

### **Retouching Photographs**

Click **Edit** in the ViewNX 2 toolbar.



Image editing functions include tone compensation, sharpness adjustment, and trimming (cropping).

### **Editing Movies**

Click Movie Editor in the ViewNX 2 toolbar.



Movie editing functions include the ability to delete unwanted scenes.

### **Printing Images**

Click **Print** in the ViewNX 2 toolbar.

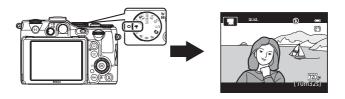


A dialog is displayed and images can be printed using a printer connected to the computer.



# Recording and Playing Back Movies

Set the mode dial to  $\P$  to display the movie recording screen. Press the shutter-release button to record movies.



In playback mode, press the **®** button to play back a movie.



# **Recording Movies**

Movies can be recorded with sound.

### **1** Rotate the mode dial to **県**.

- The amount of available recording time is displayed on the monitor.
- When Movie options is set to 220 HD 720p (1280×720), monitor display changes to an aspect ratio of 16:9 (the area indicated on the right is recorded).
- The approximate remaining recording time is displayed on the monitor. iii is displayed while saving to the internal memory.



Available movie recording time\*

Movie options

\* The maximum recording time shown in the illustration differs from the actual value.

# **2** Press the shutter-release button all the way to start recording.

- The camera focuses at the center of the frame. The focus area is not displayed when the movie is recorded.
- When the AFT (AE-L/AF-L) button is pressed while recording movies, the exposure and focus are locked (2). Press the AFT (AE-L/AF-L) button again to cancel the exposure and focus lock.



- Recording stops automatically when the maximum movie length has been recorded.
- **3** Press the shutter-release button all the way to end recording.

# Note on Recording Movies

When the AF/access lamp blinks after recording movies, the movie is not fully recorded yet. **Do not open the battery-chamber/memory card slot cover.** Removing the memory card or the battery while a movie is being saved may result in loss of the movie data or damage to the camera or to the memory card.

### Notes on Movie Recording

- When recording a movie onto a memory card, a memory card with an SD speed class of Class 6 or higher is recommended (223). If the transfer speed of the card is slow, the movie recording may end unexpectedly.
- Using a digital zoom causes image quality to deteriorate. If you start recording the movie without
  using digital zoom, and you rotate the zoom control toward T, the zoom stops at the maximum
  optical zoom ratio. Release the zoom control once, then rotate it again toward T to trigger digital
  zoom. When recording ends, digital zoom turns off.
- The sound of using the zoom control, zoom, autofocus, vibration reduction or aperture control
  when the brightness changes may be recorded. To minimize the recording of the zoom sound, set
  Zoom speed in the setup menu to Auto (default setting) or Quiet (\$\sum\_{1}\$104).
- Smear (
   <sup>\*</sup>
   <sup>\*</sup>

   <sup>\*</sup>
   <sup>\*</sup>

   <sup>\*</sup>
- · The flash does not fire.

#### Notes on Autofocus

- When Autofocus mode in the movie menu (\$\sum101\$) is set to AF-\$S single AF (default setting), the focus is locked when the shutter-release button is pressed halfway.
- Autofocus may not perform as expected (QQ33). Should this occur, try the following:
  - 1. Before recording, set **Autofocus mode** in the movie menu to **AF-S Single AF** (default setting).
  - Position a different subject at the same distance in the middle of the screen. Press the shutterrelease button to start the movie recording, and change the composition.

### Notes on the Camera Temperature

- The camera may become warm when recording movies for an extended period of time or when the camera is used in a hot area.
- When the temperature inside the camera becomes extremely high while recording a movie, recording automatically stop after 30 seconds.

The remaining amount of recording time ( 30s) is displayed on the monitor.

The camera turns off in 5 seconds after movie recording automatically stops.

Leave the camera off until the inside of the camera has cooled and then use it



#### **Maximum Movie Length**

Movie options (ДД73)	Internal memory (94 MB)	Memory card (4 GB)*
720p HD 720p (1280×720)	1 min 26 s	55 min
<u>VGA</u> VGA (640×480)	4 min 13 s	2 h 45 min
OVGA QVGA (320×240)	17 min 5 s	11 h 20 min

All figures are approximate. The maximum movie length varies with the make of the memory card and the bitrate of the recorded movie.

The maximum recording time for a single movie is 29 minutes. The maximum movie length displayed during recording is 29 minutes, even when there is enough free space on the memory card for a longer movie.

# External Microphones

- Instead of the built-in microphone, a Stereo Microphone ME-1 (available separately; 50103) can be connected to the external microphone connector (QQ3) to record sound during movie recording or voice memos for still pictures (\$\square\$90).
- When the external microphone is connected, **Wind noise reduction** in the movie menu (2101) cannot be used.
- The external microphones sensitivity can be set in **External mic sensitivity** in the setup menu  $(\Box 104).$

### **More Information**

See "File and Folder Names" (6099) for more information.

### **Changing Movie Mode Settings**

Use the following operation controls to change the setting.

- See "Features That Can Be Set Using the Multi Selector" (□60) for more information on remote control (□60), focus mode (□67).
- See "Features That Can Be Set with the Quick Menu" for more information on available quick menu (\$\sum 73\$).
- See "Options Available in the Movie Menu" (below) for more information on functions that can be set using the MENU button.

### **Options Available in the Movie Menu**

In the movie mode, the following option settings can be changed.



Display the shooting screen in the movie mode  $\rightarrow$  MENU button  $\rightarrow$   $\P$  tab ( $\square$ 13)

Option	Description	
Autofocus mode	Single AF (default setting) where the camera focuses on the same position as one at the start of movie recording, or Fulltime AF where the camera focuses continuously during movie recording can be selected.  When Full-time AF is selected, the sound of the camera focusing may be heard in recorded movies. If you want to prevent the sound of the camera focusing from being recorded, select Single AF.	<b>♣</b> 69
Wind noise reduction	Set whether or not to reduce wind noise during movie recording. During playback, not only wind noise, but other sounds may also become difficult to hear. The default setting is <b>Off</b> .	<b>6</b> 69

# **Playing Back Movies**

- 1 Press the (playback) button to select playback mode.
  - Press the multi selector to select a movie.
  - Movies can be recognized by the movie options icon (\(\infty\)100).



**2** Press the **®** button to play back a movie.

#### Adjusting the volume

Press the zoom control  $\mathbf{T}/\mathbf{W}$  ( $\square$ 2) during playback.

#### Operations available during movie playback

Playback controls appear at the top of the monitor.

Press the multi selector ◀ or ▶ to select an icon of playback control, then press the ❸ button to perform the following operations.



То	Use		Description
Rewind	*	Rewir	nd the movie while the 🕲 button is pressed down.
Advance	<b>&gt;</b>	Advar	nce the movie while the 🕲 button is pressed down.
			ollowing operations can be performed with the playback ols at the top of the monitor while playback is paused.
Pause	411	Rewind the movie by one frame. Hold down the <b>®</b> button to rewind continuously.*	
	₽	Advance the movie by one frame. Hold down the <b>®</b> button to advance continuously.*	
	×	Extract and save only the required parts of the movie (��28).	
			Save the extracted frame from a movie as a still picture (♣29).
			Resume playback.
End		Return	n to full-frame playback mode.

The movie can also be advanced or rewound by one frame by rotating the multi selector or command dial.

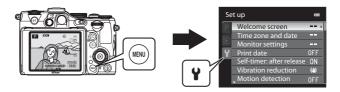
To delete a movie, use full-frame playback mode ( $\square 34$ ) or thumbnail playback mode ( $\square 35$ ) to select a movie and press the  $\mathbf{m}$  button ( $\square 36$ ).

### Note on Movie Playback



# **General Camera Setup**

This chapter describes the various settings that can be adjusted in the  $\P$  setup menu.



- For further details about each setting, refer to "The Setup Menu" in the Reference Section (♣70).

# **The Setup Menu**

#### Press the MENU button → 🕯 (setup) tab (📖 13)

From the menu screen, select the  $\Upsilon$  tab to display the setup menu, and then you can change the following settings.



Option	Description	Ш
Welcome screen	Select the image displayed as the welcome screen when the camera is turned on. Select <b>COOLPIX</b> to display the COOLPIX logo. Select <b>Select an image</b> to use a picture taken with the camera as the welcome screen. The default setting is <b>None</b> .	<b>6−6</b> 70
Time zone and date	Set settings related to the camera's date and time. The <b>Time zone</b> setting allows you to specify the time zone where the camera is mainly used and whether or not daylight saving time is in effect. When the <b>&gt;</b> travel destination is set, the camera automatically calculates the time difference between the travel destination and the <b>\( \rightarrow \)</b> home time zone, and saves images using the date and time of the travel destination.	<b>6-6</b> 71
Monitor settings	Set the image display after shooting and the screen brightness. When using <b>Photo info</b> , set whether or not to display virtual horizon, histograms, and framing grid on the monitor. When using <b>Virtual horizon display</b> , set the virtual horizon indicator to either <b>Circle</b> (default setting) or <b>Bars</b> .	<b>6−6</b> 74
Print date	Imprint the shooting date and time on pictures at the time of shooting. The default setting is <b>Off</b> .  • Dates cannot be imprinted when the scene mode is set to <b>Sports</b> , <b>Museum</b> , <b>Backlighting</b> with <b>HDR</b> set to <b>On</b> , <b>Panorama assist</b> , or <b>Pet portrait</b> with <b>Continuous</b> or during movie recording.	<b>6−6</b> 75
Self-timer: after release	Set whether or not to cancel the setting after shooting pictures with the self-timer. The default setting is <b>Exit self-timer mode</b> .	<b>6-6</b> 76

Option	Description	
Vibration reduction	Reduce blurring caused by camera shake when shooting. The default setting is <b>On</b> .  • When using a tripod to stabilize the camera, set this feature to <b>Off</b> to prevent this feature from malfunctioning.	<b>6−6</b> 76
Motion detection	When the camera detects camera shake or subject movement at the time of shooting, it automatically increases ISO sensitivity and shutter speed to reduce blurring. The default setting is <b>Off</b> .  The 🔊 indicator lights in green when the camera detects camera shake and increases shutter speed.  • When using certain shooting modes or settings, motion is not detected. In this case the 🔊 indicator is not displayed.	<b>6-6</b> 77
AF assist	When set to <b>Auto</b> (default setting), the AF-assist illuminator (\(\subseteq 33\)) lights when shooting in dark surroundings to help the camera focus.  • The illuminator has a range of about 8.0 m (26 ft) at the maximum wide-angle position and about 7.0 m (22 ft) at the maximum telephoto position.  • Even if <b>Auto</b> is selected, the AF-assist illuminator may not light depending on the position of the focus area or the scene mode that is selected.	<b>6</b> ◆678
Red-eye reduction	When the flash mode (\$\sum_61\$) is set to \$\displays (auto with red-eye reduction) and this feature is set to \$\mathbb{Pre-flash}\$ on (default setting), the flash repeatedly fires pre-flashes at low intensity before the main flash to reduce the red-eye effect, and it then performs the red-eye reduction process using picture compensation.	<b>6</b> →78
Digital zoom	When set to <b>On</b> (default setting), when the optical zoom is at the maximum telephoto zoom position, rotating and holding the zoom control toward <b>T</b> ( <b>Q</b> ) triggers the digital zoom (□31).  When set to <b>Crop</b> , the digital zoom is limited to the range (to the zoom position □) at which image quality of the shot still picture does not deteriorate (except when recording a movie).  • The digital zoom cannot be used simultaneously in certain settings such as the shooting mode.	<b>⇔</b> 79

Option	Description	Ф
Zoom speed	Set the zoom operation speed. When set to <b>Auto</b> (default setting), the zoom is operated at <b>Normal</b> speed during still picture shooting. The zoom is operated at <b>Quiet</b> speed during movie recording. When set to <b>Normal</b> , the zoom is operated at normal speed during both still picture shooting and movie recording. When set to <b>Quiet</b> , the zoom is operated at a slower speed than <b>Normal</b> to minimize recording of the zoom operating noise during both still picture shooting and movie recording.	<b>≎•</b> 080
Fixed aperture	When set to <b>On</b> in <b>A</b> or <b>M</b> shooting mode, the zoom is operated with minimum changes in the aperture value. Note, however, that the range of aperture values may be exceeded in some zoom operations. The default setting is <b>Off</b> .	<b>6</b> 80
Sound settings	Turn various camera sounds on and off. In the default setting, beep sounds are on.  The operation sound is disabled in certain settings such as shooting mode.	<b>6−6</b> 81
Record orientation	When set to <b>Auto</b> (default setting), the orientation data is recorded with the picture taken.  • Pictures taken using face detection (☐85) or pet detection (☐45) will be rotated automatically in accordance with the orientation of the face when they are displayed, regardless of the settings.	<b>∂=0</b> 81
Rotate tall	When set to <b>On</b> (default setting), the images are rotated automatically in accordance with camera orientation when they are played back.	<b>∂=</b> 082
Auto off	Set the amount of time that passes before the monitor is turned off to save power. The default setting is <b>1 min</b> .	<b>∂=0</b> 82
Format memory/ Format card	Format the internal memory (only when a memory card is not inserted) or the memory card (when a memory card is inserted).  • All data stored in the internal memory or on the memory card is deleted during formatting and cannot be restored. Be sure to transfer important images to a computer and save them before formatting.	<b>≈</b> 83
Language	Change the camera's display language.	<b>∂=</b> 083

Option	Description	Ш
TV settings	Select this option if no image is displayed on a TV even when the audio/video cable or HDMI cable is connected to the TV. <b>HDMI device control</b> is used for setting whether or not the camera receives signals from a TV when the TV that conforms to the HDMI-CEC standard is connected with an HDMI cable.	<b>6</b> ─684
External mic sensitivity	Set the sensitivity of the external microphone. The default setting is <b>Auto</b> .  • When the sensitivity of the microphone is low, set the option to <b>High</b> .	<b>6</b> €84
Built-in ND filter	When the camera's built-in ND filter is used, the amount of light that enters the camera can be reduced while shooting. Use this feature in situations such as when overexposure results from the subject being too bright. The default setting is <b>Off</b> .  ■ In shooting modes other than <b>P</b> , <b>S</b> , <b>A</b> , <b>M</b> , <b>U1</b> , <b>U2</b> , <b>U3</b> and ☑ (low noise night) modes, the built-in ND filter is controlled automatically according to the shooting mode and shooting conditions, regardless of the setting.	<b>6</b> 85
Customize command dials	Switch the functions that can be operated using the main command dial and sub-command dial for shooting pictures.  • The default setting is <b>No swap</b> .	<b>6</b> 86
Multi selector right press	When set to <b>AF area mode</b> (default setting), when the multi selector ▶ ([+]) is pressed during shooting, the AF area mode setting (□□50) is displayed.  In order not to display the <b>AF area mode</b> setting even if ▶ ([+]) is pressed, set to <b>Off</b> .	<b>6</b> 86
Delete button options	When set to <b>Press twice to delete</b> , the image can be deleted by pressing the multiple button again while the delete confirmation message is displayed.  The default setting is <b>Disable second press</b> .	<b>6</b> 86
AE/AF lock button	Select the function to be performed when the AFL (AE-L/AF-L) button is pressed during shooting. When set to <b>AE/AF lock button</b> (default setting), both focus and exposure are locked if the AFL (AE-L/AF-L) button is pressed while shooting.  • Not available when the scene mode is <b>Scene auto selector</b> (  40).	<b>6</b> 87
Fn1 + shutter button	Set the function to be performed when the shutter- release button is pressed while pressing the <b>Fn</b> 1 (FUNC1) button during shooting. The default setting is <b>Off</b> .	<b>6</b> 88

Option	Description	Φ
Fn1 + command dial	Set the function to be performed when the command dial is rotated while pressing the <b>Fn</b> 1 (FUNC1) button during shooting. The default setting is <b>Off</b> .	<b>∂</b> ~089
Fn1 guide display	Set whether or not to display a guide when the <b>Fn</b> 1 (FUNC1) button is pressed during shooting. The default setting is <b>On</b> .	<b>≈</b> 89
Fn2 button	Set the operation to be performed when the <b>Fn</b> 2 (FUNC2) button is pressed during shooting. The default setting is <b>Off</b> .	<b>≈</b> 90
Customize My Menu	Register frequently used menu items in My Menu (\$\sup\$73) (maximum of five).	<b>≈</b> 90
Reset file numbering	When <b>Yes</b> is selected, the sequential numbering of file numbers is reset. After resetting, a new folder is created and the file number for the next image taken starts from "0001."	<b>∂−</b> 091
Blink warning	When the camera detects that a human subject may have closed the eyes immediately after recognizing the face while shooting with modes other than the smile timer (\$\sum_85\$), the <b>Did someone blink?</b> screen is displayed on the monitor to check the picture taken. The default setting is <b>Off</b> .	<b>6</b> →92
Eye-Fi upload	Set whether or not to enable the function for sending images to a computer using a commercially available Eye-Fi card. The default setting is <b>Disable</b> .	<b>6−6</b> 93
MF distance indicator units	Set the unit of distance for displaying at screen gauge, to either m (meter) (default setting) or ft (feet) when using manual focus.	<b>∂=</b> 094
Reverse indicators	Set the exposure indicator to be displayed when shooting mode is $\mathbf{M}$ and +/- display direction of indicator for setting the bracketing.	<b>∂=</b> 094
Reset all	Reset the camera's settings to their default values.  • Some of the settings such as <b>Time zone and date</b> and <b>Language</b> and user settings that were saved for mode dial <b>U1, U2</b> and <b>U3</b> are not reset.	<b>6</b> →94
Firmware version	Display the current camera firmware version.	<b>∂=</b> 098



# **Reference Section**

The Reference Section provides detailed information and hints for using the camera.

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# **Taking Pictures with Manual Focus**

Available when the shooting mode is P, S, A, M, U1, U2, U3, 

 (Iow noise night), EFFECTS (special effects) or the Sports scene mode.

# 1 Press the multi selector ▼ (♥ focus mode).

- Use the multi selector to choose **MF** (manual focus) and press the **®** button.
- MF is displayed on the top of the monitor, and the image area and the enlarged center of the picture are displayed at the same time.





(3)

M MF QUAL

# **2** Adjust the focus.

- Use the multi selector to adjust the focus while viewing the image on the monitor.
- Press ▲ to focus on far subjects.
- Press ▼ to focus on near subjects.
- When ▶ is pressed, first the camera is focused with autofocus, and then the manual focus can be operated.

  Choose **Yes** and press the button to focus on the subject in the center of the screen with autofocus
- Press the shutter-release button halfway to check the composition. Press the shutter-release button all the way to take the picture.

# **3** Press the **(B)** button.

- The set focus is locked. You can continue shooting with the locked focus.
- To readjust the focus, press the button again to display the screen in step 2.
- To change back to autofocus, return to step 1 and choose any setting other than MF.



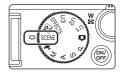
#### MF (Manual Focus)

- The digits displayed for the gauge on the right of the monitor in step 2 serve as a guideline for the
  distance to a subject that is in focus when the gauge indicates the center. To change the unit of
  this gauge, use MF distance indicator units ( ) in the setup menu.
- Press the shutter-release button halfway to preview an approximate depth of field (the area in focus behind and in front of the subject).
- The digital zoom is not available.
- Focus mode changes to **AF** (autofocus) when the monitor is turned off.
- When Fn1 + command dial (♣89) in the setup menu is set to Manual focus, the screen shown in step 2 can be displayed or the focus can be adjusted by rotating the command dial while pressing the Fn1 button.

# **Using Panorama Assist**

Using a tripod makes the composition easier. When using a tripod to stabilize the camera, set **Vibration reduction** (♣76) to **Off** in the setup menu.

1 Rotate the mode dial to SCENE.

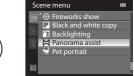


Press the MENU button to display the scene menu screen, choose

☐ Panorama assist with the multi selector and press the ௵ button.

 The Dicon is displayed to show the direction in which pictures are joined.





- **3** Use the multi selector to choose the direction and press the **(M)** button.
  - Select the direction in which pictures are joined in the completed panorama: right (∑), left (≼), up (△) or down (▽).
  - The yellow icon (∑∑) moves to the direction pressed, so press the ⋈ button to choose the direction. A white icon (∑) is displayed in the chosen direction.



- Apply flash mode (□61), self-timer (□64)/remote control (♣105), focus mode (□67) and exposure compensation (□71) settings with this step, if necessary.
- Press the **®** button again to reselect the direction.
- **4** Frame the first portion of the panorama scene and take the first picture.
  - The camera focuses on the subject at the center of the frame.
  - 1/3 of the image will be displayed as translucent





### **5** Shoot the next picture.

- Match the outline of the next picture so that 1/3 of the frame overlaps the previous picture, and press the shutter-release button.
- Repeat until you have taken the necessary number of pictures to complete the image.





# **6** Press the **6** button when shooting is completed.

• The camera returns to step 3.

#### Notes on Panorama Assist

- Set the flash mode, self-timer/remote control, focus mode and exposure compensation before releasing the shutter for the first picture. The settings cannot be changed after shooting the first picture. Pictures cannot be deleted, nor can zoom, **Image quality** (\$\sum\_75\$), or **Image size** (\$\sum\_77\$) be adjusted after shooting the first picture.
- The panorama series is terminated if the auto off function (♠82) triggers the standby mode during shooting. To prevent this, setting a longer time for the auto off function is recommended.

# 

When using panorama assist mode, all pictures in the panorama have the same exposure, white balance, and focus as the first picture of the panorama.

When the first picture is shot, AE/AFL is displayed on the monitor to indicate that exposure, white balance, and focus are locked.



#### Panorama Creation

Transfer pictures taken to a computer ( $\square$ 94) and use Panorama Maker 5 to join them in a single panorama.

Install Panorama Maker 5 on a computer using the included ViewNX 2 Installer CD.

#### More Information

See "File and Folder Names" (6-699) for more information.



# P, S, A, M Modes

# P (Programmed Auto), S (Shutter-Priority Auto) or A (Aperture-Priority Auto)

1 Rotate the mode dial to P, S or A.





- **2** Rotate the command dial to set the exposure.
  - In **P** mode, the flexible program ( $\square$ 53) can be set.
  - In S mode, the shutter speed can be set in a range from a maximum speed of 1/2000 to 8 seconds.
  - In **A** mode, the aperture value can be set in a range of f/2.8 to 8 (wide-angle position) and f/5.6 to 8 (telephoto zoom position).
- **3** Frame the subject and shoot.
  - In the default setting, the camera has nine focus areas, and automatically selects the focus areas containing the subject closest to the camera. When the subject is in focus, the focus area (active focus area) lights in green (maximum of nine areas) (♣48).







### Notes on Shooting

- When zooming is performed after the exposure is set, exposure combinations or aperture value may be changed.
- When the subject is too dark or too bright, it may not be possible to obtain the appropriate
  exposure. In such cases, the shutter speed indicator or aperture value indicator blinks when the
  shutter-release button is pressed halfway. Change the shutter speed setting or aperture value.
   When settings such as **Built-in ND filter** ( 50 Sensitivity ( 50 30) are changed, the
  appropriate exposure may be obtained.
- At shutter speeds of 1/4 second or slower, noise may appear in the image. In such situations, the shutter speed indicator lights in red. Setting Long exposure NR (♣53) to On is recommended.

