

DIGITAL CAMERA

COOLPIX S6400 Reference Manual







Highlight Features of the COOLPIX S6400

Simple touch operations that let you edit images when shooting

Create images with effects in three easy steps, simply by shooting, selecting, and saving. 30 effects are available. Just as with a smartphone application, you can preview the results of each effect on the image and choose your favorite one to suit the scene or your mood. You can also apply effects to images later by tapping **4** during playback (**1**33).

Autofocus function that automatically determines the subject

🖪 Target finding AF..... 🏹 74

The **Target finding AF** function* allows the camera to determine the main subject of the image, such as a person, flower, or small object. The camera automatically focuses on the subject, letting you freely compose the image without worrying about the focus. In addition, the camera automatically adjusts the focus area to match the size of the subject, ensuring a sharp focus on the intended subject.

The camera is also equipped with various other functions that make it easy to focus, such as **Touch shutter** (CC 69), which lets you focus and release the shutter by tapping the intended subject in the monitor after you compose the picture.

* Set AF area mode (CC)70) in the shooting menu to Target finding AF before shooting.

Parts of the Camera

The Basics of Shooting and Playback

Shooting Features

Playback Features

Recording and Playing Back Movies

General Camera Setup

Reference Section

Technical Notes and Index

Read This First

Thank you for purchasing the Nikon COOLPIX S6400 digital camera. Before using the camera, please read the information in "For Your Safety" (
will-x) 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.



Reference Manual CD

* 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 (Q16).

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" (@13).

To learn about the parts of the camera and information that is displayed in the monitor, see "Parts of the Camera" (\square 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:

Symbol	Description
	This icon indicates cautions and information that should be read before using the camera.
Ø	This icon indicates notes and information that should be read before using the camera.
∏/ ∞ /ö	These icons indicate other pages containing relevant information;

- SD and SDHC/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 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, Charging AC adapters, 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 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.

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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 Manuals

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

Notice Concerning Prohibition of Copying or Reproduction

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

Items prohibited by law from being copied or reproduced

Do not copy or reproduce paper money, coins, securities, government bonds or local government bonds, even if such copies or reproductions are stamped "Sample." The copying or reproduction of paper money, coins, or securities which are circulated in a foreign country is prohibited. Unless the prior permission of the government was obtained, the copying or reproduction of unused postage stamps or post cards issued by the government is prohibited.

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

Cautions on certain copies and reproductions

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

• Comply with copyright notices

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

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.

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



This icon marks warnings, information that should be read before using 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 Charging AC Adapter, unplug the Charging AC Adapter 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 Nikonauthorized service representative for inspection.

Do not disassemble

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

Do not use the camera or Charging AC Adapter in the presence of flammable gas

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

\Lambda 🛛 Handle the camera strap with care

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

🔺 Keep out of reach of children

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

$\mathbf{\Lambda}$

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 lowtemperature 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 Charging AC Adapter/AC adapter, be sure it is unplugged.
- Use only a Rechargeable Li-ion Battery EN-EL19 (included). Charge the battery by using a camera that supports battery charging or by using a Battery Charger MH-66 (available separately). To charge the battery with the camera, use either Charging AC Adapter EH-69P (included) or the Charge by computer function.
- 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.

- Put the battery in the battery case before transporting it. 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.

▲ Observe the following precautions when handling the Charging AC Adapter

- 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 Charging AC Adapter 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 Charging AC Adapter 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 DC-to-AC inverters. Failure to observe this precaution could damage the product or cause overheating or fire.

\Lambda 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.

\Lambda 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.

\Lambda 3D Images

Do not continuously view 3D images recorded with this device for extended periods, whether on a television, monitor, or other display.

In the case of children whose visual systems are still maturing, consult a pediatrician or ophthalmologist prior to use and follow their instructions.

Prolonged viewing of 3D images may cause eye strain, nausea, or discomfort. Cease use should any of these symptoms occur and consult a physician if necessary.

Notices

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.

Table of Contents

i
i
i
ii
١
ii
ii
x

Parts of the Camera	. 1
The Camera Body	2
Attaching the Camera Strap	
Operating the Touch Panel	4
Using the Stylus	
Indicators of the Monitor/Touch Panel	6
Shooting Mode	6
	s
Playback Mode	C
Playback Mode Using Menus	

The Basics of Shooting and Playback

	13
Preparation 1 Insert the Battery	14
Preparation 2 Charge the Battery	16
Preparation 3 Insert a Memory Card	18
Internal Memory and Memory Cards	19
Preparation 4 Setting the Display Language	je,
Date, and Time	20
Step 1 Turn the Camera On	24
Turning the Camera On and Off	25

Step 2 Select a Shooting Mode	26
Available Shooting Modes	27
Step 3 Frame a Picture	28
Using the Zoom	29
Step 4 Focus and Shoot	30
The Shutter-release Button	31
Step 5 Play Back Images	32
Step 6 Delete Unwanted Images	34
Shooting Features	37
🗖 (Auto) Mode	38
Using Quick Effects	39
Scene Mode (Shooting Suited to Scenes)	
	40
To View a Description (Help Display) of	
Each Scene	40
Characteristics of Each Scene	42
Special Effects Mode (Applying Effects	
When Shooting)	52
Smart Portrait Mode (Capturing Images o	f
Smiling Faces)	54
Using Skin Softening	56
Basic Shooting Settings	57
Available Features	57
Using the Flash (Flash Modes)	58
Using the Self-timer	61
Using Macro Mode	63
Adjusting Brightness (Exposure	
Compensation)	65
Default Settings	66

Introduction

Features That Can Be Set with 🔤 (Shooti Menu)	
Options Available in the Shooting Menu	
Features That Cannot Be Used	69
	71
Simultaneously	
Focusing	
Using Target Finding AF	
Using Face Detection	
Subjects Not Suitable for Autofocus	
Focus Lock	78
Playback Features	79
Playback Zoom	80
Thumbnail Display	81
Selecting Certain Types of Images for	
Playback	82
Available Playback Modes	82
Switching Between Playback Modes	
Features That Can Be Set with 🔤 (Playba	
Menu)	
Connecting the Camera to a TV, Compute	
or Printer	86
Using ViewNX 2	88
Installing ViewNX 2	88
Transferring Images to the Computer	91
Viewing Images	
Recording and Playing Back Movies	95
Recording Movies	96
Even with the Court De Court who we date to	

Features That Can Be Set with 🏧 (Movie	
Menu)	99

Playing Back Movies	100
General Camera Setup	103
Features That Can Be Set with 🔤 (Setu Menu)	
Reference Section	6-0 1
Using the Draw Option	. 🍋 2
Using Easy Panorama (Shooting and	
Playback)	. 🍋 3
Shooting with Easy Panorama	. 🍋 3
Viewing Images Captured with Easy	
Panorama	
Favorite Pictures Mode	
Adding Images to Albums	
Playing Back Images in Albums	
Removing Images from Albums	🍽 9
Changing the Favorites Album Icon	
Auto Sort Mode	
Auto Sort Mode Categories	
Viewing and Deleting Images Capture	
Continuously (Sequence)	
Viewing Images in a Sequence	
Deleting Images in a Sequence	
Editing Still Images	
Editing Features	
🚺 Quick Effects	
Paint	
🗳 Quick Retouch: Enhancing Contra	
Saturation	

🖪 D-Lighting: Enhancing Brightne		
Contrast		Т
🛨 Stretch: Stretching Images		
Perspective Control: Adjusting a		
of Perspective		
🕼 Glamour Retouch: Softening Ski		
Making Faces Looking Smaller with	0	
Eyes		
Small Picture: Reducing the Size		
Image		
Crop: Creating a Cropped Copy.		_
Connecting the Camera to a TV (View		T
Images on a TV)		
Connecting the Camera to a Printer Print)		
Connecting the Camera to a Printe		
		т
Printing Individual Images		
Printing Multiple Images		
Editing Movies		
The Shooting Menu (for 🗖 (Auto) M		
Image Mode (Image Size and Que Size and Size and Que S		
• • • • • • • • • • • • • • • • • • • •		
☞/��/鯷 Touch Shooting	🗢 51	
ISO ISO Sensitivity	🔶 58	
Continuous Shooting	🔶 59	
₩B White Balance (Adjusting Hue).	🏍62	
🗹 Quick Effects	🔶 65	
Ħ AF Area Mode	🏍 66	
The Smart Portrait Menu	🏍 67	
😰 Skin Softening	🏍 67	
Rlink Proof	AA68	

🖻 Smile Timer	66 8
The Playback Menu	6 69
Slide Show	66 9
On Protect	6-6 71
🖪 Print Order (Creating a DPOF Prin	t
Order)	6 73
街 Rotate Image	6-6 77
🖢 Voice Memo	6-6 78
🛱 Copy (Copy Between Internal Me	mory
and Memory Card)	6-6 80
🗳 Choose Key Picture	6-6 82
The Movie Menu	ð ð 83
🖷 Movie Options	6-6 83
WHS Open with HS Footage	6-6 87
🐙 Movie AF mode	6-6 88
💐 Wind Noise Reduction	6-6 88
The Setup Menu	6 89
Welcome Screen	6-6 89
Time Zone and Date	6-0 90
Monitor Settings	6-6 93
Print Date (Imprinting Date and Time	e)
	6-0 95
Vibration Reduction	6-0 97
Motion Detection	6-6 98
AF Assist	
Digital Zoom	0 100
Sound Settings	
Auto Off	
Format Memory/Format Card	
Language	0 104
TV Settings	
Charge by Computer	
Blink Warning	5 108

Sequence Display Options	🍋 110
Eye-Fi Upload	🍋 111
Reset All	🍋 112
Firmware Version	🏍116
File and Folder Names	🏍 117
Optional Accessories	🍋 119
Error Messages	🍋 120
Technical Notes and Index Maximizing Camera Life and Perfor	-
	ດີ. າ
The Camera	
The Camera	0 -2
	Ö -2 Ö -3
The Camera The Battery	
The Camera The Battery Charging AC Adapter	
The Camera The Battery Charging AC Adapter Memory Cards	
The Camera The Battery Charging AC Adapter Memory Cards Cleaning and Storage	 <i>Ď</i>[−]2 <i>Ď</i>[−]3 <i>Ď</i>[−]4 <i>Ď</i>[−]6
The Camera The Battery Charging AC Adapter Memory Cards Cleaning and Storage Cleaning	 <i>μ</i>²2 <i>μ</i>³3 <i>μ</i>⁴ <i>μ</i>⁵5 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6 <i>μ</i>⁶6
The Camera The Battery Charging AC Adapter Memory Cards Cleaning and Storage Cleaning Storage	 ^j ^j

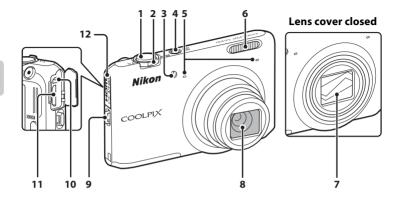
Introduction

Parts of the Camera

This chapter describes the parts of the camera and explains information that is displayed in the monitor.

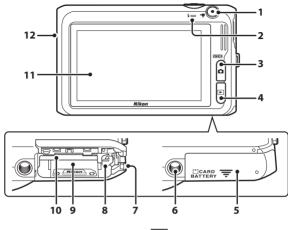
The Camera Body	2
Attaching the Camera Strap	
Operating the Touch Panel	4
Using the Stylus	
	-
Indicators of the Monitor/Touch Panel	6
Indicators of the Monitor/ Louch Panel Shooting Mode	
	6

The Camera Body



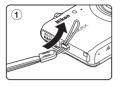
1	Shutter-release button	30
2	Zoom control W: wide-angle T: telephoto tumbnail playback Q: playback zoom	29 29 81
3	Self-timer lamp AF-assist illuminator	
4	Power switch/power-on lamp	24
5	Microphone (stereo)	85, 96

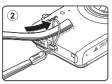
6	Flash
7	Lens cover
8	Lens
9	Eyelet for camera strap4
10	USB/audio/video output connector
10	
11	HDMI mini connector (Type C)86
12	Connector cover

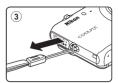


7	Power connector cover (for connection with optional AC Adapter)
8	Battery latch14
9	Battery chamber14
10	Memory card slot
11	Monitor/touch panel6
12	Speaker

Attaching the Camera Strap







Operating the Touch Panel

The monitor on the COOLPIX S6400 is a touch panel display. Use a finger or the included stylus to operate the touch panel.

Tapping

Tap the touch panel.

Use this operation to:

- Select icons.
- Select images in thumbnail playback mode (Q81).
- Perform touch shutter, touch AF/AE, or subject tracking operations (¹)69).



Dragging

Drag your finger across the touch panel and remove it from the touch panel.

Use this operation to:

- Scroll through images in full-frame playback mode (CC 32).
- Move the visible portion of an image enlarged with playback zoom (
- Use sliders to adjust exposure compensation (CC65) or other settings.



5

Parts of the Camera

Using the Stylus

Use the stylus for operations, such as when using the draw option (\square 47) or the paint option (\square 84), that require more precision than using a finger.

Attaching the Stylus

Attach the stylus to the strap as shown.

Notes About the Touch Panel

- Do not press on the touch panel with pointed objects other than the included stylus.
- Do not apply unnecessary pressure to the touch panel.

Notes About Tapping/Dragging

- The camera may not respond if your finger is left in one place too long.
- The camera may not respond if the followings are performed:
 - Bounce your finger off the display.
 - Drag your finger over too short a distance.
 - Stroke the display too lightly.
 - Move your finaer too auickly.
- The camera may not respond if something else is touching the touch panel when your finger touches it

Notes About the Touch Panel

- Keep the stylus out of reach of small children.
- Do not carry the camera by the stylus. The stylus may slip off the strap and the camera may fall.





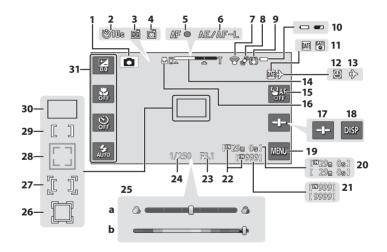




Shooting Mode

The information that is displayed in the monitor changes depending on the camera's settings and state of use.

By default, the information is displayed when the camera is turned on and when the camera is being operated, and some of the information is hidden after a few seconds (when **Photo info** is set to **Auto info** in **Monitor settings** (\Box 104)). To redisplay the information, tap \blacksquare .



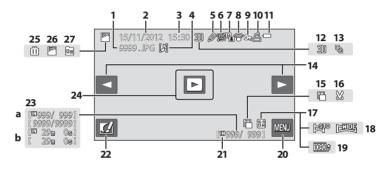
1	Shooting mode
2	Self-timer61
3	Smile timer
4	Pet portrait auto release
5	Focus indicator
6	AE/AF-L indicator
7	Eye-Fi communication indicator 105
8	Motion detection icon 104
9	Vibration reduction icon
10	Battery level indicator
11	Print date 104
12	"Date not set" indicator
12	
13	Travel destination icon22, 104
14	Zoom indicator 29, 63
15	Touch AF/AE cancellation control
15	69, 6 57
16	Macro mode63
17	Slider display control41, 53
18	Information redisplay control

19	Menu display control 10, 68, 99, 103
20	Movie recording time remaining96
21	Number of exposures remaining
	(still images)24
22	Internal memory indicator
23	Aperture value
24	Shutter speed
25	a Scene effect adjustment slider41 b Special effects adjustment slider53
26	Focus area
	(subject tracking)
27	Focus area (touch AF/AE)
28	Focus area (face detection,
	pet detection)
29	Focus area (center)
30	Focus area (auto, target finding AF)
31	Basic shooting settings control

Playback Mode

The information that is displayed in the monitor varies depending on the image played back and state of use.

By default, the information is displayed when the camera is turned on and when the camera is being operated, and some of the information is hidden after a few seconds (when **Photo info** is set to **Auto info** in **Monitor settings** (\square 104)). To redisplay the information, tap the monitor.



1	File number and type 🖚 117
2	Date of recording
3	Time of recording
4	Voice memo icon85, 🏞 78
5	Paint icon
6	 Image: Blamour retouch (all) icon84, ↔29 Blamour retouch (skin softening) icon
7	
8	Eye-Fi communication indicator 105
9	Protect icon
10	Print order icon
11	Battery level indicator
12	3D image icon 50
13	Sequence display (when Individual pictures is selected)
14	Display previous/next image

15	Small picture icon
16	Crop icon
17	Image mode ¹ 69, 🏞 49
18	Easy panorama48
19	Movie options ¹ 99
20	Menu display control 10, 84, 103
21	Internal memory indicator
22	Quick effects control33
23	a Current image number/ total number of images32b Movie length100
24	Sequence playback control
	Movie playback control
25	Album icon in favorite pictures mode ²
26	Category icon in auto sort mode ²
27	List by date icon

- ¹ Icons displayed vary depending on the setting used for shooting.
- ² The icon for the selected album or category in auto sort mode currently selected in playback mode is displayed.

Using Menus

The menus listed below allow you to change various settings.

- Shooting menu (CC68): Use to change the settings of each shooting mode or movie settings.
- Playback menu (🛄 84): Use to delete or edit images.
- Setup menu (
 104): Use to change general camera settings.

1 Tap we to display the menu screen.

- The shooting menu (¹26) is displayed in shooting mode.
- The playback menu (¹32) is displayed in playback mode.



2 Tap **a** or **b** to scroll through the options on the screen.

- Scroll through the options to display the desired options.
- Scroll to the bottom of the shooting menu to display the movie menu options (1999).



3 Tap a menu option.

• The setting screen is displayed.



4 Tap a setting option to apply the setting.

- The operations vary depending on the menu option.
- Tap 🔁 to return to the previous screen.
- When you finish changing the setting, the monitor display returns to the screen shown in step 3.

Tap 🛿 to exit the menu.

• If **OK** is displayed on the setting screen, tap **OK** after tapping the setting option.

	9	Image mod	e 📼	\otimes
	16 ≛	16 м	8 м	
1	4608×3456★	4608×3456	3264×2448	
	4м	2 м	VGA	
l	2272×1704	1600×1200	640×480	

9	White balan	ce 🧉	\times
AUTO	PRE Preset,	, , ,	
Auto -255-	manual \$10	Daylight	
Incandes.	Fluorescent	Cloudy	ОК

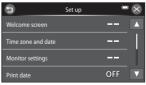
Displaying the Setup Menu

Scroll to the bottom of the shooting or playback menu and tap \clubsuit Set up.

For information about the available setting options, see "Features That Can Be Set with a (Setup Menu)" (2011).







Setup menu

The Basics of Shooting and Playback

Preparation

Preparation 1 Insert the Battery	14
Preparation 2 Charge the Battery	.16
Preparation 3 Insert a Memory Card	.18
Preparation 4 Setting the Display Language, Date, and Time	20

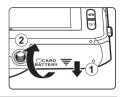
Shooting

Step 1 Turn the Camera On	24
Step 2 Select a Shooting Mode	
Step 3 Frame a Picture	
Step 4 Focus and Shoot	

Playback

Step 5 Play Back Images	32
Step 6 Delete Unwanted Images	

1 Open the battery-chamber/memory card slot cover.

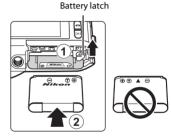


2 Insert the included EN-EL19 battery (rechargeable Li-ion battery).

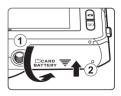
- Use the battery to push the orange battery latch in the direction indicated by the arrow ((1)), and fully insert the battery (2)).
- When the battery is inserted correctly, the battery latch will lock the battery in place.

Inserting the Battery Correctly Inserting the battery upside down or backwards could damage the camera. Be

sure to check that the battery is in the correct orientation.



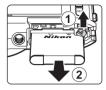
- **3** Close the battery-chamber/memory card slot cover.
 - Charge the battery before the first use or when the battery is running low. See "Preparation 2 Charge the Battery" (CD 16) for more information.



Removing the Battery

Turn the camera off and be sure that the power-on lamp and the monitor have turned off before opening the battery-chamber/ memory card slot cover.

To eject the battery, open the battery-chamber/memory card slot cover and slide the orange battery latch up in the direction indicated by the arrow (1). The battery can then be removed by hand (2). Do not pull it at an angle.



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.

Notes About the Battery

Be sure to read and follow the warnings for the battery on page ix and in "The Battery" (\dot{c} :3) before use.

Preparation 2 Charge the Battery

1 Prepare the included Charging AC Adapter EH-69P.

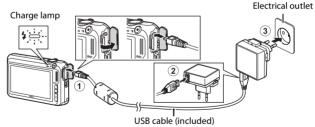
If a plug adapter* is included with your camera, attach the plug adapter to the plug on the Charging AC Adapter. Push the plug adapter firmly until it is securely held in place. Once the two are connected, attempting to forcibly remove the plug adapter could damage the product.

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

The Charging AC Adapter comes with the plug adapter attached in Argentina and Korea.

2 Make sure the battery is installed in the camera, and then connect the camera to the Charging AC Adapter in order of (1) to (3).

- Keep the camera turned off.
- Be sure that plugs are properly oriented. Do not attempt to insert plugs at an angle, and do not use force when connecting or disconnecting the plugs.



- The charge lamp slowly flashes green to indicate that the battery is charging.
- About 3 hours are required to charge a fully exhausted battery.
- When the battery has been completely charged, the charge lamp turns off.
- See "The Charge Lamp" (🛄 17) for more information.





3 Disconnect the Charging AC Adapter from the electrical outlet and then disconnect the USB cable.

The Charge Lamp

Status	Description
Flashes slowly (green)	The battery is charging.
Off	The battery is not charging. When charging is complete, the charge lamp stops flashing green and turns off.
Flashes quickly (green)	 The ambient temperature is not suited to charging. Charge the battery indoors with an ambient temperature of 5°C to 35°C (41°F to 95°F). The USB cable or Charging AC Adapter is not properly connected, or there is a problem with the battery. Disconnect the USB cable or unplug the Charging AC Adapter and correctly connect it again, or change the battery.

Notes About the Charging AC Adapter

Be sure to read and follow the warnings for the Charging AC Adapter EH-69P on page ix and in "Charging AC Adapter" (\overleftarrow{c} 4) before use.

Charging Using a Computer or Battery Charger

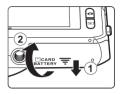
- You can also charge the Rechargeable Li-ion Battery EN-EL19 by connecting the camera to a computer (□186, ↔106).
- You can use the Battery Charger MH-66 (available separately; 🖚 119) to charge the EN-EL19 without using the camera.

Ø Operating the Camera During Charging

If you press the power switch while using the Charging AC Adapter to charge the battery in the camera, the camera turns on and you can play back images (except when the camera is connected via HDMI). Shooting is not possible.

Preparation 3 Insert a Memory Card

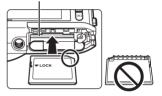
- **1** Be sure that the power-on lamp and the monitor are off and open the battery-chamber/memory card slot cover.
 - Be sure to turn off the camera before opening the cover.



2 Insert the memory card.

• Slide the memory card in until it clicks into place.

Inserting the Memory Card Correctly Inserting the memory card upside down or backwards could damage the camera and the memory card. Be sure to check that the memory card is in the correct orientation. Memory card slot



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



Formatting Memory Cards

- 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. If there is data saved on the memory card that you wish to keep, copy that data to a computer before formatting.
- To format a memory card, insert the card into the camera and select Format card in the setup menu (
 104).

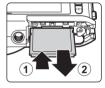
Notes About Memory Cards

See "Memory Cards" (\dot{C} 5) and the documentation included with your memory card for more information.

Removing Memory Cards

Turn the camera off and be sure that the power-on lamp and the monitor have turned off before opening the battery-chamber/ memory card slot cover.

Gently push the memory card into the camera (1) to partially eject the card, and then remove the card (2). Do not pull it at an angle.



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

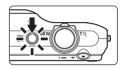
Camera data, including images and movies, can be saved in either the camera's internal memory (approximately 78 MB) or on a memory card. To use the camera's internal memory for shooting or playback, first remove the memory card.

Preparation 4 Setting the Display Language, Date, and Time

When the camera is turned on for the first time, the language-selection screen and the date and time setting screen for the camera clock are displayed.

Press the power switch to turn on the camera.

• When the camera is turned on, the power-on lamp (green) will light and then the monitor will turn on (the power-on lamp turns off when the monitor turns on).



2 Tap the desired language.

 For more information about operating the touch panel, see "Operating the Touch Panel" (¹)4).

Language	$^{\circ}$
Čeština	
Dansk	•
Deutsch	
English	

3 Tap Yes.



1

4 Tap ≤ or ≥ to select your home time zone and tap 🕅.

- To enable daylight saving time, tap . When the daylight saving time function is enabled, is displayed at the top of the monitor. To turn off the daylight saving time option, tap again.
- **5** Tap the desired date format.





6 Edit the date and time and tap **OK**.

Tap Yes.

• Tap the desired field and tap ▲ or ▼ to edit the value.



• When settings are finished, the lens extends and the camera switches to shooting mode.



🖉 Changing the Language Setting and the Date and Time Setting

- You can change these settings using the Language and Time zone and date settings in the Ψ setup menu (Q104).
- You can enable or disable daylight saving time by going to the
 [↑] setup menu and selecting Time zone and date followed by Time zone and then
 ⁽¹⁾
 ⁽²⁾
 ⁽²⁾
- If you exit without setting the date and time, will flash when the shooting screen is displayed. Use the **Time zone and date** setting in the setup menu to set the date and time (2104).