### Shutter Speed

- The control range of the shutter speed differs depending on the ISO sensitivity setting. Additionally, the range is restricted during continuous shooting (QQ83).
- When the zoom is on the wide-angle position and the aperture value is set to f/8 (minimum aperture), the shutter speed can be set to up to 1/4000 seconds.

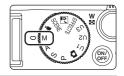
### More Information

See "Customize Command Dials" (\$\infty\$86) for more information.

### M (Manual) Mode

The user controls both the shutter speed and aperture value.

- The shutter speed can be set in a range from a maximum speed of 1/4000 to 60 seconds.
- 1 Rotate the mode dial to M.



- 2 Rotate the main command dial to choose a shutter speed value.
  - At shutter speeds of 1/4 second or slower, the shutter speed indicator lights in red (♣5).
  - See \$\infty\$53 for more information on exposure indicator.





Exposure indicator

- **3** Rotate the sub-command dial to choose an aperture value.
  - Repeat steps 2 to 3 to modify shutter speed and aperture value settings until the desired exposure is achieved.





# 4 Focus and shoot.

 In the default setting, the camera has nine focus areas, and automatically selects the focus areas containing the subject closest to the camera. When the subject is in focus, the focus area (active focus area) lights in green (maximum of nine areas) ( ◆48).







# Note on Shooting

When zooming is performed after the exposure is set, aperture value may be changed.

# Note on ISO Sensitivity

When ISO sensitivity (♣30) is set to Auto (default setting), High ISO sensitivity auto, ISO 100-200 or ISO 100-400, ISO sensitivity is fixed at ISO 100.

# Shutter Speed

- A shutter speed of 1/4000 second is available only when the zoom is at the wide-angle position and the aperture value is set to f/8 (minimum aperture).
- The control range of the shutter speed differs depending on the ISO sensitivity setting.
   Additionally, the range is restricted during continuous shooting (\(\subseteq \mathbb{B}\)83).

# **Editing Still Images**

#### **Editing Features**

Images can be easily edited with this camera using the functions below. Edited images are stored as separate files ( 599).

Editing function	Application
Quick retouch (☎11)	Easily create a copy with enhanced contrast and richer colors.
D-Lighting (🏍11)	Create a copy of the current picture with enhanced brightness and contrast, brightening dark portions of the picture.
Skin softening (🗪 12)	Make the facial skin tones softer.
Filter effects (♂13)	Apply a variety of effects using digital filter. The available effects are <b>Soft</b> , <b>Selective color</b> , <b>Cross screen</b> , <b>Fisheye</b> , <b>Miniature effect</b> and <b>Painting</b> .
Small picture (♣14)	Create a small copy of pictures suitable for uses such as e-mail attachments.
Black border ( \$\displays 15)	Add a black frame around the picture. Use when you want to add a black border to a picture.
Straighten (🗪 16)	Compensate for the slanting.
NRW (RAW) processing (♣17)	Create JPEG-format copies by performing RAW processing within the camera for NRW (RAW) images (◯◯75) without having to use a computer.
Crop ( <b>♣</b> 19)	Crop a portion of the picture. Use to zoom in on a subject or arrange a composition.

# Notes on Image Editing

- Pictures shot with an Image size (\(\infty\)77) of \(\frac{\text{Pl}}{2}\) 3648×2432, \(\frac{16}{94}\) 3584×2016, or \(\frac{14}{12}\) 2736×2736 can only be modified using the black border editing function.
   Still pictures extracted from movies recorded with \(\frac{720}{220}\) HD 720p (1280×720) can also only be modified using the black border editing function.
- When no faces are detected in the picture, skin softening cannot be applied (♣12).
- Editing other than NRW (RAW) processing cannot be performed on NRW (RAW) images. Edit a JPEG image created with NRW (RAW) processing.
- The COOLPIX P7100's editing functions are not available for pictures taken with cameras other than COOLPIX P7100.
- If a copy created using the COOLPIX P7100 is viewed on a different digital camera, it may not be
  possible to display the picture properly or transfer it to a computer.
- Editing functions are not available when there is not enough free space in the internal memory or on the memory card.

#### Restrictions on Image Editing

The following restrictions apply when editing pictures that were created by editing.

Editing functions used	Editing functions to add
Quick retouch D-Lighting	Skin softening, Small picture, Black border or Crop can be used. Quick retouch and D-Lighting cannot be used in combination with each other.
Skin softening NRW (RAW) processing	Additional editing functions can be used.
Filter effects	Skin softening, Small picture or Straighten can be used.
Small picture	No additional editing functions can be used.
Black border	Small picture can be used.
Straighten	Small picture or Black border can be used.
Crop	Black border or Straighten can be used. When the image size is 320 × 240 or smaller, straighten cannot be performed.

- Copies created by editing cannot be edited again using the same editing function.
- To use an editing function together with small picture, use the other editing function first, and use small picture as the last editing function performed on that picture.
- Pictures that were taken using skin softening can be edited using skin softening.

#### **Original Pictures and Edited Copies**

- Copies created with editing functions are not deleted if the original pictures are deleted. The original pictures are not deleted if copies created with editing functions are deleted.
- Edited copies are stored with the same shooting date and time as the original.
- Even if the pictures that are marked for **Print order** (��60) or **Protect** (��66) are used for editing, these settings are not reflected on the edited copies.

# **△** Quick Retouch: Enhancing Contrast and Saturation

Select a picture (□34) → MENU button → ▶ tab (□13) → ♣ Quick retouch

# Press the multi selector $\triangle$ or $\nabla$ to choose the setting level, and press the $\bigcirc$ button.

- The original version is displayed on the left and the edited version is displayed on the right.
- To cancel, press ◀.
- Quick retouched copies can be recognized by the icon displayed in playback mode.





# D-Lighting: Enhancing Brightness and Contrast

Select a picture (◯◯34) → MENU button → ▶ tab (◯◯13) → ♣️ D-Lighting

# Press the multi selector $\blacktriangle$ or $\blacktriangledown$ to choose the setting level, and press the $\circledcirc$ button.

- The original version is displayed on the left and the edited version is displayed on the right.
- To cancel, press ◀.
- D-Lighting copies can be recognized by the **a** icon displayed in playback mode.







# Skin Softening: Softening Skin Tones

Select a picture ( $\bigcirc$ 34)  $\rightarrow$  MENU button  $\rightarrow$   $\triangleright$  tab ( $\bigcirc$ 13)  $\rightarrow$   $\triangleright$  Skin softening

# Press the multi selector ▲ or ▼ to choose the setting level, and press the ® button.

- A confirmation screen is displayed, and the image is displayed zoomed in on the face edited by skin softening.
- To cancel, press ◀.



# **2** Confirm the results.

- Up to 12 faces, in order of proximity to the center of the frame, can be enhanced.
- When multiple faces are edited using skin softening, use the multi selector 

  or

  to switch the face that is displayed.
- To adjust the extent of skin softening, press the MENU button and return to step 1.
- To create a copy edited with skin softening, press the **®** button.
- Copies created by editing with skin softening can be recognized by the 
  icon displayed in playback mode.



# Notes on Skin Softening

- Depending on conditions such as the direction the subject is facing or the brightness of the face, the face may not be detected properly, or the desired effect may not be achieved.
- If no faces are detected in the image, a warning is displayed and the screen returns to the playback menu.

#### More Information

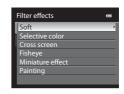
See "File and Folder Names" (6099) for more information.

# Filter Effects: Applying Digital Filter Effects

Select a picture ( $\square 34$ )  $\rightarrow$  MENU button  $\rightarrow$   $\blacktriangleright$  tab ( $\square 13$ )  $\rightarrow$   $\bigcirc$  Filter effects

Option	Description
Soft	Gently soften the focus of the image from the center to the edge. In pictures taken with face detection (\$\square\$185) or pet detection (\$\square\$45) selected, areas around faces will be blurred.
Selective color	Keep only selected image colors and makes other colors black- and-white.
Cross screen	Produce star-like rays of light that radiate outward from bright objects such as sunlight reflections and city lights. Suitable for night scenes.
Fisheye	Create images that look like they were shot with a fisheye lens. Suitable for pictures shot in macro mode.
Miniature effect	Create images that look like close-up photos of a diorama. Suitable for pictures shot while looking down from a high location, with the main subject near the center of the frame.
Painting	Create images with the ambience of paintings.

- 1 Press the multi selector ▲ or ▼ to choose the filter effect type and press the ເ button.
  - When Cross screen, Fisheye, Miniature effect or Painting is selected, proceed to step 3.



- **2** Adjust the effect and press the ® button.
  - **Soft**: Press ▲ or ▼ to choose the extent of the effect.
  - **Selective color**: Press ▲ or ▼ to select the color to keep.



Soft

- **3** Check the effect and press the ® button.
  - A new, edited copy is created.
  - To cancel, press ◀.
  - Copies created by editing with filter effect can be recognized by the (§) icon displayed in playback mode.

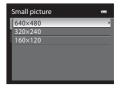




# Small Picture: Reducing the Size of an Image

Select a picture ( $\square$ 34)  $\rightarrow$  MENU button  $\rightarrow$   $\blacktriangleright$  tab ( $\square$ 13)  $\rightarrow$   $\blacktriangleright$  Small picture

- Press the multi selector ▲ or ▼ to choose the desired copy size and press the ® button.
  - The available size is 640×480, 320×240 or 160×120.



- **2** Choose **Yes** and press the **®** button.
  - A new, smaller copy is created.
  - Image quality is saved as **Basic** (compression ratio of about 1:16).
  - To cancel, choose **No** and press the **®** button.
  - The copy is displayed with a black frame.





See "File and Folder Names" ( 99) for more information.

# **■ Black Border: Adding a Black Border to Pictures**

Select a picture ( $\square 34$ )  $\rightarrow$  MENU button  $\rightarrow$   $\blacktriangleright$  tab ( $\square 13$ )  $\rightarrow$  BK Black border

- Press the multi selector ▲ or ▼ to choose the desired frame thickness and press the ® button.
  - Choose from Thin, Medium, or Broad lines.



- **2** Choose **Yes** and press the ® button.
  - A new copy with a black border is created.
  - To cancel, choose **No** and press the **®** button.



 Copies created by editing with black borders can be recognized by the in icon displayed in playback mode.

### Notes on Black Border

- A part of the picture equivalent to the thickness of the black border is cut off because the black border overlaps the picture.
- When a picture with a black border is printed using a printer's borderless print function, the black border may not be printed.



See "File and Folder Names" (6-699) for more information.

# **₹** Straighten: Compensating for Picture Slanting

Select a picture ( $\bigcirc$ 34)  $\rightarrow$  MENU button  $\rightarrow$   $\blacktriangleright$  tab ( $\bigcirc$ 13)  $\rightarrow$   $\frown$  Straighten

#### Use the multi selector to compensate for slanting.

- Press ◀ to rotate counterclockwise by 1 degree.
- Press ▶ to rotate clockwise by 1 degree.
- To cancel, press the **MENU** button.
- To create a copy edited with straighten, press the 

   button
- Copies created by editing with straighten can be recognized by the & icon displayed in playback mode.





# Notes on Straighten

- When straighten is performed, the picture edges are cut. The larger the slant for which compensation is performed, the larger the area around the picture that is cut.
- Straighten can be performed up to 15 degrees.



See "File and Folder Names" ( 99) for more information.

# NRW NRW (RAW) Processing: Creating JPEG Images from NRW Images

Press the MENU button → ▶ tab (□13) → NRW NRW (RAW) processing

1 Use the multi selector to choose the picture to be RAW processed and press the ® button.



NRW (RAW) processing

- **2** Set the NRW (RAW) processing parameters.
  - Apply the settings below while checking the image and rotating the zoom control toward T (Q). Rotate toward T (Q) again to return to the setting screen.
    - White balance: Choose a white balance setting other than Auto (warm lighting) (♣32).
    - Exp. +/-: Adjust the brightness.
    - **Picture Control**: Change the settings for finish of the image (\$\infty\$38).
    - Image quality: Choose the image quality from Fine, Normal, or Basic (275).

    - **Distortion control**: Set the distortion control (♣54).
    - **D-Lighting**: Enhance brightness and contrast in dark portions of pictures (611).
  - Press the **t** button to change back to the default settings.
  - Choose **EXE** when all settings have been adjusted.
- **3** Choose **Yes** and press the **®** button.
  - An NRW (RAW) processed JPEG image is created.
  - To cancel the creation, choose No.





### Notes on NRW (RAW) Processing

- The COOLPIX P7100 can only create JPEG-format copies of NRW (RAW) images taken with the COOLPIX P7100.
- NRW (RAW) processing > **White balance** > **Preset manual** cannot be selected for photographs taken at a **White balance** setting other than **Preset manual**.

#### **More Information**

- See "Printing Images of Size 1:1" (\$\square\$79\$) for more information.
- See "File and Folder Names" ( \$\infty\$ 99) for more information.

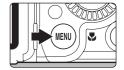
# 

Create a copy containing only the portion visible on the monitor when MENUS is displayed with playback zoom (QQ 35) enabled. Cropped copies are stored as separate files.

- **1** Enlarge the picture for cropping ( $\square$ 35).
- **2** Refine copy composition.
  - Rotate the zoom control toward **T** (**Q**) or **W** (**E**) to adjust the zoom ratio.
  - Press the multi selector ▲, ▼, ◀ or ▶ to scroll the
    picture until only the portion you want to copy is
    visible on the monitor.



**3** Press the MENU button.



- **4** Use the multi selector to choose **Yes** and press the ® button.
  - A new picture, containing only the portion visible on the monitor, is created.
  - To cancel, choose **No** and press the **®** button.



# Image Size

The narrower the cropping range, the smaller the size (amount of pixels) of the cropped picture copy. When the image size setting for a cropped copy is  $320\times240$  or  $160\times120$ , a black frame appears around the picture during playback, and the  $\blacksquare$  small picture icon is displayed on the left side of the monitor.

# Cropping the Picture in its Current "Tall" Orientation

Use the **Rotate image** option (��66) to rotate the picture so that it is displayed in landscape orientation. After cropping the picture, rotate the cropped picture back to "tall" orientation. The picture displayed in "tall" orientation can be cropped by zooming in on the picture until the black bars displayed on the both sides of the monitor disappear. The cropped picture is displayed in landscape orientation.

# More Information

See "File and Folder Names" (6-699) for more information.

# Connecting the Camera to a TV (Viewing Images on a TV)

Connect the camera to a television to play back pictures on the television. If your television is equipped with an HDMI connector, you can connect it to the camera with a commercially available HDMI cable to play back pictures.

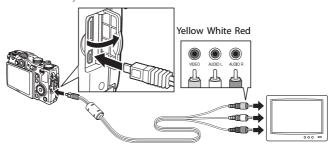
**1** Turn off the camera.



**2** Connect the camera to the TV.

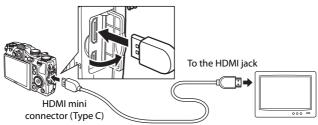
#### When connecting using the included audio/video cable

 Connect the yellow plug to the video-in jack on the TV, and the red and white plugs to the audio-in jacks.



#### When connecting using a commercially available HDMI cable

• Connect the plug to the HDMI jack on the TV.

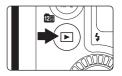


# **3** Tune the television to the video channel.

• See the instruction manual provided with your television for details.

# **4** Hold down the ▶ button to turn on the camera.

- The camera enters playback mode, and the recorded pictures are displayed on the television.
- While the camera is connected to the TV, the monitor remains off



# Notes on Connecting an HDMI Cable

- An HDMI cable is not included. Use a commercially available HDMI cable to connect the camera to
  a TV. The output terminal on this camera is a HDMI Mini Connector (Type C). When purchasing an
  HDMI cable, be sure that the device end of the cable is a HDMI Mini Connector.
- We recommend shooting still pictures with Image size (☐77) set to 2048×1536 or higher, and recording movies with Movie options (♣42) set to 200 HD 720p (1280×720).

#### Notes on Connecting the Audio/Video Cable

- When connecting the cable, be sure that the plug is oriented correctly. Do not force the plug into the camera. When disconnecting the cable, do not pull the plug at an angle.
- Do not connect cables to the HDMI mini connector and USB/audio video connector simultaneously.

# When Nothing Appears on the TV

Make sure that **TV settings** (**6–6**84) in the setup menu is appropriate for your television.

# **✓** Using the TV's Remote Control (HDMI Device Control)

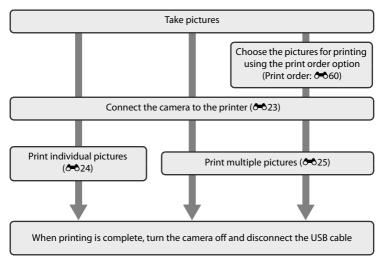
The remote control of a TV that conforms to the HDMI-CEC standard can be used to operate the camera during playback.

Instead of the multi selector or zoom control, the remote control can be used for picture selection, and switching between movies, full-frame playback and four thumbnails display.

- Set HDMI device control (\$\sigma\$68) of TV settings to On (default setting) in the setup menu, and connect the camera to the TV with an HDMI cable.
- Point the remote control at the TV to operate.
- See your TV's instruction manual or other related documentation to check whether your TV supports the HDMI-CEC standard.

# **Connecting the Camera to a Printer (Direct Print)**

Users of PictBridge-compatible ( 36) printers can connect the camera directly to the printer and print pictures without using a computer. The steps for printing are as follows.



#### Notes on Power Source

- When connecting the camera to a printer, use a fully charged battery to prevent the camera from turning off unexpectedly.
- If the AC Adapter EH-5b and the Power Connector EP-5A (available separately) ( 103) are used, COOLPIX P7100 can be powered from an electrical outlet. Do not, under any circumstances, use an AC Adapter other than the EH-5b or a Power Connector other than the EP-5A. Failure to observe this precaution could result in overheating or damage to the camera.

# Printing Pictures

In addition to printing pictures transferred to a computer and printing pictures with a direct camerato-printer connection, the following options are also available for printing pictures recorded on the memory card:

- Insert a memory card into a DPOF-compatible printer's card slot.
- Take a memory card to a digital photo lab.

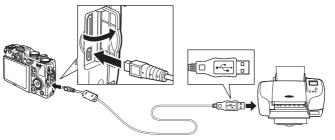
For printing using these methods, specify the pictures and the number of prints each using the **Print order** (��60) option in the playback menu.

#### **Connecting the Camera to a Printer**

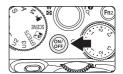
**1** Turn off the camera.



- **2** Turn on the printer.
  - Check the printer settings.
- **3** Connect the camera to the printer using the included USB cable.
  - Be sure that the plug is oriented correctly. When disconnecting the cable, do not pull the plug at an angle.



- **4** Turn on the camera.
  - When connected correctly, the **PictBridge** startup screen (1) is displayed on the camera monitor. Then the **Print selection** screen (2) is displayed.





#### **Printing Individual Images**

After connecting the camera to the printer correctly (��23), print pictures by following the procedure below.

- 1 Use the multi selector to choose the picture to be printed and press the ® button.
  - Pictures can also be chosen by rotating the main command dial.
  - Rotate the zoom control toward W (E) to display 12 thumbnails, or toward T (Q) to switch back to fullframe playback mode.



**2** Choose **Copies** and press the **®** button.



**3** Choose the number of copies (up to nine) and press the ® button.



**4** Choose **Paper size** and press the **®** button.





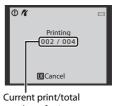
- **5** Choose the desired paper size and press the (R) button.
  - To specify the paper size using the printer settings, choose **Default** in the paper size menu.



**6** Choose **Start print** and press the **®** button.



- Printing starts.
  - The monitor display returns to that shown in step 1 when printing is complete.
  - To cancel before all copies have been printed, press the **(N)** button.

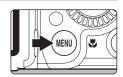


number of prints

#### **Printing Multiple Images**

After connecting the camera to the printer correctly (\$\infty\$23), print pictures by following the procedure below.

- When the **Print selection** screen is displayed, press the MENU button.
  - The **Print menu** is displayed.



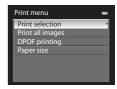
- **2** Use the multi selector to choose **Paper size** and press the ® button.
  - To exit the print menu, press the **MENU** button.



- 3 Choose the desired paper size and press the 60 button.
  - To specify the paper size using the printer settings, choose **Default** in the paper size menu.



4 Choose **Print selection**, **Print all images** or **DPOF printing** and press the ® button.



10 ⊂

Print selection

#### Print selection

Choose the pictures (up to a maximum of 99) and number of copies (up to nine per picture).

- Pictures can also be chosen by rotating the main command dial.
- Pictures selected for printing can be recognized by the check mark icon and the numeral indicating the number of copies to be printed. A check mark is not displayed with pictures for which no copies have been specified and these pictures are not printed.
- Rotate the zoom control toward T (Q) to switch to full-frame playback mode, or W (➡) to switch to 12 thumbnails display.
- Press the button when setting is complete.
- When the menu shown on the right is displayed, choose **Start print** and press the button to start printing.
- Choose **Cancel** and press the **®** button to return to the print menu.





#### Print all images

All pictures stored in the internal memory or on the memory card are printed one per each.

- When the menu shown on the right is displayed, choose Start print and press the **®** button to start printing.
- Choose **Cancel** and press the **(N)** button to return to the print menu.



#### **DPOF** printing

Pictures for which a print order was created in **Print order** option (6=60) can be printed.

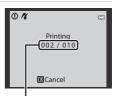
- When the menu shown on the right is displayed, choose Start print and press the (R) button to start printing.
- Choose **Cancel** and press the **®** button to return to the print menu.
- To view the current print order, choose **View** images and press the (8) button. To print pictures, press the **®** button again.





# **5** Printing starts.

- The monitor display returns to that shown in step 2 when printing is complete.
- To cancel before all copies have been printed, press the (R) button.



Current print/total number of prints

#### Paper Size

The camera supports the following paper sizes: **Default** (the default paper size for the current printer), 3.5×5 in., 5×7 in., 100×150 mm, 4×6 in., 8×10 in., Letter, A3, and A4. Only sizes supported by the current printer are displayed.

# **Editing Movies**

#### **Extracting Only the Desired Portions of the Movie**

The desired portions of a recorded movie can be saved as a separate file.

- **1** Play back the movie to be edited and pause at the start point of the portion that is to be extracted ( $\square$ 102).
- 2 Use the multi selector ◀ or ▶ to choose ☒ on the playback control and press the ௧ button.
  - The movie editing screen is displayed.



- 3 Press ▲ or ▼ to choose ※ (Choose start point) on the editing playback control.
  - Rotate the multi selector or press 

    or 

    to adjust the start position.
  - To cancel, press ▲ or ▼ to choose 🛨 (Back) and press the 🔞 button.



**1**□▼陽\*

- Press ▲ or ▼ to choose ¬ (Choose end point).

  - To check the playback of the movie in the specified range before saving it, choose ▶ (Preview) and press the ℍ button. During preview playback, the volume can be adjusted with the zoom control **T/W**. Use the multi selector to fast forward or rewind. To stop the preview playback, press the ℍ button.
- **5** After finishing the settings, press **△** or **▼** to choose **△** (Save) and press the **⑥** button.
- **6** Choose **Yes** and press the **®** button.
  - · The edited movie is saved.
  - To cancel the saving, choose No.