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 when the main battery is inserted into the camera or when the camera is connected to an optional AC adapter, and can provide several days of backup power after about ten hours of charging.
- 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 3 (220) of "Preparation 4 Setting the Display Language, Date, and Time" for more information.

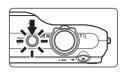
Imprinting the Shooting Date on Printed Images

- Set the date and time before shooting.
- You can permanently imprint the shooting date on images as they are captured by setting **Print** date in the setup menu (D104).
- If you want the shooting date to be printed without using the **Print date** setting, print using the ViewNX 2 software (**D**88).

Step 1 Turn the Camera On

1 Press the power switch to turn on the camera.

• The lens extends and the monitor turns on.



2 Check the battery level indicator and the number of exposures remaining. Battery level indicator

Display	Description	
	The battery level is high.	
	The battery level is low. Prepare to charge or replace the battery.	
Battery exhausted.	The camera cannot take pictures. Recharge or replace with a fully charged battery.	

Battery level indicator



Number of exposures remaining

Number of Exposures Remaining

The number of pictures that can be taken is displayed.

- In is displayed when no memory card is inserted in the camera, and images will be saved in the internal memory (approximately 78 MB).
- The number of exposures remaining depends on the amount of available memory in the internal memory or memory card, and also varies depending on the image quality and image size (determined by the image mode setting; www.setting; w

Turning the Camera On and Off

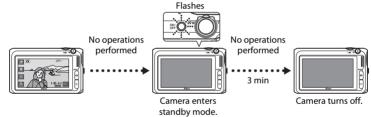
- When the camera is turned on, the power-on lamp (green) will light and then the monitor will turn on (the power-on lamp turns off when the monitor turns on).
- To turn off the camera, press the power switch. When the camera turns off, the power-on lamp and the display turn off.
- To turn the camera on in playback mode, press and hold the ▶ (playback) button. The lens will not extend.

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 flash. If no operations are performed for approximately another three minutes, the camera will turn off automatically.

While the camera is in standby mode, the monitor turns back on if you perform any of the following operations:

→ Press the power switch, shutter-release button, ((shooting mode) button, ((playback) button, or (), (movie-record) button



- The time that elapses before the camera enters standby mode can be changed using the **Auto off** setting in the setup menu (D104).
- 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-62G, the camera enters standby mode after 30 minutes (fixed).

Notes About an AC Power Source

- You can use the AC Adapter EH-62G (available separately; +19) to supply power to the camera from an electrical outlet for taking pictures and playing back images.
- Do not, under any circumstances, use another make or model of AC adapter other than the EH-62G. Failure to observe this precaution could result in overheating or in damage to the camera.

Step 2 Select a Shooting Mode

1 Press the 🖸 button.

 The shooting mode selection menu, which allows you to select the desired shooting mode, is displayed.



2 Tap the desired shooting mode icon.

- 🖸 (auto) mode is used in this example.
- The shooting mode setting is saved even after the camera is turned off.



Available Shooting Modes

140

D52

C 54

M38

Camera settings are optimized according to the scene that you select. When using scene auto selector (), the camera automatically selects the optimum scene mode when you frame a picture, making it even easier to take pictures using settings that suit the scene.

Used for general shooting. Settings can be adjusted in the shooting menu (CC69) to suit

the shooting conditions and the type of shot you want to capture.

 To select a scene, tap the icon of the desired scene mode in the shooting mode selection menu

C Special effects

Scene

Effects can be applied to images during shooting. 11 different effects are available.

 To select an effect, tap the icon of the desired effect in the shooting mode selection menu.

When the camera detects a smiling face, you can take a picture automatically without pressing the shutter-release button (smile timer). You can also use the skin softening option to smooth the skin tones of human faces.

Ô

SCENE

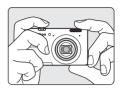


Changing the Shooting Settings

- See "Using the Flash (Flash Modes)" (¹⁵⁸) for more information.
- See "Using the Self-timer" (CC61) for more information.
- See "Using Macro Mode" (263) for more information.
- See "Adjusting Brightness (Exposure Compensation)" (¹G5) for more information.
- See "Features That Can Be Set with 🔤 (Shooting Menu)" (🛄68) for more information.

1 Hold the camera steady.

- Keep fingers, hair, the camera strap, and other objects away from the lens, flash, AF assist-illuminator, microphone, and speaker.
- When taking pictures in portrait ("tall") orientation, turn the camera so that the flash is above the lens.





2 Frame the picture.

• The focus area is displayed in the center of the frame. Position the main subject near the center of the frame.



🖉 When Using a Tripod

- We recommend using a tripod to stabilize the camera in the following situations.
 - When shooting in dim lighting or when the flash mode (\square 59) is set to 3 (off)
 - When using the telephoto setting
- Set Vibration reduction to Off in the setup menu (C 104) when using a tripod to stabilize the camera during shooting.

Using the Zoom

Use the zoom control to activate optical zoom.

- To zoom in closer to the subject, rotate the zoom control to T (telephoto).
- To zoom out and view a larger area, rotate the zoom control to W (wide-angle).

When you turn the camera on, the zoom moves to the maximum wide-angle position.

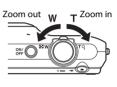
- A zoom indicator is displayed at the top of the monitor when the zoom control is rotated.
- Digital zoom, which allows you to further magnify the subject up to approximately 4x the maximum optical zoom ratio, can be activated by rotating and holding the zoom control to **T** when the camera is zoomed in to the maximum optical zoom position.

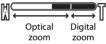
Digital Zoom and Interpolation

While using digital zoom, the image quality decreases due to interpolation when the zoom is increased beyond the \square position. Since the position of \square moves to the right as the size of an image decreases, selecting a smaller image size in the image mode setting ($\square 69$) allows you to zoom in further without decreasing the image quality due to interpolation.

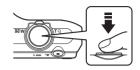


Small image size





- 1 Press the shutter-release button halfway (D31).
 - When the subject is in focus, the focus area indicator in the center of the frame glows green. You can change the focus mode setting to Target finding AF (¹/₂74), which allows the camera to detect the main subject and focuses on that subject.
 - When you are using digital zoom, the camera focuses on the subject in the center of the frame and the focus area is not displayed. When the camera has focused, the focus indicator (\(\Gamebb{G})\)6) glows green.





• While the shutter-release button is pressed halfway, the focus area or focus indicator may

flash red. This indicates that the camera is unable to focus. Modify the composition and press the shutter-release button halfway again.

2 Press the shutter-release button the rest of the way down (D31).

• The shutter is released and the image will be saved to the memory card or internal memory.



3 To apply an effect to the captured image, tap **OK**.

- The screen for selecting an effect is displayed. See "Using Quick Effects" (239) for more information.
- When you tap Cancel or when no operations are performed for about five seconds, the monitor display returns to the shooting screen.
- To not display the screen shown on the right, set **Quick effects** to **Off** (269).



The Shutter-release Button

Press halfway

Press all the

wav

To set focus and exposure (shutter speed and aperture value), press the shutter-release button lightly until you feel a slight resistance. Focus and exposure remain locked while the shutterrelease button is pressed halfway.

While pressing the shutter-release button halfway, press the shutter-release button the rest of the way down to release the shutter and take a picture. Do not use force when pressing the shutter-release button, as this

Do not use force when pressing the shutter-release button, as this may result in camera shake and blurred images. Press the button gently.

Notes About Recording Images and Saving Movies

The indicator showing the number of exposures remaining or the indicator showing the maximum movie length flashes while images are being recorded or while a movie is being saved. **Do not open the battery-chamber/memory card slot cover or remove the battery or memory card** while an indicator is flashing. Doing this could result in loss of data, or in damage to the camera or the memory card.

V Notes About Focusing

See "Subjects Not Suitable for Autofocus" (CC77) for more information.

Touch Shutter

By default, the shutter can be released by simply tapping a subject in the monitor without pressing the shutter-release button. This setting can be changed to the **Touch AF/AE** option (\square 69), which allows you to tap a subject on the monitor to set the focus and exposure on it, instead of releasing the shutter.

AF-assist Illuminator and Flash

If the subject is dimly lit, the AF-assist illuminator (\square 104) may light when the shutter-release button is pressed halfway, and the flash (\square 58) may fire when the shutter-release button is pressed all the way down.

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.

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 full-frame.



2 Drag the current image to display the previous or next image.



To display the previous image, drag the image to the right or tap



To display the next image, drag the image to the left or tap **D**.

- Tap and hold or to scroll backward or forward through the images.
- Remove the memory card from the camera to play back images saved in the camera's internal memory. IN is displayed near the current image number/total number of images display.
- To return to shooting mode, press the button, the shutter-release button, or the movie-record) button.



Current image number/total number of images

Viewing Images

- Images may be displayed briefly at low resolution immediately after switching to the next or previous image.
- When images in which the face of a person (¹¹⁷⁵) or a pet (¹¹⁴⁹) was detected at the time of shooting are displayed in full-frame playback mode, depending upon the orientation of the detected face, the images may be automatically rotated for playback display (except images captured in a series).
- You can change the orientation of an image using **Rotate image** in the playback menu (Q284).
- Each series of images captured using continuous shooting is saved in a sequence, and by default, only the first image in the sequence (key picture) is displayed to represent them (D105). Tap D to display them as individual images. Tap D to return to the key picture only display.

Notes About the Quick Effects Function

When \square is displayed in full-frame playback mode, you can tap \square to apply an effect to the image.

When the effect selection screen is displayed, tap an effect, tap M in the confirmation dialog, and tap Yes.
 See M Quick Effects" (200) for more information.



More Information

- See "Playback Zoom" (🛄 80) for more information.
- See "Thumbnail Display" (🛄 81) for more information.
- See "Selecting Certain Types of Images for Playback" (🛄 82) for more information.
- See "Features That Can Be Set with 🔤 (Playback Menu)" (🛄 84) for more information.

Step 6 Delete Unwanted Images

Play back the image to delete, tap and tap f.



2 Tap the desired deletion method.

- Current image: Only the current image is deleted.
- ALL All images: All images are deleted.
- If step 1 is performed in thumbnail playback mode (20181), select either Select images or All images.

3 Tap Yes.

- Deleted images cannot be recovered.
- To cancel, tap No.





Operating the Erase Selected Images Screen

- Tap an image to display ♥.
 - To undo the selection, tap the image again to remove ♥.
 - Tap 🔺 or 🔽 to scroll through the images.
 - Rotate the zoom control (^[]2) to **T** (**Q**) to switch to full-frame playback or **W** (^[]2) to switch back to 12-thumbnail display.



- 2 Add \checkmark to all images that you want to delete and then tap \mathbf{O} to confirm the selection.
 - A confirmation dialog is displayed. Follow the instructions displayed in the monitor.

Notes About Deletion

- Deleted images cannot be recovered. Copy important images to a computer or other media before deleting them from the camera.
- Protected images (🛄 84) cannot be deleted.

Deleting Images in a Sequence

- To delete individual images in a sequence, tap 🖸 to display them one at a time, tap 🕅, and tap 🛍.

Selecting Certain Types of Images for Deletion

When using favorite pictures mode, auto sort mode, or list by date mode, you can select images registered as favorites, images in a certain category, or images captured on a specific date for deletion (\square 82).

Shooting Features

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

You can select shooting modes and adjust settings according to the shooting conditions and the kind of images you want capture.

🖸 (Auto) Mode 33	8
Scene Mode (Shooting Suited to Scenes)	0
Special Effects Mode (Applying Effects When Shooting)	
	2
Smart Portrait Mode (Capturing Images of Smiling Faces)
	4
Basic Shooting Settings	7
Using the Flash (Flash Modes)5	
Using the Self-timer6	
Using Macro Mode6	
Adjusting Brightness (Exposure Comp <u>ens</u> ation)6	
Features That Can Be Set with 🏧 (Shooting Menu) 68	8
Features That Cannot Be Used Simultaneously	1
Focusing	4

🖸 (Auto) Mode

Used for general shooting. Settings can be adjusted in the shooting menu (CC 69) to suit the shooting conditions and the type of shot you want to capture.

Enter shooting mode \rightarrow **\Box** (shooting mode) button \rightarrow **\Box** (auto) mode

 You can select either Center (default setting) or Target finding AF in AF area mode (¹)70) in the shooting menu to determine how the camera selects the focus area that is used for autofocus.

When **Target finding AF** is selected, the camera focuses on the main subject if the camera detects it. If no main subject is detected, the camera automatically selects one or more of the nine focus areas containing the subject closest to the camera. See "Using Target Finding AF" (\square 74) for more information. The focus area can be changed using the touch shutter or touch AF/AE (\square 69).

• Subject tracking, which moves the focus area to track the subject, can be set (QG9).

Changing 🗖 (Auto) Mode Settings

- You can change the settings for the flash mode, self-timer, macro mode, and exposure compensation. See "Basic Shooting Settings" (¹⁵⁷) for more information.

Camera Settings That Cannot Be Used Simultaneously

Some settings cannot be used with other functions (\square 71).

Using Quick Effects

When in **(**auto) mode, you can apply effects to images immediately after releasing the shutter.

• The edited image is saved as a separate file with a different name (☎117).

1 Tap **OK** on the screen displayed after taking a picture in **(auto)** mode.

- When you tap Cancel or when no operations are performed for about five seconds, the monitor display returns to the shooting screen.
- To not display the screen shown on the right, set **Quick effects** to **Off** (^(C)69).

2 Tap the desired effect.

- Tap ▲ or ▼ to scroll through the thumbnails.
- See "☑ Quick Effects" (↔20) for information about the effect types.





3 Tap **0K**.

 To exit without saving the edited image, tap When a confirmation screen is displayed, tap Yes.



4 Tap Yes.

- A new, edited copy is created and the monitor display returns to the shooting screen.
- Copies created with the quick effects function are indicated by the icon displayed during playback (III)8).

Scene Mode (Shooting Suited to Scenes)

When one of the following scenes is selected, camera settings are automatically optimized for the selected scene.

Enter shooting mode \rightarrow **\Box** (shooting mode) button \rightarrow **\overline{m}** Scene mode \rightarrow select a scene

Scene auto selector (default setting) (042)	Portrait(□42)	Landscape (1142)	Sports (CC 43)
■ Night portrait	Party/indoor	Beach (□144) (□44)	B Snow
(□143)	(🎞 44)		(144)
Sunset (C)44)	■ Dusk/dawn	■ Night landscape	Close-up
	(□144)	(□145)	(🎞 45)
TI Food	▲ Museum	Fireworks show	Black and white copy (CC 46)
(1 46)	(□□46)	(\$\overline\$46\$)	
☑ Draw	Backlighting	Easy panorama	♥ Pet portrait
(□□47)	(\$\$\mu47\$)	(Щ48)	(□149)
3D photography (CC 50)			

To View a Description (Help Display) of Each Scene

When **2** is tapped on the scene selection screen, the help selection screen is displayed. Tap a scene icon to display a description of the features of that mode. Tap **2** to return to the help selection screen.



Changing Scene Mode Settings

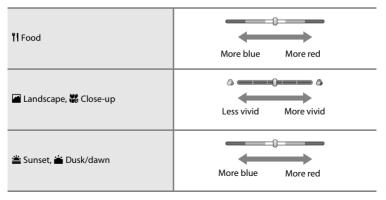
- You can change the settings for the flash mode, self-timer, macro mode, and exposure compensation for some scenes. See "Basic Shooting Settings" (¹⁵⁷) and "Default Settings" (¹⁶⁶) for more information.
- Tap 🔤 to display the available menu options for the current scene mode (available options vary depending on the scene). See "Characteristics of Each Scene" (C242) and "Features That Can Be Set with 🔤 (Shooting Menu)" (C268) for more information.

Adjusting Scene Effect

The scene effect adjustment slider is displayed by tapping 🖬 in the scene modes listed below.

- Tap or drag the scene effect adjustment slider to adjust the degree of effect to be applied to pictures taken in the selected scene mode.
- After you finish making the adjustment, tap X to hide the scene effect adjustment slider.





Characteristics of Each Scene

EXAMPLE Scene auto selector

- When you point the camera at the subject, the camera automatically selects the optimum scene mode from the list below and adjusts the shooting settings accordingly.
 Landscape, A: Night portrait, A: Night landscape, A: Close-up, A: Backlighting, A: Other scenes
- The focus area depends on the composition of the picture. When the camera detects a human face, it focuses on that face (\$\begin{array}{c} 75 \end{array}\$). The focus area can be changed using the touch shutter or touch AF/AE (\$\begin{array}{c} 69 \end{array}\$).
- When the camera selects B (night portrait), flash mode is fixed at fill flash with slow sync and red-eye reduction (when 400 (auto) is selected) and the camera captures one image at a slower shutter speed.
- When the camera selects diamond (night landscape), flash mode is fixed at () (off), regardless of the setting made, and the camera captures one image at a slower shutter speed.
- Digital zoom cannot be used.

🙎 Portrait

- When the camera detects a human face, it focuses on that face (\square 75).
- The camera softens skin tones of human faces by applying the skin softening function (\square 56).
- If no faces are detected, the camera focuses on the subject in the center of the frame.
- Digital zoom cannot be used.
- The camera focuses even when the shutter-release button is not pressed halfway. The sound of the lens focus motor may be heard while the camera focuses.

🖬 Landscape

- Use the scene effect adjustment slider (241) to adjust image saturation.
- The focus area or focus indicator (\$\begin{aligned} 7 \expressed aligned by the shutter and the shutter area by the shutter between the shutter and the shutter area by the shutter area

💐 Sports

- The camera focuses on the area in the center of the frame. The focus area can be changed using the touch shutter or touch AF/AE (¹⁶).
- Press and hold the shutter-release button all the way to capture up to 19 images continuously at a rate of about 2 fps (when image mode is set to)).
- The camera focuses 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 image in each series.
- The frame rate with continuous shooting may vary depending upon the current image mode setting, the memory card used, or shooting condition.
- When the shutter is released using the touch shutter function (69), one image is captured at a time.

💾 Night portrait

- The flash always fires.
- When the camera detects a human face, it focuses on that face (\$\$\overline\$75).
- The camera softens skin tones of human faces by applying the skin softening function (QQ56).
- If no faces are detected, the camera focuses on the subject in the center of the frame.
- Tap 🔤 and tap 🚰 Night portrait to select 🛱 Hand-held or 🗭 Tripod.
- Hand-held (default setting):
 - When the \square icon at the top left of the monitor lights in green, press the shutter-release button all the way to capture a series of images which will be combined into a single image and saved.
 - Once the shutter-release button is pressed all the way, hold the camera still until a still image is displayed. After taking a picture, do not turn the camera off before the monitor switches to the shooting screen.
 - The angle of view (i.e., the area visible in the frame) seen in the saved image will be narrower than that seen in the monitor at the time of shooting.
 - If the subject moves while the camera is shooting continuously, the image may be distorted, overlapped, or blurred.
- Tripod: Select this option when using a tripod or other means to stabilize the camera during shooting.
 - Vibration reduction is disabled even when Vibration reduction (
 104) in the setup menu is set to On.
 - One image is captured at a slow shutter speed when the shutter-release button is pressed all the way.
- Digital zoom cannot be used.

- The camera focuses on the area in the center of the frame. The focus area can be changed using the touch shutter or touch AF/AE (\$\mathbb{C}69)\$.
- To avoid the effects of camera shake, hold the camera steady. Set **Vibration reduction** to **Off** in the setup menu (1104) when using a tripod to stabilize the camera during shooting.

쭏 Beach

• The camera focuses on the area in the center of the frame. The focus area can be changed using the touch shutter or touch AF/AE (CC 69).

B Snow

• The camera focuses on the area in the center of the frame. The focus area can be changed using the touch shutter or touch AF/AE (CC 69).

🚔 Sunset

- Use the scene effect adjustment slider (241) to adjust image saturation.
- The camera focuses on the area in the center of the frame.

📸 Dusk/dawn

- Use the scene effect adjustment slider (241) to adjust image saturation.
- The focus area or focus indicator (¹¹⁷) always glows green when the shutter-release button is
 pressed halfway.

1

★: Use of a tripod is recommended when using scene modes indicated with ▲, because the shutter speed is slow. Set Vibration reduction to Off in the setup menu (□104) when using a tripod to stabilize the camera during shooting.

🔜 Night landscape

- The focus area or focus indicator (¹¹⁷) always glows green when the shutter-release button is
 pressed halfway.
- Tap 🔤 and tap 🛃 Night landscape to select 🛱 Hand-held or 🗭 Tripod.
- Hand-held (default setting): Select this option to produce shots with reduced blurring and noise even when the camera is hand-held.
 - When the disconsistent is the top left of the monitor lights in green, press the shutter-release button all the way to capture a series of images which will be combined into a single image and saved.
 - Once the shutter-release button is pressed all the way, hold the camera still until a still image is displayed. After taking a picture, do not turn the camera off before the monitor switches to the shooting screen.
 - The angle of view (i.e., the area visible in the frame) seen in the saved image will be narrower than that seen in the monitor at the time of shooting.
- **Tripod**: Select this option when using a tripod or other means to stabilize the camera during shooting.
 - Vibration reduction is disabled even when **Vibration reduction** (CP104) in the setup menu is set to **On**.
 - One image is captured at a slow shutter speed when the shutter-release button is pressed all the way.
- Digital zoom cannot be used.

🏶 Close-up

- Macro mode (\$\box\$63\$) is enabled and the camera automatically zooms to the closest position at which it can focus.
- Use the scene effect adjustment slider (241) to adjust image saturation.
- The camera focuses on the area in the center of the frame. The focus area can be changed using the touch shutter or touch AF/AE (CC 69).
- The camera focuses even when the shutter-release button is not pressed halfway. You may hear the sound of the camera focusing.

TI Food

- Macro mode (\$\box\$63\$) is enabled and the camera automatically zooms to the closest position at which it can focus.
- Use the scene effect adjustment slider (¹¹/₄₁) to adjust the subject's hue affected by the lighting. The hue setting is stored in the camera's memory even after the camera is turned off.
- The camera focuses on the area in the center of the frame. The focus area can be changed using the touch shutter or touch AF/AE (¹)⁶⁹.
- The camera focuses even when the shutter-release button is not pressed halfway. You may hear the sound of the camera focusing.

🏛 Museum

- The flash does not fire.
- The camera focuses on the area in the center of the frame. The focus area can be changed using the touch shutter or touch AF/AE (CC 69).
- The camera captures a series of up to ten images while the shutter-release button is held all the
 way down, and the sharpest image in the series is automatically selected and saved (BSS (Best
 Shot Selector)).

【】

• BSS is disabled when using the touch shutter (CC69) for shooting.

Fireworks show

- The shutter speed is fixed at about four seconds.
- Camera focuses at infinity.
- The focus indicator (¹) always glows green when the shutter-release button is pressed halfway.

Black and white copy

- The camera focuses on the area in the center of the frame. The focus area can be changed using the touch shutter or touch AF/AE (\$\overline{AF}69\$).
- Use together with macro mode (DG3) when shooting subjects that are close to the camera.
- ★: Use of a tripod is recommended when using scene modes indicated with ★, because the shutter speed is slow. Set Vibration reduction to Off in the setup menu (□104) when using a tripod to stabilize the camera during shooting.

🗹 Draw

- Write a memo or draw a picture on the touch panel display and save it as an image.
- The image is saved at an image mode setting of 🕅 (640×480).

See "Using the Draw Option" (🖚 2) for more information.

🖀 Backlighting

- The camera focuses on the area in the center of the frame. The focus area can be changed using the touch shutter or touch AF/AE (¹⁶).
- Tap and tap HDR HDR to enable or disable the high dynamic range (HDR) function to suit the type of picture you want to take.
- OFF Off (default setting): The flash fires to prevent the subject from being hidden in shadow.
 When the shutter-release button is pressed all the way down, one image is captured.
- ON On: Use when taking pictures with very bright and dark areas in the same frame.
 - Digital zoom cannot be used.
 - When the shutter-release button is pressed all the way, the camera shoots images continuously at high speed, and saves the following two images.
 - A non-HDR composite image
 - An HDR composite image in which the loss of details in highlights or shadows is minimized
 - The second image saved is an HDR composite image. If there is only enough memory to save one image, an image processed by D-Lighting (\square 84) at the time of shooting, in which dark areas of the image are corrected, is the only image saved.
 - Once the shutter-release button is pressed all the way, hold the camera still until a still image is displayed. After taking a picture, do not turn the camera off before the monitor switches to the shooting screen.
 - The angle of view (i.e., the area visible in the frame) seen in the saved image will be narrower than that seen in the monitor at the time of shooting.

🗖 Easy panorama

- Allows you to take a panorama picture simply by moving the camera in the desired direction.
- Press the shutter-release button all the way down, remove your finger from the button, and then slowly pan the camera horizontally. Shooting automatically ends when the camera captures the specified shooting range.
- The camera focuses at the center of the frame when shooting starts.
- The zoom position is fixed at wide-angle.
- Tap 國 and tap 於 / 印 Easy panorama to select a shooting range from 於 Normal (180°) (default setting) or 戶 呼 Wide (360°).
- If you display an image captured using easy panorama full-frame and tap **I**, the panorama image scrolls automatically.

See "Using Easy Panorama (Shooting and Playback)" (🖚 3) for more information.