# Notes on Editing Movies

- Once a movie is created through editing, it cannot be used again for extracting a movie. To extract
  another range, select and edit the original movie.
- Because the edited movies are extracted in 1-second units, they may vary slightly from the set start point and end point. Sections shorter than two seconds cannot be extracted.
- Editing functions are not available when there is not enough free space in the internal memory or on the memory card.

#### **More Information**

See "File and Folder Names" ( 6099) for more information.

#### Saving a Frame from a Movie as a Still Picture

A screen from a recorded movie can be extracted and saved as a still picture.

- Pause a movie and display the screen to be extracted (\(\sum 102\)).
- Choose ☑ on the playback control with the multi selector ◀ or ▶ and press the ๋ button.



- When the confirmation dialog is displayed, choose Yes and press the button to save. To cancel the saving, choose No.
- The still picture is saved with **Normal** as the image quality. The image size is determined by the type (image size) (\$\infty\$42) of the original movie.



Movie type	Size of still picture
<b>720</b> HD 720p (1280×720)	% (1280×720)
<b>VGA</b> VGA (640×480)	<b>(640×480)</b>
QVGA (320×240)	<b>(</b> 320×240)

# Note on Saving a Still Picture

#### **Quick Menu**

#### QUAL Image Quality and Image Size

To set the image quality and image size, see "Changing the Image Quality and Image Size" ( $\square$ 74).

# **ISO Sensitivity (Setting the ISO sensitivity)**

Rotate the mode dial to P, S, A or  $M \rightarrow ISO$  (Quick menu dial) ( $\square 72$ )  $\rightarrow$  ISO sensitivity

The higher the ISO sensitivity, the less light needed for taking pictures.

The higher the ISO sensitivity, the darker the subject that can be shot. Additionally, even with subjects of similar brightness, pictures can be taken at faster shutter speeds, and blurring caused by camera shake and subject movement can be reduced.

- Setting the ISO sensitivity to a high level is effective when shooting dark subjects, not using the flash, shooting at the telephoto zoom position and similar situations, but the pictures taken may be slightly grainy.
- Press the multi selector 

  or 

  to choose the ISO sensitivity setting.
  - Items can also be chosen by rotating the main command dial
  - Press the multi selector ▼ when the ISO sensitivity is set to Auto, High ISO sensitivity auto, ISO 100-200 or ISO 100-400 to proceed to step 2.
  - If the ISO sensitivity is fixed, proceed to step 3.



# **2** Choose the minimum shutter speed.

• Press the multi selector ▲ to return to the ISO sensitivity setting.



- **3** After completing the settings, press the quick menu button or the **1** button.
  - The monitor display reverts to shooting screen.

#### **Types of ISO Sensitivity**

Option	Description
ISO sensitivity	AUTO Auto (default setting): The sensitivity is ISO 100 in bright places; in dark places the camera automatically raises the sensitivity to a maximum of ISO 800.  Biligh ISO sensitivity auto: The ISO sensitivity is set automatically within the range of ISO 100 to 1600 according to the brightness of the subject.  BISO 100-200, BISO 100-400 (fixed range auto): Choose the range in which the camera automatically adjusts ISO sensitivity. The camera does not raise sensitivity beyond the maximum value in the selected range. Set the maximum value for ISO sensitivity to control "grain" that appears in images.  100, 200, 400, 800, 1600, 3200, Hi 1 (equivalent to ISO 6400): ISO sensitivity is locked at the specified value.
Minimum shutter speed	When the shooting mode is <b>P</b> or <b>A</b> and <b>ISO sensitivity</b> is set to <b>Auto</b> , <b>High ISO sensitivity auto</b> , <b>ISO 100-200</b> or <b>ISO 100-400</b> , the shutter speed at which the ISO sensitivity automatic control starts to function (1/125 to one second) is set. The default setting is <b>None</b> . If the exposure is insufficient with the shutter speed that is set here, the ISO sensitivity is increased automatically to obtain the correct exposure. If the exposure is still insufficient even after the ISO sensitivity is increased, the shutter speed slows down.

The icon for the current setting is displayed on the monitor ( $\square$ 8).

- When **Auto** is selected, the **SO** icon is not displayed at ISO 100, but is displayed if the ISO sensitivity automatically increases to more than 100 ( $\square$ 30).
- When **High ISO sensitivity auto** is selected, the lie icon is displayed. When **ISO 100-200** or **ISO 100-400** is selected, the lie icon and the maximum ISO sensitivity value are displayed.

# Notes on ISO Sensitivity

- In M (manual) mode, ISO sensitivity is fixed at ISO 100 if Auto, High ISO sensitivity auto, ISO 100-200 or ISO 100-400 is selected.
- This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" (\(\sigma 80\)) for more information.



# WB White Balance (Matching Image Colors with Colors as Seen with the Naked Eye)

Rotate the mode dial to P, S, A, M,  $\square$  or  $\P \rightarrow WB$  (Quick menu dial) ( $\square$ 72)  $\rightarrow$  White balance

The color of light reflected from an object varies with the color of the light source. The human brain is able to adapt to changes in the color of the light source, with the result that white objects appear white whether seen in the shade, direct sunlight, or under incandescent lighting. Digital cameras can mimic this adjustment of the human eye by processing images according to the color of the light source. This is known as "white balance." For natural coloration, choose a white balance setting that matches the light source before shooting.

Although the default setting, **Auto (normal)**, can be used under most types of lighting, you can apply the white balance setting suited to a particular light source to achieve more accurate results.

- Press the multi selector 

  or 

  to choose the type of white balance.
  - Items can also be chosen by rotating the main command dial.
  - When 
     \( \bigcup \) is chosen, set the color temperature (
     \( \bigcup \) 34) using 
     \( \bigcup \) temp.
  - To perform fine adjustment of the white balance setting, choose **Fine-tune** and press the **®** button.



- **2** After completing the settings, press the quick menu button or the ® button.
  - The monitor display reverts to shooting screen.

# Fine Adjustment of White Balance

Press the multi selector  $\triangle$ ,  $\nabla$ ,  $\triangleleft$  or  $\triangleright$  to set fine adjustment value.

- The four directions are A (amber), B (blue), G (green) and M (magenta), and fine adjustment can be performed in six levels in all directions.
- When the m button is pressed, the fine adjustment value is reset to the center (coordinate 0, 0).
- $\bullet\,$  Rotate the sub-command dial to return to the screen in step 1.

The color displayed in the fine-tune screen for white balance represents the approximate color in the color temperature direction.

When a color is set in the fine-tune screen, it may not be reproduced exactly in the image. For example, when the white balance is set to **Incandescent**, the image will not have a strong blue color even if fine adjustment is performed in the B (blue) direction.



	Option	Description
AUT01	Auto (normal) (default setting)	The white balance is automatically adjusted to suit the lighting conditions. Default setting is suitable for most situations. When set to <b>Auto (warm lighting)</b> , the images are preserved
AUTO2	Auto (warm lighting)	with warm colors if they are shot under an incandescent light source. When using the flash, according to the brightness of the flash, the images are adjusted to suitable white balance.
*	Daylight	The white balance is adjusted for direct sunlight.
*	Incandescent	Use under incandescent lighting.
<b></b>	Fluorescent (FL1 to FL3)	Use under most types of fluorescent lighting. Choose one of <b>FL1</b> (white fluorescent), <b>FL2</b> (daylight white/neutral fluorescent) and <b>FL3</b> (daylight fluorescent).
4	Cloudy	Use when shooting under overcast skies.
<del>G</del>	Flash	Use with the flash.
K	Choose color temp.	Use to directly specify the color temperature (♣34).
PRE	Preset manual (1 to 3)	Useful when shooting under unusual lighting. See "Using Preset Manual" (��35) for more information.

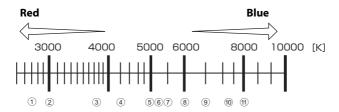
The icon for the current setting other than **Auto (normal)** is displayed on the monitor  $(\square 8)$ .

#### Notes on White Balance

- At white balance settings other than **Auto (normal)**, **Auto (warm lighting)** or **Flash**, set the flash mode to **③** (off) (□161).
- This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" (CM80) for more information.

#### Color Temperature

The perceived color of a light source varies with the viewer and other conditions. Color temperature is an objective measure of the color of a light source, defined with reference to the temperature to which an object would have to be heated to radiate light in the same wavelengths. While light sources with a color temperature in the neighborhood of 5000–5500K appear white, light sources with a lower color temperature, such as incandescent light bulbs, appear slightly yellow or red. Light sources with a higher color temperature appear tinged with blue. The camera white balance options are adapted to the following color temperatures.



- Sodium-vapor lamps: 2700K
- Incandescent/ Warm-white fluorescent: 3000K
- White fluorescent: 3700K
- Cool-white fluorescent: 4200K
- (5) Day white fluorescent: 5000K
- 6 Direct sunlight: 5200K

- Flash: 5400K
- Cloudy: 6000K
- Daylight fluorescent: 6500K
- High temp. mercury-vapor: 7200K
- Shade: 8000K

#### **Using Preset Manual**

Use when you want to make pictures taken under unusual lighting conditions (such as lamps with reddish light) look as though they were shot in normal light. Use the procedure below to shoot after measuring the white balance value under the shooting light.

- Up to three preset values can be saved: PRE1, PRE2 and PRE3.
- Place a white or gray reference object under the lighting that will be used during shooting.
- 2 Display the white balance quick menu (♠32) and press the multi selector ◀ or ▶ to choose PRE1, PRE2 or PRE3.
  - Items can also be chosen by rotating the main command dial.



- 3 Press ▼ to choose Preset manual and press ◀ or ▶ to choose PRE.
  - The lens extends to the zoom position for measurement.



- Frame a white or gray reference object in the reference object frame and press the button.
  - The shutter is released and the new white balance preset value is set (no picture is recorded).



Reference object frame

#### Notes on Preset Manual

- The camera cannot measure a white balance value for when the flash fires. When shooting with the flash, set White balance to
  - $\textbf{Auto (normal)}, \textbf{Auto (warm lighting)} \ \texttt{or} \ \textbf{Flash}.$
- When a wide-angle converter is mounted, preset manual cannot be used. Further, the preset value cannot be measured.
- Using the Previously Measured White Balance Value

Choose  $\mathbf{X}$  in step 3. The most recently measured value is set for white balance, without performing measurement again.

# Performing Fine Adjustment for the Measured White Balance Value

After selecting preset PRE1, PRE2 or PRE3, select **Fine-tune** and press the **®** button to perform fine adjustment for white balance (★32).

# BKT Bracketing (Continuous Shooting While Changing the Shutter Speed, ISO Sensitivity and White Balance)

Rotate the mode dial to P, S, A or  $M \rightarrow BKT$  (Quick menu dial) ( $\square 72$ )  $\rightarrow$  Auto bracketing

Continuous shooting can be performed while changing the exposure (brightness) automatically with the shutter speed (Tv) or ISO sensitivity (Sv), or multiple pictures can be recorded while varying the white balance (WB). This is effective when adjusting the brightness of an image is difficult, or when multiple light sources are mixed together and it is difficult to decide the white balance.

- Press the multi selector 

  or 

  to choose the type of bracketing, and press 

  √.
  - Items can also be chosen by rotating the main command dial.



- Choose the number of pictures to shoot and press ▼.
  - 3 or 5 pictures can be chosen.



- 3 Choose the range of increment correction and press ▼.
  - For **W** (exposure bracketing (Tv)) or **SV** (exposure bracketing (Sv)), choose **0.3**, **0.7** or **1**.
  - For WB (white balance bracketing), choose 1, 2 or 3.
- Auto bracketing
  Number of shots
  Increment
  Range
  Reset
- **4** Choose the bracketing range and press the quick menu button or the ® button.
  - The monitor display reverts to shooting screen.
  - To change the values to the default setting, select Reset and press the button.



# More Information

See "Reverse Indicators" ( 94) for more information.

#### **Types of Auto Bracketing**

	Option	Description
OFF	OFF (default setting)	Bracketing is not performed.
Tv	Exposure bracketing (Tv)	Set the number of pictures to shoot continuously, the range of exposure increments, and the bracketing range. When the shutter-release button is pressed all the way, pictures are shot continuously while the shutter speed is adjusted automatically.  • "Tv" means "Time value."
Sv	Exposure bracketing (Sv)	Set the number of pictures to shoot continuously, the range of ISO sensitivity increments, and the bracketing range. When the shutter-release button is pressed all the way, pictures are shot continuously while changing the ISO sensitivity, with the shutter speed and aperture value fixed.  • "Sv" means "Sensitivity value."
WB	White balance bracketing	Set the number of pictures to record, the range of color temperature compensation increments, and the bracketing range.  When the shutter-release button is pressed all the way, one picture is shot, and the set number of pictures is recorded with the color temperature changed for each one.

The icon for the current setting other than **OFF** is displayed on the monitor ( $\square$ 8).

# Notes on Auto Bracketing

- Exposure bracketing (Tv) and Exposure bracketing (Sv) are not available in M (manual) mode
- $\bullet \ \ \textbf{Exposure bracketing (Tv)} \ \text{is not available in } S \ (\text{Shutter-priority auto}) \ \text{mode}.$
- When exposure compensation (\$\sum271\$) and **Exposure bracketing (Tv)** are set simultaneously, the combined exposure compensation is applied.
- In White balance bracketing, only compensation for the color temperature (horizontal direction from A (amber) to B (blue)) is performed. Compensation in the vertical direction from G (green) to M (magenta) is not performed.
- This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" (□ 80) for more information.



# Picture Control (COOLPIX Picture Control) (Changing the Settings for Image Recording )

Rotate the mode dial to P, S, A or  $M \rightarrow \mathbb{Z}$  (Quick menu dial) ( $\square$ 72)

Change the settings for image recording according to the shooting scene or your preferences. Sharpness, contrast and saturation can be adjusted in detail.

#### **Types of COOLPIX Picture Control**

	Option	Description
SD2	Standard (default setting)	Standard processing for balanced results. Recommended for most situations.
NL <sup>©</sup>	Neutral	Minimal processing for natural results. Choose for pictures that will later be extensively processed or retouched.
(A)	Vivid	Pictures are enhanced for a vivid, photoprint effect. Choose for pictures that emphasize primary colors, such as blue, red, and green.
MC <sup>2</sup>	Monochrome	Take monochrome photographs such as in black-and-white or sepia.
(1 <u>5</u>	Custom 1*	Change to the setting for <b>Custom 1</b> in COOLPIX Custom Picture Control.
(2) (2)	Custom 2*	Change to the setting for <b>Custom 2</b> in COOLPIX Custom Picture Control.

Only displayed when the setting customized in Custom Picture Control ( 43) has been registered.

The icon for the current setting other than **Standard** is displayed on the monitor (CD8).

#### COOLPIX Picture Control

- The COOLPIX Picture Control feature of the COOLPIX P7100 cannot be used with other makes of cameras, Capture NX, Capture NX 2 and ViewNX 2 Picture Control feature.
- This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" (CD80) for more information.

# Customizing Existing COOLPIX Picture Controls: Quick Adjust and Manual Adjust

COOLPIX Picture Control can be customized using Quick adjust, which allows for balanced adjustment of sharpness, contrast, saturation and other image editing components, or manual adjust, which allows for detailed adjusting of the components individually.

- 1 Use the multi selector to choose the type of COOLPIX Picture Control and press the ® button.
  - Items can also be chosen by rotating the main command dial.



- Press ▲ or ▼ to highlight the desired setting (♣040) and press ◀ or ▶ to choose a value.
  - Press the **(N)** button to set the value.
  - When COOLPIX Picture Controls are modified from the default settings, an asterisk (\*) is displayed after the options in the Picture Control Setting menu.
  - To change the values to the default setting, select Reset and press the button.



#### **✓** View Grid of COOLPIX Picture Control

When the zoom control is rotated toward  $\mathbf{T}(\mathbf{Q})$  while the screen in step 1 of the above procedure is displayed, the contrast and saturation are displayed using a grid. The vertical axis indicates the contrast level, and the horizontal axis indicates the saturation. Rotate the zoom control toward  $\mathbf{T}(\mathbf{Q})$  again to return to the previous screen.

. The COOLPIX Picture Control grid displays the current and default settings in relation to the other COOLPIX Picture Controls.

- Rotate the multi selector to change to other COOLPIX Picture Controls.
- Press the 🔞 button to display the COOLPIX Picture Control Setting screen (step 2 above).
- For **Monochrome**, the grid is displayed for contrast only.
- The grid is also displayed when adjusting **Contrast** or **Saturation** with manual adjustment.



# Types of Quick Adjust and Manual Adjust

Option	Description
Quick adjust <sup>1</sup>	Adjust the sharpness, contrast and saturation levels automatically. Five levels of adjustment are available from <b>-2</b> to <b>+2</b> .  Choose from options between <b>-2</b> and <b>+2</b> to reduce or emphasize the effect of the selected COOLPIX Picture Control. The default setting is <b>0</b> .
lmage sharpening	Control how much outlines are sharpened during shooting. Choose <b>A</b> (auto) to adjust sharpening automatically, or choose from seven levels of adjustment between <b>0</b> (no sharpening) and <b>6</b> . The higher the number, the sharper the image, and the lower the number, the softer the image. The default setting is <b>3</b> for <b>Standard</b> or <b>Monochrome</b> , <b>2</b> for <b>Neutral</b> and <b>4</b> for <b>Vivid</b> .
Contrast	Control the contrast. Choose <b>A</b> (auto) to adjust the contrast automatically according to the type of scene, or choose from seven levels of adjustment between <b>-3</b> and <b>+3</b> .  – makes it into an image with a softer appearance, and + gives it a harder appearance. Choose lower values to prevent highlights in portrait subjects from being "washed out" in direct sunlight, higher values to preserve detail in misty landscapes and other low-contrast subjects.  The default setting is <b>0</b> .
Saturation <sup>2</sup>	Control the vividness of colors. Choose <b>A</b> (auto) to adjust saturation automatically according to the type of scene, or seven levels of adjustment can be done by choosing from values between <b>-3</b> and <b>+3</b> .  Setting to the – side reduces the vividness, and setting to the + side increases the vividness.  The default setting is <b>0</b> .
Filter effects <sup>3</sup>	Simulate the effect of color filters on monochrome photographs. Choose from <b>Off</b> (the default setting), <b>Y</b> (yellow), <b>O</b> (orange), <b>R</b> (red), and <b>G</b> (green). <b>Y</b> , <b>O</b> , <b>R</b> : Enhance contrast. Can be used to tone down the brightness of the sky in landscape photographs. The contrast is strengthened in the order $\mathbf{Y} \to \mathbf{O} \to \mathbf{R}$ . <b>G</b> : Soften skin tones. Suitable for portraits.

Option	Description
Toning <sup>3</sup>	Control the tint used in monochrome photographs from <b>B&amp;W</b> (black-and-white, the default setting), <b>Sepia</b> , and <b>Cyanotype</b> (blue-tinted monochrome).  Pressing the rotary multi selector ▼ when <b>Sepia</b> or <b>Cyanotype</b> is selected enables you to choose from seven levels of saturation.  Press ◀ or ▶ to adjust the saturation.

- 1 Quick adjust is not available in **Neutral, Monochrome, Custom 1** and **Custom 2**. The values set manually are disabled if quick adjust is used after manual setting.
- 2 Not displayed for Monochrome.
- 3 Only displayed for Monochrome.

# Note on Image sharpening

The effects of **Image sharpening** cannot be previewed on the monitor during shooting. Check the results in playback mode.

#### Note on Contrast

When **Active D-Lighting** (♣56) is set to settings other than **Off**, the ♠ mark is displayed for **Contrast** and Contrast cannot be adjusted.

#### Contrast, Saturation and A (Auto)

- Results for contrast and saturation vary with the exposure, and the position and size of the subject in the frame.
- The setting for the COOLPIX Picture Control which has **A** (auto) selected for either **Contrast** or **Saturation** is displayed in green in the COOLPIX Picture Control grid.

# Options that Can Be Adjusted in Custom 1 and Custom 2

The option of the original COOLPIX Picture Control can be adjusted if **Custom 1** or **Custom 2** is selected.



# QUAL Movie Options (Changing the Type of Movie to Shoot)

Rotate the mode dial to  $\P \rightarrow QUAL$  (Quick menu dial) ( $\square$ 72)  $\rightarrow$  Movie options

You can choose the type of movie to shoot. The higher the image size and bit rate, the higher the image quality, but the file size also becomes larger.

- 1 Press the multi selector 

  or 

  to choose the movie type.
  - The maximum movie length for the selected movie type is displayed.
  - Items can also be chosen by rotating the main command dial.



Maximum movie length

- **2** After completing the settings, press the quick menu button or the **®** button.
  - The monitor display reverts to shooting screen.

#### **Image Size**

Option	Description
HD 720p (1280×720) (default setting)	Movies with an aspect ratio of 16:9 are recorded.  • Movie bitrate: 9 Mbps
<u>VGA</u> VGA (640×480)	Movies with an aspect ratio of 4:3 are recorded.  • Movie bitrate: 3 Mbps
QVGA (320×240)	Movies with an aspect ratio of 4:3 are recorded.  • Movie bitrate: 640 kbps

- The movie bitrate is the volume of movie data recorded per second. As a
  variable bitrate (VBR) system has been adopted, the movie recording rate varies
  automatically according to the subject so that more data is recorded per
  second for movies containing frequently moving subjects, thus increasing
  movie file size.
- The frame rate is approximately 30 frames per second (fps) in all options.

# **More Information**

# Shooting Menu (P, S, A or M Mode)

#### **Custom Picture Control (COOLPIX Custom Picture Control)**

Rotate the mode dial to P, S, A or  $M \rightarrow MENU$  button  $\rightarrow P$ , S, A or M tab ( $\square$ 13)  $\rightarrow$  Custom Picture Control

The picture editing options created by customizing COOLPIX Custom Picture Controls can be registered up to two options. The registered options can be displayed as **Custom 1** and **Custom 2** in COOLPIX Custom Picture Control.

#### **Creating COOLPIX Custom Picture Controls**

1 Use the multi selector to choose **Edit and** save and press the ® button.



- 2 Choose the original COOLPIX Picture Control (♂39) to be edited, and press the ® button.
- 3 Press ▲ or ▼ to highlight the desired setting and press ◀ or ▶ to choose a value (♣39).
  - The options are the same as those for adjusting the COOLPIX Picture Control.
  - Press the **®** button to display the save as screen.
  - To change the values to the default setting, select **Reset** and press the **®** button.
- 4 Choose the registration destination and press the 🕅 button.
  - The COOLPIX Custom Picture Control is registered.
  - Custom 1 or Custom 2 can be selected from the Picture Control and Custom Picture Control selection screen after registration.



# **Deleting COOLPIX Custom Picture Controls**

Select **Delete** in step 1 of "Creating COOLPIX Custom Picture Controls" to delete a registered Custom Picture Control.

#### Metering

Rotate the mode dial to P, S, A, M or A  $\rightarrow$  MENU button  $\rightarrow$  P, S, A, M or A tab ( $\square$ 13)  $\rightarrow$  Metering

The process of measuring the brightness of the subject to determine the exposure is known as "metering."

Use this option to choose how the camera meters exposure.