Notes About Printing Panorama Images

When printing panorama images, the entire image may not be able to be printed depending on the printer's settings. Additionally, printing may not be possible depending on the printer.

See the documentation provided with the printer or consult the digital photo lab for details.

- When you point the camera at a dog or cat, the camera detects the pet's face and focuses on it. By default, the shutter is automatically released when focus is acquired (pet portrait auto release).
- To change the continuous shooting setting, tap and tap 🖵 Continuous.
 - Single: The camera takes one picture at a time.
 - Continuous (default setting): When focus is acquired on the detected face, the camera automatically releases the shutter 3 times. When you manually release the shutter, up to 19 images can be continuously taken while the shutter-release button is held down. The frame rate with continuous shooting is about 2 fps (when Image mode is set to R 4608×2592).

V Using Pet Portrait Auto Release

- To change the pet portrait auto release setting, tap and tap **b** Pet portrait auto release.
 - ON On (default setting): The shutter is automatically released when focus is acquired on the detected face
 - OFF Off: The shutter is not automatically released when a pet face is detected. Use the shutterrelease button or touch shutter to release the shutter (\Box) 69). The camera also detects human faces (\square 75). If the camera detects a human face and a pet face in the same shot, it focuses on the pet's face.
- Pet portrait auto release turns off automatically when:
 - Five bursts have been taken.
 - Internal memory or the memory card is full.

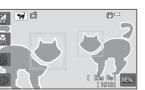
To continue taking pictures with **Pet portrait auto release**, tap 🔤 and set **Pet portrait auto** release to On again.

Notes About AF Areas

- When the camera detects a face, a vellow double border (focus area) is displayed around the face, and the double border turns green when the camera has focused.
- When the camera detects more than one dog or cat face (up to five can be detected), the face displayed largest in the monitor is framed by a double border and the others by single borders.
- When no pet or human faces are detected, the camera focuses on the subject at the center of the frame.

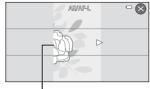
Notes About Pet Portrait Scene Mode

- Digital zoom cannot be used.
- Depending on the distance of the pet from the camera, the speed of the pet's movement, the direction the pet is facing, the ambient brightness around its face, etc., the pet face may not be detected and other subjects may be displayed with a border.



3D 3D photography

- The camera captures one image for each eye to simulate a three-dimensional image on a 3Dcompatible TV or monitor.
- After taking the first picture by pressing the shutterrelease button or using the touch shutter, move the camera horizontally to the right so that the subject is aligned with the guide on the monitor. The camera automatically takes the second picture when it detects that they are aligned.
- The camera focuses on the area in the center of the frame for the first shot. The focus area can be changed using the touch shutter or touch AF/AE (CD69).





- The focus, exposure, and white balance are locked after the first shot, and AE/AF-L is displayed on the monitor.
- The angle of view (i.e., the area visible in the frame) seen in the saved image will be narrower
 than that seen in the monitor at the time of shooting.
- Images captured in this mode are saved at an image size of 🕎 (1920 × 1080).
- The two captured images are saved as a 3D image (MPO file). The first image (the left eye image) is also saved as a JPEG file.

Notes About Taking 3D Pictures

- Moving subjects are not suited to 3D photography.
- Images have a less pronounced 3D feel as the distance between the camera and background is increased.
- Images may have a less pronounced 3D feel when the subject is dark or when the second image is not aligned precisely.
- Images captured under dim lighting may appear grainy with noise.
- The maximum telephoto zoom position is limited to an angle of view equivalent to that of a 120 mm lens in 35mm [135] format.
- Shooting is canceled after the first shot if 🗞 is tapped or the subject is not aligned with the guide within approximately ten seconds.
- If the camera does not take the second picture and cancels the shooting even when you align the guide with the subject, try shooting with the shutter-release or touch shutter.
- 3D movies cannot be taken.

Playing Back 3D Images

- 3D images cannot be played back in 3D on the camera monitor. Only the left eye image of a 3D image is displayed during playback.
- To view 3D images in 3D, a 3D-compatible TV or monitor is required. Use a 3D-compatible HDMI cable to connect the camera and these devices (CC 86) for 3D viewing.
- When connecting the camera using an HDMI cable, set **TV settings** in the setup menu (
 104) as follows:
 - HDMI: Auto (default setting) or 1080i
 - HDMI 3D output: On (default setting)
- When the camera is connected via HDMI and images are played back, it may take a while to display images when switching between 3D images and non-3D images. Playback zoom is not possible while images are played back in 3D.
- Refer to the documentation included with the TV or monitor for details on how to make the settings.

Caution for Viewing 3D Images

When viewing 3D images on a 3D-compatible TV or monitor for an extended period of time, you may experience discomfort such as eye strain or nausea. Carefully read the documentation included with your TV or monitor to ensure proper use.

Special Effects Mode (Applying Effects When Shooting)

Effects can be applied to images during shooting.

Enter shooting mode $\Rightarrow \square$ (shooting mode) button $\Rightarrow \square$ Special effects mode \Rightarrow select an effect $\Rightarrow \square$

The following 11 effects are available.

Category	Description	
SOFT Soft (default setting)	Softens the image by adding a slight blur to the entire image.	
SEPIA Nostalgic sepia	Adds a sepia tone and reduces the contrast to simulate the qualities of an old photograph.	
High-contrast monochrome	Changes the image to black and white and gives it sharp contrast.	
H High key	Gives the entire image a bright tone.	
LO Low key	Gives the entire image a dark tone.	
Selective color	Creates a black and white image in which only the specified color remains.	
POP Pop	Increases the color saturation of the entire image to create a bright look.	
VIVID Super vivid	Increases the color saturation of the entire image and sharpens the contrast.	
1 Toy camera effect 1	t 1 Gives the entire image a yellowish hue and darkens the image periphery.	
2 Toy camera effect 2	Decreases the color saturation of the entire image and darkens the image periphery.	
🛠 Cross process	Gives the image a mysterious appearance based on a specific color.	

- The camera focuses on the area in the center of the frame. The focus area can be changed using the touch shutter or touch AF/AE (CC69).
- When Selective color or Cross process is selected, tap or drag the slider to select the desired color.
 After you select the desired color, tap X to hide the slider. To display it again, tap 4.



Changing Special Effects Mode Settings

- You can change the settings for the flash mode, self-timer, macro mode, and exposure compensation. See "Basic Shooting Settings" (¹⁵⁷) for more information.
- If you tap a, the menu options for special effects mode are displayed. See "Features That Can Be Set with a (Shooting Menu)" (CM68) for more information.

Smart Portrait Mode (Capturing Images of Smiling Faces)

When the camera detects a smiling face, you can take a picture automatically without pressing the shutter-release button (smile timer). In addition, the skin softening function smoothes the skin tones of human faces.

Enter shooting mode → 🖸 (shooting mode) button → 🗵 Smart portrait mode

1 Frame the picture.

• Point the camera at a human face. See "Using Face Detection" (CC 75) for more information.

2 Without pressing the shutter-release button, wait for the subject to smile.

- If the camera detects that the face framed by the double border is smiling, the shutter is automatically released. See "S mile timer" (C 70) for more information.
- After the camera releases the shutter, it will continue to detect faces and smiles, and will
 release the shutter again if it detects a smiling face.

3 End shooting.

- Any one of the following operations can be used to cancel smile detection and stop shooting.
 - Set Smile timer (270) to Off.
 - Press the 🖸 button and select a different shooting mode.
 - Turn the camera off.

Notes About Smart Portrait Mode

- Digital zoom cannot be used.
- Under some shooting conditions, the camera may be unable to detect faces or detect smiles.
- See "Notes About Face Detection" (CC 76) for more information.

🖉 Auto Power Off in Smile Timer Mode

When **Smile timer** is set to **On**, the auto power off function (\square 105) is activated and the camera turns off when either of the situations indicated below persists and no other operations are performed.

- The camera does not detect any faces.
- The camera detected a face, but cannot detect a smile.

When the Self-timer Lamp Flashes

When using smile timer, the self-timer lamp flashes when the camera detects a face and flashes quickly 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.
- Touch shutter (CC69) can be used when Smile timer is set to Off.

Changing Smart Portrait Mode Settings

- You can change the settings for the flash mode, self-timer, and exposure compensation. See "Basic Shooting Settings" (¹⁵⁷) for more information.
- If you tap a, the menu options for smart portrait mode are displayed. See "Features That Can Be Set with a (Shooting Menu)" (CM68) for more information.

Camera Settings That Cannot Be Used Simultaneously

Some settings cannot be used with other functions (QQ71).

Using Skin Softening

When the shutter is released while using one of the shooting modes listed below, the camera detects up to three human faces and processes the image to soften facial skin tones before saving the image.

- Scene auto selector (242), Portrait (242), or Night portrait (243) scene mode is selected.
- Smart portrait mode (CC 54)

Editing functions such as **Skin softening** can be applied to saved images by using **Glamour retouch** (CD 84).

Notes About Skin Softening

- It may take more time than usual to save images after shooting.
- 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. If the desired results are not produced, switch to another shooting mode and then try shooting again.
- The skin softening level cannot be adjusted when shooting in **Portrait** or **Night portrait** scene mode, or when the camera selects one of these scenes while in scene auto selector scene mode.

Basic Shooting Settings

When in shooting mode, you can tap the icons on the left side of the monitor to set the following features:

- 1 Exposure compensation
- 2 Macro mode
- 3 Self-timer
- 4 Flash mode
- When the icons are hidden, tap DBP.

Available Features



The features that are available vary with the shooting mode, as shown below.

• See "Default Settings" (CC66) for information about each mode's default settings.

Features	🗖 (auto)	Scene	Special effects	Smart portrait
Flash mode (🎞 58)	~		~	\checkmark^2
Self-timer (🎞 61)	~	1	~	\checkmark^2
Macro mode (🎞 63)	~		~	-
Exposure compensation (\square 65)	~		~	~

¹ Varies by the scene. See "Default Settings" (🛄66) for more information.

² Varies by the smart portrait menu setting. See "Default Settings" (DG66) for more information.

Using the Flash (Flash Modes)

You can set the flash mode to match the shooting conditions.

1 Tap the flash mode icon.



2 Tap the desired flash mode icon.

- See "Available Flash Modes" (¹⁵⁹) for more information.
- Tap 🕒 to return to the shooting screen without changing the setting.

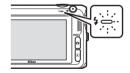


The Flash Lamp

- The flash lamp indicates the status of the flash when you press the shutter-release button halfway.
 - On: The flash will fire when you press the shutter-release button all the way down.
 - Flashing: 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 turn off in order to save power while the flash is charging.

Effective Range of the Flash

When ISO sensitivity is set to **Auto**, the flash has a range of 0.5 to 6.2 m (1 ft 8 in. to 20 ft) at the maximum wide-angle zoom position and a range of 1.2 to 2.9 m (4 ft to 9 ft 6 in.) at the maximum telephoto zoom position.



Available Flash Modes

\$ AUTO	Auto
	The flash fires automatically when lighting is dim.
\$ ©	Auto with red-eye reduction
	Reduce red-eye in portraits caused by the flash (\square 60).
۲	Off
	The flash will not fire. We recommend using a tripod to stabilize the camera when shooting in dark surroundings.
4	Fill flash
	The flash fires whenever a picture is taken. Use to "fill-in" (illuminate) shadows and backlit subjects.
#* *	Slow sync
	Auto flash mode is combined with slow shutter speed. Suited to evening and night portraits that include background scenery. The flash illuminates main subject; slow shutter speeds are used to capture background at night or under dim lighting.

Intermediate The Flash Mode Setting

- The setting varies with the shooting mode. See "Available Features" (\$\$7) and "Default Settings" (\$\$66) for more information.
- Some settings cannot be used with other functions (QQ71).
- The flash mode setting applied in 🖸 (auto) mode is saved in the camera's memory even after the camera is turned off.

Red-eye Reduction

This camera uses Advanced Red-Eye Reduction (In-Camera Red-Eye Fix).

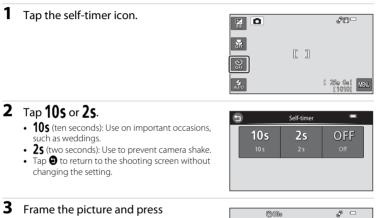
If the camera detects red-eye while saving an image, the affected area will be processed to reduce red-eye before the image is saved.

Note the following when shooting:

- More time than usual is required to save images.
- Red-eye reduction may not produce the desired results in all situations.
- In some cases, red-eye correction may be applied to areas of an image unnecessarily. In these cases, select another flash mode and take the picture again.

Using the Self-timer

The camera is equipped with a self-timer that releases the shutter ten seconds or two seconds after you press the shutter-release button. The self-timer is useful when you want to be in the picture you are taking, and when you want to avoid the effects of camera shake that occur when you press the shutter-release button. When using the self-timer, use of a tripod is recommended. Set **Vibration reduction** to **Off** in the setup menu (\square 104) when using a tripod to stabilize the camera during shooting.



- Frame the picture and press the shutter-release button halfway.
 - Focus and exposure will be set.



4 Press the shutter-release button the rest of the way down.

- The self-timer starts, and the number of seconds remaining before the shutter is released is displayed in the monitor. The self-timer lamp flashes while the timer is counting down. About one second before the shutter is released, the lamp stops flashing and glows steadily.
- When the shutter is released, the selftimer will be set to Off.
- To stop the timer before a picture is taken, press the shutter-release button again.







Some settings cannot be used with other functions (\square 71).

Using Macro Mode

Tap the macro mode icon.

When using macro mode, the camera can focus on objects as close as approximately 10 cm (4 in.) from the front of the lens.

This feature is useful when taking close-up pictures of flowers and other small subjects.



2 Tap **ON**.

1

Tap
 to return to the shooting screen without changing the setting.



3 Use the zoom control to set the zoom ratio to a position where ⊕ and the zoom indicator glow green.



How close you can be to the subject when shooting depends on the zoom ratio.
 When the zoom ratio is set to a position where and the zoom indicator glow green, the camera can focus on subjects as close as approximately 30 cm (1 ft) from the lens. When the zoom is at the maximum wide-angle position, (at the position where a is displayed), the camera can focus on subjects as close as approximately 10 cm (4 in.) from the lens.

Notes About Using the Flash

The flash may be unable to light the entire subject at distances of less than 50 cm (1 ft 8 in.).

Autofocus

When taking still pictures in macro mode, the camera continuously adjusts the focus until the shutter-release button is pressed halfway to lock the focus. Therefore, the sound of lens focus motor can be heard.

The Macro Mode Setting

- Macro mode cannot be used when using certain shooting modes. See "Default Settings" (D166) for more information.
- Some settings cannot be used with other functions (QQ71).
- The macro mode setting applied in (auto) mode is saved in the camera's memory even after the camera is turned off.

Adjusting Brightness (Exposure Compensation)

You can adjust overall image brightness.

1



4

2 Tap or to change the exposure compensation value.

- To make the image brighter, apply positive (+) exposure compensation.
- To make the image darker, apply negative (-) exposure compensation.
- You can also drag the slider to change the value.

3 Press the shutter-release button to take a picture.

- To exit the setting screen without taking a picture, tap **9**.
- To cancel the exposure compensation, return to step 1 and revert the value to **0**.



Exposure compensation

Exposure Compensation Value

The exposure compensation value applied in **(**auto) mode is saved in the camera's memory even after the camera is turned off.

Default Settings

Default settings for each shooting mode are described below.

	Flash mode (🎞 58)	Self-timer (印61)	Macro mode (🎞63)	Exposure compensation (🎞65)
🗖 (auto) (🛄 38)	\$ AUTO	Off	Off	0.0
(special effects) (CD52)	\$AUTO	Off	Off	0.0
じ (smart portrait) (ロ54)	\$AUTO ¹	Off ²	Off ³	0.0
Scene				
(二42)	\$AUTO ⁴	Off	Off ⁵	0.0
Ž (🛄42)	\$ ©	Off	Off ³	0.0
()42)	\mathbf{S}^3	Off	Off ³	0.0
💐 (🛄43)	\mathbf{S}^3	Off ³	Off ³	0.0
≌* (◯◯43)	\$⊚ ⁶	Off	Off ³	0.0
💥 (🛄 44)	\$@ ⁷	Off	Off ³	0.0
🚰 (🎞 44)	\$ auto	Off	Off ³	0.0
🖲 (🛄 44)	\$ auto	Off	Off ³	0.0
🚔 (1144)	\mathbf{S}^3	Off	Off ³	0.0
iii (🎞 44)	\mathbf{S}^3	Off	Off ³	0.0
🔛 (🛄 45)	\mathbf{S}^3	Off	Off ³	0.0
36 (CC)45)	3	Off	On ³	0.0
" (🎞 46)	\mathbf{S}^3	Off	On ³	0.0
盦 (囗]46)	\mathbf{S}^3	Off	Off	0.0
@ (🛄 46)	\mathbf{S}^3	Off ³	Off ³	0.0 ³
(()46)	\$	Off	Off	0.0

	Flash mode (🎞 58)	Self-timer (🎞61)	Macro mode (🎞63)	Exposure compensation (CC65)
2 (🛄 47)	-	-	-	-
2 (147)	\$ ⁸ / 3 ⁸	Off	Off ³	0.0
口 (〇〇48)	③ ³	Off ³	Off ³	0.0
🦋 (🎞 49)	③ ³	Off ³	Off	0.0
3D (🛄 50)	③ ³	Off ³	Off	0.0

¹ Cannot be used when **Blink proof** is set to **On**.

² Can be set when **Smile timer** is set to **Off**.

- ³ The setting cannot be changed.
- ⁴ The camera automatically selects the flash mode appropriate for the scene it has selected. (9) (off) can be selected manually.
- ⁵ Cannot be changed. The camera enters macro mode when 🗱 is selected.
- ⁶ The setting cannot be changed. The flash mode setting is fixed at fill flash with red-eye reduction.
- ⁷ Slow sync with red-eye reduction flash mode may be used.
- ⁸ Flash is fixed at **\$** (fill flash) when **HDR** is set to **Off**, and is fixed at **③** (off) when **HDR** is set to **On**.



Features That Can Be Set with 🔤 (Shooting Menu)

The settings listed below can be changed by tapping 🔤 during shooting (🛄 10).



The settings that can be changed vary depending on the shooting mode, as shown below.

	Auto mode	Scene ²	Special effects	Smart portrait
Image mode ¹	~	~	~	~
Touch shooting	~	~	~	~
ISO sensitivity	~	-	-	-
Continuous	~	-	-	-
White balance	~	-	-	-
Quick effects	~	-	-	-
AF area mode	~	-	-	-
Skin softening	-	-	-	~
Blink proof	-	-	-	~
Smile timer	-	-	-	~

¹ The setting is also applied to other shooting modes.

² Additional settings are available for some scene modes. See "Characteristics of Each Scene" (C 42) for more information.

Options Available in the Shooting Menu

Option	Description	
🗣 Image mode	Allows you to select the combination of image size and image quality used when saving images.	6 49
ᇦ/舉/船 Touch shooting	Allows you to select the touch shooting setting. The available settings are Touch shutter (default setting), Subject tracking , and Touch AF/AE . Subject tracking can be selected only in (auto) mode.	€51
ISO ISO sensitivity	Allows you to control the camera's sensitivity to light. You can set sensitivity to Auto (default setting) or Fixed range auto , or lock the setting at 125 , 200 , 400 , 800 , 1600 , or 3200 . When Auto is selected, the camera sets the ISO sensitivity automatically. When Fixed range auto is selected, an ISO sensitivity range of either ISO 125-400 or ISO 125-800 can be selected.	₽₽ 58
Continuous	Allows you to capture a series of images. The available settings are Single (default setting), Continuous H, Continuous L, Pre- shooting cache, Continuous H: 120 fps, Continuous H: 60 fps, BSS, and Multi-shot 16.	€59
₩B White balance	Allows you to adjust white balance to suit the light source in order to make the colors in images match what you see with your eye. The available settings are Auto (default setting), Preset manual , Daylight, Incandes., Fluorescent, Cloudy , and Flash .	6 2
🚺 Quick effects	Allows you to enable or disable the quick effects function (¹¹ 39). The default setting is On .	6 5

Option	Description	
[+] AF area mode	Allows you to determine how the camera selects the focus area that is used for autofocus; the available settings are Center (default setting) and Target finding AF (\square 74).	æ 66
ទើ Skin softening	Allows you select the degree of the skin softening effect. When a setting other than Off is selected, the camera softens skin tones by applying the skin softening function before saving images. The default setting is Normal .	6 7
😺 Blink proof	When On is selected, the camera automatically releases the shutter twice each time a picture is taken. Of the two shots, one in which the subject's eyes are open is saved. The flash cannot be used. The default setting is Off .	€ 68
ত্র্র Smile timer	When On (default setting) is selected, the camera detects human faces and then automatically releases the shutter whenever a smile is detected. Self-timer cannot be used with this feature.	æ 68

Camera Settings That Cannot Be Used Simultaneously

Some settings cannot be used with other functions (CC 71).

Features That Cannot Be Used Simultaneously

Restricted function	Option	Description
Flash mode	Continuous (🎞 69)	When a setting other than Single is selected, the flash cannot be used.
Flash mode	Blink proof (🛄70)	When Blink proof is set to On , the flash cannot be used.
Self-timer	Subject tracking (🛄 69)	When Touch shooting is set to Subject tracking, Self-timer cannot be used.
Sell-timer	Smile timer (🎞 70)	When Smile timer is used for shooting, the self-timer cannot be used.
Macro mode	Subject tracking (🛄69)	When Touch shooting is set to Subject tracking, Macro mode cannot be used.
lmage mode	Continuous (🎞 69)	 Image mode is set as follows depending on the continuous shooting setting: Continuous H: 120 fps: M (image size: 640 × 480 pixels) Continuous H: 60 fps: M (image size: 1280 × 960 pixels) Multi-shot 16: M (image size: 2560 × 1920 pixels)
Tauch chaotine	Smile timer (🎞 70)	When Smile timer is used for shooting, Touch shooting cannot be used.
Touch shooting	Pet portrait auto release (🖽 49)	When Pet portrait auto release is used for shooting, Touch shooting cannot be used.
ISO sensitivity	Continuous (🎞 69)	When Pre-shooting cache , Continuous H: 120 fps , Continuous H: 60 fps , or Multi- shot 16 is selected, the ISO sensitivity setting is automatically specified according to the brightness.

Some functions cannot be used with other menu options.

Restricted function	Option	Description
	Self-timer (🎞 61)	When Pre-shooting cache is selected or when using the self-timer, Continuous is fixed at Single .
Continuous	Touch shutter (🎞 69)	When Continuous H , Continuous L , Pre- shooting cache , Continuous H: 120 fps , Continuous H: 60 fps , or BSS is selected, one image is taken each time the monitor is tapped.
Quick effects	Continuous (🎞 69)	When images are continuously captured, Quick effects in shooting mode cannot be used.
	Subject tracking (🛄69)	When Touch shooting is set to Subject tracking, AF area mode cannot be set.
AF area mode	White balance (🎞 69)	When a setting other than Auto is selected for White balance in Target finding AF mode, the camera does not detect the main subject.
Monitor settings	Quick effects (🛄 69)	When Quick effects is set to On, Image review is fixed at On.
Print date	Continuous (🏛 69)	When Pre-shooting cache , Continuous H: 120 fps , Continuous H: 60 fps is selected, date and time cannot be imprinted on images.
	Subject tracking (🛄69)	When Touch shooting is set to Subject tracking, Motion detection is disabled.
Motion detection	ISO sensitivity (🎞 69)	When the ISO sensitivity is set to any setting other than Auto , Motion detection is disabled.
	Continuous (🏛 69)	When a setting other than Single or BSS is selected, Motion detection is disabled.
Digital zoom	Subject tracking (🎞 69)	When Touch shooting is set to Subject tracking , digital zoom cannot be used.
Digital zoom	Continuous (🎞 69)	When Multi-shot 16 is selected, digital zoom cannot be used.

Restricted function	Option	Description
Shutter sound	Continuous (🎞 69)	When a setting other than Single is selected, the shutter sound is disabled.
Blink warning	Continuous (🎞 69)	When a setting other than Single is selected, Blink warning is disabled.



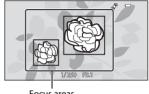
- Depending on the shooting mode or the current settings, digital zoom may not be available (
- When digital zoom is in effect, the camera focuses in the center of the frame.

Using Target Finding AF

Select 🖸 (auto) mode → tap 🔤 → 🗗 AF area mode → 🖪 Target finding AF

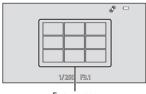
The camera focuses in the manner described below when you press the shutter-release button halfway.

 If the camera detects the main subject, it focuses on that subject. When the subject is in focus, the focus areas (up to three areas) that match up with the size of the subject light in green.
 When a human face is detected, focus priority will be on that person (face detection).



Focus areas

 If the camera does not detect the main subject, it automatically selects one or more of the nine focus areas containing the subject closest to the camera. When the subject is in focus, the focus areas that are in focus (up to nine areas) light in green.





Notes About Target Finding AF

- Depending on shooting conditions, the subject that the camera determines to be the main subject may vary.
- The camera may not detect the main subject appropriately in the following situations:
 - When the image shown on the monitor is very dark or bright
 - When the main subject lacks clearly defined colors
 - When the shot is framed so that the main subject is at the edge of the monitor
 - When the main subject is composed of a repeating pattern
- The camera does not detect the main subject in the following situations:
- When White balance is set to any setting other than Auto.

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)
Scene auto selector (□42), Portrait (□42), or Night portrait (□43) scene mode	Up to 12	The face closest to the camera
Pet portrait scene mode (when Pet portrait auto release is set to Off) (249)	Up to 12 ¹	The face closest to the camera ²
Smart portrait mode (🎞 54)	Up to 3	The face closest to the center of the frame

¹ If the camera detects both people and pets in the same shot, the camera can detect up to 12 faces.

² If the camera detects a human face and a pet face in the same shot, it focuses on the pet's face.

- Tap a face framed by a single border to change the focus area to that face (except when smile timer (\$\overline\$68) is set to **On**).
- If the shutter button is pressed halfway when no faces are detected:
 - When **Scene auto selector** is selected, the focus area changes depending on which scene the camera selects.
 - In **Portrait** and **Night portrait** scene modes or in smart portrait mode, the camera will focus on the subject in the center of the frame.
 - In **Pet portrait** scene mode, the camera focuses on a pet face if one is detected. If no pet faces are detected, the camera focuses on the area in the center of the frame.

Notes About Face Detection

- The camera's ability to detect faces depends on a variety of factors, including the direction in which the faces are looking. 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 faces are looking.
- In some rare cases, such as those described in "Subjects Not Suitable for Autofocus" (\$\prod_77\$), the subject may not be in focus even though the double border turns green. If the camera does not focus, try focus lock shooting (\$\prod_78\$).

Subjects Not Suitable for Autofocus

The camera may not focus as expected in the following situations. In some rare cases, the subject may not be in focus despite the fact that the focus area or the focus indicator glows 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. the subject is inside a cage)
- Subjects with repeating patterns (window blinds, buildings with multiple rows of similarly shaped windows, etc.)
- Subject is moving rapidly

In the situations noted above, try pressing the shutter-release button halfway to refocus several times, or focus on another subject positioned at the same distance from the camera as the actual desired subject, and use focus lock (\square 78).

Focus Lock

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

The following procedure describes how to use focus lock when using **(**auto) mode with **AF area mode** (**(**170) set to **Center**.

- **1** Position the subject in the center of the frame.
- **2** Press the shutter-release button halfway.
 - Confirm that the focus area glows green.
 - Focus and exposure are locked.



3 Continue holding down the shutterrelease button halfway and recompose the picture.

• Be sure to maintain the same distance between the camera and the subject while the shutter-release button is pressed halfway.



4 Press the shutter-release button the rest of the way down to take the picture.



Playback Features

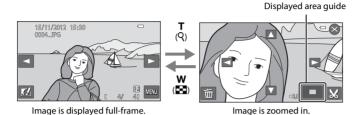
Playback Features

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

Playback Zoom	
Thumbnail Display	
Selecting Certain Types of Images for Playba	ck 82
Features That Can Be Set with 🔤 (Playback N Connecting the Camera to a TV, Computer, o	-
Using ViewNX 2	
Using ViewNX 2	

Playback Zoom

Rotating the zoom control to T(Q) or double-tapping an image in full-frame playback mode (\square 32) zooms in on the center of the image displayed in the monitor.

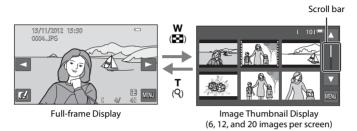


• You can change the zoom ratio by rotating the zoom control to **W** (🔄) or **T** (**Q**). Images can be zoomed up to 10x.

- To view a different area of the image, drag the image or tap Ⅰ, Ⅰ, Ⅰ, or Ⅰ.
- If you rotate the zoom control to T (Q) to zoom in on an image captured using face detection (□175) or pet detection (□149) (except images captured in a series), the camera zooms in on the face detected at the time of shooting. If the camera detected multiple faces when the image was captured, tap i to display a different face. Rotate the zoom control to T (Q) or W (□ again to change the zoom ratio and return to normal playback zoom.
- To delete images, tap 👼.
- You can crop the image and save the displayed area of the image as a separate file by tapping X (↔ 32).
- Tap 🛿 or double-tap the image to return to full-frame playback mode.

Thumbnail Display

Rotating the zoom control to **W** (🔄) in full-frame playback mode (🛄 32) displays images as thumbnails.



- You can view several images on one screen, making it easy to find the image you want.
- You can change the number of thumbnails displayed by rotating the zoom control to W (E3) or T(Q).
- To scroll through the images, drag your finger up or down on the monitor, drag the scroll bar, or tap ▲ or ▲.
- Tap an image to display it in full-frame playback mode.

Selecting Certain Types of Images for Playback

You can change the playback mode according to the type of images you want to view.

Available Playback Modes

►	Play	11 32
	All images are played back. When you switch from shooting mode to playback mode is selected.	le, this
×	Favorite pictures	6-6 7
	Play back images added to an album. You must add images to an album before you select this mode (\square 84).	ı can
AUTO	Auto sort	6 11
	Images are automatically sorted into categories, such as portraits, landscapes, and movies.	
12	List by date	6-0 13
	Images captured on the selected date are played back.	

Switching Between Playback Modes

- 1 When viewing images in full-frame playback mode or thumbnail playback mode, press the ▶ button.
 - The playback mode selection menu is displayed, from which you can select one of the available playback modes.



2 Tap the desired playback mode icon.

- If you select Play, the playback screen is displayed.
- When an option other than Play is selected, the album, category, or shooting date selection screen is displayed.
- To return to the current playback mode without switching playback modes, press the button.

3 Tap an album, category, or shooting date.

- For 🖈 favorite pictures, see ↔7.
- For 🌆 auto sort, see 🏍 11.
- For 🖾 list by date, see 🖚13.
- Repeat from step 1 to select a different album, category, or shooting date.



Features That Can Be Set with 🔤 (Playback Menu)

If you tap when viewing images in full-frame playback mode or thumbnail playback mode, the following menu options can be used (\square 10).







Option	Description	
★ Favorite pictures	Allows you to add selected images to an album. This option is not displayed in favorite pictures mode.	
Remove from favorites	Allows you to remove images from an album. This option is displayed only in favorite pictures mode.	6 9
Delete ¹	Delete images or movies.	34
Slide show ¹	Play back images, stored in the internal memory or on a memory card, one by one in an automated slide show.	
On Protect ¹	Protect selected images from accidental deletion.	66 71
굅 Print order ^{1, 2}	When using a printer to print images saved on the memory card, you can use the Print order function to select which images are printed, and how many copies of each image are printed.	
Paint ^{3, 4}	Draw on images or add decorations to images. Painted copies are stored as separate files.	6 22
🗹 Retouch ^{3, 4}	Edit images. Available editing functions are 🗳 Quick retouch, 🛱 D-Lighting, 🏵 Stretch, 🕼 Perspective control, 🖾 Glamour retouch, and 😭 Small picture.	6 17
	B Rotate image is available to set the orientation of images when they are played back on the camera.	6 77

Option	Description	
₽ Voice memo ⁴	Record voice memos using the camera's built-in microphone and attach them to images. Voice memo can also be played back and deleted.	6 78
Copy ^{1, 5}	Allows you to copy images between the internal memory and a memory card.	6 80
Ghoose key picture ⁴	Allows you to change the key picture for images captured in sequence (sequence of images; (2)33). This option is disabled when Sequence display options ((2)105) in the setup menu is set to Individual pictures .	6 82

¹ This function can also be performed in thumbnail playback mode.

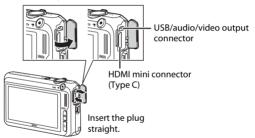
² This function is not available for images captured in **3D photography** scene mode (¹⁵⁰).

- ³ The selected image is edited, and the copy is saved with a different file name, except when edited using **Rotate image**. Certain restrictions apply. For example, images captured in **Easy panorama** (¹¹/₄₈) or **3D photography** (¹¹/₅₀) cannot be edited and the same editing function cannot be applied multiple times ([★]18, [★]19).
- ⁴ This function is not available when only the key pictures are displayed for sequences of images. To use this function, tap **D** to display the images in a sequence individually.
- ⁵ This function cannot be selected when using favorite pictures mode, auto sort mode, or 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.



How to open the connector cover.

Viewing images on a TV

Images and movies captured with the camera can be viewed on a TV. Connection method: Connect the video and audio plugs of the included audio video cable 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



6639

A 34



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 port with the included USB cable.

- Before connecting to a computer, install ViewNX 2 on the computer using the included ViewNX 2 CD-ROM. For information about using the ViewNX 2 CD-ROM and transferring images to a computer, see page 88.
- If any USB devices that draw the power from the computer are connected, disconnect them from the computer before you connect the camera to it. Connecting the camera and other USB-powered devices to the same computer simultaneously may cause a camera malfunction or excessive power supply from the computer, which could damage the camera or memory card.

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 port with the included USB cable.

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 included ViewNX 2 CD-ROM.



Installing ViewNX 2

• An Internet connection is required.

Compatible Operating Systems

Windows

- Windows 7 Home Basic/Home Premium/Professional/Enterprise/Ultimate (Service Pack 1)
- 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 10.6.8, 10.7.4)

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

1 Start the computer and insert the ViewNX 2 CD-ROM 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.

Nikon ®		ViewNX 2 [™]
Welcome to the world of Nilon digital photography. Please select your language from the drop-down list.	Tra.	Typical Installation (Recommended) Custom Installation All necessary software will be
	3000	installed, including Vew/K2 2 for the transfer, browsing, edding, and sharing of photos. An Internet connection is required.
Region Selection Next Evit		Installation Guide Exit

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.

4 Download the software.

- When the Software Download screen is displayed, click I agree Begin download.
- · Follow the on-screen instructions to install the software.

5 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 (for creating a single panorama image of a landscape, etc. from a series of images that each capture a separate portion of the subject)

6 Remove the ViewNX 2 CD-ROM from the CD-ROM drive.

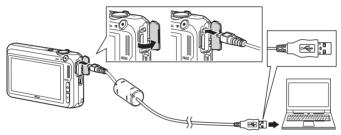
Transferring Images to the Computer

1 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. The camera automatically turns on.

To transfer images that are saved in the camera's internal memory, remove the memory card from the camera before connecting it to the computer.



- 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.

 Under Import pictures and videos, click Change program. A program selection dialog will be displayed; select Import File using Nikon Transfer 2 and click OK.



101	SINN Nacolaristic cooursicituate=PTP 2005 semaining	B ¹ armanan	
Charge program	peer denice on, protonen, and indens to view film; and fiddes; or your devic	Daspipaga)

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

The connection may not be recognized if the camera is connected to the computer via a USB hub.

2 Transfer images to the computer.

- Confirm that the name of the connected camera or removable disk is displayed as the "Source" on the "Options" title bar of Nikon Transfer 2 ((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 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.



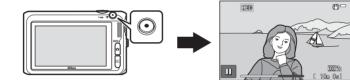
Playback Features

Starting ViewNX 2 Manually

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

Recording and Playing Back Movies

You can record movies by simply pressing the \bigcirc (* \blacksquare movie-record) button.



Recording Movies	96
Features That Can Be Set with 🔤 (Movie Menu)	
Playing Back Movies1	00

Recording Movies

You can record movies by simply pressing the \bigcirc ($^{+}$ movie-record) button.

- **1** Display the shooting screen.
 - Movies can be recorded in any shooting mode (\$\Omega26\$) except **Draw** scene mode.



Movie recording time remaining

2 Press the ● (*\mathbf{m} movie-record) button to start movie recording.

- The camera focuses on the subject in the center of the frame. Focus areas are not displayed during recording.
- IN is displayed while saving to the internal memory.
- Tap 🛄 to pause recording (except when HS movie recording; 💭 99). Tap 📧 again to resume recording.
- Recording automatically stops about five minutes after recording is paused or when the maximum movie length has been recorded.





3 Press the ● (▶ movie-record) button again to end recording.

Notes About Recording Images and Saving Movies

The indicator showing the number of exposures remaining or the indicator showing the maximum movie length flashes while images are being recorded or while a movie is being saved. **Do not open the battery-chamber/memory card slot cover or remove the battery or memory card** while an indicator is flashing. Doing this could result in loss of data, or in damage to the camera or the memory card.

Notes About Movie Recording

- Memory cards with an SD Speed Class rating of 6 or faster are recommended when recording movies (223). Movie recording may stop unexpectedly when memory cards with a lower Speed Class rating are used.
- There may be some degradation in image quality when digital zoom is used. When recording
 movies, the digital zoom can magnify the image up to 4x the maximum optical zoom ratio.
- When recording ends, digital zoom turns off.
- The sounds of zoom control operation, zoom, autofocus lens drive movement, vibration reduction, and aperture operation when brightness changes may be recorded.
- The following phenomena may be seen in the monitor while recording movies. These
 phenomena are saved in the recorded movies.
 - Banding may occur in images under fluorescent, mercury-vapor, or sodium-vapor lighting.
 - Subjects that move quickly from one side of the frame to the other, such as a moving train or car, may appear skewed.
 - The entire movie image may be skewed when the camera is panned.
 - Lighting or other bright areas may leave residual images when the camera is moved.
- Depending on the distance to the subject or the amount of zoom applied, subjects with repeating
 patterns (fabrics, lattice windows, etc.) may have colored stripes (interference patterns, moire, etc.)
 in them during movie recording and playback. This occurs when the pattern in the subject and the
 layout of the image sensor interfere with each other; it is not a malfunction.

Camera Temperature

- The camera may become warm when shooting movies for an extended period of time or when the camera is used in a hot area.
- If the inside of the camera becomes extremely hot when recording movies, the camera will automatically stop recording after ten seconds.

The amount of time remaining until the camera stops recording (🔊 10s) is displayed.

After the camera stops recording, it turns itself off. Leave the camera off until the inside of the camera has cooled.



Notes About Autofocus

Autofocus may not perform as expected (277). Should this occur, try the following:

- 1. Set Movie AF mode (1999) in the movie menu to AF-S Single AF (default setting) before starting movie recording.
- 2. Frame another subject—positioned at the same distance from the camera as the intended subject—in the center of the frame, press the ● (*\not movie-record) button to start recording, and then modify the composition.

Movie Options and Maximum Movie Length

Movie options (CC)99)	Memory card (4 GB)*
1080m HD 1080p★ (1920×1080) (default setting)	25 min
1080 m HD 1080p (1920×1080)	40 min
720 ₪ HD 720p (1280×720)	50 min

All figures are approximate. The maximum movie length may vary depending on the make of the memory card, even among memory cards of the same capacity. Check the shooting screen for the maximum movie length when recording to the internal memory (approx. 78 MB).

* Individual movie files cannot exceed 4 GB in size or 29 minutes in length, even when there is sufficient free space on the memory card for longer recording. When a battery is used to operate the camera, the battery may run out and recording may end before either limit is reached, despite the battery being fully charged (2719). In addition, recording may end before either limit is reached if camera temperature becomes elevated.

Functions Available for Movie Recording

- The exposure compensation and white balance settings for the current shooting mode are also applied with movie recording. The settings adjusted with the scene effect adjustment slider in scene mode (\square 40) and the hues specified in special effects mode (\square 52) are also applied to movies. When macro mode is enabled, movies of subjects close to the camera can be recorded. Confirm settings before starting movie recording.
- The self-timer (A61) can be used. When the (* movie-record) button is pressed after the self-timer is enabled, the camera focuses on the subject in the center of the frame and starts movie recording after the specified two or ten seconds.
- The flash will not fire.
- Tap 🔤 to adjust movie menu settings before starting movie recording (
- If Photo info in the Monitor settings (1104) in the setup menu is set to Movie frame+auto info, the area that will be visible in the movie can be confirmed before movie recording starts.

Features That Can Be Set with 🔤 (Movie Menu)

Tap \square in shooting mode to configure the settings listed below (\square 10). If the movie menu is not displayed, tap \square to scroll to the bottom of the screen.

	~~~~		5	Shooting me	nu 🖷 🗙
<b>W</b> FF	[]		Movie options	Open with HS footage	Movie AF mode
OFF Auto	( 25n 0e) ( 1010)		Wind noise reduction	AF area mode	Y   Set up ▼

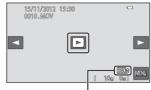
Option	Description	
R Movie options	<ul> <li>Select the movie type.</li> <li>Select either normal speed movies or HS (high speed) movies, which enable slow motion or fast motion playback.</li> </ul>	<b>æ</b> 83
प्रि ^{मिड} Open with HS footage	When you select an HS movie option in <b>Movie options</b> , choose whether or not the camera records HS movies when movie recording starts. The default setting is <b>On</b> . When <b>Off</b> is selected, the camera records a normal speed movie when recording starts. After recording starts, tap the HS movie switch icon at the bottom right of the monitor to switch to HS movie recording.	<b>6</b> 87
<b>栗</b> Movie AF mode	When $AF-S$ single $AF$ (default setting) is selected, focus is locked when movie recording begins. When $AF-F$ Full-time $AF$ is selected, the camera focuses continuously while recording. When $AF-F$ 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 AF-S single $AF$ . • When an HS movie option is selected in <b>Movie options</b> , the setting is fixed at $AF-S$ single $AF$ .	<b>6</b> 88
Solution Wind Noise reduction	<ul> <li>Set whether or not to reduce wind noise during movie recording.</li> <li>When an HS movie option is selected in Movie options, the setting is fixed at OFF Off.</li> </ul>	<b>æ</b> 88

# **Playing Back Movies**

Press the D button to enter playback mode. Movies are indicated by the movie options icon (\$\$\$\$ 099).

Tap 🖻 to play back movies.

 To adjust the volume before playback, tap and then tap (10).



Movie option

#### **Deleting movies**

See "Step 6 Delete Unwanted Images" (CC34) for more information.

#### **Functions Available During Playback**

Tap the monitor during playback to display the playback control panel at the bottom in the monitor. The operations described below are available by tapping the icons in the panel.



Use	Description	
	Tap 🚺 to adjust volume.*	
**	Tap and hold 🕶 to rewind movie.	
ÞÞ	Tap and hold 🕨 to advance movie.	
	Pause playback. The following operations can be performed while playback is paused.	
	Rewind movie back one frame. Tap and hold difference for continuous frame-by-frame rewind.	
	Advance movie forward one frame. Tap and hold to for continuous frame-by-frame advance.	
	Tap I displayed at the center of the screen to resume playback.	
I	Tap X to display the movie edit screen. Cut out unwanted portions of a movie and save the desired portion.	
	End movie playback and return to full-frame playback mode.	

* You can also adjust volume by rotating the zoom control to **T** or **W** during playback.

# Notes About Playing Back Movies

The COOLPIX S6400 is not able to play back movies recorded with another make or model of digital camera.


# **General Camera Setup**

This chapter describes the various settings that can be adjusted in the 🕈 setup menu.



 For further details about each setting, refer to "The Setup Menu" in the Reference Section ( \$\circ\$ 89).

# Features That Can Be Set with 🔤 (Setup Menu)

Tap  $\square$  and tap  $\Upsilon$  Set up to make the settings listed below ( $\square$ 10). If  $\Upsilon$  Set up is not displayed, tap  $\square$  to scroll to the bottom the screen.

9	Shooting me	nu 🗖 🗙	9	Set up 🦷	$\sim$
<b>~</b>	₩da	AF-S	Welc	ome screen 📃 🗕	
Movie options	Open with HS footage	Movie AF mode	Time	zone and date ——	
C OFF	[+][-]	Y	Moni	itor settings ——	
Wind noise reduction	AF area mode	Set up	Print	date OFF	

Option	Description	
Welcome screen	Allows you to select whether or not the welcome screen is displayed when the camera is turned on.	<b>20</b> 89
Time zone and date	Allows you to set the camera clock and select the home and destination time zones.	<b>~</b> 90
Monitor settings	Allows you to adjust photo information display and monitor brightness settings.	<b>6</b> 93
Print date	Allows you to imprint the shooting date and time on images.	<b>60</b> 95
Vibration reduction	Reduces the effects of camera shake while shooting.	<b>6</b> 97
Motion detection	Allows you to set whether or not the camera automatically increases the shutter speed to reduce blurring caused by camera shake if motion is detected when shooting still images.	€98
AF assist	Allows you to enable or disable the AF-assist illuminator.	<b>6-6</b> 99
Digital zoom	When set to <b>On</b> (default setting), if you rotate the zoom control to $\mathbf{T}(\mathbf{Q})$ when the camera is already zoomed in to the maximum optical zoom position, the digital zoom is activated ( $\square 29$ ).	€100
Sound settings	Allows you to adjust sound settings.	<b>60</b> 101

Option	Description	
Auto off	Allows you to set the amount of time that passes before the monitor turns off to save power.	<b>6</b> 102
Format memory/ Format card	Allows you to format the internal memory or the memory card.	€0103
Language	Allows you to change the camera's display language.	<b>6-6</b> 104
TV settings	Allows you to adjust TV-connection settings.	<b>∂</b> 105
Charge by computer	<ul> <li>When set to Auto (default setting), you can charge the camera's battery by connecting the camera to a computer (provided that the computer is able to supply power).</li> <li>When charging by computer, it takes more time to charge the battery than when using the Charging AC Adapter EH-69P.</li> </ul>	☎106
Blink warning	Allows you to set whether or not closed eyes are detected when taking pictures of people using face detection.	€108
Sequence display options	Allows you to select whether to display only the key picture for a sequence of images captured continuously or to display the sequence as individual images.	<b>æ</b> 110
Eye-Fi upload	Set whether or not to enable the function for sending images to a computer using a commercially available Eye-Fi card.	€0111
Reset all	Allows you to reset the camera's settings to their default values.	<b>6</b> 112
Firmware version	View the current camera firmware version.	<b>6-6</b> 116


# Reference Section

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

# Shooting

Using the Draw Option	<b>6-0</b> 2
Using Easy Panorama (Shooting and Playback)	<b>6-</b> 03

# Playback

Favorite Pictures Mode	6–67
Auto Sort Mode	
List by Date Mode	ð=ð13
Viewing and Deleting Images Captured Continuously (Sequence)	6–014
Editing Still Images	🍋 17
Connecting the Camera to a TV (Viewing Images on a TV)	ð 🔂 34
Connecting the Camera to a Printer (Direct Print)	🍋 38
Editing Movies	6 <b>-6</b> 47

# Menu

The Shooting Menu (for 🗖 (Auto) Mode)	
The Smart Portrait Menu	
The Playback Menu	
The Movie Menu	
The Setup Menu	

# **Additional Information**

File and Folder Names	. 0-0117
Optional Accessories	. 0-0119
Error Messages	

6 - 61

# **Using the Draw Option**

Write a memo or draw a picture on the touch panel display and save it as an image. The image is saved at an image mode setting of M (640×480).

#### Enter shooting mode $\rightarrow$ $\square$ (shooting mode) button $\rightarrow$ Scene mode $\rightarrow$ $\square$ (draw)

# **1** Write a memo or draw pictures.

- Tap Ø (pen) to write text or draw pictures (↔ 23).
- Tap 🐼 (eraser) to erase text or pictures (♣23).
- Rotate the zoom control to T (Q) to display the image in full-frame playback mode and rotate the zoom control to T (Q) again to enlarge the image display by 3×. Tap ▲, D, T or K to



change the portion of the image visible in the monitor. Rotate the zoom control to  ${f W}$  ( ${f E}$ ) to return to the original display size.

# **2** Tap **OK**.

- Tap , before tapping X, to undo the last operation applied using the pen or erase tool (up to the last five operations can be undone).
- To exit without saving the edited image, tap When a confirmation screen is displayed, tap Yes.

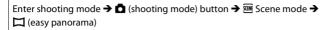


# 3 Tap Yes.

• The memo is saved.

# Using Easy Panorama (Shooting and Playback)

# **Shooting with Easy Panorama**



You can select either 🏷 Normal (180°) (default setting) or 💆 Wide (360°) as the shooting range. See "Changing Shooting Range" (🍽 4) for more information.

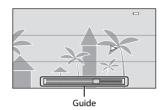
- **1** Frame the first edge of the panorama scene, and then press the shutter-release button halfway to focus.
  - The zoom position is fixed at the maximum wide-angle position.
  - A grid is displayed in the monitor.
  - The camera focuses on the subject at the center of the frame.
  - Exposure compensation (CC65) can be set.
  - If the focus and exposure are not correct, try using focus lock (¹⁷⁸).
- **2** Press the shutter-release button all the way, and then remove your finger from the shutter-release button.
  - D is displayed to indicate the direction of camera movement.





#### 3 Move the camera slowly and straight in one of the four directions, and beain shootina.

- When the camera detects which direction it is moving in, shooting begins.
- A guide indicating the current shooting position is displayed.
- When the shooting position guide reaches the edge, shooting ends.





#### Changing Shooting Range

- In easy panorama scene mode, tap 🔤, tap 🖄 / 🖾 Easy panorama, and tap Normal (180°) or Wide (360°).
- When the camera is readied in the horizontal position. the image size (width × height) is as follows.
  - Normal (180°): 3200 × 560 when moved horizontally, 1024 × 3200 when moved vertically
  - Wide (360°): 6400 × 560 when moved horizontally, 1024 × 6400 when moved vertically



- When the camera is readied in the vertical position, the direction and the width and height are switched.



#### Example of camera movement



- The operator, without shifting position, moves the camera horizontally or vertically in an arc so that the guide travels from one edge to the other.
- Shooting stops if the guide does not reach the edge within about 15 seconds (when Normal (180°) is selected) or within about 30 seconds (when Wide (360°) is selected) after shooting starts.

# Notes About Easy Panorama Shooting

- The range of the image seen in the saved image will be narrower than that seen in the monitor at the time of shooting.
- If the camera is moved too quickly or shaken too much, or if the subject is too uniform (e.g. walls or darkness), an error may occur.
- If shooting is stopped before the camera reaches the half-way point in the panorama range, a
  panorama image is not saved.
- If more than half of the panorama range is captured but shooting ends before reaching the edge of the range, the range not captured is recorded and displayed in gray.

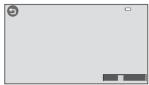
# Viewing Images Captured with Easy Panorama

If you switch to playback mode ( $\square 32$ ) and display an image captured using easy panorama in full-frame playback mode, **D** is displayed.



Tap **I** to display the short edge of the image using the entire monitor and automatically move (scroll) the displayed area.

To scroll through the displayed image, drag your finger across the monitor ( $\square$ 4).



The operations listed below can be performed using the camera's touch panel.

Function	Description			
	e scrolling.			
Pause	Manual scrolling	While paused, drag your finger across the monitor to view a different area of the image.		
Resume automa scrolling	Resume automatic scrolling	While paused, tap the monitor to resume automatic scrolling.		
End	Tap 🕤.	^		

# Notes About Easy Panorama Scroll Playback

The COOLPIX S6400 may not be able to scroll the playback of, or zoom in on, easy panorama images captured with another make or model of digital camera.



# **Favorite Pictures Mode**

You can sort your images (except movies) into nine albums and add them as favorite pictures (added images are not copied or moved).

After you add images to albums, you can choose to play back only the added images by using favorite pictures mode.

- By creating albums for certain subjects or events, you can find your favorite images easily.
- The same image can be added to multiple albums.
- Up to 200 images can be added to each album.

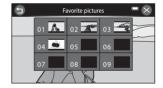
# **Adding Images to Albums**