Option	Description
Matrix (default setting)	Use a wide area of the screen for metering. This metering mode provides the appropriate exposure for a variety of shooting conditions. Recommended for typical shooting.
Center-weighted	The camera meters the entire frame but assigns greatest weight to the subject at the center of the frame. The classic metering for portraits; it preserves background details while letting lighting conditions at the center of the frame determine exposure. Can be used with focus lock ( 33) to meter off-center subjects.
• Spot	The camera meters the area shown by the circle in the center of the frame. This can be used when the subject metering target is lighter or darker than the background. Ensure that the subject is within the area shown by the circle when shooting. Can be used with focus lock ( 33) to meter off-center subjects.
	The camera meters the selected focus area to determine the exposure. Available only when <b>Face priority</b> or <b>Manual</b> is selected for AF area mode (��48).

# Notes on Metering

- When the digital zoom is in effect, at magnifications of 1.2x to 1.8x, Metering is set to Center-weighted, and at magnifications of 2.0x to 4.0x, it is set to Spot. Note that when the digital zoom is in effect, the metered area is not displayed on the monitor.
- This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" (◯ 80) for more information.

# Metering in Low Noise Night Mode

**Metering** can be set even in low noise night mode ( $\square$ 50). This setting is stored in the camera's memory independently and is not applied to **Metering** in shooting modes P, S, A and M.

# Metering Area

The active metering area is displayed when **Center-weighted** or **Spot** is selected for **Metering** ( $\square$ 8).

## **Continuous Shooting**

Rotate the mode dial to P, S, A, M or  $\textcircled{2} \Rightarrow MENU$  button  $\Rightarrow P$ , S, A, M or 2 tab ( $\square$ 13)  $\Rightarrow$  Continuous

Change the settings for continuous shooting and BSS (Best Shot Selector).

	Option	Description	
s	Single (default setting)	One picture is shot each time the shutter-release button is pressed.	
<u>_</u>	Continuous	Keep pressing the shutter-release button all the way, and up to 90 pictures are shot at a rate of about 1.2 frames per second (fps) when image quality is set to <b>Normal</b> and image size is set to <b>W 3648×2736</b> .	
包	Continuous flash	Keep pressing the shutter-release button all the way, and continuous shooting is performed using the built-in flash (approximately three frames continuously at a rate of about 1.0 frame per second when image quality is set to <b>Normal</b> and image size is set to <b>107 3648×2736</b> ). The camera charges the built-in flash once continuous shooting ends. No shooting can be performed until the charging ends. Because the ISO sensitivity is raised during shooting, pictures may be slightly grainy.	
BSS	BSS (Best Shot Selector)	BSS is recommended for shooting under low lighting without the flash, with the camera zoomed in, or in other situations in which camera shake is likely to blur pictures.  Keep pressing the shutter-release button all the way, and up to ten pictures are shot and the camera automatically selects and saves only the sharpest picture in the series.	
	Multi-shot 16	Each time the shutter-release button is pressed all the way, the camera shoots 16 pictures at a rate of about 30 frames per second and arranges them in a single picture.  • The image quality is fixed at <b>Normal</b> and the image size is fixed at <b>E</b> (2560 × 1920 pixels).  • The digital zoom is not available.	
Ø	Intvl timer shooting	The camera shoots still pictures automatically at the specified interval (��46).	

The icon for the current setting other than **Single** is displayed on the monitor  $(\square 8)$ .

#### Notes on Continuous Shooting

- Focus, exposure and white balance are fixed at the values determined with the first shot in each series.
- The frame rate may become slower depending on the image quality, image size, memory card type or shooting conditions.
- When **ISO sensitivity** (��30) is set to **3200** or **Hi 1**, the frame rate becomes slower.
- This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" (\(\superscript{Q}\)80) for more information.
- For details about using the built-in flash and the Speedlight (external flash unit) (available separately), see "Features That Cannot Be Used Simultaneously" (\$\sum\_{20}\$80).
- Do not raise or lower the built-in flash during continuous shooting. Shooting stops if the built-in flash is raised or lowered.

#### Note on Continuous Flash

The continuous flash cannot be used when the built-in flash is lowered. Raise the built-in flash when using the continuous flash to shoot.

#### Note on Best Shot Selector

**BSS** is suited for shooting stationary subjects. BSS may not produce the desired results if the subject moves or the composition changes.

#### Note on Multi-shot 16

Smear ( 33) visible in the monitor when shooting with Multi-shot 16 enabled will be recorded with images. Avoiding bright objects such as the sun, reflections of the sun, and electric lights when shooting with Multi-shot 16 enabled is recommended.

# Continuous Shooting in Low Noise Night Mode

**Continuous** can be set to **Single** or **Continuous** even in low noise night mode ( $\square$ 50). This setting is stored in the camera's memory independently and is not applied to **Continuous** in shooting modes P, S, A and M.

#### **Interval Timer Shooting**

Rotate the mode dial to P, S, A, M or  $\square$   $\rightarrow$  MENU button  $\rightarrow$  P, S, A, M or  $\square$  tab ( $\square$ 13)  $\rightarrow$  Continuous

Choose from 30 s, 1 min, 5 min, or 10 min.

Use the multi selector to select Intvl timer shooting for the Continuous setting, and then press the button.



# 2 Choose the interval between each shot and press the ® button.

- The maximum amount of frames that can be taken during interval timer shooting differs according to the interval taken between each shot.
  - 30 s: 600 images
  - 1 min: 300 images
  - 5 min: 60 images
  - 10 min: 30 images



#### **3** Press the MENU button.

• The camera returns to shooting screen.

- Press the shutter-release button all the way to shoot the first picture and start interval timer shooting.
  - The monitor is turned off and the power-on lamp blinks between shots.
  - The monitor reactivates automatically immediately before the next picture is shot.



# **5** Press the shutter-release button all the way again to finish shooting.

 Shooting finishes automatically if the internal memory or memory card becomes full, or when the number of shot frames reaches the upper limit.

# Notes on Interval Timer Shooting

- To prevent the camera from turning off unexpectedly during shooting, use a fully charged battery.
- To power the camera continuously for extended periods, use the AC Adapter EH-5b and the Power Connector EP-5A (available separately) (♣103). Do not, under any circumstances, use an AC Adapter other than the EH-5b or a Power Connector other than the EP-5A. Failure to observe this precaution could result in overheating or damage to the camera.
- Do not rotate the mode dial to a different setting while performing interval timer shooting.

#### More Information

See "File and Folder Names" (6-699) for more information.

#### **AF Area Mode**

Rotate the mode dial to P, S, A, M, **EFFECTS** or  $\mathbf{P}$   $\rightarrow$  MENU button  $\rightarrow$  P, S, A, M,  $\mathbf{P}$  or  $\mathbf{P}$  tab ( $\square$ 13)  $\rightarrow$  AF area mode

You can set how the camera selects the focus area for autofocus.

The AF area mode can also be selected by pressing the multi selector ► (\(\mathbb{H}\)) (\(\mathbb{M}\)60, \(\sigma \)86).

(LL100, 0-000).		
Option	Description	
Face priority	The camera automatically detects and focuses on a face (see "Using Face Detection" (CL 85) for more information). If the camera detects multiple faces, the camera focuses on the face closest to the camera. When non-human subjects are photographed, or a subject with which no face can be detected is framed, AF area mode is set to Auto. The camera automatically selects one or more of the nine focus areas containing the subject closest to the camera.  • When the monitor is turned off, the focus area is fixed at the Center (normal).	
Auto (default setting)	The camera automatically selects one or more of the nine focus areas containing the subject closest to the camera.  Press the shutter-release button halfway to activate the focus area. When the shutter-release button is pressed halfway, the focus area selected by the camera is displayed on the monitor (up to nine areas).  When the monitor is turned off, the focus area is fixed at the Center (normal).	

	Option	Description	
[1]	Manual	Choose manually the focus position from 99 areas in the screen. This option is suited to situations in which the intended subject is relatively still and not positioned at the center of the frame.  Rotate the multi selector or press	
[•] [•]	Center (spot), Center (normal), Center (wide)	The camera focuses on the subject at the center of the frame. The focus area is always displayed at the center of the frame. Three sizes are available for the focus area.	
•	Subject tracking	Subject tracking begins once you select a subject to be focused on, and the focus area will move and follow the subject. See "Subject Tracking Mode (Focusing on a Moving Subject)" ( 50).	

#### Notes on AF Area Mode

- When the digital zoom is in effect, the camera focuses on the subject at the center of the frame regardless of the applied **AF area mode** option.
- In some rare cases of shooting subjects for which autofocus does not perform as expected (CC 33), the subject may not be in focus.
- This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" (\(\sigma 80\)) for more information.

#### **Subject Tracking Mode (Focusing on a Moving Subject)**

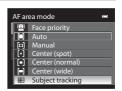
Rotate the mode dial to P, S, A, M or a  $\Rightarrow$  MENU button  $\Rightarrow$  P, S, A, M or a tab ( $\square$ 13)  $\Rightarrow$  AF area mode

Choose this mode to shoot moving subjects. Subject tracking begins once you select a subject to be focused on, and the focus area will move and follow the subject.

This function can be used when the shooting mode is P, S, A, M, U1, U2, U3
or 
 (low noise night).

# 1 Rotate the multi selector to select Subject tracking and press the button.

• The camera enters subject tracking mode, and a white border is displayed at the center of the frame.



# Frame the subject at the center of the border, and press the ® button.

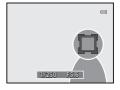
- The subject is registered.
- When the camera is unable to focus on the subject, the border lights in red. Change the composition and try again.
- Once the subject is registered, it is framed by a yellow focus area display, and subject tracking begins.
- Press the button to cancel the registration of the subject.
- If the camera loses sight of the subject, the focus area display disappears; register the subject again.





# **3** Press the shutter-release button all the way to take the picture.

- If the camera focuses on the focus area when the shutter-release button is pressed halfway, the focus area display lights in green and the focus is locked.
- If the shutter-release button is pressed halfway while the focus area is not displayed, the camera focuses the subject at the center of the frame.



# Notes on Subject Tracking

- The digital zoom is not available.
- Set the zoom position, flash mode, focus mode, or menu settings before registering a subject. If any of these are changed after a subject is registered, the subject will be canceled.
- During certain conditions, such as when the subject is moving quickly, when there is a large
  amount of camera shake, or when there are multiple subjects that look alike, the camera may not
  be able to register or track a subject, or the camera may track a different subject. Additionally, the
  subject may not be tracked properly depending on factors such as the subject's size and
  brightness.
- In subject tracking, the monitor is not turned off even when the  $\square$  button is pressed ( $\square$ 15).
- This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" (CD80) for more information.

#### **Autofocus Mode**

Rotate the mode dial to P, S, A or  $M \rightarrow MENU$  button  $\rightarrow P$ , S, A or M tab ( $\square$ 13)  $\rightarrow$  Autofocus mode

Choose how the camera focuses.

Option	Description
Single AF AF-S (default setting)	The camera focuses only when the shutter-release button is pressed halfway.
AF-F Full-time AF	The camera focuses continuously until the shutter-release button is pressed down halfway. Use with moving subjects. A sound will be heard while the camera focuses.

# Autofocus Mode for Movie Recording

Autofocus mode for movie recording can be set with **Autofocus mode** (��69) in the movie menu.

#### Flash Exp. Comp.

Rotate the mode dial to P, S, A, M or  $\mathbf{Q}$   $\Rightarrow$  MENU button  $\Rightarrow$  P, S, A, M or  $\mathbf{Q}$  tab ( $\square$ 13)  $\Rightarrow$  Flash exp. comp.

Flash compensation is used to adjust the flash output, changing the brightness of the subject relative to the background.

Option	Description
-0.3 to -2.0	The flash output is reduced from -0.3 to -2.0 EV, in increments of 1/3 EV, to prevent unwanted highlights or reflections.
0.0 (default setting)	The flash output is not adjusted.
+0.3 to +2.0	The flash output is increased from +0.3 to +2.0 EV, in increments of 1/3 EV, to make the main subject of the frame appear brighter.

The icon for the current setting other than  ${\bf 0.0}$  is displayed on the monitor ( $\square$ 8).

# Flash Exp. Comp. in Low Noise Night Mode

**Flash exp. comp.** can be set even in low noise night mode ( $\square$ 50). This setting is stored in the camera's memory independently and is not applied to **Flash exp. comp.** in shooting modes **P**, **S**, **A** and **M**.

#### **Noise Reduction Filter**

Rotate the mode dial to P, S, A or  $M \rightarrow MENU$  button  $\rightarrow P$ , S, A or M tab ( $\square$ 13)  $\rightarrow$  Noise reduction filter

Set the strength of the noise reduction function that is normally performed when recording the picture.

• For noise at slow shutter speeds, set with **Long exposure NR** (**6-6**53).

	Option	Description
NR	High	Perform noise reduction at a level higher than the standard strength.
NR	Normal (default setting)	Perform noise reduction at the standard strength.
NR	Low	Perform noise reduction at a level lower than the standard strength.

The icon for the current setting other than **Normal** is displayed on the monitor ( $\square$ 8).

#### Long Exposure NR

Rotate the mode dial to P, S, A or M  $\rightarrow$  MENU button  $\rightarrow$  P, S, A or M tab ( $\square$ 13)  $\rightarrow$  Long exposure NR

At slow shutter speeds, pictures may be affected by "noise" in the form of randomly-spaced, brightly-colored dots concentrated in dark parts of the image. Reduce noise at slow shutter speeds. Enabling long exposure NR increases the time needed to record pictures after they are shot.

	Option	Description
AUTO	Auto (default setting)	Noise reduction is performed at slow shutter speeds that are likely to result in pictures affected by noise.
<b>\$</b> NR	On	Noise reduction is applied to pictures shot at shutter speeds of 1/4 second or slower. Switching this to <b>On</b> is recommended when shooting at slow shutter speeds.

When long exposure NR is performed, the @MR icon is displayed on the monitor ( $\square$ 8).

# Note on Long Exposure NR

This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" ( $\square$ 80) for more information.

#### **Distortion Control**

Rotate the mode dial to P, S, A or  $M \rightarrow MENU$  button  $\rightarrow P$ , S, A or M tab ( $\square$ 13)  $\rightarrow$  Distortion control

Choose whether to correct the peripheral distortion that occurs due to the intrinsic characteristics of lenses. Enabling distortion control reduces the size of the frame, as compared to when distortion control is not enabled.

When **On** is selected, distortion is corrected.

• The default setting is Off.

When **On** is selected, an icon for this setting is displayed on the monitor ( $\square$ 8).

#### Note on Distortion Control

This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" ( $\square$ 80) for more information.

# Wide-angle Converter

Rotate the mode dial to P, S, A or  $M \rightarrow MENU$  button  $\rightarrow P$ , S, A or M tab ( $\square$ 13)  $\rightarrow$  Wide-angle converter

Set when the Wide-angle Converter WC-E75A (0.75 $\times$ ) (available separately) is mounted. The Adapter Ring UR-E22 (available separately) is also required for mounting.

	Option	Description
W	On	Set when using the Wide-angle Converter WC-E75A. The angle of view when the WC-E75A is mounted is equivalent to about 21 mm in 35mm [135] format (when <b>Distortion control</b> is set to <b>Off</b> ). The zoom lens is fixed at the wide-angle end. The digital zoom is not available.
OFF	None (default setting)	Use when no converter lens is attached (be sure to remove the lens adapter ring and attach the lens ring).

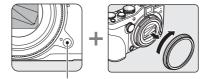
When **On** is selected, an icon for this setting is displayed on the monitor ( $\square$ 8).

#### Notes on the Wide-angle Converter for Shooting

- Set Wide-angle converter to On before shooting. Set Wide-angle converter to None when no converter lens is attached.
- Using the flash units (available separately) may darken the peripheral area of the picture. Check the
  picture on the monitor after shooting. A wide-flash adapter is recommended when shooting with
  the Speedlight SB-600, SB-700, SB-800 or SB-900.
- AF-assist illuminator cannot be used when Wide-angle converter is set to On.
- This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" (□80) for more information.

#### Installing and Removing the Lens Ring

- Before attaching the wide-angle converter, remove the lens ring. Before installing or removing the lens ring, be sure to turn off the camera. While pressing the lens ring release button, rotate the lens ring clockwise and remove it.
- To attach the lens ring to the camera, align the lens ring mounting index (white dot) with the lens ring release button, and then rotate the lens ring counterclockwise.



Lens ring release button

- When not using the wide-angle converter, be sure to attach the lens ring onto the camera.
- For more information on attaching the wide-angle converter, see the instruction manual provided with the wide-angle converter.

# **Flash Control**

Rotate the mode dial to P, S, A or  $M \rightarrow MENU$  button  $\rightarrow P$ , S, A or M tab ( $\square$ 13)  $\rightarrow$  Flash control

You can set the built-in flash to off even when you are not using a Speedlight (external flash unit) ( 101) attached to the camera's accessory shoe.

Option		Description
AUTO		When a flash unit is mounted, the flash unit fires. When a flash unit is not used, the built-in flash fires.
OFF	Built-in off	The built-in flash is disabled.

#### Note on Flash Control

This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" ( $\square$ 30) for more information.

#### **Active D-Lighting**

Rotate the mode dial to P, S, A or  $M \rightarrow MENU$  button  $\rightarrow P$ , S, A or M tab ( $\square$ 13)  $\rightarrow$  Active D-Lighting

"Active D-Lighting" preserves details in highlights and shadows, creating photographs with natural contrast. The image taken reproduces the contrast effect that is seen with the naked eye. This is particularly effective for shooting scenes with high contrast, such as brightly lit outdoor scenery from a dark room or shaded subjects at a sunny seaside.

Option		Description
船	High Normal Low	Set the level of the Active D-Lighting effect that is applied during shooting.
OFF	Off (default setting)	Active D-Lighting is not applied.

The icon for the current setting other than **Off** is displayed on the monitor ( $\square$ 8).

# Active D-Lighting

- Additional time is required to record images when shooting using Active D-Lighting.
- The exposure is reduced in comparison to shooting with Active D-Lighting set to Off. To ensure
  that the gradation is appropriate, adjustments of the highlighted areas, shadow areas and midtones are made before recording.
- This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" (\(\subseteq 80\) for more information.

# Active D-Lighting Versus D-Lighting

The **Active D-Lighting** option in the shooting menu reduces exposure before shooting to optimize the dynamic range. The **D-Lighting** (��11) option in the playback menu optimizes dynamic range in pictures taken.

#### **Zoom Memory**

Rotate the mode dial to P, S, A or  $M \rightarrow MENU$  button  $\rightarrow P$ , S, A or M tab ( $\square$ 13)  $\rightarrow$  Zoom memory

When the zoom control is operated while pressing the **Fn**1 button, the camera changes in steps to the focal length (equivalent to 35mm [135] format of angle of view) of the zoom lens that is set in advance in **Zoom memory**. The following settings are available: **28 mm**, **35 mm**, **50 mm**, **85 mm**, **105 mm**, **135 mm** and **200 mm**.

- Multiple focal lengths can be chosen.
- The default setting is on  $\checkmark$  for all the check boxes.
- To finish the setting, press the multi selector ◀.

# Notes on Zoom Operation

- Operate the zoom control while pressing the **Fn**1 button to change the zoom position to focal length for which the zoom memory is set to on.
  - The changed focal length is the closest to that before the operation. To change the zoom position to the next focal length level, release the zoom control and then operate it again.
- $\bullet\,$  Release your finger from the Fn 1 button when using the digital zoom.

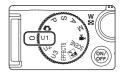
# Specialized Menu for U1, U2 or U3

The following describes how to use **Save user settings** and **Reset user settings**. See "U1, U2 and U3 (User Setting Modes)" ( $\square$ 57) for more information other than **Save user settings** and **Reset user settings**.

#### **Save User Settings**

The frequently used settings for shooting can be changed and saved in U1, U2 and U3.

1 Rotate the mode dial to U1, U2 or U3.



- **2** Change to a frequently used combination of shooting settings.
  - Press the MENU button to display the menu and switch between tabs with the multi selector (\$\sum\_{13}\$).
    - U1, U2, U3 tabs: Display the specialized menus for U1, U2 and U3 ( $\square$ 57).
    - P, S, A, M tabs: Display the shooting menus (◯☐54).
  - Display the guick menu by pressing the guick menu button (\$\square\$72).
- 3 After changing the settings, choose Save user settings in the specialized menu for U1, U2 or U3, and press the ® button.



- **4** Choose **Yes** and press the **®** button.
  - The current settings are saved.
  - Rotate the zoom control toward T (Q) to display the settings (♣59). Rotate toward T (Q) again to return to the save user settings screen.



# **Clock battery**

If the internal clock battery (\$\sumsymbol{\Pi}\$27) is exhausted, the settings saved in \$\mathbf{U1}\$, \$\mathbf{U2}\$ or \$\mathbf{U3}\$ will be reset. Writing down any important setting is recommended.

# Confirmation Screen of User Settings

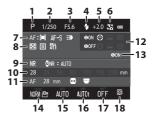
Rotate the zoom control toward T(Q) to display the settings on the screen in step 4 ( $\clubsuit$ 58).

- Shooting mode
- 2 Shutter speed
- 3 Aperture value
- 4 Flash mode
- 5 Flash exp. comp.
- 6 Flash control
- 7 AF area mode, autofocus mode, AF assist
- 8 Metering, continuous shooting mode, active D-Lighting
- 9 Noise reduction filter, long exposure NR
- 10 Zoom memory
- 11 Focus mode, focal length (35mm equiv.), distortion control, wide-angle converter
- 12 Photo info, virtual horizon display
- 13 Initial monitor display
- 14 Image quality, image size
- 15 ISO sensitivity
- 16 White balance
- 17 Auto bracketing
- 18 Picture Control

# ${\color{red} {\mathbb Z}}$ Resetting for U1, U2 and U3

If **Reset user settings** is selected in specialized menu for U1, U2 or U3, the settings that are saved in the user settings are reset as follows:

- Specialized menus for U1, U2 and U3: Shooting mode: P Programmed auto, Focal length (35mm equiv.): 28 mm, Photo info: information hidden, Virtual horizon display: Circle, Initial monitor display: Show info, Flash mode: ₩ Auto, Focus: ♠F Autofocus, AF area mode: ✔ Auto, AF assist: Auto
- Shooting menu, quick menu: Same as the default setting for each item



# The Playback Menu

For more information about image editing function; Quick retouch, D-Lighting, Skin softening, Filter effects, Small picture, Black border, Straighten and NRW (RAW) processing, see "Editing Still Images" (8–89).

# **A** Print Order (Creating a DPOF Print Order)

Press the MENU button → ► tab (□13) → △ Print order

If you choose to use one of the following methods to print pictures that are stored on a memory card, the pictures to print and the number of copies can be set in advance on the memory card.

- Printing with a DPOF-compatible (2:16) printer that is equipped with a card slot.
- Ordering the prints from a digital photo lab that has a DPOF service.
- Printing by connecting the camera to a PictBridge-compatible ( \$\insertail 16\) printer ( \$\insertail 22\)). (When the memory card is removed from the camera, the print order can also be performed for the pictures stored on the internal memory.)
- 1 Use the multi selector to choose **Select images** and press the ® button.
  - When list by date mode (\$\sum 88\$) is selected, the menu shown on the right is not displayed.
     Proceed to the step 2.



Print selection

- 2 Choose the pictures (up to a maximum of 99) and number of copies (up to nine per picture).

  - Pictures can also be chosen by rotating the main command dial.
  - Pictures selected for printing can be recognized by the check mark icon and the numeral indicating the number of copies to be printed. If no copies have been specified for images, the selection is canceled.
  - Rotate the zoom control toward T (Q) to switch to full frame playback mode, or W
     (►) to switch to 12 thumbnails display.
  - Press the ® button when setting is complete.



# **3** Choose whether or not to also print shooting date and shooting information.

- Choose **Date** and press the button to print the shooting date on all pictures in the print order.
- Choose Info and press the button to print shooting information (shutter speed and aperture value) on all pictures in the print order.
- Choose **Done** and press the button to complete the print order.

Pictures selected for printing are recognized by the licon displayed in playback mode.





# Notes on Printing Shooting Date and Shooting Information

When the **Date** and **Info** options are enabled in the print order menu, shooting date and shooting information are printed on pictures when a DPOF-compatible ( 16) printer which supports printing of shooting date and shooting information is used.

- Shooting information cannot be printed when the camera is connected directly to a printer, via the included USB cable, for DPOF printing ( 27).
- Date and Info are reset each time the Print order menu is displayed.
- The date and time printed on the picture is the date and time recorded on the camera when the picture was taken. The date and time printed using this option are not affected if the camera's

  Time zone and date setting is changed from the setup menu after the pictures are taken.

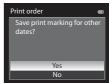


#### Notes on Print Order

- When setting a print order in list by date mode and pictures other than those on the chosen date are already set for printing, the screen shown on the right is displayed.
  - Select Yes to add the print order setting to the existing print order.
  - Select No to remove the existing print order and retain the print order setting.

Additionally, if there are more than 99 pictures as a result of adding the current print order settings, the screen shown on the right will be displayed.

- Select Yes to remove the existing print order and retain the print order setting.
- Select Cancel to retain the existing print order and remove the print order setting.





NRW (RAW) pictures cannot be set for printing. Create a JPEG picture using NRW (RAW) processing (♣17), and then set the JPEG picture for printing.

# Deleting All Print Orders

In step 1 of the print order procedure (>>> 60), choose **Delete print order** and press the **®** button to delete the print orders for all pictures.

# **Print Date**

The shooting date and time can be imprinted in pictures at the time of shooting by using **Print date** ( **\*\*** 75) in the setup menu. This information can be printed even from printers that do not support printing of the date and time. Only the date and time of print date on the pictures are printed, even if **Print order** is enabled with the date selected in the print order screen.

#### More Information

See "Printing Images of Size 1:1" (QQ79) for more information.

# Slide Show

Press the MENU button → ▶ tab (□13) → ■ Slide show

View pictures stored in the internal memory or on a memory card in an automatic slide show

# 1 Use the multi selector to choose **Start** and press the ® button.

- To repeat the slide show automatically, enable Loop and press the 

   ⊕ button before choosing Start. The check mark ( ✓ ) is added to the loop option when enabled.

# Pause Pause Start Frame intvl 3s Loop

# **2** The slide show begins.

- Press the multi selector 

  to display the next picture, or

  to display the previous picture. Press and hold 

  to fast forward, or

  to rewind.
- To exit partway or pause, press the **®** button.



#### **3** Choose End or Restart.

 When exiting or pausing the slide show, the screen shown on the right is displayed. Choose and press the button to return to the playback menu. Choose to play the slide show again.



#### Notes on Slide Shows

- Only the first frame of movies (QQ102) included in slide shows is displayed.
- Slide shows play for a maximum of 30 minutes, even when **Loop** is selected (\$\sime\$82).



## ₩ Delete

Press the MENU button → ▶ tab (Д13) → ₩ Delete

Delete a picture. Multiple pictures can also be deleted.

Option	Description
Erase selected images	In the image selection screen, choose the pictures for deletion. See "The Image Selection Screen" (♣65) for more information.  • When images saved with an Image quality (☐75) setting of NRW (RAW) + Fine, NRW (RAW) + Normal or NRW (RAW) + Basic are chosen, the NRW (RAW) and JPEG images are deleted at the same time.
Erase all images	Delete all pictures.
Erase selected NRW images	Only NRW (RAW) images are displayed in the picture selection screen.  Select and delete images.  For pictures where NRW (RAW) and JPEG images are recorded at the same time, only the NRW (RAW) image is deleted.
Erase selected JPEG images	Only JPEG images are displayed in the image selection screen. Select and delete pictures.  For pictures where NRW (RAW) and JPEG images are recorded at the same time, only the JPEG image is deleted.

#### Notes on Deletion

- Once deleted, pictures cannot be recovered. Transfer important images to a computer before deletion.
- Pictures marked with the 🗪 icon are protected and cannot be deleted (🇝 66).
- sis displayed in the image selection screen for pictures where NRW (RAW) and JPEG images are
  recorded at the same time.

#### The Image Selection Screen

The image selection screen is displayed in the following menus.

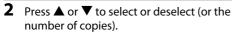
Only one image can be selected for some menu items, while for other menu items, multiple images can be selected.

Functions for which only one image can be selected	Functions for which multiple images can be selected
• Playback menu: Quick retouch* ( 6-011), D-Lighting* ( 6-011), Skin softening* ( 6-012), Filter effects* ( 6-013), Rotate image* ( 6-066), Small picture* ( 6-014), Voice memo* ( 6-067), Black border* ( 6-015), Straighten* ( 6-016), NRW (RAW) processing ( 6-017)  • Setup menu: Select an image in Welcome screen ( 6-070)	Playback menu:     Select images in Print order (♣60),     Erase selected images in Delete (♣64),     Protect (♣66),     Hide image (♣66),     Selected images in Copy (♣68)

<sup>\*</sup> These menus are displayed if menu items are selected when the playback menu has been displayed from a mode other than playback mode (\(\Qmathrm{\Quad}\)13).

Follow the procedure described below to select images.

- **1** Rotate the multi selector, or press **◄** or **▶** to choose the desired image.
  - Images can also be chosen by rotating the main command dial.
  - Rotate the zoom control toward T (Q) to switch to fullframe playback mode, or W (►) to switch to 12 thumbnails display.
  - For functions for which only one image is selected, proceed to step 3.



When an image is selected, a check mark (
 ) is displayed with the image. Repeat steps 1 and 2 to select additional images.



- **3** Press the **(N)** button to apply the image selection.
  - With selections such as Erase selected images, the confirmation dialog is displayed. Follow the instructions on the screen.



#### On Protect

Press the MENU button → ▶ tab (13) → • Protect

Protect selected pictures from accidental deletion.

In the picture selection screen, choose a picture and set or cancel protection. See "The Image Selection Screen" (♠65) for more information.

Note, however, that formatting the camera's internal memory or the memory card permanently erases the protected files (��83).

Protected pictures are recognized by the  $\mathfrak{G}_{\overline{a}}$  icon in playback mode ( $\mathfrak{Q}$ 10).

# ♣ Rotate Image

Press the MENU button → ▶ tab (◯ 13) → ♣ Rotate image

Change the orientation of pictures played back in the camera's monitor after shooting. Still pictures can be rotated 90° clockwise or counterclockwise. Pictures that were recorded in the "tall" orientation can be rotated up to 180° in either direction.

Select a picture in the picture selection screen ( $\bullet \bullet 65$ ) to display the rotate image screen. Rotate the multi selector, or press  $\blacktriangleleft$  or  $\blacktriangleright$  to rotate the picture 90°. Press the 8 button to set the orientation displayed and save the orientation data with the picture.

# **⋈** Hide Image

Press the MENU button → ▶ tab (◯◯13) → 🎇 Hide image

Hide pictures so that they cannot be played back on the camera monitor. In the picture selection screen, choose the pictures and set or cancel the hide setting. See "The Image Selection Screen" (��65) for more information. Hidden pictures cannot be deleted using the **Delete** option. Note, however, that formatting the internal memory or memory card (��83) permanently erases the hidden pictures.



Press the MENU button → ▶ tab (113) → Voice memo

Use the camera's microphone to record voice memos for pictures.

• The recording screen is displayed for a picture without voice memo, while the voice memo playback screen is displayed for a picture with voice memo (a picture marked with 🕅 in full-frame playback mode).

#### **Recording Voice Memos**

- Recording ends after about 20 seconds or when the button is released.
- Do not touch the microphone during recording.
- During recording,  $\mathbf{REO}$  and  $\mathbf{M}$  blink on the monitor.
- When recording ends, the voice memo playback screen is displayed.



#### **Playing Voice Memos**

Pictures for which voice memos have been recorded are indicated by 🖟 in full-frame playback mode.

- Press the button to play back a voice memo. To end playback, press the button again.
- Rotate the zoom control toward T or W during playback to adjust playback volume.
- Press the multi selector 

   before or after playing a voice memo to return to the playback menu. Press the MENU button to exit the playback menu.



#### **Deleting Voice Memos**

Press the **m** button on the voice memo playback screen. Press the multi selector ▲ or ▼ to select **Yes** and press the **®** button to delete only the voice memo.



#### Notes on Voice Memos

- When a picture with a voice memo attached is deleted, both the picture and its voice memo are deleted.
- Voice memos cannot be recorded for a picture that already has a voice memo attached on it. The current voice memo must be deleted before a new voice memo can be recorded.
- COOLPIX P7100 is not able to record a voice memo for a picture taken with cameras other than COOLPIX P7100.
- A voice memo of the image with the **Protect** setting (♣66) cannot be deleted.



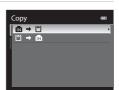
See "File and Folder Names" (6-699) for more information.

# III Copy (Copy Between Internal Memory and Memory Card)

Press the MENU button → ▶ tab (♠13) → ♣ Copy

Copy pictures between the internal memory and a memory card.

- 1 Use the multi selector to select an option from the copy screen and press the ® button.
  - 🚯 **\'**: Copy pictures from the internal memory to the memory card.
  - 🗀 🗈 Copy pictures from the memory card to the internal memory.



- **2** Select a copy option and press the ® button.
  - Selected images: In the picture selection screen (♣65), choose the pictures for copying.
  - All images: Copy all pictures.



# Notes on Copying Pictures

- JPEG-, NRW-, MOV-, and WAV-format files can be copied. Files recorded in any other format cannot be copied.
- Voice memo (6-667) attached to pictures and Protect setting (6-666) are also copied with the
  pictures.
- Pictures recorded with another make or model of camera or that have been modified on a computer cannot be copied.
- The **Print order** (\$\infty\$60) settings are not copied.
- Pictures with **Hide image** (��66) settings cannot be copied.

# Message: "Memory contains no images."

If there are no pictures stored on the memory card when playback mode is selected, the message, **Memory contains no images.**, is displayed. Press the **MENU** button to display the copy option screen, and copy the pictures stored in the camera's internal memory to the memory card.

#### More Information

See "File and Folder Names" ( 99) for more information.



#### The Movie Menu

#### **Autofocus Mode**

Rotate the mode dial to  $\P \rightarrow \text{MENU}$  button  $\rightarrow \P$  (Movie) tab ( $\square$ 13)  $\rightarrow$  Autofocus mode

Choose how the camera focuses when recording movies.

Option	Description
AF-S Single AF (default setting)	Lock on the focus when the shutter-release button is pressed halfway. Select this option when the distance between the camera and the subject remains fairly consistent.
<b>AF-F</b> Full-time AF	The camera focuses continuously during movie recording. Suitable for shooting when the distance between the camera and subject changes. The operation sound when the camera focuses may be recorded. Setting to <b>Single AF</b> is recommended if the sound is noticeable.

#### Wind Noise Reduction

Rotate the mode dial to  $\P \rightarrow \text{MENU}$  button  $\rightarrow \P$  (Movie) tab ( $\square$ 13)  $\rightarrow$  Wind noise reduction

Option		Description
<b>9</b>	On	The noise of wind blowing on the camera's built-in microphone is minimized during recording. This setting is suitable for recording in strong winds. During playback, not only wind noise, but other sounds may also become difficult to hear.
OFF (	Off (default setting)	Wind noise is not reduced.

When **On** is selected, an icon for this setting is displayed on the monitor ( $\square$ 8).



Note on Wind Noise Reduction

When the external microphone (\$\displays 84) is used for shooting, wind noise reduction is not available.

# **The Setup Menu**

#### **Welcome Screen**

Press the MENU button → 🕆 tab (□13) → Welcome screen

Choose whether or not to display the welcome screen on the monitor when the camera is turned on.

Option	Description	
None (default setting)	Display the shooting or playback screen without displaying the welcome screen.	
COOLPIX Display the welcome screen before displaying the shooting playback screen.		
Select an image	Select a picture taken to display as the welcome screen. Display the image selection screen, choose an image (♣65), and press the ₩ button to register it.  • Because the selected image is stored in the camera, the image appears in the welcome screen even if the original image is deleted.  • NRW (RAW) images (☐75), pictures shot with an Image size (☐77) of ፫³ 3648×2432, 1%, 3584×2016, or [♣² 2736×2736, or pictures reduced to 320×240 or smaller using small picture editing (♠614) or crop (♠619) cannot be selected.	

# **Time Zone and Date**

Press the MENU button  $\rightarrow$  Y tab ( $\square$ 13)  $\rightarrow$  Time zone and date

Option	Description	
Date and time	Set the camera clock to the current date and time.  Use the multi selector to set the date and time.  Choose an item: Press ➤ or ◀ (selected in the following order: D (day) → M (month) → Y (year) → hour → minute).  Set the contents: Press ▲ or ▼. Date and time can also be set by rotating the main command dial.  Finish setting: Choose minute and press the ⋈ button or ▶.	
Date format	Choose the order in which the day, month, and year are displayed (Year/Month/Day, Month/Day/Year or Day/Month/Year).	
Time zone	♠ Home time zone can be specified and daylight saving can be enabled or disabled.  When ➢ travel destination is registered, the time difference (♣73) from the ♠ home time zone is automatically calculated and the local date and time are recorded. Useful when traveling.	

#### **Setting the Travel Destination Time Zone**

- 1 Use the multi selector to choose **Time zone** and press the ® button.
  - The **Time zone** screen is displayed.



- 2 Choose → Travel destination and press the 
  ⑥ button.
  - The date and time displayed on the monitor change according to the region currently selected.



- **3** Press ▶.
  - The time zone selection screen is displayed.



- **4** Press **◄** or **▶** to choose the travel destination (Time zone).
  - The time difference between home and the travel destination is displayed.
  - When using the camera in an area where daylight saving time is in effect, turn on the daylight saving setting with
     A. When set to on, the icon is displayed on the top of the monitor and the clock advances by one hour. To turn off, press
  - Press the button to register the travel destination time zone
  - While the travel destination time zone is selected, the picon is displayed on the monitor when the camera is in shooting mode.

#### Time difference



#### **𝕒** Home Time Zone

- To switch to the home time zone, choose 春 Home time zone in step 2 and press the 🔞 button.
- To change the home time zone, choose ☐ Home time zone in step 2 and perform the same procedure as for ➤ Travel destination to set the home time zone.



# Time Zones

The camera supports the time zones listed below.

For time differences not listed below, set the camera clock using **Time zone and date**.

UTC +/-	Location	UTC +/-	Location
-11	Midway, Samoa	+1	Madrid, Paris, Berlin
-10	Hawaii, Tahiti	+2	Athens, Helsinki, Ankara
-9	Alaska, Anchorage	+3	Moscow, Nairobi, Riyadh, Kuwait, Manama
-8	PST (PDT): Los Angeles, Seattle, Vancouver	+4	Abu Dhabi, Dubai
-7	MST (MDT): Denver, Phoenix	+5	Islamabad, Karachi
-6	CST (CDT): Chicago, Houston, Mexico City	+5.5	New Delhi
-5	EST (EDT): New York, Toronto, Lima	+6	Colombo, Dhaka
-4.5	Caracas	+7	Bangkok, Jakarta
-4	Manaus	+8	Beijing, Hong Kong, Singapore
-3	Buenos Aires, Sao Paulo	+9	Tokyo, Seoul
-2	Fernando de Noronha	+10	Sydney, Guam
-1	Azores	+11	New Caledonia
±0	London, Casablanca	+12	Auckland, Fiji

## **Monitor Settings**

Press the MENU button  $\rightarrow$  Y tab ( $\square$ 13)  $\rightarrow$  Monitor settings

Option	Description	
lmage review	On (default setting): Picture is displayed on the monitor immediately after shooting and the monitor display returns to shooting screen.  Off: Picture is not displayed after shooting.  Zoom in on active focus point: Picture is displayed on the monitor immediately after shooting and the monitor display returns to the shooting screen. An enlarged image of the focused section is displayed in the area where focusing is performed.  Tone level information: Tone level information (\(\Qmathrm{1}\)15) is displayed on the monitor immediately after shooting.	
Brightness	Choose from five settings to select the monitor brightness. The default setting is <b>3</b> .	
Photo info	Choose the display options that are displayed on the monitor durin shooting. Separate display options (□15) can be selected for whe the monitor display (□8) is set to <b>Show info</b> and when it is set to <b>Hide info</b> . In the default setting, all options are hidden.   ♥ Virtual horizon: Display the virtual horizon for checking whether the camera is horizontal. When the camera is horizontal or vertical, the mark on the virtual horizon display turns green.   ■ View/hide histograms: Display a graph that shows the brightness distribution in the picture (□8).   ■ View/hide framing grid: Display a boxed guide for framing.  • To select show or hide, choose an option with the multi selector and then press the   Button to turn the check box on  or or of the finishing the setting, choose Confirm and press the  button.	
Virtual horizon display	Set the virtual horizon indicator to either <b>Circle</b> (default setting) or <b>Bars</b> (\$\sumsymbol{\Omega} 8\$).	

# Notes on Monitor Display Settings

- Only the framing grid is displayed in movie mode.
- In shooting modes U1, U2 and U3, Photo info in the setup menu settings cannot be set. Select
  the U1, U2 or U3 tab and set Photo info in the specialized menus for U1, U2 and U3 (
  13,
  58).

#### **Print Date (Imprinting Date and Time on Pictures)**

Press the MENU button → Y tab (□13) → Print date

The shooting date and time can be imprinted on pictures at the time of shooting. This information can be printed even from printers that do not support printing of the date and time ( $\bullet\bullet$ 61).



Option		Description	
DATE	Date	The date is imprinted on pictures.	
DATE	Date and time	The date and time are imprinted on pictures.	
OFF Off (default setting)		The date and time are not imprinted on pictures.	

The icon for the current setting other than **Off** is displayed on the monitor ( $\square$ 8).

#### Notes on Print Date

- Imprinted dates cannot be deleted from the image, nor can dates be imprinted after the picture has been taken.
- Dates cannot be imprinted in the following situations.
  - When the scene mode is set to Sports, Museum, Backlighting with HDR set to On, Panorama assist, or Pet portrait with Continuous
  - During movie recording
- This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" (\sum 80) for more information.
- Dates imprinted with an **Image size** (□,77) setting of ७ 640×480 may be difficult to read. Set the image size to 1 1024×768 or higher.
- The date is recorded using the format selected in the setup menu's Time zone and date option (□26, ♣71).

#### Print date and Print order

When printing from DPOF-compatible printers which support printing of shooting date and shooting information, the date and information can be printed on pictures without the date and time being imprinted on them with **Print date**, using options in the **Print order** menu ( **6**60).

#### Self-timer: After Release

Press the MENU button → ¥ tab (□13) → Self-timer: after release

Set whether or not to cancel the self-timer mode ( $\square$ 64), or ten seconds or two seconds remote mode ( $\blacktriangleleft$ 105), after shooting pictures.

Option	Description
Exit self-timer mode (default setting)	Cancel the self-timer mode after shooting pictures.  • The setting is not canceled in the quick-response remote or smile timer mode (Д65).
Stay in self-timer mode	Enable shooting continuously without canceling the setting, after shooting pictures.  • The setting applied in shooting modes ♠ (auto), P, S, A, M, ♠ (low noise night) or EFFECTS (special effects) is not cancelled even after the camera is turned off.

#### **Vibration Reduction**

Press the MENU button  $\Rightarrow \Upsilon$  tab ( $\square$ 13)  $\Rightarrow$  Vibration reduction

Option		Description	
(4)	On (default setting)	Correct camera shake that commonly occurs when shooting still pictures or movies at the telephoto zoom position or slow shutter speed.  The camera automatically detects the panning direction and only corrects for vibration caused by camera shake.  When the camera is panned horizontally, for example, vibration reduction only reduces vertical shake. If the camera is panned vertically, vibration reduction only compensates for horizontal shake.	
OFF Off Vibration Reducti		Vibration Reduction is not enabled.	

• When using a tripod to stabilize the camera, set vibration reduction to **Off**. When **On** is selected, an icon for this setting is displayed on the monitor (\(\subseteq 3\))8).

#### Notes on Vibration Reduction

- After the power is turned on or the camera enters shooting mode from playback mode, wait until
  the display stabilizes before shooting.
- Due to the characteristics of the vibration reduction function, images displayed on the monitor immediately after shooting may appear blurry.
- Vibration reduction may be unable to completely eliminate the effects of camera shake in some situations.



#### **Motion Detection**

Press the MENU button  $\Rightarrow$  Y tab ( $\square$ 13)  $\Rightarrow$  Motion detection

Enable motion detection to reduce the effects of camera shake and subject movement when shooting still pictures.

Option	Description	
ু <b>৽</b> Auto	If the camera detects the movement of the subject or camera shake, the ISO sensitivity is raised and the shutter speed is increased to reduce their effects. However, motion detection does not function in the following situations.  • When the fill flash fires • In the following scene modes: Sports, Night portrait, Dusk/dawn, Night landscape, Museum, Fireworks show, Backlighting and Pet portrait • When shooting mode is P, S, A, M, U1, U2, U3, ♀ (low noise night) or EFFECTS (special effects)	
OFF Off (default setting)	Motion detection is not enabled.	

When **Auto** is selected, an icon for this setting is displayed on the monitor ( $\square$ 8). The motion detection icon lights in green when the camera detects any vibration and increases the shutter speed.

#### Notes on Motion Detection

- Motion detection may be unable to completely reduce effects of camera shake and subject movement in some situations.
- Motion detection may not function if the subject exhibits significant movement or is too dark.
- The pictures taken may become grainy.
- This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" (\(\subseteq\) 80) for more information.

#### **AF Assist**

Press the MENU button  $\Rightarrow$  Y tab ( $\square$ 13)  $\Rightarrow$  AF assist

Enable or disable the AF-assist illuminator that assists the autofocus when the lighting is dim.

Option	Description	
Auto (default setting)	AF-assist illuminator lights automatically if the lighting is dim. The illuminator has a range of about 8.0 m (26 ft) at the maximum wide-angle position and about 7.0 m (22 ft) at the maximum telephoto position.  • For some focus areas and scene modes such as <b>Museum</b> (□43), <b>Pet portrait</b> (□45), AF-assist illuminator does not turn on even if <b>Auto</b> is set.	
Off	AF-assist illuminator does not light. The camera may be unable to focus if lighting is dim.	

## Note on the AF-assist Illuminator

In shooting modes **U1, U2** and **U3, AF assist** in the setup menu settings cannot be set. Select the **U1, U2** or **U3** tab and set **AF assist** in the specialized menus for **U1, U2** and **U3** ( $\square$ 13, 58).

# **Red-eye Reduction**

Press the MENU button  $\Rightarrow$  Y tab ( $\square$ 13)  $\Rightarrow$  Red-eye reduction

Choose the red-eye reduction method when the flash mode ( $\square$ 61) is • (auto with red-eye reduction).