```
Press the ▶ button (playback mode)* → select an image → tap  → 🖈 Favorite pictures
```

* Images cannot be added to albums in favorite pictures playback mode.

Tap an album to which you want add the image. The image is added to the album and the monitor display returns to the album selection screen.

- You can repeatedly add the same image to other albums by tapping them.
- Drag the current image to change the image to add.
- Tap 🛿 to finish adding images.

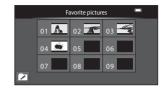


# **Playing Back Images in Albums**

#### Press the ▶ button (playback mode) → ▶ button → 🕅 Favorite pictures

Tap an album to play back the images that have been added to the selected album.

- The icon of the selected album is displayed during playback (
- If you tap ☑, you can change the album icons (their colors and designs) (↔ 10).
- When viewing images in full-frame playback mode or thumbnail playback mode, tap with to select a feature from the favorite pictures menu (184).



#### Notes About Deletion

If an image is deleted while using favorite pictures mode, the image will not only be removed from the album, but the corresponding image file will also be permanently deleted from the internal memory or the memory card.

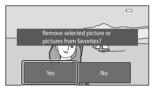


# **Removing Images from Albums**

To remove an image from an album without permanently deleting it, follow the procedure described below.

- Select the desired image in full-frame display in favorite pictures mode, tap we to display the menu options, and then tap . The confirmation dialog is displayed.
- Tap **Yes** to remove the image from the album.



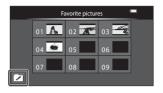


# **Changing the Favorites Album Icon**

#### Press the ▶ button (playback mode) → ▶ button → 🕅 Favorite pictures

# 1 Tap 🖸.

 The album icon and icon color selection screen is displayed.



# 2 Tap the desired icon, tap or drag the slider to select the icon's color, and tap **OK**.

• The album selection screen is displayed.



# **3** Tap the desired album.

- The icon is changed.
- To select a different icon and color again, tap **9** before tapping the album.



# Notes About Album Icons

- Set the album icons separately for the internal memory and for the memory card.
- To change the album icons for the internal memory, first remove the memory card from the camera.
- The default setting for the icon is the number icon.



Reference Section

# **Auto Sort Mode**

Images are automatically sorted into categories, such as portraits, landscapes, and movies.

#### Press the ▶ button (playback mode) → ▶ button → Auto sort

Tap a category to play back the images in the selected category.

- The icon of the selected category is displayed during playback (DD8).
- When viewing images in full-frame playback mode or thumbnail playback mode, tap to select a feature from the auto sort menu (Q84).

# Auto Sort Mode Categories



Option	Description
😮 Smile	Images captured in smart portrait mode ( $\square$ 54) with the smile timer setting set to $\mathbf{On}$
Portraits	Images captured in <b>Portrait</b> *, <b>Night portrait</b> *, <b>Party/indoor</b> , or <b>Backlighting</b> * scene mode ( <b>4</b> 0) Images captured in smart portrait mode ( <b>5</b> 4) with the smile timer setting set to <b>Off</b>
<b>TI</b> Food	Images captured in <b>Food</b> scene mode (🎞 40)
Landscape	Images captured in <b>Landscape</b> * scene mode (🛄40)
Dusk to dawn	Images captured in Night landscape*, Sunset, Dusk/dawn, or Fireworks show scene mode (□40)
Close-ups	Images captured in <b>1</b> (auto) mode with macro mode ( <b>1</b> 63) Images captured in <b>Close-up</b> * scene mode ( <b>1</b> 40)

Option	Description	
🦋 Pet portrait	Images captured in <b>Pet portrait</b> (🎞 49) scene mode	
🖷 Movie	Movies (🎞 96).	
🗹 Retouched copies	Copies created using editing functions (🏞 17)	
D Other scenes	All other images that cannot be defined by the categories described above	

* Images captured in scene auto selector scene mode (CC42) are also sorted into the appropriate categories.

#### Notes About Auto Sort Mode

- Up to 999 images and movie files can be sorted into each category in auto sort mode. If 999 images or movies have already been sorted into a specific category, new images and movies cannot be sorted into that category nor can they be displayed in auto sort mode. You can play back images and movies that could not be sorted into a category by using normal playback mode (□32) or list by date mode (∞13).
- Images and movies copied from the internal memory to a memory card, or vice versa, cannot be played back in auto sort mode ( 60).
- Images or movies saved by a camera other than the COOLPIX S6400 cannot be played back in auto sort mode.

#### Press the ▶ button (playback mode) → ▶ button → ն List by date

Tap a date to play back the images captured on the selected date.

- The first image that was captured on the selected date is displayed.
- 🖻 is displayed during playback (🛄 8).
- To change the displayed month, tap ▲ or ▼.

Mon	Tue	Wed	Thu	Fri	Sat	
			1	2	3	
5	6	7	8	9	10	
12	13	14	<b>\$</b>	16	17	2012
19				23	24	11
10%	27	28	29	30		
	5 12 19	5 6 12 13 19 20	5 6 7 12 13 14 19 20 21	12 13 14 <b>1</b> 19 20 21 22	1         2           5         6         7         8         9           12         13         14         16           19         20         21         22         23	Image: 1         Image: 2         Image: 3           5         6         7         8         9         10           12         13         14         Image: 3         16         17           19         20         21         22         23         24

### Notes About List by Date Mode

- The 9,000 most recent images can be displayed in list by date mode.
- Images captured when the camera's date is not set are treated as images captured on January 1, 2012.

# **Viewing Images in a Sequence**

Each series of images captured using the following settings is saved in a sequence.

- 🖸 (auto) mode (🛄 38)
  - Continuous H
  - Continuous L
  - Pre-shooting cache
  - Continuous H: 120 fps
  - Continuous H: 60 fps

By default, only the first image of a sequence (key picture) is displayed to represent the images in the sequence in full-frame playback mode or thumbnail playback mode ( $\square$ 81).

• When only the key picture is displayed for a sequence, the picture cannot be zoomed in on.

When only the key picture is displayed for a sequence, tap **D** to display each image in a sequence individually.

- To display the previous or next image, drag the current picture to the left or right, or tap
- To return to key picture only display, tap 9.
- To display images in a sequence as thumbnails, set Sequence display options to Individual pictures in the setup menu ( 110).

- Scene mode (🖽 40)
  - Sports
  - Pet portrait (when Continuous is selected)





# Sequence Display Options

- Select Sequence display options (Intersection of the setup menu to set all sequences to be displayed using their key pictures or to display them as individual images.
- Images captured continuously with cameras other than the COOLPIX S6400 cannot be displayed as a sequence.

### Changing Key Picture in Sequence

A sequence's key picture can be changed using **Choose key picture** (🖚 82) in the playback menu.

#### Playback Menu Options Available When Using Sequence

When 🔤 is tapped, the following menu operations are available for the images in that sequence.

- Favorite pictures¹ (♣7)
- Delete (🏍 16)
- Slide show (🗝 69)
- Protect¹ (♣71)
- Print order¹ (**66**73)

- Paint² (♣22)
- Retouch² (♣17)
- Voice memo² (♣78)
- Copy¹ (♣80)
- Choose key picture² (🏍 82)
- ¹ If we is tapped when only a key picture is displayed, the same settings can be applied to all images in that sequence. Tap we after displaying individual images to apply settings to each displayed image.
- ² This operation is not available when only a key picture is displayed. Display the images in the sequence individually and then tap Image.

# **Deleting Images in a Sequence**

If **Sequence display options** (O 110) in the setup menu is set to **Key picture only**, images to be deleted vary as described below. To display the screen for selecting the deletion method, tap  $\fbox{O}$  and tap  $\Huge{O}$ .

- If only key pictures are displayed for sequences when 🔤 is tapped:
  - Current image: When a key picture is selected, all images in that sequence are deleted.
  - Select images: When a key picture is selected on the erase selected images screen (D35), all pictures in the sequence are deleted.
  - All images: All images are deleted, including the sequence represented by the currently displayed key picture.
- If was tapped and each individual image in the sequence is displayed before tapping

Deletion methods change as follows.

- Current image: The image currently displayed is deleted.
- Select images: When multiple images in the sequence are selected on the erase selected images screen (\$\overlime{4}35\$), the selected images are deleted.
- Entire sequence: All images in the sequence, including the image currently displayed, are deleted.

# **Editing Features**

Use the COOLPIX S6400 to edit images in-camera and save them as separate files (🖚 117). The editing functions described below are available.

Editing function	Description	
Quick effects (🖚 20)	Apply a variety of effects to images.	
Paint (🏞 22)	Draw on images, or add decorations to images.	
Quick retouch (🗢 25)	Easily create retouched copies in which contrast and saturation have been enhanced.	
D-Lighting (📤 26)	Create a copy of the current image with enhanced brightness and contrast, brightening dark portions of the image.	
Stretch (🏞 27)	Stretch the current image horizontally to make the subject appear thinner or wider.	
Perspective control ( <b>6</b> 28)	Adjust the perspective of pictures taken in landscape orientation. Apply perspective control similar to that available with shift lenses. This option is suited to images of buildings or architecture.	
Glamour retouch (🖚 29)	Make facial skin tone softer and make faces look smaller with larger eyes.	
Small picture (🖚31)	Create a small copy of images suitable for use as e-mail attachments.	
Crop (🏞 32)	Crop a portion of the image. Use to zoom in on a subject or arrange a composition.	

For information about the rotate image function, see page 🖚77.

# Notes About Image Editing

- The editing functions of COOLPIX S6400 cannot be used for images captured with another make or model of digital camera.
- Images captured using Easy panorama (¹⁴⁸) or 3D photography (¹⁵⁰) cannot be edited.
- If no face is detected in an image, a copy cannot be created using the glamour retouch function ( $\bigcirc$  29).
- When 999 images are already sorted into the ☑ (retouched copies) category in auto sort mode (↔11), images cannot be edited.
- Edited copies created with COOLPIX S6400 may not be displayed properly on another make or model of digital camera. It may also be impossible to transfer them to a computer using another make or model of digital camera.
- Editing functions are not available when there is not enough free space in the internal memory or on the memory card.
- Images created in **Draw** scene mode (🗢 2) can only be edited with the paint, small picture, or crop function.
- To edit an individual image in a sequence of images ( A) when only the key picture is displayed, perform one of the procedures described below:
  - Tap **I** to display a sequence of images as individual images and select an image in the sequence.
  - Set **Sequence display options** (*c***1**10) in the setup menu to **Individual pictures** to display them as individual images and select an image.

# Restrictions on Image Editing

When an edited copy is further modified with another editing function, check the following restrictions.

Editing function used	Editing functions to use	
Paint	The paint, small picture, or crop function can be used.	
Quick effects Retouch D-Lighting Stretch Perspective control	The paint, small picture, glamour retouch, or crop function can be used.	
Glamour retouch	The editing functions other than glamour retouch can be used.	
Small picture	Another editing function cannot be used.	
Сгор	Another editing function cannot be used. However, the paint function can be applied to cropped copies saved at an image size 18 (1280×720) pixels or larger.	

• Copies created with editing functions other than the paint function cannot be further edited with the same function used to create them.

- When combining the small picture or crop function and another editing function, use the small picture and crop functions after other editing functions have been applied.
- Retouch effects such as the glamour retouch function's skin softening effect can be applied to images taken with the skin softening function ( 6067).

#### Original and Edited Images

- Copies created with editing functions are not deleted if the original images are deleted. The original images are not deleted if copies created with editing functions are deleted.
- Edited copies are saved with the same shooting date and time as the original.
- Print order ( 73) and protect settings ( 71) do not remain effective in edited copies.

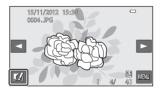
# 🗹 Quick Effects

Select one of the 30 effects listed below. The effect results can be previewed on the screen shown in step 2 ( $\clubsuit$ 21).

Effect	Description
Pop and Super vivid	Mainly enhances the color saturation.
Painting, High key, Toy camera effect 1, Toy camera effect 2, Low key, Cross process (red), Cross process (yellow), Cross process (green), and Cross process (blue)	Mainly adjusts hue and creates a different look for the image.
Soft, Fisheye, Cross screen, and Miniature effect	Processes images with a variety of effects.
High-contrast monochrome, Sepia, Cyanotype, and Selective color (12 colors)	Turns multicolor images into single color images. Selective color transforms all colors, except a specified color, to black and white.

#### Display the image to which you want to apply an effect in full-frame playback mode and tap

• The effect selection screen is displayed.



### **2** Tap the desired effect.

• Tap 🚺 or 🔽 to scroll through the display.



# **3** Tap **OK**.

To exit without saving the edited image, tap S.
 When a confirmation screen is displayed, tap Yes.



- A new, edited copy is created.
- Copies created with the quick effects function are indicated by the 🖉 icon displayed during playback (CD8).

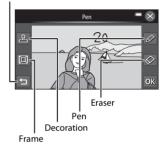
# 🖉 Paint

Press the ▶ button (playback mode) → select an image → tap 🔤 → 🖉 Paint

# 1 Use the Ø, Ø, 壆, and I tools to paint images.

- For more information about using each tool, see "Write and Draw on images" ( 23).
- Rotate the zoom control to T (Q) to display the image in full-frame playback mode and rotate the zoom control to T (Q) again to enlarge the image display by 3×. Tap ▲, ▶, ▶, ♥ or ▲ to change the portion of the image visible in the monitor. Rotate the zoom control to ₩ (➡) to return to the original display size.
- Tap **b** to undo the last operation applied using the pen, eraser, or decoration tool (up to the last five operations can be undone).





# **2** Tap **DK**.

To exit without saving the edited image, tap S.
 When a confirmation screen is displayed, tap
 Yes.



# **3** Tap Yes.

- A new, painted copy is created.
- Images taken at an Image mode setting (□69) of 
   ¹⁰/₄ 4608×2592 are saved at a size of 
   ¹⁰/₄ (2272×1704) or larger are saved at a size of 
   ¹⁰/₄ (2272×1704) and images taken at
   ¹⁰/₄ 1600×1200 or 
   ¹⁰/₄ 640×480 are saved at a size of 
   ¹⁰/₄ (640×480).
- Painted copies are indicated by the 𝒜 icon displayed during playback (□ 8).

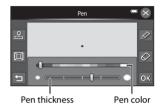
#### **Using the Paint Tools**

#### Write and Draw on images

Tap 🖉 to write or draw on images.

You can change the color and thickness of the pen using the palette. To hide the palette, tap 🖉 or the image.

- Tap or drag the pen color slider to select pen color.
- Tap the pen thickness slider to select pen thickness.

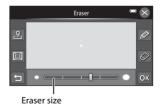


#### **Erase Paint Tool Additions**

Tap 🐼 to erase additions to images using the paint or decoration tool.

You can change the size of the eraser using the palette. To hide the palette, tap 🐼 or the image.

• Tap the eraser size slider to select the size of the eraser.



#### Add Decorations

Tap 🖪 to add a decoration.

You can change the decoration type or size using the palette. To hide the palette, tap 😫 or the image.

- Decoration type can be selected from 14 types.
- Tap the decoration size slider to select the decoration size.
- When I is selected for the decoration type, I (day, month, year) and I (day, month, year, time) options are available.

#### Add a Frame

Tap 🔟 to add a frame around the image.

• Tap or to display seven different frames one at a time.

#### Decoration type



#### Decoration size



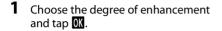
# **Reference Section**

#### Notes About Shooting Date Decoration

- When the shooting date decoration is added to pictures taken at an **Image mode** setting (<a>49</a>) of **(M) 640×480**, the shooting date may be difficult to read. Set **Image mode** to **(A) 1600×1200** or larger when shooting.
- The date added with the shooting date decoration uses the Date format setting selected in the setup menu's Time zone and date item ( >> 90).
- The date and time added with the shooting date decoration are the date and time at which the picture was taken. These cannot be changed.

### 🖄 Quick Retouch: Enhancing Contrast and Saturation

Press the ▶ button (playback mode) → select an image → tap → Ø Retouch → L^{*} Quick retouch





- A new, retouched copy is created.
- Copies created with the quick retouch function are indicated by the 
   icon displayed during playback (
   18).

### D-Lighting: Enhancing Brightness and Contrast

Press the ▶ button (playback mode) → select an image → tap 🔤 → 🗹 Retouch → 陷 D-Lighting

- **1** Tap **OK**.
  - The original version is displayed on the left and the edited version is displayed on the right.



- A new, edited copy is created.

# 🛨 Stretch: Stretching Images

Press the ▶ button (playback mode) → select an image → tap → Ø Retouch → ∰ Stretch

 Tap □ or □, or tap or drag the slider at the bottom of the screen to adjust stretch effect.



**2** Tap **OK**.

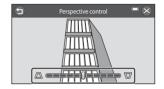


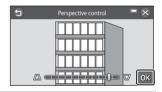
- A new, stretched copy is created.
- Stretched copies are indicated by the 🔢 icon displayed in playback mode (📖 8).

## Perspective Control: Adjusting a Sense of Perspective

Press the ▶ button (playback mode) → select an image → tap → Ø Retouch → ▲ Perspective control

 Tap △ or ▽, or tap or drag the slider at the bottom of the screen to adjust perspective control.





**2** Tap **OK**.

Reference Section

- Tap **Yes**.
  - A new, edited copy is created.
  - Copies created using the perspective control function are indicated by the 🕅 icon displayed in playback mode (🛄 8).

# Glamour Retouch: Softening Skin and Making Faces Looking Smaller with Larger Eyes

Press the ▶ button (playback mode) → select an image → tap → Ø Retouch → ☞ Glamour retouch

#### 1 Tap 🐷 All or 🖾 Skin softening.

- All: Soften facial skin tones, make faces look smaller, and make eyes look larger.
- Skin softening: Soften facial skin tones.
- The preview screen is displayed.



#### **2** Preview the result of the effect.

- Skin tones in up to 12 faces, in the order of that closest to the center of the frame, are softened.
- Tap **Before** or **After** to view the image with or without the effects.
- If more than one face was retouched, tap in or
   to display a different face.
- To change the effect, tap 🕤 to return to step 1.
- Tap **OK** to display the confirmation dialog for saving the new copy.

- A new, edited copy is created.



# Notes About Glamour Retouch

- If no faces are detected in the image, the glamour retouch function cannot be used.
- The glamour retouch function may not perform as expected depending on the direction in which the faces are looking or the brightness of the faces in the image.

### 🔚 Small Picture: Reducing the Size of an Image

Press the  $\blacktriangleright$  button (playback mode)  $\rightarrow$  select an image  $\rightarrow$  tap  $\blacksquare \rightarrow extsf{M}$  Retouch  $\rightarrow extsf{E}$ Small picture



**2** Tap **OK**.

1



- A new, small copy is created (compression ratio of approximately 1:16).
- Copies created with the small picture function are displayed at a smaller size with the Elements icon during playback.

# 🗶 Crop: Creating a Cropped Copy

Create a copy containing only the portion visible in the monitor when 🔀 is displayed with playback zoom (🖽 80) enabled. Cropped copies are saved as separate files.

#### 1 Enlarge the picture for cropping (

#### **2** Refine copy composition.

- Rotate the zoom control to  ${\bm T}\left( Q\right)$  or  ${\bm W}\left( {\bm \Xi}\right)$  to adjust the zoom ratio.
- Drag the current image, or tap T , or so that only the portion to be copied is visible in the monitor.



**3** Tap 🔀.



# **Reference Section**

- A cropped copy is created.
- Copies created with the crop function are indicated by the & icon displayed during playback (CP8).

# 🖉 Image Size

- The aspect ratio of the cropped copies is 16:9. As the area to be saved is reduced, the image size (pixels) of the cropped copy is also reduced.
- When the image size of the cropped copy is 640 × 360, the image is displayed at a smaller size during playback.

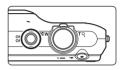
#### Cropping the Image in Its Current "Tall" Orientation

Use the **Rotate image** option ( $\checkmark$ 77) to rotate the image so that it is displayed in landscape orientation. After cropping the image, rotate the cropped image back to "tall" orientation. The image displayed in "tall" orientation can be cropped by zooming in on the image until the black bars displayed on the both sides of the monitor disappear. The cropped image is displayed in landscape orientation.

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

Connect the camera to a TV to play back images or movies on the TV. If your TV is equipped with an HDMI jack, a commercially available HDMI cable can be used to connect the camera to the TV.

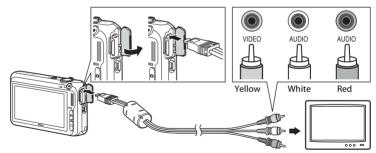
#### **1** Turn off the camera.



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

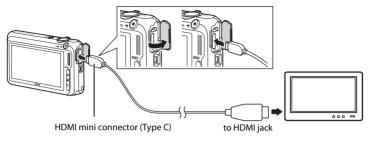
#### When using the included audio/video cable

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



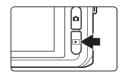
#### When using a commercially available HDMI cable

Connect the plug to the HDMI jack on the TV.



#### **3** Set the TV's input to external video input.

- See the documentation provided with your TV for details.
- 4 Hold down the ► button to turn on the camera.
  - The camera enters playback mode and images are displayed on the TV.
  - The camera monitor remains off while images are displayed on the television.
  - See "Operations with TV Connection" ( 36) for more information.



#### **Operations with TV Connection**

While images are displayed full-frame on the TV, the previous or next image can be viewed by dragging your finger across the camera monitor.

When the first frame of a movie is displayed, the movie can be played back by tapping the camera monitor.

- Tap the camera monitor to turn TV display off and display the image in the camera monitor. When images are displayed in the camera monitor, tap the controls displayed to operate the camera (only playback mode is available when connected via HDMI).
- Images will be automatically displayed on the TV in the following situations:
  - No operations are performed for a few seconds (except when a setting screen, such as a menu, is displayed).
  - A slide show is played back.
  - A movie is played back.

# Notes About Connecting the HDMI Cable

An HDMI cable is not included. Use a commercially available HDMI cable to connect the camera to a high-definition TV. The output terminal on this camera is an HDMI mini connector (type C). When purchasing an HDMI cable, be sure that the device end of the cable is an HDMI mini connector.

#### Notes About Connecting the Cable

- When connecting the cable, be sure that the plug is properly oriented. 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 (Type C) and to the USB/audio/video output connector simultaneously.

#### If Images Are Not Displayed on the TV

Be sure that the camera's video mode setting in the **TV settings** (🖚 105) under the setup menu conforms to the standard used by your TV.

#### Using a TV Remote Control (HDMI Device Control)

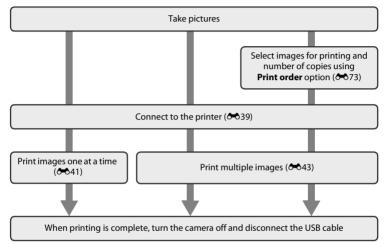
The remote control of an HDMI-CEC-compatible TV can be used to control playback. It can be used instead of the camera's touch panel to select images, start and pause movie playback, scroll playback of images taken using easy panorama, and switch between full-screen playback mode and six-image thumbnail display, etc.

- Aim the remote control at the TV when operating it.
- Refer to the TV's operating instructions for information about the TV's HDMI-CEC compatibility.

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

Users of PictBridge-compatible ( $\not{c}$  22) printers can connect the camera directly to the printer and print images without using a computer.

Follow the procedures below to print images.



#### Notes About 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-62G (available separately) is used, COOLPIX S6400 can be powered from an
  electrical outlet. Do not use any other make or model of AC adapter as it may cause the camera to
  heat up or malfunction.



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

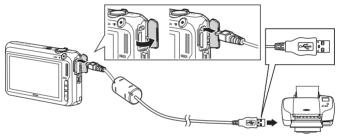
#### **1** Turn off the camera.

## **2** Turn on the printer.

• Check printer settings.

#### **3** Connect the camera to the printer using the included USB cable.

• Be sure that plugs are properly oriented. Do not attempt to insert plugs at an angle, and do not use force when connecting or disconnecting the plugs.



# **4** The camera is automatically turned on.

 When properly connected, the **PictBridge** startup screen will be displayed in the camera monitor, followed by the **Print selection** screen.



#### If the PictBridge Startup Screen Is not Displayed

Turn the camera off and disconnect the USB cable. Set the **Charge by computer** option (******106) in the camera's setup menu to **Off** and reconnect the cable.

#### Printing Images

Images saved on a memory card can be printed by transferring the images to a computer or connecting the camera directly to a printer. The following printing methods are also available:

- · Inserting a memory card into a DPOF-compatible printer's card slot
- Taking a memory card to a digital photo lab

For printing using these methods, specify the images and the number of prints each to the memory card using the **Print order** option in the playback menu ( $\checkmark$ 73).