Option	Description	
Pre-flash on (default setting)	The flash repeatedly fires pre-flashes at low intensity before the main flash to reduce the red-eye effect, and it then performs the red-eye reduction process using picture compensation. Note that there is a slight lag between the shutter-release button being pressed and the picture being shot.	
Pre-flash off	Pre-flashes do not fire. The shutter is released immediately when the shutter-release button is pressed all the way, and the red-eye reduction process is performed using picture compensation.	

#### **Digital Zoom**

Press the MENU button  $\Rightarrow$  Y tab ( $\square$ 13)  $\Rightarrow$  Digital zoom

Enable or disable the digital zoom.

Option	Description	
On (default setting)	When the camera is zoomed in to the maximum optical zoom position, rotating and holding the zoom control toward $\mathbf{T}(Q)$ triggers the digital zoom ( $\square$ 31).	
Crop	Limit zoom magnification up to the position of 🗗 during still picture shooting. Also limit the digital zoom to the range at which image quality of the shot still picture does not deteriorate ( ) 31).  • The digital zoom is not available when the image size is 1 3648×2736, 1 3264×2448, 2 3648×2432, 3584×2016 or 1 2736×2736.  • During movie recording, digital zoom works as described in On.	
Off	The digital zoom is not activated.	

## Notes on Digital Zoom

- When the digital zoom is in effect, AF area mode is set to **Center (spot)** (\$\infty\$48).
- The digital zoom cannot be used when Scene auto selector, Portrait, Night portrait, Backlighting with HDR set to On or Pet portrait is selected in scene mode.
- This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" (\(\subseteq\) 80) for more information.
- At magnifications of 1.2x to 1.8x, Metering is set to Center-weighted, and at magnifications of 2.0x to 4.0x, it is set to Spot.
- The digital zoom is not available for Zoom exposure (□ 47).

#### **Zoom Speed**

Press the MENU button → ¥ tab (□13) → Zoom speed

Set the zoom operation speed. Slow down the zoom speed to minimize the recording of the zoom operating noise during movie recording.

Option	Description	
Auto (default setting)	During still picture shooting, operate the zoom at the <b>Normal</b> speed. During movie recording, operate the zoom at a lower speed than <b>Normal</b> to minimize the recording of the zoom operating noise. During still picture shooting, rotating the zoom control all the way in either direction adjusts the zoom quickly, while rotating the control partially adjusts the zoom slowly.	
Normal	During both still picture shooting and movie recording, operate the zoom at the standard speed. During both still picture shooting and movie recording, rotating the zoom control all the way in either direction adjusts the zoom quickly, while rotating the control partially adjusts the zoom slowly.	
Quiet	During both still picture shooting and movie recording, operate the zoom at a lower speed than <b>Normal</b> .	

The icon for the current setting other than **Auto** is displayed on the monitor ( $\square$ 8).

# **Fixed Aperture**

Press the MENU button  $\Rightarrow$  Y tab ( $\square$ 13)  $\Rightarrow$  Fixed aperture

Option	Description	
On	In <b>A</b> or <b>M</b> shooting mode, zooming can be performed with minimum changes in the aperture value.  • When f-number exceeds exposure range at new zoom position, the aperture value is not fixed.	
Off (default setting)	The aperture value is not fixed.	

#### **Sound Settings**

Press the MENU button → Y tab (□13) → Sound settings

Adjust the following sound settings.

Option	Description	
Button sound	Set the following all sound settings to <b>On</b> (default setting) or <b>Off</b> .  Setting beep (beep sounds once when the settings are completed)  Focus beep (beep sounds twice when the camera focuses on the subject)  Error beep (beep sounds three times when an error is detected)  Start-up sounds	
Shutter sound	Choose whether to set the shutter sound to <b>On</b> (default setting) or <b>Off</b> .	

# Notes on Sound Settings

- In **Pet portrait** scene mode, even when **On** is set, the button sound and shutter sound are disabled.
- Even when On is set, the shutter sound is disabled when scene mode is Backlighting with HDR set to On or during movie recording.
- This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" (\sum 80) for more information.

# **Record Orientation**

Press the MENU button → Y tab (□13) → Record orientation

Option	Description	
Auto (default setting)	The orientation data is recorded with the taken picture. When played back while <b>Rotate tall</b> (��82) is set to <b>On</b> , the picture is automatically rotated for display.	
Off	The orientation data is not recorded and pictures are always displayed in the horizontal position.	

• The orientation data can be changed after shooting using **Rotate image** in the playback menu (♣66).

#### Notes on Recording the Orientation Data

- In **Continuous** or **Auto bracketing** mode, all pictures are recorded with the same orientation data as the first picture.
- Correct orientation data may not be obtained for pictures recorded with the camera facing up or down.

#### **Rotate Tall**

Press the MENU button → ¥ tab (□13) → Rotate tall

When **On** (default setting) is selected, pictures taken with orientation data in "tall" or with face detection are automatically rotated in accordance with the recorded orientation data for display.





#### **Auto Off**

Press the MENU button  $\rightarrow$  Y tab ( $\square$ 13)  $\rightarrow$  Auto off

If no operations are performed for a certain period while the camera is on, the monitor is turned off to save power and the camera enters standby mode ( $\square$ 25). In this menu, set the time before the camera enters standby mode.

Choose from 30 s, 1 min (default setting), 5 min and 30 min.

# Auto Off Setting

- In the following situations, the time taken for the camera to enter standby mode is fixed.
  - When menus are displayed: three minutes
  - When tone level information is displayed (shooting mode): three minutes
  - During slideshow playback: maximum of 30 minutes
  - When the AC Adapter EH-5b is connected: 30 minutes
- The camera does not enter standby mode when transferring images using the Eye-Fi card.



#### **Format Memory/Format Card**

Press the MENU button → Y tab (□13) → Format memory/Format card

Format the internal memory or a memory card.

Formatting permanently deletes all data in the internal memory or memory card. The deleted data cannot be recovered. Be sure to transfer important pictures to a computer before formatting.

#### **Formatting the Internal Memory**

To format the internal memory, remove the memory card from the camera. The **Format memory** option is displayed on the setup menu.

#### **Formatting Memory Cards**

When a memory card is inserted in the camera, the memory card can be formatted. The **Format card** option is displayed on the setup menu.

# Formatting Internal Memory and Memory card

- Do not turn off the camera or open the battery-chamber/memory card slot cover during formatting.
- The first time you insert a memory card that has been used in another device into this camera, be sure to format it with this camera.

#### Language

Press the MENU button  $\Rightarrow$  Y tab ( $\square$ 13)  $\Rightarrow$  Language

Choose one of 29 languages for displaying the camera menus and messages.

Cocking Czech Nederlands Dutch Türken Turkish

Čeština	Czech
Dansk	Danish
Deutsch	German
English	(default setting)
Español	Spanish
Ελληνικά	Greek
Français	French
Indonesia	Indonesian
Italiano	Italian
Magyar	Hungarian

Neuerianus	Dutti
Norsk	Norwegian
Polski	Polish
Português (BR)	Brazilian Portuguese
Português (PT)	Portuguese
Русский	Russian
Română	Romanian
Suomi	Finnish
Svenska	Swedish
Tiếng Việt	Vietnamese

Türkçe	Turkish
Українська	Ukrainian
عربي	Arabic
简体中文	Simplified Chinese
繁體中文	Traditional Chinese
日本語	Japanese
한글	Korean
ภาษาไทย	Thai
हिन्दी	Hindi

## **TV Settings**

Press the MENU button  $\rightarrow \Upsilon$  tab ( $\square$ 13)  $\rightarrow$  TV settings

Adjust the settings for connecting to a TV.

Option	Description	
Video mode	Select the analog video output system from <b>NTSC</b> or <b>PAL</b> in accordance with your TV.	
HDMI	Select a picture resolution for HDMI output from <b>Auto</b> (defaul setting), <b>480p</b> , <b>720p</b> , or <b>1080i</b> . When <b>Auto</b> is set, the output resolution that is best suited to the connected TV is selected automatically from <b>480p</b> , <b>720p</b> or <b>1080i</b> .	
HDMI device control	Select whether or not the camera receives signals from a TV when a TV that conforms to the HDMI-CEC standard is connected with an HDMI cable. When set to <b>On</b> (default setting), the television remote control can be used to operate the camera during playback.  See "Using the TV's Remote Control (HDMI Device Control)" (🇝21) for more information.	

# **HDMI and HDMI-CEC**

"HDMI" is an abbreviation of High-Definition Multimedia Interface, which is one type of multimedia interface.

"HDMI-CEC" is an abbreviation of HDMI-Consumer Electronics Control, which enables operations to be linked between compatible devices.

# **External Mic Sensitivity**

Press the MENU button  $\Rightarrow$  Y tab ( $\square$ 13)  $\Rightarrow$  External mic sensitivity

Select **High** if the sensitivity of the external microphone is low during movie recording.

• The default setting is **Auto**.

#### **Built-in ND Filter**

Press the MENU button  $\Rightarrow$  Y tab ( $\square$ 13)  $\Rightarrow$  Built-in ND filter

When the camera's built-in ND filter is used, the amount of light that enters the camera while shooting can be reduced in three steps. Use in situations such as when overexposure results from the subject being too bright. Set whether or not to use the built-in ND filter to reduce the light in the following shooting modes.

- 🖭 (low noise night) mode
- P, S, A and M modes (including U1, U2 and U3 modes)
  In shooting modes other than the above, the on/off setting of the built-in ND filter is controlled automatically according to the shooting mode and shooting conditions, regardless of **Built-in ND filter** setting.

Option	Description	
On	Use the ND filter to reduce the light.	
Auto	In mode ☑ (low noise night) or P (Programmed auto), when the subject is too bright and the exposure range is exceeded, reduce the light automatically with the ND filter.  • In shooting modes S, A and M, the ND filter is Off.	
Off (default setting)	The ND filter is not used.	

The icon for the current setting other than **Off** is displayed on the monitor ( $\square$ 8). No icon is displayed when the setting is  $\square$  (auto), scene or movie mode.

# Effects of the Built-in ND Filter

Using the filter may enable the shooting of subjects that are too bright without overexposing the image. It can also be used in situations such as when you want to slow down the shutter speed at a low aperture value.

For example, at a shutter speed of 1/2000 second with the correct exposure, if the ND filter is used to reduce the light in three steps, the speed can be changed to 1/250 second without changing the aperture value.

#### **Customize Command Dials**

Press the MENU button → Y tab (□13) → Customize command dials

Option	Description	
No swap (default setting)	The respective functions operated using the main command dial and sub-command dial are not swapped.	
Swap main and sub	Swap the functions that can be operated using the main command dial and sub-command dial when shooting pictures.  The functions are not swapped for the playback or menu screen.	

#### **Multi Selector Right Press**

Press the MENU button  $\Rightarrow$  Y tab ( $\square$ 13)  $\Rightarrow$  Multi selector right press

Set to **Off** if you do not want to display the AF area mode (♣♦48) setting when the multi selector ▶ is pressed.

• The default setting is **AF area mode**.

#### **Delete Button Options**

Press the MENU button  $\Rightarrow$  Y tab ( $\square$ 13)  $\Rightarrow$  Delete button options

Option	Description	
Press twice to delete	Press the <b>m</b> button once more to delete an image while the deletion confirmation message is displayed (CL)36).	
Disable second press (default setting)	Even if the <b>b</b> utton is pressed again while the deletion confirmation message is displayed, the image is not deleted.	

#### **AE/AF Lock Button**

Press the MENU button  $\Rightarrow$  Y tab ( $\square$ 13)  $\Rightarrow$  AE/AF lock button

Select the function to be performed when the AEL (AE-L/AF-L) button ( $\square$ 5) is pressed while shooting.

Option	Description	
AE/AF lock (default setting)	Lock both the focus and exposure when the ﷺ (AE-L/AF-L) button is pressed.	
AE lock only	Lock only the exposure when the ${\mathbb A}^{\!$	
AF lock only	Lock only the focus when the AFL (AE-L/AF-L) button is pressed.	

The AFL (AE-L/AF-L) button setting is displayed on the monitor during shooting (QQ8).

- During still picture shooting, lock only when the AE/AF-L button is pressed.
- During movie recording, lock when the AE/AF-L button is pressed, and release when the button is pressed again.

# Notes on AE/AF Lock Button Setting

- The AFL (AE-L/AF-L) button cannot be used when **Scene auto selector** is selected in scene mode.
- ullet AE-L (exposure locking) cannot be used when the shooting mode is set to  ${f M}$ .
- AF-L (focus locking) cannot be used when focus mode ( $\square$ 67) is set to **MF** (manual focus).

#### **More Information**

See "Focus Lock" (2233) for more information.

#### Fn1 + Shutter Button

Press the MENU button → ¥ tab (□13) → Fn1 + shutter button

Set the function to be performed when the shutter-release button is pressed while pressing the  $\mathbf{Fn}$ 1 (FUNC1) button ( $\mathfrak{Q}$ 2) during shooting.

• This can be used when P, S, A, M, U1, U2 or U3 is chosen for shooting mode.

Option	Description	
Off (default setting)	Shoot without changing the setting.	
NRW (RAW)/Normal (Image quality) (ДД75)	When Fine, Normal or Basic is set, shoot with the NRW (RAW) setting. When NRW (RAW) is set, shoot with the Normal setting.  The image size is 104 3648×2736.  When NRW (RAW) + Fine, NRW (RAW) + Normal or NRW (RAW) + Basic is set, shoot without changing the setting.	
ISO sensitivity (☎30)	Shoot with <b>ISO sensitivity</b> set to <b>Auto</b> .	
White balance (♂32)	Shoot with White balance set to Auto (normal).  Cannot be used when Picture Control is set to Monochrome.	
Picture Control (☎38)	Shoot with Picture Control set to <b>Standard</b> .	

#### Fn1 + Command Dial

Press the MENU button  $\Rightarrow$  Y tab ( $\square$ 13)  $\Rightarrow$  Fn1 + command dial

Set the function to be performed when the command dial is rotated while pressing the  $\mathbf{F}\mathbf{n}$ 1 (FUNC1) button during shooting.

 Rotating either the main command dial or sub-command dial enables the operation.

Option	Description		
Off (default setting)	Shoot without the function. Operation will be disabled.		
Manual focus (♣2)	When the focus mode is set to manual focus, the focus can be adjusted.		
Metering (ð=644)	Change the setting for metering.		
Continuous (ठ+०45)	Change the settings for continuous shooting.		
Flash exp. comp. (♂52)	Change the setting for Flash exp. comp.		
Active D-Lighting (5-656)	Change the setting for Active D-Lighting.		
Manual flash level (☐62)	Change the flash output set for the built-in flash when the flash mode is set to manual.		

# Note on Fn1 + Command Dial

Operation is disabled when AE or AF is locked (except when recording a movie).

# **Fn1 Guide Display**

Press the MENU button  $\Rightarrow \Upsilon$  tab ( $\square$ 13)  $\Rightarrow$  Fn1 guide display

Option	Description	
On (default setting)	The Fn1 button operation indicator (\(\subseteq \mathbb{B}\)) and the functions assigned to the Fn1 + shutter button (\(\sigma\) 88) and Fn1 + command dial (\(\sigma\) 89) are displayed while the Fn1 (FUNC1) button is pressed.	
Off	Even if the $\mathbf{Fn}$ 1 button is pressed, guide is not displayed.	

#### **Fn2 Button**

Press the MENU button → Y tab (□13) → Fn2 button

Choose the function to be performed when the  $\mathbf{F}\mathbf{n}$ 2 button ( $\square$ 2) is pressed while shooting.

Option	Description	
Off (default setting)	Shoot without the function. Operation will be disabled.	
Virtual horizon, View/hide histograms, View/hide framing grid	Select whether to view or hide the virtual horizon, histogram or framing grid displays (�� 74) on the monitor during shooting.	
Built-in ND filter	Change the built-in ND filter (♣65) setting.	

# **Customize My Menu**

Press the MENU button → Y tab (□13) → Customize My Menu

Register frequently used menu items in My Menu (maximum of five). The registered My Menu can be displayed when the quick menu dial is set to Manual and the quick menu button is pressed, allowing settings to be quickly checked or changed (only when shooting mode is set to P. S. A. M. U1. U2 or U3).



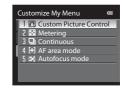
The following items can be registered.

Custom Picture Control (6-643)	Noise reduction filter (��53)	Vibration reduction (♣676)
Metering ( <b>6–6</b> 44)	Long exposure NR (🍑 53)	Digital zoom (♣79)
Continuous (♣♦45)	Distortion control (♣654)	Format memory/Format card (
AF area mode (��48)	Wide-angle converter (��54)	Built-in ND filter (🏍85)
Autofocus mode (♣652)	Flash control (🍑 55)	Eye-Fi upload (🏞 93)
Flash exp. comp. (♣652)	Active D-Lighting (♣56)	- (no setting) (delete)*

Choose to remove an item from My Menu.

## Registering into My Menu

- 1 Use the multi selector to choose the menu item and press the ® button.
  - The menu item selection screen is displayed.



- **2** Choose the menu item to be registered and press the ® button.
  - The chosen menu item is switched.
  - To finish the setting, press the multi selector ◀.



## **Reset File Numbering**

Press the MENU button  $\Rightarrow$  Y tab ( $\square$ 13)  $\Rightarrow$  Reset file numbering

When **Yes** is selected, the sequential numbering of file numbers is reset (\$\infty\$99). After resetting, a new folder is created and the file number for the next picture taken starts from "0001."

## Notes on Reset file numbering

- Reset file numbering cannot be used when scene mode is set to Panorama assist, or if IntvI timer shooting is chosen for Continuous when P, S, A, M, U1, U2 or U3 shooting modes are used. For Panorama assist or IntvI timer shooting, a new folder is created, and file numbers are assigned automatically starting with "0001" (♣99, 100).
- Reset file numbering cannot be applied when the folder number reaches 999 and there are images in the folder. Insert a new memory card, or format the internal memory/memory card ( 83).



## **Blink Warning**

Press the MENU button → ¥ tab (◯◯13) → Blink warning

Choose whether or not blinking eyes are detected when using face detection  $(\square 85)$  in the following shooting modes.

- In the following scene modes: Scene auto selector (\$\sum40\$), Portrait (\$\sum40\$) or Night portrait (\$\sum41\$)
- Shooting modes P, S, A, M, U1, U2, U3, 

   (low noise night) and EFFECTS

   (special effects) (when Face priority (→48) is selected for AF area mode)

Option	Description
On	The <b>Did someone blink?</b> screen is displayed on the monitor if the camera detects that a human subject may have closed the eyes immediately after recognizing the face. The face of the human subject that may have closed his/her eyes is framed by a yellow border. You can check the picture taken and determine if you need to take the picture again.
Off (default setting)	The camera does not detect blinks.

#### The Did someone blink? Screen

If no operations are performed for a few seconds, the screen automatically returns to the shooting screen.

 To zoom in the face for which blinking was detected, rotate the zoom control toward T (Q). To return to full-frame playback mode, rotate the zoom control toward W (►).



- When the camera detects that one or more human subjects have closed their eyes, press ▲, ▼, ◄ or ▶ during playback zoom to display other faces. Other faces can also be displayed by rotating the main command dial
- Press the **m** button to delete the picture taken.
- Press the ® button to return to shooting screen.

## Note on Blink Warning

This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" ( $\square$ 80) for more information.

## **Eye-Fi Upload**

Press the MENU button → Y tab (□13) → Eye-Fi upload

Option	Description
Enable	Upload images created by the camera to a preselected destination.
Disable (default setting)	Images will not be uploaded.

## Notes on Eye-Fi Cards

- Note that images will not be uploaded if signal strength is insufficient even if **Enable** is selected.
- Select **Disable** where wireless devices are prohibited.
- Refer to the instruction manual of your Eye-Fi card for more information. In the event of malfunction, contact the card manufacturer.
- The camera can be used to turn Eye-Fi cards on and off, but may not support other Eye-Fi functions.
- If the Eye-Fi card where Eye-Fi upload cannot be set to off is inserted, Eye-Fi upload cannot be set.
- The camera is not compatible with the endless memory function. When it is set on a computer, disable the function. If the endless memory function is enabled, the number of pictures taken may not be displayed correctly.
- Eye-Fi cards are for use only in the country of purchase. Observe all local laws concerning wireless devices
- Leaving the setting as **Enable** will result in the battery being depleted in a shorter period of time.

## Eye-Fi communication indicator

The communication status of the Eye-Fi card in the camera can be confirmed on the monitor (QQ8).

- 🕅: Eye-Fi upload is set to Disable.
- 🛜 (blinks): Eye-Fi upload enabled; uploading data.
- 🛜: Eye-Fi upload enabled but no images available for upload.
- 🛣: An error occurred. The camera cannot control the Eye-Fi card.

#### **MF Distance Indicator Units**

Press the MENU button → Y tab (□13) → MF distance indicator units

Set either **m** (meter) (default setting) or **ft** (feet) for the unit of gauge displayed when the focus mode is set to manual focus ( $\frown$ 2).

#### **Reverse Indicators**

Press the MENU button → Y tab (□13) → Reverse indicators

Change the +/- display direction of the exposure indicator ( $\square$ 53) displayed when shooting mode is M and the indicator displayed for setting bracketing ( $\multimap$ 36). The + side of the indicators is set to the left and - side is set to the right in the default setting.

## **Reset All**

Press the MENU button → Y tab (◯◯13) → Reset all

When **Reset** is selected, the camera settings are restored to the default values.