#### **Printing Individual Images**

After properly connecting the camera to the printer (🖚 39), follow the procedures described below to print an image.

# 1 Tap ▲ or ▲ to choose the desired image and tap 0K.

• To more easily find the desired image, rotate the zoom control to  $\bm{W}$  ( $\fbox$ ) to switch to 12-image thumbnail display mode. Rotate the zoom control to  $\bm{T}$  ( $\bm{Q}$ ) to switch to full-frame playback mode.



**2** Tap Copies.



# **3** Tap the desired number of copies (up to nine).



# 4 Tap Paper size.



# **5** Tap the desired paper size.

- Tap or to display the previous or next page.
- To specify paper size using settings on the printer, select **Default** in the paper size option.

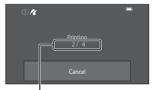


#### 6 Tap Start print.



#### Printing begins.

 Monitor display returns to the print selection screen shown in step 1 when printing is complete.



Current number of copies/ total number of copies

#### **Printing Multiple Images**

After properly connecting the camera to the printer (🖚 39), follow the procedures described below to print multiple images.

# 1 When the **Print selection** screen is displayed, tap **W**.



#### **2** Tap **Paper size**.

• To exit the print menu, tap **9**.



## **3** Tap the desired paper size.

- Tap ▲ or ▼ to display the previous or next page.
- To specify paper size using settings on the printer, select **Default** in the paper size option.



Reference Section

# 4 Tap Print selection, Print all images, or DPOF printing.



#### Print selection

Select images (up to 99 images) and the number of copies (up to nine) of each.

- Tap the desired image and tap are real at the bottom left of the monitor to specify the number of copies to be printed.
- Images selected for printing are indicated by the check mark (♥) and the numeral indicating the number of

 Print selection

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copies to be printed. If no copies have been specified for images, the selection is canceled.

- Rotate the zoom control to  $\mathbf{T}(\mathbf{Q})$  to switch back to full-frame playback or  $\mathbf{W}(\mathbf{E})$  to display 12 thumbnails.
- Tap ket to cancel the selection of all images.
- Tap **OK** when setting is complete.
- When the screen shown on the right is displayed, tap **Start print** to start printing.

Tap **Cancel** to return to the print menu.

9	Print selection	
	10 prints	
	Start print	
	Cancel	

#### Print all images

One copy each of all images saved in the internal memory, or on the memory card, is printed.

 When the screen shown on the right is displayed, tap Start print to start print. Tap Cancel to return to the print menu.



#### DPOF printing

Print images for which a print order was created using the **Print order** option (**C**73).

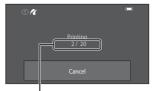
- When the screen shown on the right is displayed, tap Start print to start printing. Tap to return to the print menu.
- To view the current print order, tap View images. To print images, tap OK.





## **5** Printing begins.

• Monitor display returns to the print menu shown in step 2 when printing is complete.



Current number of copies/ total number of copies



The camera supports the following paper sizes: **Default** (the default paper size for the printer connected to the camera), **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 printer will be displayed.



# **Editing Movies**

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

1 Play back the desired movie and pause at the start point of the portion that is to be extracted (1100).

# **2** Tap 🔀.

• The movie edit screen is displayed.



#### **3** Tap 💹 (choose start point).

- When editing begins, the frame where playback was paused is the start point.
- Tap ≤ or ▷ to move the start point to the beginning of the desired portion of the movie.
- To cancel editing, tap 9.



### 4 Tap 🖾 (choose end point).

 Tap or to move the end point on the right edge to the end of the desired portion of the movie.



# 5 When the settings are finished, tap **OK**.

- Tap D (preview) before tapping **OK** to preview the specified portion of the movie.
- When previewing the movie, you can perform the operations listed below by tapping the icons on the control panel.
  - 🚺: Adjust volume.
  - ◀/▶: Advance or rewind.
  - II/I: Pause or end playback.

## 6 Tap Yes.

• The edited movie is saved.



# Reference Section

#### Notes About Movie Editing

- Use a sufficiently charged battery to prevent the camera from turning off during editing. When the battery level display is 💷, movie editing is not possible.
- A movie that was created by editing cannot be trimmed again. To trim another area of the movie, select and edit the original movie.
- Movies are trimmed in one-second intervals, therefore the actual trimmed portion of the movie may differ slightly from the selected start and end points. Movies cannot be trimmed so that they are less than two seconds long.
- Editing functions are not available when there is not enough free space in the internal memory or on the memory card to save the edited copies.



#### More Information

See "File and Folder Names" (🖚 117) for more information.



# The Shooting Menu (for 🗖 (Auto) Mode)

#### Image Mode (Image Size and Quality)

Enter shooting mode → Tap 🔤 → 🔃 Image mode

You can select the combination of image size and compression ratio that is used when saving images.

Select the image mode best suited to the manner in which images will be used and the capacity of the internal memory or memory card.

Image mode*	Description	
tili 4608×3456★	Images will be higher quality than 📴. The compression ratio is approximately 1:4.	
6 4608×3456	Best choice in most situations. The compression ratio is approximately 1:8.	
8∎ 3264×2448		
4 _м 2272×1704		
2∎ 1600×1200	Smaller size than 🔝, 🖼, or 🚛 and therefore allows more images to be saved. The compression ratio is approximately 1:8.	
100×480	Suited to full-screen display on a TV with an aspect ratio of 4:3, or distribution by e-mail. The compression ratio is approximately 1:8.	
₩ 4608×2592 (default setting)	Images with an aspect ratio of 16:9 are saved. The compression ratio is approximately 1:8.	

* The total number of pixels captured, and the number of pixels captured horizontally and vertically. ____

Example: 🔂 4608×3456 = approx. 16 megapixels, 4608 × 3456 pixels

#### Notes About Image Mode

- The setting is also applied to other shooting modes.
- Some settings cannot be used with other functions (QQ71).
- The image mode cannot be selected in **Draw**, **3D photography**, or **Easy panorama** scene mode ( $\square$ 40).

#### Number of Images That Can Be Saved

The following table lists the approximate number of images that can be saved on a 4 GB memory card. Note that due to JPEG compression, the number of images that can be saved varies greatly depending on the composition of the image. In addition, this number may vary depending on the make of the memory card, even when the memory cards have the same specified capacity. Check the shooting screen for the number of images that can be saved when saving to the internal memory (approx. 78 MB).

Image mode	Memory card ¹ (4 GB)	Print size ² (cm/in.)	
tili 4608×3456★	380	Approx. 39 × 29/15 × 11.5	
6 4608×3456	760	Approx. 39 × 29/15 × 11.5	
8₩ 3264×2448	1520	Approx. 28 × 21/11 × 8	
4 2272×1704	3130	Approx. 19 × 14/7.5 × 5.6	
<b>2</b> ∎ 1600×1200	6330	Approx. 13 × 10/5.3 × 4	
100 640×480	22400	Approx. 5 × 4/2 × 1.5	
₩ 4608×2592	1010	Approx. 39 × 22/15 × 8.5	

¹ If the number of exposures remaining is 10,000 or more, the number of exposures remaining display shows "9999".

² Print size at an output resolution of 300 dpi. Print sizes are calculated by dividing the number of pixels by printer resolution (dpi) and multiplying by 2.54 cm (1 in). However, at the same image size, images printed at higher resolutions will print smaller than the size indicated, and those printed at lower resolutions will print larger than the size indicated.

# نَّ الْعَبْ الْعَبْ Touch Shooting

Select one of the options listed below.

Option	Description	Ш
ليَّ Touch shutter (default setting)	Pictures can be taken by simply tapping the monitor.	<b>6</b> 53
🖶 Subject tracking*	Use this option to take pictures of moving subjects. Tap the subject on which the camera will focus. The focus area will automatically move to track the subject.	<b>€€</b> 55
Tap the monitor to set the focus area. Press the shutter-release button to take the picture with the focus and exposure achieved with the focus area.		€ 57

* Available only in 🖸 mode.

#### 6 Focus Area That Can Be Set with Touch Shutter or Touch AF/AE

The focus area that can be set by tapping the monitor when using **Touch shutter** or **Touch AF/AE** varies depending on the shooting mode as described below.

Shooting mode	Available focus area	
🗖 (auto) mode (🛄 38)		
Scene auto selector, Sports, Party/ indoor, Beach, Snow, Close-up, Food, Museum, Black and white copy, Backlighting, and 3D photography scene modes (40)	Focus area can be changed onto the subject that is tapped. ¹	
Special effects mode (🛄 52)		
Portrait and Night portrait scene modes (1140)	Only a border displayed by face detection ( $\square$ 75) can be selected. ¹	
Landscape, Sunset, Dusk/dawn, Night landscape, Fireworks show, and Easy panorama scene modes (40)	<ul> <li>The shutter can be released using Touch shutter, but the focus area cannot be changed. See "Characteristics of Each Scene" (242).</li> <li>Touch AF/AE cannot be used.</li> </ul>	
<b>Pet portrait</b> scene mode (CQ40) (when pet portrait auto release is set to <b>Off</b> ² )	Only a border displayed by pet detection (CQ49) or face detection can be selected. ¹	
Smart portrait mode (口54) (when smile timer is set to <b>Off</b> ² )	<ul> <li>When a face is detected: Only a border displayed by face detection (¹¹⁷⁵) can be selected.¹</li> <li>When no face is detected: Focus area can be changed onto the subject that is tapped.</li> </ul>	

¹ When the camera detects more than one face, tap a face framed by a single border to set the focus area on that face.

² When enabled, **Touch shutter** and **Touch AF/AE** are disabled.

#### Tapping the Monitor to Release the Shutter (Touch Shutter)

Enter shooting mode  $\rightarrow$  tap  $\square \rightarrow \square / \square / \square / \square$  Touch shooting  $\rightarrow \square$  Touch shutter

#### Tap the desired subject to take a picture.

- Do not use force when tapping the monitor as this may cause slight movement of the camera, resulting in blurred images.
- When digital zoom is in effect, the camera focuses on the subject in the center of the frame.
- The shutter-release button can also be used when the touch shutter option is selected.
- If [ ] is displayed when the monitor is tapped, the shutter cannot be released. Tap an area within [ ].





# Notes About Touch Shutter

- The focus area that can be set varies depending on the shooting mode (🖚 52).
- When taking pictures with Continuous H, Continuous L, Pre-shooting cache, Continuous H: 120 fps, Continuous H: 60 fps, or BSS in Continuous setting (359) enabled, or in Sports, Museum, Pet portrait (when Continuous is selected) scene mode (240), use the shutter-release button to take pictures. Only one picture can be taken at a time using the touch shutter function.
- Prevent shooting with accidental tapping of the monitor by changing the touch shooting setting to **Touch AF/AE** (🗢 57) (not available in some shooting modes). At this setting, the shutter is not released when the monitor is tapped.
- When shooting a subject that is not suitable for autofocus, the subject may not be in focus (\$\$\mathbb{Q}\$77).
- When a subject displayed in the monitor is tapped with the self-timer (CC61) enabled, the camera locks focus and releases the shutter after ten or two seconds.
- Some settings cannot be used with other functions (QQ71).

#### 🖶 Focusing on a Moving Subject (Subject Tracking)

Select 🗖 (auto) mode → tap 🔤 → Ģ/舉/船 Touch shooting → 🗣 Subject tracking

• 🙀 (subject tracking) is enabled only in 🗖 (auto) mode.

#### 1 Register a subject.

- Tap the desired tracking subject in the monitor.
  - The subject is registered.
  - When the border framing the subject glows red, the camera is unable to focus. Change the composition and try again.
- If the tapped area does not contain a subject that can be registered, [ ] is displayed in the monitor. Tap an area within [ ].
- When a subject is registered, a yellow focus area is displayed on the subject and the camera begins tracking the subject.
- Tap another subject to change a subject to follow.
- To cancel the registration of the subject, tap in on the right side of the monitor.
- If the camera can no longer track the registered subject, the focus area will disappear and the registration will be canceled. Register the subject again.





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

- The camera focuses on the focus area when the shutter-release button is pressed halfway. The focus area will glow green and focus will be locked.
- When the camera is unable to focus, the focus area will flash. Press the shutter-release button halfway again to focus.



- If the shutter-release button is pressed halfway while the focus area is not displayed, the camera focuses on the area in the center of the frame.
- Press the shutter-release button all the way down to release the shutter.

#### Notes About Subject Tracking

- Digital zoom is not available.
- The sound of the lens focus motor can be heard when the subject tracking function is working.
- Adjust zoom position and apply shooting settings (³⁸) before registering the subject. If these
  settings are adjusted after the subject has been registered, subject registration will be canceled.
- It may be impossible to register the desired subject, or the camera may be unable to track the
  registered subject or may begin tracking a different subject, if the subject is moving rapidly, if
  there is a significant amount of camera shake, or if the camera detects a similar subject. The
  camera's ability to accurately track the registered subject is also dependent upon the size and
  brightness of the subject.
- In some rare cases, subjects not suitable for autofocus (\$\$\mathbb{m}77\$) may be out of focus despite the fact that the focus area glows green. In this situation, try focus lock shooting (\$\$\mathbb{m}78\$) by focusing on another subject that is the same distance from the camera.
- Some settings cannot be used with other functions (271).

#### I Touch Shooting Setting

Subject registration with subject tracking will be canceled when the camera is turned off.

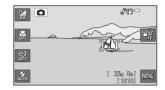
#### **6-0**56

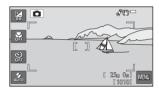
## AFL Tapping the Monitor to Focus (Touch AF/AE)

Enter shooting mode → tap IIII → III/每/船 Touch shooting → 船 Touch AF/AE

# 1 Tap the subject on which the camera focuses.

- I I or a double border will be displayed around the area tapped.
- When digital zoom is in effect, the focus area cannot be selected.
- To cancel the focus area selection, tap 🎬 on the right side of the monitor.
- If a position on which focus cannot be acquired is tapped, [2] will be displayed in the monitor. Tap an area within [2].





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

 Press the shutter-release button halfway to acquire focus and exposure, and press it all the way down to release the shutter.

## ₽ ₽

## Notes About Touch AF/AE

- The focus area that can be set varies depending on the shooting mode (2052).
- When shooting a subject that is not suitable for autofocus, the subject may not be in focus ( $\square$ 77).



## **|SO ISO Sensitivity**

#### Select **○** (auto) mode → tap **○** → **ISO** ISO sensitivity

When ISO sensitivity is increased, less light is needed when taking pictures. Higher ISO sensitivity allows darker subjects to be captured. 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.

 Although higher ISO sensitivity is effective when shooting darker subjects, shooting without the flash, shooting while using the zoom, etc., images may contain noise.

Option	Description	
Auto (default setting) Sensitivity is ISO 125 when there is sufficient lighting; the came compensates by raising sensitivity to a maximum of ISO 1600 w lighting is dim.		
Fixed range auto	Select the range in which the camera automatically adjusts ISO sensitivity, from <b>ISO 125-400</b> or <b>ISO 125-800</b> . The camera will not increase sensitivity beyond the maximum value in the selected range. Set the maximum value for ISO sensitivity for effective control over the amount of "grain" that appears in images.	
125, 200, 400, 800, 1600, 3200	Sensitivity is locked at the specified value.	

#### Notes About ISO Sensitivity

Some settings cannot be used with other functions ( $\square$ 71).



## Continuous Shooting

#### Select **○** (auto) mode → tap **□** → **□** Continuous

Change settings to continuous or BSS (Best Shot Selector).

Option	Description	
<ul><li>Single</li><li>(default setting)</li></ul>	One picture is taken each time the shutter-release button is pressed.	
🚇 Continuous H	While the shutter-release button is held all the way down, images are captured continuously at a rate of about 10 fps (when image mode is set to <b>24608×2592</b> ). Shooting ends when the shutter-release button is released, or 7 images have been captured.	
Sontinuous L	While the shutter-release button is held all the way down, up to 19 images are captured continuously at a rate of up to about 2 fps (when image mode is set to <b>18 4608×2592</b> ). Shooting ends when the shutter-release button is released.	
nterest and the second	Pre-shooting cache makes it easy to capture perfect moments by saving images from before the shutter-release button was pressed all the way. Pre-shooting cache shooting begins when the shutter-release button is pressed halfway, and continues when the shutter-release button is pressed all the way (∞61).         • Frame rate: up to 18 fps         • Number of frames:         Up to 5 frames (including up to 2 frames captured in the pre-shooting cache)         Shooting ends when the shutter-release button is released or when the maximum number of frames has been shot.	
120fps Continuous H: 120 fps	Each time the shutter-release button is pressed all the way, 50 frames are captured at a speed of about 1/120 s or faster. Image mode is fixed at I (image size: 640 × 480 pixels).	
60  Continuous H: 60 fps	Each time the shutter-release button is pressed all the way, 25 frames are captured at a speed of about 1/60 s or faster. Image mode is fixed at I (mage size: 1280 × 960 pixels).	

Option	Description	
<b>BSS</b> BSS (Best Shot Selector)	The "Best Shot Selector" is recommended when shooting with the flash off or the camera zoomed in, or in other situations in which inadvertent motion can result in blurred images. When BSS is on, the camera takes up to ten pictures while the shutter-release button is held down. The sharpest image in the series is automatically selected and saved.	
Hulti-shot 16	<ul> <li>Each time the shutter-release button is pressed, the camera takes 16 shots at a rate of about 30 fps and arranges them in a single image.</li> <li>Image mode is fixed at  (image size: 2560 × 1920 pixels).</li> <li>Digital zoom cannot be used.</li> </ul>	

#### Notes About Continuous Shooting

- When a setting other than **Single** is selected, flash cannot be used. Focus, exposure, and white balance are fixed at the values determined with the first image in each series.
- It may take some time to save the images after shooting. The amount of time it takes to finish saving the images depends on the number of images, image mode, the write speed of the memory card, etc.
- When ISO sensitivity increases, noise may appear in captured images.
- The frame rate with continuous shooting may vary depending upon the current image mode setting, the memory card used, or shooting condition.
- When Continuous is set to Pre-shooting cache, Continuous H: 120 fps, Continuous H: 60 fps, or Multi-shot 16, banding or variance in brightness or hue may occur in images that were captured under lighting that flickers at high speeds, such as fluorescent, mercury-vapor, or sodium-vapor lighting.
- Some settings cannot be used with other functions (QQ71).

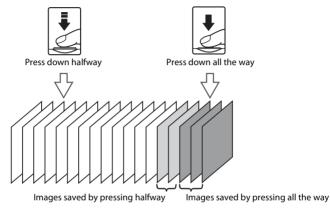
## Notes About BSS

**BSS** is suited for shooting stationary subjects. BSS may not produce the desired results if the subject moves or the composition changes.



## Pre-shooting Cache

When **Pre-shooting cache** is selected, shooting begins when the shutter-release button is pressed halfway for 0.5 seconds or longer, and images captured before the shutter-release button is pressed all the way are saved along with images captured after the shutter-release button is pressed all the way. Up to 2 images can be saved in the pre-shooting cache.



 If the number of exposures remaining is less than five, shooting with the pre-shooting cache is not possible. Before shooting, check that there are five or more exposures remaining.

#### Images Captured in Continuous Shooting Mode

• Each time images are captured using Continuous H, Continuous L, Pre-shooting cache, Continuous H: 120 fps, or Continuous H: 60 fps, the captured images are saved as a "sequence" (🖚 14).

#### More Information

- See "Subjects Not Suitable for Autofocus" (277) for more information.
- See "Viewing and Deleting Images Captured Continuously (Sequence)" (Co 14) for more information.

## WB White Balance (Adjusting Hue)

#### Select **○** (auto) mode → tap **□** → **₩**B 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 by processing images according to the color of the light source. This is known as "white balance." For natural colors, select a white balance setting that matches the light source before shooting.

Although **Auto** (default setting) can be used under most types of lighting, white balance can be adjusted to suit the sky conditions or light source and achieve more natural color tones in the image.

Option	Description	
AUTO Auto (default setting)	White balance is automatically adjusted to suit lighting conditions.	
<b>PRE</b> Preset manual	Useful when shooting under unusual lighting (🏞 63).	
🔆 Daylight	White balance adjusted for direct sunlight.	
₩ Incandes.	Use under incandescent lighting.	
🗮 Fluorescent	Use under fluorescent lighting.	
Cloudy	Use when taking pictures under overcast skies.	
兮 Flash	Use with the flash.	

Tap an option to select it and tap OK.

#### **Using Preset Manual**

The preset manual option is used with mixed lighting or to compensate for light sources with a strong color cast when the desired effect has not been achieved with white balance settings like **Auto** and **Incandes.** (for example, to make images shot under a lamp with a red shade look as though they had been shot under white light).

Use the procedure below to measure the white balance value under the lighting used during shooting.

- 1 Place a white or gray reference object under the lighting that will be used during shooting.
- **2** Tap  $\blacksquare$  and tap  $\blacksquare$ .



## **3** Tap **PRE** and tap **OK**.

 The lens extends to the zoom position for measurement.

9	White balan	ce 🖷	$\times$
AUTO	PRE	<u>کڑ</u>	
Auto	Preset manual	Daylight	
З	0.0	ک ا	V
incendes.	Fluorescent	Cloudy	ок

Reference Section

# 4 Frame the white or gray reference object in the measuring window.

 To apply the most recently measured value for preset manual instead of taking a new measurement, tap Cancel. The most recently measured value is set for white balance, and a new measurement is not performed.



# **5** Tap **Measure** to measure a new white balance value.

- The shutter is released and the new white balance value for preset manual is set. No image is saved.
- When the monitor display returns to the screen shown in step 3, tap X to complete the setting.



#### Notes About White Balance

- Some settings cannot be used with other functions (271).
- Set the flash to ③ (off) when white balance is set to any setting other than Auto and Flash (□58).

## Notes About Preset Manual

A value for flash lighting cannot be measured with **Preset manual**. When shooting using the flash, set **White balance** to **Auto** or **Flash**.



## 🗹 Quick Effects

#### Select **○** (auto) mode → tap **○** → **C** Quick effects

Enable or disable the quick effects function.

Option	Description		
ON On (default setting)	<ul> <li>The screen shown on the right is displayed immediately after the shutter is released.</li> <li>Tap OK to display the effect selection screen and enable the quick effects function (□39).</li> <li>When you tap Cancel or when no operations are performed for about five seconds shooting screen.</li> </ul>	Quick effects OK Cancel s, the monitor display returns to the	
OFF Off	Disables the quick effects function (during shooting).		

## Notes About Quick Effects

This function cannot be used with some functions ( $\square$ 71).

## [+] AF Area Mode

#### Select 🖸 (auto) mode → tap 🔤 → [+] AF area mode

Option	Description		
<ul> <li>Center</li> <li>(default setting)</li> </ul>	The camera focuses on the subject in the center of the frame. The focus area is always displayed in the center of the screen.	Focus area	
🖪 Target finding AF	When the camera detects the main subject, it focuses on that subject. See "Using Target Finding AF" (\$\D74\$) for more information.	AF areas	

Use this option to determine how the camera selects the focus area for autofocus.

#### Notes About AF Area Mode

- When digital zoom is in effect, focus will be on the center of the screen regardless of the AF area mode setting.
- Autofocus may not perform as expected (Q77).
- Some settings cannot be used with other functions (271).

## **The Smart Portrait Menu**

See "The Shooting Menu (for ▲ (Auto) Mode)" ( 49) for information about ♣ Image mode and ♣ / ♣ Touch shooting.

## 😰 Skin Softening

Enter shooting mode  $\rightarrow \Box$  (shooting mode) button  $\rightarrow \boxdot$  Smart portrait mode  $\rightarrow$  tap  $\blacksquare \rightarrow \bowtie$  Skin softening

#### Enable skin softening.

Option	Description	
<b>₊</b> ŧŧ High	When the shutter is released, the camera detects one or more	
♦♦ Normal (default setting)	human faces (up to three faces), and processes the image to soften facial skin tones before saving the image. You can select the amount of effect that is applied.	
<b>♦</b> Low		
OFF Off	Turns skin softening off.	

The effects of skin softening are not visible when framing pictures for shooting. Check the degree of skin softening performed in playback mode.

## 🔯 Blink Proof

#### Enter shooting mode $\Rightarrow$ $\square$ (shooting mode) button $\Rightarrow$ $\boxdot$ Smart portrait mode

#### → tap 🔤 → 🤯 Blink proof

The camera automatically releases the shutter twice each time a picture is taken. Of the two shots, one in which the subject's eyes are open is saved.

Option	Description	
<b>ON</b> On	Enables blink warning. Flash cannot be used when <b>On</b> is selected. If the camera saved an image in which the subject's eyes may have been closed, the dialog shown on the right is displayed for a few seconds.	A blink was detected in the picture just taken.
<b>()</b> FF Off (default setting)	Turns the blink warning off.	

# **Reference Section**

## 🖻 Smile Timer

Enter shooting mode  $\rightarrow \Box$  (shooting mode) button  $\rightarrow \boxdot$  Smart portrait mode  $\rightarrow$  tap  $\blacksquare \Rightarrow \boxdot$  Smile timer

The camera detects human faces and then automatically releases the shutter whenever a smile is detected.

Option	Description	
<b>ON</b> On (default setting)	Enables smile timer.	
OFF Off	Turns the smile timer off.	

## The Playback Menu

- See "Favorite Pictures Mode" ( C) for information about Favorite pictures and Remove from favorites.
- See "Step 6 Delete Unwanted Images" (🛄 34) for information about 🗑 Delete.
- See "Editing Still Images" (🖚 17) for information about 🖉 Paint and 🗹 Retouch.

## Slide Show

Press the ▶ button (playback mode) → tap 🔤 → 🎍 Slide show

Play back images, saved in the internal memory or on a memory card, one by one in an automated "slide show."

## 1 Tap Start.

- To change the effect, tap Effects before tapping Start.
- To change the interval between images, tap Frame intvl and select the desired interval before tapping Start.
- To repeat the slide show automatically, tap Loop before tapping Start.

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$\rightarrow$
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## **2** The slide show begins.

- Tap the monitor to display the operation panel at the bottom of the screen.
- The screen that appears when the slide show is paused is displayed after the last slide is played back.



Tap the icons in the operation panel to perform the corresponding operation. The following operations are available.

То	Тар	Description
Rewind	44	Tap and hold 💶 to rewind slide show.
Advance	▶	Tap and hold 🕨 to advance slide show.
Pause		<ul> <li>Pause playback.</li> <li>To resume playback, tap D displayed at the center of the screen.</li> </ul>
End		End slide show.

#### Notes About Slide Show

- Only the first frame of movies included in a slide show is displayed.
- When **Key picture only** is selected as the method to display sequences (*****14), only the key picture is displayed.
- Images captured using easy panorama (CA48, 🕶3) are displayed full-frame when played in a slide show. They do not scroll.
- Slide show effects cannot be specified when the camera is connected via HDMI and 3D pictures are played back in 3D (CD 51). Classic is automatically selected.
- The maximum playback time is up to 30 minutes even if **Loop** is enabled (🏞 102).

#### **6-6**70

## On Protect

Protects selected images from accidental deletion.

Note that formatting the camera's internal memory or the memory card will permanently delete protected files (

Protected images are indicated by the 🖙 icon during playback (🛄 8).

#### **Protecting One Image**

Press the ▶ button (playback mode) → select an image → tap 🔤 → On Protect

## Tap **()) On**.

- The selected image is protected.
- To continue protecting another image, drag the current image.
- To exit without protecting images, tap **9**.



Press the  $\blacktriangleright$  button (playback mode)  $\rightarrow$  switch to thumbnail playback mode ( $\square$ 81)  $\rightarrow$  tap  $\blacksquare \rightarrow \bigcirc$  Protect

# **1** Tap the desired images to be protected.

- When an image is selected, a check mark () is displayed. To cancel the selection, tap the image again.
- Rotate the zoom control to **T** (**Q**) to switch to full-frame playback or **W** (**⊡**) to switch back to 12-thumbnail display.

## **2** Tap **OK**.

• The selected images are protected.

## **Removing Protection from Images**

- To remove protection from an image, display a protected image in full-frame playback mode, follow the procedure in "Protecting One Image" (2071), and tap Off in "Protecting One Image".
- To remove protection from multiple images at a time, uncheck protected images in step 1 of "Protecting Multiple Images".





## 名 Print Order (Creating a DPOF Print Order)

When printing images saved on the memory card using any of the following methods, the **Print order** option in the playback menu is used to create digital "print orders" for printing on DPOF-compatible devices.

- Inserting the memory card into a DPOF-compatible (22) printer's card slot.
- Taking the memory card to a digital photo lab.
- Connecting the camera to a PictBridge-compatible (22) printer (338). A print order can also be created for images saved in the internal memory if the memory card is removed from the camera.
- Images selected for printing are indicated by the ≜ icon (🛄 8) during playback.

#### **Creating a Print Order for One Image**

Press the  $\blacktriangleright$  button (playback mode)  $\rightarrow$  select an image  $\rightarrow$  tap  $\blacksquare \rightarrow \blacksquare$  Print order

4

- **1** Tap the desired number of copies (up to nine) and tap OK.
  - To make a print order for another image, drag the current image before tapping **OX**.
  - If the total number of images in a print order, including images just added, exceeds 99, the screen shown at right will be displayed.
    - Tap **Yes** to remove images previously added from the print order and restrict the print order to images just marked.
    - Tap **Cancel** to remove the images just added from the print order and restrict the print order to images previously marked.



Print order

Δ

- Tap DATE Date to place 
   ✓ in the checkbox to imprint the shooting date on the image.
- Tap INFO Info to place 
   ✓ in the checkbox to imprint the photo information (shutter speed and aperture value) on the image.
- Tap **OK** to complete the print order.

#### **Creating a Print Order for Multiple Images**

Press the  $\blacktriangleright$  button (playback mode)  $\rightarrow$  switch to thumbnail playback mode ( $\square$ 81)  $\rightarrow$  tap  $\blacksquare \rightarrow \blacksquare$  Print order

 Tap the desired images to print (up to 99 images) and tap ▲ or ▲ at the bottom left of the monitor to specify the number of copies (up to nine) for each.



- Images selected for printing can be recognized by the check mark () 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 to  ${\sf T}({\sf Q})$  to switch to full-frame playback or  ${\sf W}({\scriptsize \hbox{\rm E}})$  to switch back to 12-thumbnail display.
- Tap 👪 to remove print markings from all images and cancel the print order.
- Tap 🔀 when setting is complete.



- Tap DATE Date to place 
   ✓ in the checkbox to imprint the shooting date on all images in the print order.
- Tap INFO Info to place 
  imprint the photo information (shutter speed and aperture value) on all images in the print order.
- Tap **OK** to complete the print order.

#### **Canceling Print Order**

Print order
 Print order
 Solution
 Date
 Info
 Info
 OK
 OK

- To remove a print marking from an image, display an image selected for printing in fullframe playback mode, follow the procedure in "Creating a Print Order for One Image" (��73), and tap "0" in step 1.
- To remove print markings from multiple images at a time, remove the print markings of the desired images in step 1 of "Creating a Print Order for Multiple Images" (2074). Tap at to remove print markings from all images.

## V Notes About Printing Shooting Date and Shooting Information

When the **Date** and **Info** settings are enabled in the print order option, shooting date and shooting information are printed on images when a DPOF-compatible (22) printer that supports printing of shooting date and shooting information is used.

- Shooting information cannot be printed when the camera is connected to a DPOF-compatible printer via the included USB cable ( 45).
- Note that Date and Info settings are reset each time the Print order option is displayed.
- The date printed is that saved when the image was captured. Changing the camera's date using the Date and time or Time zone in the Time zone and date option in the setup menu after an image has been captured has no effect on the date printed on the image.



## Notes About Print Order

Print orders cannot be created for images captured in **3D photography** scene mode.

## 🖉 Print Date

Using the **Print date** option ( **>>** 95) in the setup menu, shooting date and time can be imprinted on images at the time of shooting. Images with the date imprinted on them can be printed from printers that do not support printing of the date on images.

Only the date and time imprinted on images with the print date option will be printed, even if the **Print order** date option is enabled.

## 🗄 Rotate Image

Press the ▶ button (playback mode) → select an image → tap → Ø Retouch → ⊕ Rotate image

Specify the orientation in which saved images are displayed during playback. Still images can be rotated 90 degrees clockwise or 90 degrees counterclockwise.

• Tap 🖸 or 😋 to rotate the image 90 degrees.



• Tap 🕅 to finalize display orientation and save the orientation information with the image.

## Notes About Image Rotation

- Images captured with another make or model of digital camera or captured with **3D photography** (D) cannot be rotated on the COOLPIX S6400.
- Images captured in sequence cannot be rotated when only the key pictures are displayed for them. First display the images individually, and then rotate the desired image (¹/₁).

## 🖢 Voice Memo

#### Press the $\blacktriangleright$ button (playback mode) $\rightarrow$ select an image $\rightarrow$ tap $\blacksquare \rightarrow \oint$ Voice memo

Use the camera's microphone to record voice memos for images.

#### **Recording Voice Memos**

- Tap I to record a voice memo (up to about 20 seconds).
- Do not touch the microphone during recording.
- During recording, REC flashes in the monitor.



- Tap 🖸 to end recording.
- When recording ends, the voice memo playback screen is displayed.
- Tap 🕤 to return to the playback menu.



#### **Playing Voice Memos**

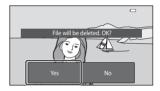
- Tap 🖸 to play the voice memo.
- Tap 
   To stop playback.
- Tap will during playback to adjust playback volume.
- J flashes during playback.
- Tap 🕤 to return to the playback menu.

#### **Deleting Voice Memos**

Tap 🖬 while the screen described in "Playing Voice Memos" is displayed.

Tap Yes to delete only the voice memo.





## Notes About Voice Memos

- When an image with a voice memo attached is deleted, both the image and its voice memo are deleted.
- You cannot delete voice memos attached to protected images (3071).
- Voice memos cannot be recorded for an image that already has a voice memo attached to it. The current voice memo must be deleted before a new voice memo can be recorded.
- The COOLPIX S6400 cannot record voice memos for images captured with another make or model of digital camera.
- Voice memos cannot be recorded for images captured in sequence when only the key pictures are displayed for sequences of images. First display the images individually, and then record voice memos (2014).

#### More Information

See "File and Folder Names" (Con 117) for more information.

## 🗄 Copy (Copy Between Internal Memory and Memory Card)

#### Press the ▶ button (playback mode) → tap 🔤 → 🛱 Copy

Copy images between the internal memory and a memory card.

- **1** Tap the desired option from the copy screen.
  - ▲ → Camera to card: Copy images from internal memory to memory card.
  - 🖆 ➡ 🕅 Card to camera: Copy images from memory card to internal memory.

## **2** Tap the desired copy option.

- Selected images: Copy images selected. Proceed to step 3.
- ALL All images: Copy all images. When a confirmation dialog is displayed, tap Yes. Images are copied. To return to the playback menu without copying, tap No.







#### 3 Tap the images to be copied.

- When an image is selected, a check mark is displayed. To cancel the selection, tap the image again. A check mark is removed.
- Rotate the zoom control to  $\mathbf{T}(\mathbf{Q})$  to switch to full-frame playback or **W** ( ) to switch back to 12-thumbnail display.

#### 4 Tap OK.

 When a confirmation dialog is displayed, tap Yes. Images are copied. To return to the playback menu without copying, tap No.

## Notes About Copying Images

- JPEG-, MOV-, WAV-, and MPO-format files can be copied. Files saved in any other format cannot be copied.
- If voice memos ( 78) are attached to images selected for copying, the voice memos are copied with the images.
- Operation is not guaranteed with images captured with another make of camera or that have been modified on a computer.
- When copying images for which **Print order** ( 73) options are enabled, the print order settings are not copied. However, when copying images for which **Protect** (🗢 71) is enabled, the protect setting is copied.
- Images or movies copied from the internal memory or a memory card cannot be displayed in auto sort mode (🖚11).
- If an image added to an album ( 7) is copied, the copied image is not added to the album.







#### Notes About Copying Images in a Sequence

- If you tap and select **Current sequence** after you tap and display images in a sequence as individual images, all images in the sequence are copied.
- If you tap 2 and display images in a sequence as individual images, only Card to camera (memory card to internal memory) image copy is available.

#### If "Memory contains no images." Is Displayed

If a memory card that contains no images is inserted into the camera, **Memory contains no images.** will be displayed when the camera is switched to playback mode. Tap and tap **H Copy** to display the copy options screen and copy the images saved in the camera's internal memory to the memory card.

#### More Information

See "File and Folder Names" (Con 117) for more information.

## 🗳 Choose Key Picture

Press the  $\blacktriangleright$  button (playback mode)  $\rightarrow$  select an image in a sequence  $\rightarrow$  tap  $\boxdot \rightarrow$  tap  $\boxdot \rightarrow \boxdot$  Choose key picture

When **Sequence display options** ( $\frown$  110) in the setup menu is set to **Key picture only**, the key picture displayed in full-frame playback mode ( $\Box$  32) and thumbnail playback mode ( $\Box$  81) can be set for each sequence of images.

- When the key picture selection screen is displayed, tap an image and tap OK.
- The key picture cannot be changed when Sequence display options is set to Individual pictures.

## **The Movie Menu**

## **Movie Options**

#### Enter shooting mode $\rightarrow$ tap $\blacksquare \rightarrow R$ Movie options

Select the desired movie option to record. Larger image sizes and faster movie bitrates mean greater image quality and larger movie file sizes.

- The movie bitrate is the volume of movie data recorded per second. Variable bitrate (VBR)
  encoding is used to automatically adjust the bitrate depending on the subject being
  recorded. When recording movies of a subject with large amounts of motion, the file size
  increases.
- See "Movie Options and Maximum Movie Length" (
  98) for information about maximum movie length.
- When recording normal speed movies, select one of the normal speed movie options (�*83), and when recording HS (high speed) movies, select one of the HS movie options (�*84).

Туре	Movie bitrate	Description
1080 m HD 1080 p ★ (1920×1080) (default setting)	Approx. 18 Mbps	Movies with an aspect ratio of 16:9 are recorded. This option is suited to playback on a widescreen TV.
1080₀ HD 1080p (1920×1080)	Approx. 12.3 Mbps	Movies with an aspect ratio of 16:9 are recorded. This option is suited to playback on a widescreen TV.
720 ₪ HD 720p (1280×720)	Approx. 9 Mbps	Movies with an aspect ratio of 16:9 are recorded.

#### **Normal Speed Movie Options**

• The frame rate is approximately 30 fps for all options.

#### **HS Movie Options**

Туре	Movie bitrate	Description
720 ₪ HS 60 fps (1280×720)	Approx. 6 Mbps	<ul> <li>1/2-speed slow motion movies with a 16:9 aspect ratio are recorded.</li> <li>Max. recording time*: 30 seconds (playback time: 1 minute)</li> </ul>
1080788 HS 15 fps (1920×1080)	Approx. 12 Mbps	<ul> <li>2x speed fast motion movies with a 16:9 aspect ratio are recorded.</li> <li>Max. recording time*: 2 minutes (playback time: 1 minute)</li> </ul>

* The maximum recording time shown here refers only to the portion of the movie that is recorded in slow motion or fast motion.

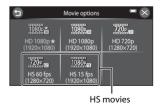
#### **Recording Movies in Slow Motion and Fast Motion (HS Movie)**

Enter shooting mode  $\rightarrow$  tap  $\blacksquare \rightarrow \blacksquare$  Movie options

HS (high speed) movies can be recorded. HS movies can be played back in slow motion at half the normal playback speed, or in fast motion at twice the normal playback speed.

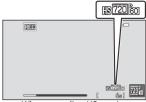
## **1** Tap an HS movie option.

• After selecting the option, tap 😣 to return to the shooting screen.



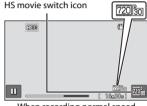
# 2 Press the ● (*★ movie-record) button to start recording.

 Movie recording starts in HS mode when Open with HS footage in the movie menu is set to On.



When recording HS movies

 Movie recording starts at normal speed when Open with HS footage in the movie menu is set to Off. Tap the HS movie switch icon to switch to HS movie recording at the point where the camera should record for slow motion or fast motion playback.



When recording normal speed movies

- When recording HS movies, the maximum movie length display changes and displays the remaining movie length for HS movie recording.
- The movie options icon changes when switching between HS movie recording and normal speed movie recording.

## **3** Press the ● (MR movie-record) button to end recording.

## Notes About HS Movie

- Sound is not recorded.
- Zoom position, focus, exposure, and white balance are locked when the (*\mathbf{m} movie-record) button is pressed to start HS movie recording.

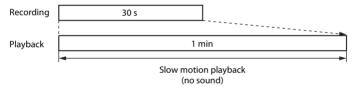
## HS Movie

Recorded movies are played back at about 30 frames per second.

When **Movie options** (56) 83) in the movie menu is set to 20 **fps (1280×720)**, movies that can be played back in slow motion can be recorded. When set to 20 **fps (1280×720)**, movies (**1920×1080**), movies that can be played back in fast motion at a speed two times faster than normal speed can be recorded.

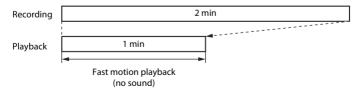
#### Portions recorded at 720 B HS 60 fps (1280×720):

High-speed recording is possible for up to 30 seconds, and the captured portion can be played back in slow motion at a speed two times slower than normal speed.



#### Portions recorded at 1080 HS 15 fps (1920×1080):

A movie of up to two minutes in length is recorded when shooting for the purpose of high-speed playback. Playback is two times faster.



## Milles Open with HS Footage

#### Enter shooting mode $\rightarrow$ tap $\square \rightarrow \P$ ^{Hs} Open with HS footage

Select whether the camera records normal speed movies or HS movies (slow motion or fast motion movies) when movie recording starts.

Option	Description
<b>ON</b> On (default setting)	Record HS movies when movie recording begins.
OFF off	Record normal speed movies when movie recording begins. Tap the HS movie switch icon ( 6685) to switch to HS movie recording at the point where the camera should record for slow motion or fast motion playback.

## 🖷 Movie AF mode

#### Enter shooting mode $\rightarrow$ tap $\blacksquare \rightarrow R$ Movie AF mode

Select how the camera focuses in movie mode.

Option	Description	
<b>AF-S</b> Single AF (default setting)	Focus is locked when the $\bigcirc$ (* movie-record) button is pressed to start recording. Select this option when the distance between the camera and the subject will remain fairly consistent.	
<b>AF-F</b> Full-time AF	Camera focuses continuously. Select this option when the distance between the camera and subject will change significantly during recording. The sound of the camera focusing may be heard in the recorded movie. Use of <b>Single</b> <b>AF</b> is recommended to prevent the sound of the camera focusing from interfering with recording.	

• When an HS movie option is selected in Movie options, the setting is fixed at Single AF.

## 💐 Wind Noise Reduction

Enter shooting mode  $\rightarrow$  tap  $\blacksquare \rightarrow \circledast$  Wind noise reduction

Allows you to reduce wind noise during movie recording.

Option	Description
<b>ON</b> On	Reduces the sound produced when wind passes over the microphone. Use when recording movies in locations with strong winds. Other sounds may become difficult to hear during playback.
OFF Off (default setting)	Wind noise reduction is not enabled.

• When an HS movie option is selected in Movie options, the setting is fixed at Off.

#### Welcome Screen

#### Tap ₩ → ¥ (setup menu) → Welcome screen

Allows you to configure the welcome screen that is displayed when you turn on the camera.

Option	Description	
None (default setting)	The camera enters shooting or playback mode without displaying the welcome screen.	
COOLPIX	The camera displays a welcome screen and enters shooting or playback mode.	
Select an image	<ul> <li>Displays an image selected for the welcome screen. When the image selection screen is displayed, tap an image and tap M to set it as the welcome screen.</li> <li>On the image selection screen, rotate the zoom control to T (Q) to switch to full-frame playback display or W (≥) to switch back to 12-thumbnail display.</li> <li>As the selected image is saved in the camera, it will be displayed when the camera is turned on even if the original image is deleted.</li> <li>Images captured using Easy panorama or 3D photography, and copies created at a size of 320 × 240 or smaller using the small picture (∞31) function, cannot be selected.</li> </ul>	

## **Time Zone and Date**

#### Tap $\blacksquare \rightarrow \P$ (setup menu) $\rightarrow$ Time zone and date

#### Set the camera clock.

Option	Description	
Date and time	<ul> <li>Set camera clock to current date and time.</li> <li>Tap the fields (day, month, year, hour, and minute) on the displayed screen to set the date and time.</li> <li>Select a field: Tap the desired filed.</li> <li>Edit the value: Tap ▲ or ▲.</li> <li>Apply the setting: Tap 𝔅.</li> </ul>	
Date format	The available date formats are <b>Year/Month/Day</b> , <b>Month/Day/Year</b> , and <b>Day/Month/Year</b> .	
Time zone	<b>Home time zone</b> ( $\stackrel{\bullet}{\Box}$ ) can be specified and daylight saving time can be enabled or disabled. When <b>Travel destination</b> ( $\stackrel{\bullet}{>}$ ) is selected, the time difference between the travel destination and the home time zone ( $\stackrel{\bullet}{\Box}$ ) is automatically calculated and the date and time in the selected region are saved. This can be useful when travelling.	

#### **Selecting the Travel Destination Time Zone**

## **1** Tap **Time zone**.



## **2** Tap **> Travel destination**.

• The date and time displayed in the monitor changes according to the region currently selected.



## **3** Tap 🗐.

• The travel destination screen is displayed.



**Reference Section** 

# 4 Tap or to choose the travel destination time zone and tap .

 If daylight saving time is in effect, tap 
 to enable daylight saving time function.
 is displayed at the top of the monitor and the camera clock is advanced one hour. Tap 
 again to disable the daylight saving time function.



- If the time zone that you want to select is not available, set the appropriate time in Date and time.
- While the travel destination time zone is selected, the b icon will be displayed in the monitor when the camera is in shooting mode.

#### 🖉 👌 Home Time Zone

- To switch to the home time zone, tap **\bigcirc Home time zone** in step 2.

#### Ø Daylight Saving Time

When daylight saving time starts or ends, turn the daylight saving time function on or off from the time zone selection screen displayed in step 4.

#### Imprinting Date on Images

Enable the **Print date** option (******95) in the setup menu after the date and time have been set. When the **Print date** option is enabled, images will be saved with shooting date imprinted on them.



#### **5-**0*92*

## Tap $\blacksquare \Rightarrow \P$ (setup menu) $\Rightarrow$ Monitor settings

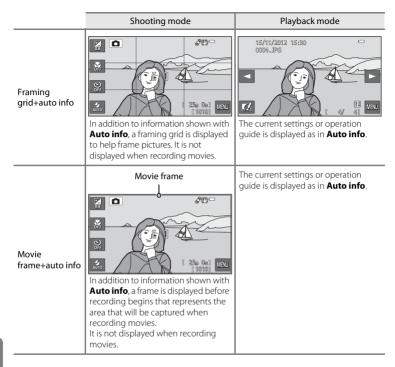
Set the options below.

Option	Description	
Photo info	Select information displayed in the monitor during shooting and playback.	
Image review	This setting determines whether or not the captured image is displayed immediately after shooting. The default setting is <b>On</b> .	
Brightness	Select from five settings for monitor brightness. The default setting is <b>3</b> .	

## Photo Info

Select whether or not the photo information is displayed in the monitor.

	Shooting mode	Playback mode	
Show info	Image: Constraint of the second sec	13/11/2012 13:300 00004P5 C C A/ A3	
Auto info (default setting)	If no operations are performed for a few seconds, some of the control icons and information are hidden. To display the control icons and information again, tap eduring shooting or tap the monitor during playback.		



## Notes About Monitor Settings

When Quick effects (665) is set to On, Image review is fixed at On.

**6-**094

## Print Date (Imprinting Date and Time)

#### Tap 🔤 → 🖞 (setup menu) → Print date

The shooting date and time can be imprinted on the images when shooting, allowing the information to be printed even from printers that do not support date printing (��76).



Option	Description	
MIE Date	Date is imprinted on images.	
🖉 Date and time	Date and time are imprinted on images.	
OFF Off (default setting)	Date and time are not imprinted on images.	

The current setting can be confirmed in the monitor when shooting ( $\square$ 6). No indicator is displayed when **Off** is selected.

## Notes About Print Date

- Imprinted dates form a permanent part of image data and cannot be deleted. The date and time cannot be imprinted on images after they have been captured.
- The date cannot be imprinted in the following situations:
  - When using Night portrait (when Hand-held is selected), Night landscape (when Hand-held is selected), Backlighting (when HDR is set to On), Easy panorama, or 3D photography scene mode
  - When the continuous shooting setting (2069) is set to Pre-shooting cache, Continuous H: 120 fps, or Continuous H: 60 fps.
  - When shooting movies
- The date is saved using the format selected in the setup menu's **Time zone and date** item (C20, +90).

## Print Date and Print Order

When printing with a DPOF-compatible printer that can print the shooting date and shooting information, you can use the **Print order** option (🍽 73) to print this information on images, even if the **Print date** function was set to **Off** at the time of shooting.

## **Vibration Reduction**

#### Tap 🔤 → 🖞 (setup menu) → Vibration reduction

Reduce the effects of camera shake while shooting. Vibration reduction effectively reduces blur, caused by slight hand movement known as camera shake, which commonly occurs when shooting with zoom applied or at slow shutter speeds. The effects of camera shake are reduced when recording movies, in addition to when taking still pictures.