## Pop-up Menu

Option	Default value
Flash mode (QQ61)	Auto
Self-timer (□164)/Smile timer (□165)/ Remote control (6-0105)	OFF
Focus mode (QQ67)	Autofocus

## Shooting in the Scene Mode

Option	Default value
Scene menu (CC) 39)	Scene auto selector
Hue adjustment in Food mode ( 43)	Center
HDR in Backlighting (QQ44)	Off
Pet portrait (QQ45)	Pet portrait auto release: On Continuous: Continuous

## **Special Effects Menu**

Option	Default value
Special effects (QQ48)	Creative monochrome

## Low Noise Night Mode Menu

Option	Default value
Continuous (QQ50)	Single
Flash exp. comp. (QQ50)	0.0
Metering (◯◯50)	Matrix

#### Movie Menu

Option	Default value
Autofocus mode (♣69)	Single AF
Wind noise reduction (♣69)	Off

## **Quick Menu**

Option	Default value
Image quality (QQ75)	Normal
Image size (CC)77)	<b>™</b> 3648×2736
Movie options (♣♦42)	HD 720p (1280×720)
ISO sensitivity (🏍 31)	Auto
Minimum shutter speed (♣♦31)	None
White balance (♣32)	Auto (normal)
Auto bracketing ( 36)	Off
Picture Control (♣638)	Standard

## **Shooting Menu**

Option	Default value
Metering (♣♦44)	Matrix
Continuous (🏞 45)	Single
Intvl timer shooting (5–646)	30 s
AF area mode (♣048)	Auto
Autofocus mode (5–52)	Single AF
Flash exp. comp. (5–52)	0.0
Noise reduction filter (5–53)	Normal
Long exposure NR (♂53)	Auto
Distortion control (5–54)	Off
Wide-angle converter (♂54)	None
Flash control (8–655)	Auto
Active D-Lighting ( 5-656)	Off
Zoom memory (8–657)	All values are chosen

## Setup Menu

Option	Default value
Welcome screen (♣670)	None
Image review (♂↑74)	On
Brightness ( <del>**</del> 74)	3
Photo info (5–674)	Hide all items
Print date (♣675)	Off
Self-timer: after release (♂↑76)	Exit self-timer mode
Vibration reduction (♣676)	On
Motion detection (♣677)	Off
AF assist (♣678)	Auto
Red-eye reduction (♣678)	Pre-flash on
Digital zoom (♣679)	On
Zoom speed (♣080)	Auto
Fixed aperture (♣680)	Off
Button sound (♣81)	On
Shutter sound (♂♂81)	On
Record orientation (♣681)	Auto
Rotate tall (5–682)	On

Option	Default value
Auto off ( 82)	1 min
HDMI ( <b>6-</b> 084)	Auto
HDMI device control (☎84)	On
External mic sensitivity ( \$\infty\$84)	Auto
Built-in ND filter (♣685)	Off
Customize command dials (♣686)	No swap
Multi selector right press (♣686)	AF area mode
Delete button options (♣686)	Disable second press
AE/AF lock button (♣87)	AE/AF lock
Fn1 + shutter button (♂ 88)	Off
Fn1 + command dial (♣89)	Off
Fn1 guide display ( \$\infty\$89)	On
Fn2 button (♂ 690)	Off
Customize My Menu (🇝 90)	1: Custom Picture Control 2: Metering 3: Continuous 4: AF area mode 5: Autofocus mode
Blink warning (♣92)	Off
Eye-Fi upload (🏞 93)	Disable
MF distance indicator units ( \$\infty\$ 94)	m
Reverse indicators ( \$\infty\$94)	+0-

## Others

Option	Default value
Paper size (♣24, 25)	Default
Frame intvl for Slide show (5–63)	3 s

- Choosing Reset all also clears the current file number (\$\sim 99\$) in the memory.
   After resetting, numbering continues from the lowest number available in the internal memory or the memory card. If Reset all is performed after all pictures are deleted from the internal memory or memory card (\$\sim 64\$), the file numbers for the next pictures taken start from "0001."
- The following settings remain unaffected even if Reset all is performed.
   Quick menu: Preset manual data for White balance (♣35)
   Shooting menu: Custom Picture Control registration (♣43)
   Setup menu: Time zone and date (♣71), Language (♣83) and Video mode (♣84) in TV settings
- User settings that were saved for mode dial U1, U2 and U3 are not reset to the
  default settings when Reset all is performed. To change these settings back to
  the default settings, use Reset user settings (\$\subseteq\$58).

#### Firmware Version

Press the MENU button → Y tab (□13) → Firmware version

Displays the current camera firmware version.



## **File and Folder Names**

Pictures, movies and voice memos are assigned file names as follows.

DSCN0001.JPG				
Identifier (not displayed on camera mon	itor)		Extension (signifies the file typ	e)
Original still pictures (voice memo attachment included), movies	DSCN		Still pictures RAW still pictures Movies	.JPG .NRW
Small copies (voice memo attachment included)	SSCN		Voice memos	.WAV
Cropped copies (voice memo attachment included)	RSCN File number (assigned aut ascending order, starting			•
Pictures created with picture editing other than cropping and small picture and attached voice memos, movies created with movie editing	FSCN			

- A folder for storing files is automatically created using the following naming convention: "Folder number + NIKON" (e.g., "100NIKON"). If there are 200 files in a folder, a new folder is created. (For example, the folder name following "100NIKON" becomes "101NIKON.") A new folder is also created when the file numbers in a folder reach 9999 or Reset file numbering (5091) is performed. The next file number is set automatically to "0001."
   If a folder contains no files, a new folder is not created even if Reset file
  - If a folder contains no files, a new folder is not created even if **Reset file numbering** is performed.
- When images are shot with an Image quality (\$\sum 75\$) setting of NRW (RAW) + Fine, NRW (RAW) + Normal or NRW (RAW) + Basic, the NRW (RAW) and JPEG images that are recorded at the same time are assigned the same file name. The NRW (RAW) and JPEG images that are recorded at the same time are saved in the same folder. If there are 199 files in a folder, a new folder is created and the images are saved in the new folder.
- Voice memo file names have the same identifier and file number as the picture to which the voice memo is attached.

#### File and Folder Names

- In Panorama assist (\$\sum45\$), a folder is created for each shooting session using the following naming convention: "Folder number + P\_XXX" (e.g., "101P\_001").
   Pictures are saved in sequence in file numbers starting from 0001.
- Each time a picture is taken in Interval timer shooting (♣46), a folder named with the convention: 'Folder number + INTVL' (e.g., 101INTVL) is created.
   Pictures are saved in sequence in file numbers starting from 0001.
- When image files or voice files are copied to or from the internal memory or memory card ( 68), the file naming conventions are as follows:
  - Files copied using selected images are copied to the current folder (or to the folder used for subsequent pictures), where they are assigned file numbers in ascending order following the largest file number in memory.
  - Files copied using all images, along with their folder, are copied together.
     Folder numbers are assigned in ascending order, following the largest folder number on the destination medium.
     File names are not changed.
- When the current folder is numbered 999, if there are 200 files in the folder or if a file is numbered 9999, no further pictures can be shot until the internal memory or memory card is formatted ( 83), or a new memory card is inserted

## **Speedlights (External Flash Unit)**

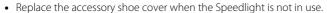
The camera is equipped with an accessory shoe, allowing the following Speedlights or Wireless Speedlight Commander to be attached to the camera. Use the Speedlights when the built-in flash cannot provide sufficient lighting.

- Speedlights SB-400, SB-600, SB-700, SB-800, SB-900
- Wireless Speedlight Commander SU-800

The built-in flash is set to **3** (off) automatically when using Speedlights. While **1** is displayed on the monitor, the Speedlight flash mode is also displayed on the monitor, and it can be set with the same procedure as the built-in flash ( $\square$ 61).

## How to Attach a Speedlight

- Remove the accessory shoe cover before attaching a Speedlight as shown on the right.
- When the built-in flash is raised, gently push to lower the flash until it clicks shut
- Refer to the instruction manual of your Speedlight for more information on how to attach Speedlight and details on how to use it.







#### Note on External Flash

Attempting to attach external flashes that do not support this camera may damage the camera and the external flash

## **U**se Only Nikon Flash Accessories

Use only Nikon Speedlights. Negative voltages or voltages over 250 V applied to the accessory shoe could not only prevent normal operation, but damage the sync circuitry of the camera or flash.

## Speedlights SB-400, SB-600, SB-700, SB-800 and SB-900

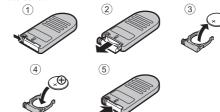
- Before using Speedlights SB-600, SB-700, SB-800 or SB-900, set the Speedlight flash control mode to TTL. This enables the Standard i-TTL flash control to use monitor pre-flashes to adjust flash output automatically in response to lighting conditions. Refer to the instruction manual of your Speedlight for more information on i-TTL flash control.
- Wireless multiple flash-unit photography can be performed by setting the SB-700, SB-800, SB-900
  or Wireless Speedlight Commander SU-800 to "commander," and setting the SB-600, SB-700, SB800 and SB-900 to "remote flash unit." However, the flash is not usable even if the monitor preflashes are fired when the SB-900 is set to "commander."
  - The Wireless multiple flash group setting is only applicable to group A. Change the setting for both the commander and the remote flash unit to group A. Refer to the instruction manual of your Speedlight for more information.
- When wireless multiple flash-unit photography is performed, if ISO sensitivity is set to **Auto**, **High ISO sensitivity auto**, **ISO 100-200** or **ISO 100-400**, it is fixed at ISO 100.
- The camera does not support Flash Color Information Communication, Auto FP High-Speed Sync, FV lock, or AF-assist for multi-area AF when using Speedlights SB-600, SB-700, SB-800 or SB-900.
- Power zoom function can be used with Speedlights SB-600, SB-700, SB-800 or SB-900, setting zoom head position automatically depending upon focal length.
- When using Speedlights SB-600, SB-700, SB-800 or SB-900, the edges of pictures shot at ranges under 2 m (6 ft 7 in.) on the zoom wide-angle position may appear dark. In such cases, use the wide-flash adapter.
- When set to STBY (standby), the Speedlight turns on and off at the same time as the camera.
   Confirm on the Speedlight that the Ready-light is on.

# **Optional Accessories**

Rechargeable battery	Rechargeable Li-ion Battery EN-EL14 <sup>1</sup>		
Battery charger	Battery Charger MH-24 <sup>1, 2</sup>		
AC adapter/ Power connector	AC Adapter EH-5b (connect as shown) and Power Connector EP-5A (connect as shown) When the Power Connector is inserted into the camera and the AC Adapter is connected, the camera can be powered from an electrical outlet. The AC Adapter and the Power Connector are available separately.  1 2 3 Before closing the battery-chamber/memory card slot cover, fully insert the cord of the power connector into the slot in the battery chamber. If part of the cord runs out of the slot, the cover or cord may be damaged when the cover is closed.		
	connector of the Power Connector EP-5A.		
USB cable	USB Cable UC-E6 <sup>1</sup>		
Audio/Video cable	Audio Video Cable EG-CP16 <sup>1</sup>		
Converter lens	Wide-angle Converter WC-E75A (0.75x) (requires Adapter Ring UR-E22)		
Lens adapter ring	Adapter Ring UR-E22		
Speedlight (external flash unit)	Speedlight SB-400, SB-600, SB-700, SB-900 Wireless Speedlight Commander SU-800		
External microphone	Stereo Microphone ME-1		

Remote Control MI -I 3 How to replace the battery (3 V CR2025 lithium battery) in the remote control.

#### Remote control



- When changing the remote control battery, be sure that the battery's positive (+) and negative (-) terminals are oriented correctly.
- Be sure to read and follow the warnings for the battery on page vii and the section, "The Battery" (25-3).
- Included with the camera at the time of purchase (see "Confirming the Package Contents" (Wii) for more information).
- When using in other countries, use a commercially available plug adapter as necessary. For more information about plug adapters, consult your travel agency.

See our websites or product catalogs for up-to-date information on accessories for the COOLPIX P7100

## Notes on Converter and Adapter Ring

- Be sure to set Wide-angle converter (5-54) to On.
- Do not attach lens hoods or filters to the converter lens or adapter ring, as they may cause shading around the edges of images.

## **Shooting with Remote Control**

Use the Remote Control ML-L3 (available separately) ( 104) to release the shutter. It is convenient for taking self-portraits and effectively eliminates blur caused by camera shake that occurs when the shutter-release button is pressed. Use of a tripod is recommended during shooting with the remote control. Set **Vibration reduction** ( 176) in the setup menu to **Off** when using a tripod to stabilize the camera.

1 Press ◀ (🖒 self-timer) on the rotary multi selector.



- 2 Select remote control mode using the multi selector and press ▶ to display the setting.

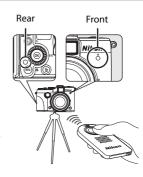
  - **â** (quick-response remote): Press the transmission button on the remote control to shoot instantly.
  - **ii** 10s (ten seconds remote): Press the transmission button on the remote control to shoot with ten-second delay.
  - **6** 2s (two seconds remote): Press the transmission button on the remote control to shoot with two-second delay.
  - The icon for the selected remote control mode is displayed.
  - If the button is not pressed within a few seconds, the selection is set and the setting menu disappears.
- **3** Frame the picture.





## 4 Aim the transmitter at the infrared receiver on the front or rear of the camera $(\square 2, 3)$ and press the transmission button.

- · Press the transmission button from a distance of 5 m (16 ft) or less
- In the guick-response remote mode, once the subject is in focus, the shutter is released.
- In ten seconds or two seconds remote mode, the self-timer lamp blinks when the subject is in focus. and then about one second before the shutter is released, the lamp stops blinking and remains lit. To stop the timer before a picture is taken, press the transmission button again.



• When the shutter is released in ten seconds or two seconds remote mode, the remote control mode turns to Off

## Note on the Remote Control

This feature may not be used in combination with certain features. See "Features That Cannot Be Used Simultaneously" (QQ80) for more information.

## **Error Messages**

The following table lists the error messages and other warnings displayed on the monitor, as well as the solutions for dealing with them.

Display	Description	Solution	Ш
(blinks)	Clock not set.	Set date and time.	<b>6-6</b> 71
<b>6</b> Battery exhausted.	Battery exhausted.	Charge or replace the battery.	18, 20
<b>O</b> Battery temperature high	Battery temperature is high.	Turn off camera, and allow battery to cool down before resuming use. Five seconds after this message appears, the monitor is turned off, and the power-on lamp, the AF/access lamp and the flash lamp flicker. After the lamps blink for three minutes, the camera turns off automatically, but you can also press the power switch to turn it off manually.	25
① The camera will turn off to prevent overheating.	Inside of the camera has become hot. The camera turns off automatically.	Leave the camera off until the inside of the camera has cooled and then turn it on again.	-
Please wait for the camera to finish recording.	Camera cannot perform other operations until recording is complete.	Wait until message clears from display automatically when recording is complete.	-
Memory card is write protected.	Write-protect switch of the memory card is in "lock" position.	Slide the write-protect switch to "write" position.	-
0	Write-protect switch of Eye-Fi card is in "lock" position.	Slide the write-protect switch to "write" position.	-
Not available if Eye-Fi card is locked.	Error accessing Eye-Fi card.	Use an approved card. Check that connectors are clean. Confirm that memory card is correctly inserted.	23 22 22

Display	Description	Solution	Ф
This card cannot be used.  This card cannot be read.	Error accessing memory card.	Use an approved card. Check that connectors are clean. Confirm that memory card is correctly inserted.	23 22 22
Card is not formatted. Format card? Yes No	Memory card has not been formatted for use in this camera.	All data stored on the memory card is deleted when formatted. If there is any data on the card that you want to keep, select <b>No</b> , and backup the data to a computer before formatting the memory card. To format the memory card, select <b>Yes</b> and press the <b>®</b> button.	22
① Out of memory.	Memory card is full.	Choose lower image quality or smaller image size. Delete pictures and movies.  Replace memory card. Remove memory card and use internal memory.	75, 77 36, 102, \$\infty\$64 22 23
	Error occurred while recording picture.	Format the internal memory or memory card.	<b>⇔</b> 83
	Camera has run out of file numbers.	Replace the memory card, or format the internal memory/memory card.	22, <b>6-6</b> 83
<b>⊕</b> Image cannot be saved.	Picture cannot be used for welcome screen.	The following pictures cannot be used.  • NRW (RAW) images  • Pictures taken with Image size of	75 77 <b>◆</b> ◆14, <b>◆</b> ◆19
	There is insufficient space to save a copy.	or smaller  Delete pictures from destination.	<b>6</b> 4
① Sound file cannot be saved.	A voice memo cannot be attached to this file.	Voice memos cannot be attached to movies.     Select a picture taken with this camera.	- <b>6</b> 67

Display	Description	Solution	Ш
	Cannot edit selected picture.	Confirm the conditions that are required for editing. RAW processing cannot be performed for NRW (RAW) pictures that were taken with cameras other than COOLPIX P7100. These options cannot be used with movies.	<b>6-6</b> 9
• Cannot record movie.	Time out error while recording movie.	Choose memory card with faster write speed.	23
Cannot reset file numbering.	No more folders can be created.	Insert a new memory card, or format the internal memory/memory card.	22, <b>6–6</b> 83
Memory contains no images.	No pictures in the internal memory or memory card.	Pictures stored in the internal memory can only be viewed if no memory card is inserted. To copy files from internal memory to memory card, press the MENU button to display the copy screen, then copy the files from internal memory to memory card.	22 <b>6</b> €68
file contains no image data.	File not created with COOLPIX P7100.	File cannot be viewed on this camera. View file using the computer or any other devices which was used to create or edit this file.	-
0	The picture cannot be played back in a slide show.	-	<b>63</b>
All images are hidden.	All images in the internal memory/ memory card are hidden.	Disable the <b>Hide image</b> setting to view images.	<b>66</b> 66
This image cannot be deleted.	Picture is protected.	Disable protection.	<b>6</b> 66
Travel destination is in the current time zone.	Destination in same time zone as home.	-	<b>∂−6</b> 73
Mode dial is not in the proper position.	Mode dial is between two modes.	Rotate the mode dial to select the desired mode.	28



Display	Description	Solution	m
My Menu can not be changed at current settings.	All registered menu items cannot be changed at the current setting.	Check the settings of functions that are not registered in My Menu.     Change the menu item to be registered in My Menu.	<b>≈</b> 90 <b>≈</b> 90
• Raise the flash.	The flash is lowered when the scene mode is Night portrait or Backlighting with HDR set to Off or the Continuous mode is Continuous flash.	Press the <b>\$ ©</b> (flash pop-up) button to raise the flash.	41, 44, 61, <b>3</b>
	The flash is not raised during the scene auto selector.	Press the <b>\$ (</b> (flash pop-up) button to raise the flash. The camera can still shoot normally with the flash lowered if you do not wish to use it.	40, 61
① Speedlight setting error	Group A has not been selected for group setting when shooting using wireless multiple flash- unit photography.	Set the group setting of the master commander and remote flash unit to Group A.	<b>→</b> 102
Lens error	Lens is not operating properly.	Turn camera off and then on again. If error persists, contact retailer or Nikon-authorized service representative.	25
① Communications error	Error occurred during communication with printer.	Turn off camera and reconnect cable.	<b>6−</b> 023
System error	Error has occurred in camera's internal circuitry.	Turn off camera, remove and reinsert battery, and turn on camera. If the error persists, contact retailer or Nikon-authorized service representative.	25
Initializing lens. Cannot focus.	The camera cannot focus.	Wait until the camera recovers automatically.	_

Display	Description	Solution	
Printer error: check printer status.	Printer error	Check printer. After solving the problem, select <b>Resume</b> and press the <b>®</b> button to resume printing.*	-
Off Printer error: check paper	Specified size of paper is not loaded.	Load the specified size of paper, select <b>Resume</b> and press the button to resume printing.*	-
<b>⊕</b> /////// Printer error: paper jam	Paper has jammed in the printer.	Remove the jammed paper, select <b>Resume</b> and press the <b>®</b> button to resume printing.*	-
Printer error: out of paper	No paper is loaded in the printer.	Load the specified size of paper, select <b>Resume</b> and press the button to resume printing.*	-
Off Printer error: check ink	Ink error	Check ink, select <b>Resume</b> and press the <b>(B)</b> button to resume printing.*	_
Off Printer error: out of ink	Ink cartridge is empty.	Replace ink cartridge, select <b>Resume</b> and press the <b>®</b> button to resume printing.*	-
Off Printer error: file corrupt	An error caused by the image file has occurred.	Select <b>Cancel</b> and press the <b>®</b> button to cancel printing.	-

<sup>\*</sup> See the instruction manual provided with your printer for further guidance and information.




# Technical Notes and Index

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## **Caring for the Products**

#### The Camera

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

Be sure to read and follow the warnings of "For your Safety" (\(\subseteq\)vii to \(\subseteq\)viii) thoroughly before using the products.

## Keep Dry

The device will be damaged if immersed in water or subjected to high humidity.

## **Do Not Drop**

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

## Handle the Lens and All Moving Parts with Care

Do not apply force to the lens, lens cover, monitor, memory card slot, or battery chamber. These parts are easily damaged. Applying force to the lens cover could result in camera malfunction or damage to the lens. Should the monitor break, care should be taken to avoid injury caused by broken glass and to prevent the liquid crystal from the display touching the skin or entering the eyes or mouth.

## Do Not Point the Lens at Strong Light Sources for Extended Periods

Avoid pointing the lens at the sun or other strong light sources for extended periods when using or storing the camera. Intense light may cause deterioration of the CCD image sensor, producing a white blur effect in photographs.

## 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 charge or the magnetic fields produced by equipment such as radio transmitters could interfere with the monitor, damage data saved on the memory card, or affect the product's internal circuitry.

## Avoid Sudden Changes in Temperature

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

## ▼ Turn the Product off Before Removing or Disconnecting the Power Source or the Memory Card

Do not remove the battery while the product is on, or while images are being saved or deleted. Forcibly cutting power in these circumstances could result in loss of data or in damage to product memory or internal circuitry.

## 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 displays, and does not indicate a malfunction. Images saved using the
  product will not be affected.
- White or colored streaks of light may be visible on the monitor with framing of bright subjects.
   This phenomenon, known as "smear," occurs when extremely bright light strikes the image sensor.
   This is due to characteristics of the image sensor and does not indicate a malfunction. Smear may also cause partial discoloration on monitor display with shooting. Smear does not affect recorded images except when shooting with Continuous set to Multi-shot 16 and when recording movies.
   When shooting in these modes, avoiding bright objects such as the sun, reflections of the sun, and electric lights is recommended.
- Images on the monitor may be difficult to see under bright lighting.
- The monitor is lit by an LED backlight. Should the monitor begin to dim or flicker, contact your Nikon-authorized service representative.

## **The Battery**

- Be sure to read and follow the warnings of "For Your Safety" (\(\sum v\) ito \(\sup v\)iii) thoroughly before using the battery.
- Check the battery level before using the camera and replace or charge the battery if necessary. Do not continue charging once the battery is fully charged as this will result in reduced battery performance. Whenever possible, carry a fully charged spare battery when taking pictures on important occasions.
- Do not use the battery at ambient temperatures below 0°C (32°F) or above 40°C (104°F).
- Charge the battery indoors with an ambient temperature of 5°C to 35°C (41°F to 95°F) before use.
- When the battery temperature is between 0°C and 10°C (32°F to 50°F) or 45°C to 60°C (113°F to 140°F), the chargeable capacity may decrease.
- The battery is not charged at ambient temperatures below 0°C (32°F) or above 60°C (140°F).
- Note that the battery may become hot during use; wait for the battery to cool before charging. Failure to observe these precautions could damage the battery, impair its performance, or prevent it from charging normally.
- On cold days, the capacity of batteries tends to decrease. Be sure that the
  battery is 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.
- Dirt on the battery terminals can prevent the camera from functioning. Should
  the battery terminals become dirty, wipe them off with a clean, dry cloth before
  use.

#### Caring for the Products

- If the battery will not be used for some time, insert it in the camera and run it flat before removing it for storage. The battery should be stored in a cool location with an ambient temperature of 15°C to 25°C (59°F to 77°F). Do not store the battery in hot or extremely cold locations.
- Always remove the battery from the camera or battery charger when it is not being used. When inserted, minute amounts of current are drawn from the battery even when not in use. This may result in excessive draining of the battery and complete loss of function. Turning the camera on or off while the battery is exhausted can result in reduced battery life. When the battery level is low, be sure to charge the battery before using it.
- Recharge the battery at least once every six months and completely exhaust it before returning it to storage.
- After removing the battery from the camera or battery charger, attach the included terminal cover to the battery and store it in a cool place.
- A marked drop in the time a fully-charged battery retains its charge, when used at room temperature, indicates that the battery needs to be replaced. Purchase a new EN-EL14 battery.
- Replace the battery when it no longer holds a charge. Used batteries are a valuable resource. Please recycle used batteries in accordance with local regulations.

## **The Battery Charger**

- Be sure to read and follow the warnings of "For Your Safety" (\(\subseteq\)viii) thoroughly before using the battery charger.
- The included Battery Charger is for use only with a Rechargeable Li-ion Battery FN-FI 14.
- The MH-24 is compatible with AC 100-240 V, 50/60 Hz electrical outlets. When using in other countries, use a commercially available plug adapter as necessary. For more information about plug adapters, consult your travel agency.

## **The Memory Cards**

- Use only Secure Digital memory cards. See "Approved Memory Cards" (23).
- Be sure to observe the precautions in the memory card documentation when you use the memory card.
- Do not affix labels or stickers to the memory card.
- Do not format the memory card using a computer.
- When a memory card is used for the first time, it is recommended to format it with this camera. In particular, the first time you insert a memory card that has been used in another device into this camera, be sure to format it with this camera.
- Formatting permanently deletes all data in the memory card. Be sure to transfer important pictures to a computer before formatting.
- If the error message "Card is not formatted. Format card?" is displayed when you
  insert a memory card into this camera, the memory card must be formatted. If
  the memory card contains images you wish to keep, select No and save those
  images on your computer before formatting the memory card. To format the
  card, select Yes and press the Boutton.
- Do not perform the following during formatting, while data is being written to
  or deleted from the memory card, or during data transfer to a computer.
   Failure to observe this precaution could result in loss of data or damage to the
  memory card:
  - Open the battery-chamber/memory card slot cover to remove the battery or memory card.
  - Turn off the camera
  - Disconnect the AC adapter

## **Caring for the Camera**

## Cleaning

Lens/ viewfinder	Avoid touching glass parts with your fingers. Remove dust or lint with a blower (typically a small device with a rubber bulb attached to one end that is pumped to produce a stream of air out the other end). To remove fingerprints, oily substances, or other stains that cannot be removed with a blower, carefully wipe the lens with a dry soft cloth or eyewear cleaning cloth, using a spiral motion that starts at the center of the lens and working toward the edges. Do not wipe the lens forcibly or with a hard material. Failure to observe this precaution could result in damage or trouble. If this fails, clean the lens using a cloth lightly dampened with commercial lens cleaner.
Monitor	Remove dust or lint with a blower. To remove fingerprints, oily substances or other stains, carefully wipe the monitor with a dry soft cloth or eyewear cleaning cloth. Do not wipe the monitor forcibly or with a hard material. Failure to observe this precaution could result in damage or trouble.
Body	Use a blower to remove dust, dirt, or sand, then wipe gently with a soft, dry cloth. After using the camera at the beach or other sandy or dusty environment, wipe off any sand, dust, or salt with a dry cloth lightly dampened with fresh water and dry thoroughly. <b>Note that foreign matter inside the camera could cause damage not covered by the warranty.</b>

Do not use volatile organic solvents such as alcohol or thinner, chemical detergents, anticorrosive agents, or anti-fogging agents.

## Storage

Remove the battery if the camera will not be used for an extended period. Do not store the camera with naphtha or camphor moth balls, or in any of the following locations:

- Next to equipment that produces strong electromagnetic fields, such as televisions or radios
- Exposed to temperatures below –10°C (14°F) or above 50°C (122°F)
- Places that are poorly ventilated or subject to humidity 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.

Be sure to read and follow the warnings given in "The Battery" ( $\triangle$ 3) of "Caring for the Products" to store the battery.

## **Troubleshooting**

If the camera fails to function as expected, check the list of common problems below before consulting your retailer or Nikon-authorized service representative. Refer to the page numbers in the right-most column for more information.

• See "Error Messages" ( 107) for more information.

## Power, Display, Settings Issues

Problem	Cause/Solution	Ф
Camera turns off without warning.	Battery is exhausted. If no operations are performed for a while, camera has turned off automatically by auto off to save power. Inside of the camera has become hot. Leave the camera off until the inside of the camera has cooled. At low temperatures, the camera and the battery may not function normally.	24 25 - •
Monitor is blank.	Camera is off. Battery is exhausted. Standby mode for saving power: Press the power switch, shutter-release button or the ▶ button, or rotate the mode dial. Monitor is turned off. Press the □ button to turn it on. Camera and computer are connected via USB cable. Camera and TV are connected via A/V cable or HDMI cable. Interval timer shooting in progress.	25 24 25 15 91 91
Monitor is hard to see.	Ambient lighting too bright: Use viewfinder or move to darker location.     Adjust monitor brightness.     Monitor is dirty. Clean monitor.     Use monitor brightness boost.	16 16, 104 <b>3</b> :6 16
The viewfinder is hard to read.	Adjust diopter adjustment control.	16
Date and time of recording are not correct.	If the camera clock has not been set ("Date not set" indicator blinks during shooting), recording date and time is recorded as "01/01/11 00:00." Set the correct date and time using <b>Time zone and date</b> in the setup menu.  The camera clock is not as accurate as a normal clock, such as watches. Check camera clock regularly against more accurate timepieces and reset as required.	26, 104
No information displayed in monitor.	Shooting information and photo information may be hidden. Press the 🔲 button until shooting information or photo information is displayed.	15

#### Troubleshooting

Problem	Cause/Solution	THE CONTRACT OF THE CONTRACT O
<b>Print date</b> not available.	Time zone and date has not been set.	26, 104
Date not appearing on pictures even when <b>Print date</b> is enabled.	<ul> <li>A shooting mode that does not support print date is selected.</li> <li>Another function that is set now is restricting the print date.</li> <li>The date cannot be imprinted onto a movie.</li> </ul>	104 80 _
Camera settings reset.	Clock battery is exhausted; all settings were restored to their default values.	27
Reset file numbering cannot be done.	Reset file numbering cannot be applied when the folder number reaches 999 and there are images in the folder. Change the memory card, or format the internal memory/memory card. Reset file numbering cannot be set when the scene mode is set to Panorama assist, or when the shooting mode is P, S, A, M, U1, U2 or U3 and IntvI timer shooting is chosen for Continuous in the shooting menu.	104, ◆83
Monitor is turned off, and the power-on lamp flickers.	Battery temperature is high. Turn off camera, and allow battery to cool down before resuming use. After the lamp blinks for three minutes, the camera turns off automatically, but you can also press the power switch to turn it off manually.	25
Camera temperature rises.	When functions such as movie recording or sending images using an Eye-Fi card are used for a long time, or when the camera is used in a location with a high ambient temperature, the camera temperature may rise. This is not a malfunction.	99

## Electronically Controlled Cameras

In extremely rare instances, unusual characters may appear on the monitor and the camera may stop functioning. In most cases, this phenomenon is caused by a strong external static charge. Turn the camera off, remove and replace the battery, then turn the camera on again. Note that disconnecting the power source as described above may result in the loss of any data not recorded on the internal memory or memory card at the time the problem occurred. Data already recorded is not affected. In the event of continued malfunction, contact your retailer or Nikon-authorized service representative.



## **Shooting Issues**

Problem	Cause/Solution	m m
Cannot set to shooting mode.	Disconnect the HDMI cable or USB cable.	91
No picture taken when shutter- release button is pressed.	When camera is in playback mode, press the  or shutter-release button.     When menus are displayed, press the MENU button.     Battery is exhausted.     When the scene mode is Night portrait or Backlighting with HDR set to Off or Continuous in the shooting menu is set to Continuous flash, raise the flash.     When flash lamp blinks, flash is charging.     Group A has not been selected for group setting when shooting using wireless multiple flash-unit photography. Set the group setting of the master commander and remote flash unit to Group A.	34 13 24 41,44, 54,61 61 <b>◆</b> 102
Camera cannot focus.	Subject is too close to the camera. Try shooting with (macro close-up) in the focus mode, or Scene auto selector or Close-up scene mode. The intended subject is one with which autofocus does not perform well. Set AF assist in the setup menu to Auto. Subject not in focus area when shutter-release button pressed halfway. The focus mode is set to MF (manual focus). Turn camera off and then on again.	40, 42, 67 33 104 32, 54 67 25
Pictures are blurred.	Use flash. Use vibration reduction and motion detection. Use BSS (Best Shot Selector). Use a tripod to stabilize the camera (use with the self-timer for better results).	61 54 54 64
Streaks of light or partial discoloration are visible on the monitor.	Smear occurs when extremely bright light strikes the image sensor. When shooting with Continuous set to Multi-shot 16 and when recording movies, avoiding bright objects, such as the sun, reflections of the sun, and electric lights is recommended.	<b>Ö</b> -2
Bright specks appear in pictures shot using flash.	Flash is reflecting off particles in air. Set the flash to <b>③</b> (off).	62

## Troubleshooting

Problem	Cause/Solution	Ш
Flash does not fire.	<ul> <li>Flash is set to (off).</li> <li>A scene mode that cannot turn on flash is selected.</li> <li>The movie mode is selected.</li> <li>Another function that is set now is restricting the flash.</li> <li>Built-in flash does not fire when a Speedlight (external flash unit) (available separately) is used.</li> </ul>	62 61 98 80 \$\infty\$101
Zoom does not operate.	On is selected for Wide-angle converter in the shooting menu. When the lens ring is removed while the camera is on, the zoom is fixed in a wide-angle end. Turn the camera off, attach the lens ring, and then turn the camera on again. Remove the wide-angle converter, and attach the lens ring.	54, \$\infty\$54 \$\infty\$54
The digital zoom is not available.	Off is selected for Digital zoom in the setup menu. When Scene auto selector, Portrait, Night portrait, Backlighting with HDR set to On or Pet portrait is selected in scene mode, the digital zoom cannot be used. Other functions that restrict the use of digital zoom is set.	104 40, 41, 44, 45
<b>Image size</b> not available.	Another function that is set now is restricting <b>Image size</b> .	80
No sound when shutter is released.	Off is selected for Shutter sound under Sound settings in the setup menu. Sports, Museum, Backlighting with HDR set to On or Pet portrait is selected in scene mode. The movie mode is selected. Other functions that restrict the use of the shutter sound are set. Do not block the speaker.	104 41, 43, 44, 45 98 80 3
AF-assist illuminator does not light.	<b>Off</b> is selected for <b>AF assist</b> in the setup menu. Even when <b>Auto</b> is set, AF-assist illuminator may not light depending on the focus area position or scene mode.	104
Pictures appear smeared.	Lens is dirty. Clean lens.	<b>Ö</b> -6
Colors are unnatural.	White balance does not match light source.	72
Ring-shaped or rainbow-colored bands are seen on the screen or the shot image.	When the subject is backlit or when shooting with an extremely bright light source in the display, such as in sunlight, ring-shaped or rainbow-colored bands may appear on the image.  Change the position of the light source or remove it from the display, and try shooting again.	-

Problem	Cause/Solution	Φ
Randomly spaced bright pixels ("noise") appear in image.	As the subject is dark, shutter speed is too slow or ISO sensitivity is too high.  Use flash. Specify a lower ISO sensitivity setting. Apply Long exposure NR in the shooting menu to suit situations.	61 72 54
Pictures are too dark (underexposed).	<ul> <li>Flash is set to ③ (off).</li> <li>Flash window is blocked.</li> <li>Subject is beyond flash range.</li> <li>Adjust exposure compensation.</li> <li>Raise the ISO sensitivity.</li> <li>Subject is backlit. Raise the flash, and set the scene mode to Backlighting with HDR set to Off or set the flash mode to ⑤ (fill flash).</li> <li>On is selected for Built-in ND filter in the setup menu.</li> </ul>	62 30 61 71 72 44,61
Pictures are too bright (overexposed).	Adjust exposure compensation.     Use <b>Built-in ND filter</b> setting in the setup menu.	71 104
Areas not affected by red-eye are also corrected.	When $\clubsuit$ (auto with red-eye reduction) or "fill flash with red-eye reduction" of the <b>Night portrait</b> scene mode is applied during shooting, In-Camera Red-Eye Fix may, in very rare cases, be applied to areas not affected by red-eye. Set a flash mode other than $\clubsuit$ (auto with red-eye reduction), select a scene mode other than <b>Night portrait</b> , and resume shooting.	41,61
Skin softening results are not as expected.	Skin softening may not produce the desired results depending on shooting conditions.     For pictures with four or more faces, try using <b>Skin softening</b> in the playback menu.	86 89
Saving images takes time.	It may take more time to save images in the following situations.  • When the noise reduction function is in operation  • When flash is set to ★◎ (auto with red-eye reduction)  • When using Portrait or Night portrait scene mode while shooting  • When using smile timer while shooting  • When using Active D-Lighting while shooting  • When Image quality is set to NRW (RAW), NRW (RAW) + Fine, NRW (RAW) + Normal or NRW (RAW) + Basic	54 62 40, 41 65 54 75
Cannot set or use Continuous or Auto bracketing.	Another function that is set now is restricting the <b>Continuous</b> setting or <b>Auto bracketing</b> .	80
Cannot set COOLPIX Picture Control.	Another function that is set now is restricting COOLPIX Picture Control.	80



## **Playback Issues**

Problem	Cause/Solution	Ψ.
File cannot be played back.	<ul> <li>File was overwritten or renamed by computer or another make or model of camera.</li> <li>File cannot be played back during interval timer shooting.</li> <li>NRW (RAW) images or movies recorded with cameras other than COOLPIX P7100 cannot be played back.</li> </ul>	- 54 75, 98
Cannot zoom in on picture.	<ul> <li>Playback zoom cannot be used with movies, small pictures, or cropped copies of size 320 × 240 pixels or smaller.</li> <li>Playback zoom may not be available for pictures taken with cameras other than COOLPIX P7100.</li> </ul>	_
Cannot record or play back voice memo.	Voice memos cannot be attached to movies. Voice memos cannot be attached to pictures taken with cameras other than COOLPIX P7100, and voice memos recorded by other cameras cannot be played back.	102 89
Pictures and movies cannot be edited.	<ul> <li>Confirm the conditions that are required for editing pictures or movies.</li> <li>Pictures and movies taken with cameras other than COOLPIX P7100 cannot be edited.</li> </ul>	70, <b>~</b> 10
Pictures not displayed on television.	Video mode or HDMI is not correctly set in the TV settings setup menu. Cables are connected to both the HDMI mini connector and USB/audio video connector. Memory card contains no pictures. Replace memory card. Remove memory card to play back pictures from internal memory.	104 91 22
Nikon Transfer 2 does not start when camera is connected to a computer.	<ul> <li>Camera is off.</li> <li>Battery is exhausted.</li> <li>USB cable is not correctly connected.</li> <li>Camera is not recognized by the computer.</li> <li>Confirm that the operating system used is compatible with the camera.</li> <li>Computer is not set to launch Nikon Transfer 2 automatically. For more information on Nikon Transfer 2, refer to help information contained in ViewNX 2.</li> </ul>	25 24 91 - 92 95
Pictures to be printed are not displayed.	Memory card contains no pictures. Replace memory card.     Remove memory card to print pictures from internal memory.	22 23
Cannot select paper size with camera.	Paper size cannot be selected from the camera in the following situations, even for PictBridge compatible printers. Use the printer to select paper size.  The paper size selected using the camera is not compatible with the printer.  A printer that automatically sets the paper size is being used.	<b>6-0</b> 24, <b>6-0</b> 25

# **Specifications**

## Nikon COOLPIX P7100 Digital Camera

_		
Type		Compact digital camera
Effective pixels		10.1 million
Image sensor		1/1.7-in. type CCD; approx. 10.39 million total pixels
Le	ens	7.1× optical zoom, NIKKOR lens
	Focal length	6.0-42.6mm (angle of view equivalent to that of 28-200 mm lens in 35mm [135] format)
	f/-number	f/2.8-5.6
	Construction	11 elements in 9 groups (including 2 ED lens elements)
Digital zoom		Up to 4× (angle of view equivalent to that of approx. 800 mm lens in 35mm [135] format)
-	ibration reduction	Lens shift
Α	utofocus (AF)	Contrast-detect AF
	Focus range	• Approx. 50 cm (1 ft 8 in.) to ∞ ( <b>W</b> ), approx. 80 cm (2 ft 8 in.) to ∞ ( <b>T</b> )
	(from lens)	<ul> <li>Macro close-up mode: Approx. 2 cm (0.8 in.) (at a wide-angle position) to ∞</li> </ul>
	Focus-area selection	Face priority, auto (9-area automatic selection), center (wide, normal, spot), manual with 99 focus areas, subject tracking
V	iewfinder	Real-image optical viewfinder, with diopter adjustment function (–3 to +1 m <sup>-1</sup> )
	Frame coverage	Approx. 80% horizontal and 80% vertical (compared to actual picture)
N	lonitor	7.5 cm (3-in.), approx. 921k-dot, wide viewing angle TFT LCD monitor with anti-reflection coating and 5-level brightness adjustment, tiltable approx. 81° downward, approx. 105° upward
	Frame coverage (shooting mode)	Approx. 96% horizontal and 96% vertical (compared to actual picture)
	Frame coverage (playback mode)	Approx. 100% horizontal and 100% vertical (compared to actual picture)
St	torage	
	Media	Internal memory (approx. 94 MB) SD/SDHC/SDXC memory card
	File system	DCF, Exif 2.3, and DPOF compliant
		Still pictures: JPEG, NRW (RAW)
	File formats	RAW and JPEG can be recorded simultaneously
		Sound files (voice memo): WAV Movies: MOV (Video: H.264/MPEG-4 AVC, Audio: AAC stereo)

Image size	• 10 M	
(pixels)	• PC 1024×768 • VGA 640×480	
( /	• 3:2 <b>3648×2432</b> • 16:9 <b>3584×2016</b>	
	• 1:1 <b>2736×2736</b>	
ISO sensitivity (Standard output sensitivity)	<ul> <li>ISO 100, 200, 400, 800, 1600, 3200, Hi 1 (equivalent to 6400)</li> <li>Auto (auto gain from ISO 100 to 800)</li> <li>High ISO sensitivity auto (ISO 100 to 1600)</li> <li>Fixed range auto (ISO 100 to 200, 100 to 400)</li> <li>Low noise night mode (ISO 400 to 12800)</li> </ul>	
Exposure		
Metering	256-segment matrix, center-weighted, spot, spot AF area (with support for 99 focus areas)	
Exposure control	Programmed auto exposure with flexible program, shutter priority auto, aperture-priority auto, manual, exposure bracketing (Tv), exposure bracketing (Sv), motion detection, exposure compensation (–3.0 to +3.0 EV in steps of 1/3 EV)	
Shutter	Mechanical and charge-coupled electronic shutter	
Speed	<ul> <li>1/2000 - 8 s (P, S mode)</li> <li>1/4000 - 8 s (A mode)</li> <li>1/4000 - 60 s (M mode)</li> <li>4 s (Fireworks show scene mode)</li> <li>1/2000 - 2 s (in shooting modes other than the above)</li> </ul>	
Aperture	Electronically-controlled 6-blade iris diaphragm	
Range	10 steps of 1/3 EV ( <b>W</b> ) ( <b>A</b> , <b>M</b> mode)	
Self-timer	Durations of 2 or 10 seconds can be selected	
Built-in flash		
Range (approx.) (ISO sensitivity: Auto)	[W]: 0.3 to 9.0 m (1 ft to 29 ft) [T]: 0.3 to 4.5 m (1 ft to 14 ft)	
Flash control	TTL auto flash with monitor preflashes	
Accessory shoe	ISO 518 hot-shoe contact with sync and data contacts and safety lock	
Interface	Hi-Speed USB	
Data transfer protocol	MTP, PTP	
Video output	Can be selected from NTSC and PAL	
HDMI output	Can be selected from Auto, 480p, 720p, and 1080i	

I/O terminal	Audio/video output; digital I/O (USB); HDMI Mini Connector (Type C) (HDMI output), external microphone connector (stereo mini-pin jack (3.5 mm diameter), plug-in power type)
Supported languages	Arabic, Brazilian Portuguese, Chinese (Simplified and Traditional), Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hindi, Hungarian, Indonesian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Romanian, Russian, Spanish, Swedish, Thai, Turkish, Ukrainian, Vietnamese
Power sources	<ul> <li>One Rechargeable Li-ion Battery EN-EL14 (included)</li> <li>AC Adapter EH-5b (used in combination with the Power Connector EP-5A) (available separately)</li> </ul>
Battery life	Still pictures <sup>1</sup> : Approx. 350 shots
(EN-EL14)	Movies <sup>2</sup> : Approx. 2 h 55 min ( <b>HD 720p (1280×720)</b> )
Tripod socket	1/4 (ISO 1222)
Dimensions $(W \times H \times D)$	Approx. 116.3 $\times$ 76.9 $\times$ 48.0 mm (4.6 $\times$ 3.1 $\times$ 1.9 in.) (excluding projections)
Weight	Approx. 395 g (14 oz) (including battery and SD memory card)
Operating environment	
Temperature	0°C to 40°C (32°F to 104°F)
Humidity	85% and below (no condensation)

- Unless otherwise stated, all figures are for a camera with a fully-charged Rechargeable Li-ion Battery EN-EL14 operated at an ambient temperature of 25°C (77°F).
- Based on Camera and Imaging Products Association (CIPA) standards for measuring the life of camera batteries. Measured at 23 (±2)°C (73 (±4)°F); zoom adjusted with each shot, flash fired with every other shot, image quality set to **Normal**, image size set to **№ 3648×2736**. Battery life may vary depending on shooting interval and length of time menus and images are displayed.
- When recording a single movie, the maximum recording time is 29 minutes even when there is enough free space on the memory card.

#### **Rechargeable Li-ion Battery EN-EL14**

Туре	Rechargeable lithium-ion battery	
Rated capacity	DC 7.4 V, 1030 mAh	
Operating temperature	0°C to 40°C (32°F to 104°F)	
Dimensions $(W \times H \times D)$	Approx. $38 \times 53 \times 14$ mm (1.5 $\times$ 2.1 $\times$ 0.6 in.) (excluding projections)	
Weight	Approx. 48 g (1.7 oz) (excluding terminal cover)	

### **Battery Charger MH-24**

Rated input	AC 100 to 240 V, 50/60 Hz, 0.2 A max.	
Rated output	DC 8.4 V, 0.9 A	
Supported rechargeable battery	Rechargeable Li-ion Battery EN-EL14	
Charging time	Approx. 1 hour and 30 minutes when no charge remains	
Operating temperature	0°C to 40°C (32°F to 104°F)	
Dimensions $(W \times H \times D)$	Approx. $70 \times 26 \times 97$ mm (2.8 × 1.0 × 3.8 in.) For Argentina: Approx. $70 \times 68 \times 104$ mm (2.8 × 2.7 × 4.1 in.)	
Weight	Approx. 89 g (3.1 oz), excluding plug adapter For Argentina: Approx. 125 g (4.5 oz)	

## **Specifications**

- Nikon will not be held liable for any errors this manual may contain.
- The appearance of this product and its specifications are subject to change without notice.

## **Supported Standards**

- **DCF:** Design Rule for Camera File System is a standard widely used in the digital camera industry to ensure compatibility among different makes of camera.
- **DPOF:** Digital Print Order Format is an industry-wide standard that allows pictures to be printed at a digital photo lab or with a household printer from print orders stored on the memory card.
- Exif version 2.3: This camera supports Exif (Exchangeable Image File Format
  for Digital Still Cameras) version 2.3, a standard that allows information stored
  with photographs to be used for optimal color reproduction when images are
  output from Exif-compliant printers.
  - See the instruction manual of the printer for further details.
- **PictBridge:** A standard developed cooperatively by the digital camera and printer industries, allowing photographs to be output directly to a printer without connecting the camera to a computer.



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