Set Vibration reduction to Off when using a tripod to stabilize the camera during shooting.

Option	Description
() On (default setting)	Vibration reduction is enabled.
OFF Off	Vibration reduction is disabled.

The current setting can be confirmed in the monitor when shooting (⁽⁽⁾6). No icon is displayed when **Off** is selected.

## Notes About Vibration Reduction

- After turning on the camera or after switching from playback mode to shooting mode, wait for the shooting mode screen to be displayed completely before taking pictures.
- Due to characteristics of the vibration reduction function, images displayed in the camera's monitor immediately after shooting may be displayed blurry.
- Vibration reduction may be unable to completely eliminate the effects of camera shake in some situations.
- When **Tripod** is selected in **Night landscape** or **Night portrait** scene mode, vibration reduction is turned off.

## **Motion Detection**

#### Tap 🔤 → 🖞 (setup menu) → Motion detection

Enable motion detection to reduce the effects of subject movement and camera shake when shooting still images.

Option	Description
وه Auto (default setting)	<ul> <li>When the camera detects subject movement or camera shake, the ISO sensitivity and shutter speed are automatically increased to reduce blurring.</li> <li>However, motion detection does not function in the following situations:</li> <li>When the flash fires.</li> <li>When <b>Touch shooting</b> (\$51) is set to <b>Subject tracking</b>.</li> <li>When <b>ISO sensitivity</b> (\$58) is set to any setting other than <b>Auto</b>.</li> <li>When <b>Continuous</b> (\$59) is set to any setting other than <b>Single</b> or <b>BSS</b>.</li> <li>In the following scene modes: <b>Sports</b> (\$43), <b>Night portrait</b> (\$43), <b>Dusk/dawn</b> (\$46), <b>Backlighting</b> (\$47), <b>Easy panorama</b> (\$48), <b>Pet portrait</b> (\$49), and <b>3D photography</b> (\$50)</li> </ul>
OFF Off	Motion detection is disabled.

The current setting can be confirmed in the monitor when shooting ( $\square$ 6). When the camera detects camera shake or subject movement, it increases shutter speed and the motion detection icon turns green. No icon is displayed when **Off** is selected.

## Notes About Motion Detection

- Motion detection may be unable to completely eliminate the effects of subject movement and camera shake in some situations.
- Motion detection may not function if the subject exhibits significant movement or is too dark.
- The images captured using motion detection may be somewhat "grainy" in appearance.

## Tap 🔤 → 🖞 (setup menu) → AF assist

Enable or disable AF-assist illuminator, which assists autofocus operation when the subject is dimly lit.

Option	Description
∰0 Auto (default setting)	AF-assist illuminator will be used to assist the focus operation when the subject is dimly lit. The illuminator has a range of about 1.9 m (6 ft 3 in.) at the maximum wide-angle position and about 1.5 m (4 ft 11 in.) at the maximum telephoto position. Note that for some scene modes (such as <b>Museum</b> (146) and <b>Pet</b> <b>portrait</b> (149)) or focus areas, the AF-assist illuminator may not light even when <b>Auto</b> is selected.
OFF Off	AF-assist illuminator does not light. The camera may be unable to focus under dim lighting.

#### Tap 🔤 → 🖞 (setup menu) → Digital zoom

Enable or disable digital zoom.

Option	Description
<b>ON</b> On (default setting)	When the camera is zoomed in to the maximum optical zoom position, rotating the zoom control to $\mathbf{T}(\mathbf{Q})$ triggers digital zoom ( $\mathbf{\Pi}$ 29).
OFF Off	Digital zoom will not be activated.

## Notes About Digital Zoom

- When digital zoom is in effect, the camera focuses at the center of the frame.
- Digital zoom cannot be used in the following situations.
  - When Touch shooting is set to Subject tracking
  - When Continuous is set to Multi-shot 16
  - When Scene auto selector, Portrait, Night portrait, Night landscape, Backlighting (when HDR is set to On), Easy panorama, Pet portrait, or 3D photography is selected in scene mode
  - When smart portrait mode is selected



## **Sound Settings**

#### Tap 🔤 → 🖞 (setup menu) → Sound settings

Adjust the following sound settings.

Option	Description
Button sound	Select <b>On</b> (default setting) or <b>Off</b> . When <b>On</b> is selected, a beep will sound once when operations are completed successfully, twice when the camera acquires focus on the subject, and three times when an error is detected. Start-up sound will also play when the camera is turned on.
Shutter sound	Select <b>On</b> (default setting) or <b>Off</b> . The shutter sound is disabled even if <b>On</b> is selected, when using any continuous shooting settings other than <b>Single</b> (2005) or when recording movies.

## Notes About Sound Settings

Button sounds and the shutter sound are disabled when using the **Pet portrait** scene mode.

## Auto Off

#### Tap 🔤 → 🖞 (setup menu) → Auto off

If no operations are performed for a specified amount of time, the monitor turns off and the camera enters standby mode ( $\square 25$ ).

This setting determines the amount of time that passes before the camera enters standby mode. You can select **30 s**, **1 min** (default setting), **5 min**, or **30 min**.

## When the Monitor Has Turned Off to Save Power

- When the camera is in standby mode, the power-on lamp flashes.
- If no operations are performed for approximately another three minutes, the camera will turn off automatically.
- When the power-on lamp is flashing, pressing any of the following buttons will turn the monitor back on:

Power switch, shutter-release button, 🖸 button, 🕨 button, or 🗨 (🔭 movie-record) button

## Notes About Auto Off

- The time that passes before the camera enters standby mode is fixed in the following situations:
  - When a menu is displayed: Three minutes minimum (or **5 min** or **30 min**, if these settings are selected)
  - During slide show playback: Up to 30 minutes
  - When the AC Adapter EH-62G is connected: 30 minutes
  - When an audio video cable or HDMI cable is connected: 30 minutes
- The camera does not enter standby mode when transferring images using an Eye-Fi card.

**h**102

## Format Memory/Format Card

#### Tap 🔤 → 🖞 (setup menu) → Format memory/Format card

Use this option to format the internal memory or a memory card.

Formatting the internal memory or memory cards permanently deletes all data. Data that has been deleted cannot be restored. Be sure to transfer important images to a computer before formatting.

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 in the setup menu.



#### **Formatting Memory Cards**

When a memory card is inserted in the camera, the **Format card** option is displayed in the setup menu.



## Notes About Formatting Internal Memory and Memory Cards

- Do not turn the camera off 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.

## Tap 🔤 → 🖞 (setup menu) → Language

Čeština	Czech
Dansk	Danish
Deutsch	German
English	(default setting)
Español	Spanish
Ελληνικά	Greek
Français	French
Indonesia	Indonesian
Italiano	Italian
Magyar	Hungarian
Nederlands	Dutch
Norsk	Norwegian
Polski	Polish
Português (BR)	Brazilian Portuguese
Português (PT)	European Portuguese
Русский	Russian

Select one of 31 languages for display of camera menus and messages.

Română	Romanian
Suomi	Finnish
Svenska	Swedish
Tiếng Việt	Vietnamese
Türkçe	Turkish
Українська	Ukrainian
عربي	Arabic
বাংলা	Bengali
简体中文	Simplified Chinese
繁體中文	Traditional Chinese
हिन्दी	Hindi
日本語	Japanese
한글	Korean
தமிழ்	Tamil
ภาษาไทย	Thai

#### Tap 🔤 → 🖞 (setup menu) → TV settings

Adjust settings for connection to a TV.

Option	Description
Video mode	Select from NTSC and PAL.
HDMI	Select a resolution for HDMI output from <b>Auto</b> (default setting), <b>480p</b> , <b>720p</b> , or <b>1080i</b> . When <b>Auto</b> is selected, the option best suited to the TV to which the camera is connected is automatically selected from <b>480p</b> , <b>720p</b> , or <b>1080i</b> .
HDMI device control	Select whether or not the camera can receive signals from a TV that supports the HDMI-CEC standard when it is connected to the TV via HDMI. When On (default setting) is selected, the TV's remote control can be used to control the camera during playback. See "Using a TV Remote Control (HDMI Device Control)" ( $\bigcirc$ 37) for more information.
HDMI 3D output	Set the method used to output 3D images captured with this camera to HDMI devices. Select <b>On</b> (default setting) to play back 3D images in 3D.

# HDMI and HDMI-CEC

HDMI (High-Definition Multimedia Interface) is a multimedia interface. HDMI-CEC (HDMI-Consumer Electronics Control) allows compatible devices to inter-operate.



## **Charge by Computer**

#### Tap $\blacksquare \Rightarrow \P$ (setup menu) $\Rightarrow$ Charge by computer

Select whether or not the battery inserted into the camera is charged when the camera is connected to a computer via the USB cable (**D**86).

Option	Description
Auto (default setting)	When the camera is connected to a computer that is running, the battery inserted into the camera is automatically charged using power supplied by the computer.
Off	The battery inserted into the camera is not charged when the camera is connected to a computer.

## Notes About Charging with Connection to a Computer

- The battery cannot be charged, nor can data be transferred, when the camera is connected to a computer before the camera's display language and date and time have been set (\$\box\$20). If the camera's clock battery (\$\box\$22) has been exhausted, the date and time must be reset before the battery can be charged or images can be transferred with connection to a computer. In this case, use the Charging AC Adapter EH-69P (\$\box\$16) to charge the battery and then set the camera's date and time.
- If the camera is turned off, charging will also stop.
- If the computer enters sleep mode while charging, charging will stop and the camera may turn off.
- When disconnecting the camera from the computer, turn the camera off and then disconnect the USB cable.
- About 3 hours and 15 minutes are required to charge a fully exhausted battery. Charging time increases when images are transferred while the battery is charging.
- When the camera is connected to a computer, an application installed on the computer, such as Nikon Transfer 2, may start. If the camera was connected to the computer for the sole purpose of charging the battery, exit the application.
- The camera turns off automatically if there is no communication with the computer for 30 minutes after the battery has finished charging.
- Depending upon computer specifications, settings, and power supply and allocation, it may be
  impossible to charge the battery using a computer connection while it is inserted into the camera.



# Notes About Connecting the Camera to a Printer

- The battery cannot be charged with connection to a printer, even if the printer complies with the PictBridge standard.
- When Auto is selected for Charge by computer, it may be impossible to print images with direct connection of the camera to some printers. If the PictBridge startup screen is not displayed in the monitor after the camera is connected to a printer and turned on, turn the camera off and disconnect the USB cable. Set Charge by computer to Off and reconnect the camera to the printer.

## / The Charge Lamp

The following chart explains charge lamp status when the camera is connected to a computer.

Status	Description	
Flashes slowly (green)	Battery charging.	
Off	Battery not charging. If the charge lamp changes from slow flashing (green) to off while the power-on lamp is lit, charging is complete.	
Flashes quickly (green)	<ul> <li>The ambient temperature is not suited to charging. Charge the battery indoors with an ambient temperature of 5°C to 35°C (41°F to 95°F).</li> <li>The USB cable is not connected correctly, or the battery is faulty. Make sure the USB cable is connected correctly and replace the battery if necessary.</li> <li>The computer is in sleep mode and is not supplying power. Wake up the computer.</li> <li>The battery cannot be charged because the computer cannot supply power to the camera due to the computer's settings or its specifications.</li> </ul>	

## **Blink Warning**

#### Tap 🔤 → 🖞 (setup menu) → Blink warning

Select whether or not the camera detects human subjects that have blinked when shooting in the following situations:

- When the camera recognizes a human face as the main subject (174) in 1 (auto) mode with **AF area mode** set to **Target finding AF**.
- When the camera detects a face (¹⁷⁵) in Scene auto selector (¹⁴²), Portrait (¹⁴²), or Night portrait (¹⁴³) scene mode.

Option	Description
On	When the camera detects that one or more human subjects may have blinked in an image captured using face detection, the <b>Did</b> <b>someone blink?</b> screen is displayed in the monitor. The face of the human subject that may have blinked when the shutter was released is framed by a yellow border. Should this occur, check the image and determine whether or not another image should be captured. See "The Blink Warning Screen" (🗢 109) for more information.
Off (default setting)	Blink warning is disabled.

## Notes About Blink Warning

The blink warning does not function at continuous settings other than Single (59).



## **The Blink Warning Screen**

When the **Did someone blink?** screen shown on the right is displayed in the monitor, the operations described below are available.

If no operations are performed within a few seconds, the camera automatically returns to shooting mode.



Function	Description	
Enlarge the detected face that blinked	Rotate the zoom control to ${f T}$ ( ${f Q}$ ).	
Switch to full-frame playback	Rotate the zoom control to <b>W</b> (🔁).	
Select the face to be displayed	If the camera detects that more than one human subject blinked, tap or the to switch the display to another face.	
Delete the image	Tap 💼.	
Switch to shooting mode	Tap 🕅 or press the shutter-release button.	

## **Sequence Display Options**

#### Tap 🔤 → 🖞 (setup menu) → Sequence display options

Choose the method used to display a series of images shot continuously (sequence) (↔14) when viewing them in full-frame playback mode (□32) and in thumbnail playback mode (□81).

Settings are applied to all sequences, and the setting is saved in the camera's memory even if the camera is turned off.

Option	Description
凸 Individual pictures	Set all pictures in all sequences to be displayed individually. $\$ is displayed on the playback screen ( $\square$ 8).
(default setting)	Set all sequences to be displayed using their key pictures only.

#### Tap 🔤 → 🖞 (setup menu) → Eye-Fi upload

Option	Description	
Enable (default setting)	Upload images created by the camera to a preselected destination.	
🕅 Disable	Images will not be uploaded.	

## Notes About 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.
- 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 ( $\square$ 6).

- 🕅: Eye-Fi upload is set to Disable.
- 🛜 (lights): Eye-Fi upload enabled; waiting to begin upload.
- 🛜 (flashes): 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.

## **Reset All**

### Tap 🔤 → 🖞 (setup menu) → Reset all

When **Reset** is selected, the camera's settings will be restored to their default values.

#### **Basic Shooting Functions**

Option	Default value
Flash mode (🎞 58)	Auto
Self-timer (🎞 61)	Off
Macro mode (🎞 63)	Off
Exposure compensation (CC65)	0.0

#### **Shooting Menu**

Option	Default value
Image mode (🏞 49)	₩ 4608×2592
Touch shooting (🗢 51)	Touch shutter
ISO sensitivity (🗢 58)	Auto
Continuous (🍋 59)	Single
White balance (🍽 62)	Auto
Quick effects ( 🗢 65)	On
AF area mode (🖚 66)	Center

#### Scene Mode

Option	Default value
Scene setting in the shooting mode selection menu (240)	Scene auto selector
Scene effect adjustment slider (🛄41)	Center
Night portrait (🎞 43)	Hand-held
Night landscape (🎞 45)	Hand-held
HDR in backlighting scene mode (🎞 47)	Off
Easy panorama (🎞 48)	Normal (180°)
Continuous shooting in pet portrait mode (🎞 49)	Continuous
Pet portrait auto release in pet portrait mode (49)	On

#### **Special Effects Mode**

Option	Default value
Special effects setting in the shooting mode selection menu (🎞 52)	Soft

#### Smart Portrait Menu

Option	Default value
Skin softening (🍽 67)	Normal
Blink proof (🕶 68)	Off
Smile timer (🏞 68)	On

#### Movie Menu

Option	Default value
Movie options (🍽 83)	HD 1080p★ (1920×1080)
Open with HS footage (🗝 87)	On

Option	Default value
Movie AF mode ( <b>***</b> 88)	Single AF
Wind noise reduction (🕶 88)	Off

#### Setup Menu

Option	Default value
Welcome screen (🍽 89)	None
Photo info (🍽 93)	Auto info
Image review (🗢 93)	On
Brightness (🗢 93)	3
Print date (🍽 95)	Off
Vibration reduction (🖚 97)	On
Motion detection (🗢 98)	Auto
AF assist (🗢 99)	Auto
Digital zoom (🖚 100)	On
Button sound (🖚 101)	On
Shutter sound (🍽 101)	On
Auto off (🖚 102)	1 min
HDMI (🏞 105)	Auto
HDMI device control (🖚 105)	On
HDMI 3D output (🍽 105)	On
Charge by computer (🖚 106)	Auto
Blink warning (🖚 108)	Off
Sequence display options (🍽 110)	Key picture only
Eye-Fi upload (🍽 111)	Enable

#### Others

Option	Default value
Paper size (	Default
Slide show effects ( 🖚 69)	Classic
Frame interval for slide show (🗝 69)	3 s

- Selecting Reset all also clears the current file number (↔ 117) from memory. Numbering will continue from the lowest number available. To reset file numbering to "0001", delete all images saved in the internal memory or on the memory card (□ 34) before selecting Reset all.
- The following menu settings will remain unaffected when menus are reset with Reset all. Shooting menu: Preset manual data (2063) acquired for White balance Playback menu: Choose key picture (2082) Setup menu: Time zone and date (2090), Language (20104), and Video mode (20105) under TV settings Others: Favorite album icon (2010)

## **Firmware Version**

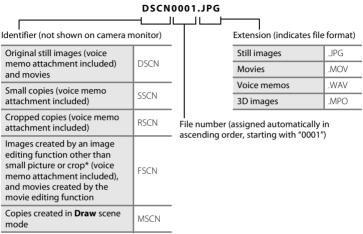
#### Tap 🔤 → 🖞 (setup menu) → Firmware version

View the current camera firmware version.



# **File and Folder Names**

Images, movies, or voice memos are assigned file names as follows.



* Including images edited using the quick effects function (🖽 39) in 🗖 (auto) mode

- Files are saved in folders named with a folder number followed by "NIKON" (e.g. "100NIKON"). When the number of files within a folder reaches 9999, a new folder will be created. File numbers will be assigned automatically starting with "0001".
- Voice memo file names have the same identifier and file number as the image to which the voice memo is attached.

- Files copied using Copy>Selected images are copied to the current folder, where they
  are assigned new file numbers in ascending order starting from the largest file number in
  memory. Copy>All images copies all folders from the source medium; file names do not
  change but new folder numbers are assigned in ascending order, starting from the largest
  folder number on the destination medium ( 880).
- A single folder can hold up to 200 images; if the current folder already contains 200 images, a new folder, named by adding one to the current folder name, will be created the next time an image is captured. If the current folder is numbered 999 and contains 200 images, or an image is numbered 9999, no further images can be captured until the internal memory or memory card is formatted (\$\circ\$103), or a new memory card is inserted.

# **Optional Accessories**

Battery charger	Battery Charger MH-66 (Charging time when no charge remains: Approx. 1 h 50 min)
AC adapter	AC Adapter EH-62G (connect as shown) 1 2 3 2 3 3 5 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7

# **Error Messages**

Display	Cause/Solution	
(flashes)	Clock not set. Set date and time.	<b>6</b> 90
Battery exhausted.	Charge or replace battery.	14, 16
Battery temperature high	Battery temperature is high. Turn off camera, and allow battery to cool down before resuming use. After five seconds, this message will disappear, the monitor will turn off, and the power-on lamp will flash quickly. After the lamp flashes for three minutes, the camera will turn off automatically. Pressing the power switch also turns off the camera.	25
The camera will turn off to prevent overheating.	Inside of the camera has become hot. Turn off camera, and allow battery to cool down before resuming use.	-
Æ● (● flashes red)	Camera cannot focus. • Refocus. • Use focus lock.	30, 77 78
Please wait for the camera to finish recording.	Camera cannot perform other operations until saving is complete. Wait until message clears from display automatically when saving is complete.	-
Memory card is write protected.	Write-protect switch is in "lock" position. Slide write-protect switch to "write" position.	-
Not available if Eye-Fi card is locked.	Write-protect switch of Eye-Fi card is in "lock" position. Slide the write-protect switch to "write" position.	-
	Error accessing Eye-Fi card. • Check that terminals are clean. • Confirm that Eye-Fi card is correctly inserted.	18

Display	Cause/Solution	
This card cannot be used. This card cannot be read.	Error accessing memory card. • Use approved card. • Check that terminals are clean. • Confirm that memory card is correctly inserted.	18, <b>🌣</b> 23
Card is not formatted. Format card? Yes No	Memory card has not been formatted for use in COOLPIX S6400. Formatting deletes all data saved on the memory card. If you need to keep copies of any images, make sure to tap <b>No</b> and save the copies to a computer or other medium before formatting the memory card. Tap <b>Yes</b> to format the memory card.	<b>ö</b> :5
Out of memory.	Memory card is full. <ul> <li>Select smaller image size.</li> <li>Delete images.</li> <li>Insert new memory card.</li> <li>Remove memory card and use internal memory.</li> </ul>	69,
	Error occurred while saving image. Format internal memory or memory card.	<b>6</b> 103
Image cannot be saved.	Camera has run out of file numbers. Insert a new memory card or format internal memory or memory card.	↔103, ↔117
	Image cannot be used for welcome screen. The following images cannot be registered as welcome screen. • Images captured using <b>Easy panorama</b> and <b>3D</b> <b>photography</b> • Images reduced to 320 × 240 size or smaller with small image editing	<b>~</b> 89
	Insufficient space to save a copy. Delete images from destination.	34

Display	Cause/Solution	
Album is full. No further pictures can be added.	<ul><li>200 images have already been added to album.</li><li>Remove some images from album.</li><li>Add to other albums.</li></ul>	<b>60</b> 9 <b>60</b> 7
Sound file cannot be saved.	<ul><li>A voice memo cannot be attached to this file.</li><li>Voice memos cannot be attached to movies.</li><li>Select an image captured with this camera.</li></ul>	- <b>6-0</b> 79
A blink was detected in the picture just taken.	One or more portrait subjects may have blinked when the picture was taken. Check the image in playback mode.	32, <b>6</b> 68
Image cannot be modified.	Cannot edit selected image. • Select images that support editing function. • Movies cannot be edited.	<b>6</b> 19 -
Cannot record movie.	Time out error while saving movie on the memory card. Select memory card with faster write speed.	18
Memory contains no images.	<ul> <li>No images in the internal memory or memory card.</li> <li>Remove the memory card from the camera to play back images saved in the camera's internal memory.</li> <li>To copy the images saved in the camera's internal memory to the memory card, tap and tap Copy.</li> </ul>	18 •••80
	No images have been added to the selected album. • Add images to the album. • Select an album to which images are added.	<b>6€</b> 7 <b>6€</b> 8
	No images are contained in the category selected in auto sort mode. Select the category containing the sorted images.	<b>60</b> 11
File contains no image data.	File not created with this camera. File cannot be viewed on this camera.	
This file cannot be played back.	View file using a computer or the devices used to create or edit this file.	
All images are hidden.	No images available for a slide show.	<b>6</b> 9

Display	Cause/Solution	
This image cannot be deleted.	Image is protected. Disable protection.	<b>60</b> 71
Travel destination is in the current time zone.	Destination in same time zone as home.	-
Unable to create panorama.	<ul> <li>Could not shoot using easy panorama.</li> <li>Shooting with easy panorama may not be possible in the following situations.</li> <li>When shooting does not end after a certain amount of time.</li> <li>When the camera is moved too fast.</li> <li>When the camera is not moved properly in the panorama direction.</li> </ul>	
Unable to create panorama. Pan the camera in one direction only.		<b>6-0</b> 3
Unable to create panorama. Pan the camera more slowly.		
Shooting failed	<ul> <li>When taking 3D pictures, the first shot could not be successfully taken.</li> <li>Try shooting again.</li> <li>In some shooting conditions, such as when the subject is moving, dark, or low in contrast, shooting may not be possible.</li> </ul>	50
Failed to take second shot	<ul> <li>When taking 3D images, the second shot could not be successfully taken after the first shot.</li> <li>Try shooting again. After taking the first shot, move the camera horizontally and frame the subject so that it is aligned with the guide.</li> <li>In some shooting conditions, such as when the subject is moving, dark, or low in contrast, the second shot may not be taken.</li> </ul>	50
Failed to save 3D image	<ul> <li>Failed to save the 3D images.</li> <li>Try shooting again.</li> <li>Delete unnecessary images.</li> <li>3D images may not be created depending on the shooting conditions, such as when the subject is moving, dark, or low in contrast, and they cannot be saved.</li> </ul>	50 34 -

Display	Cause/Solution	
Lens error	Lens error. Turn camera off and then on again. If error persists, contact retailer or Nikon-authorized service representative.	24
Communications error	Error occurred during communication with printer. Turn camera off and reconnect USB cable.	<b>6</b> 39
System error	Error has occurred in camera's internal circuitry. Turn camera off, remove and reinsert battery, and turn camera on. If error persists, contact retailer or Nikon- authorized service representative.	14, 25
Printer error: check printer status.	Printer error. Check printer. After solving the problem, tap <b>Resume</b> to resume printing.*	-
Printer error: check paper	Specified size of paper is not loaded in printer. Load the specified paper size and tap <b>Resume</b> to resume printing.*	-
Printer error: paper jam	Paper has jammed in printer. Remove the jammed paper and tap <b>Resume</b> to resume printing.*	-
Printer error: out of paper	No paper is loaded in printer. Load the specified paper size and tap <b>Resume</b> to resume printing.*	-
Printer error: check ink	Ink error. Check ink and tap <b>Resume</b> to resume printing.*	-
Printer error: out of ink	Running out of ink or ink cartridge is empty. Replace ink cartridge and tap <b>Resume</b> to resume printing.*	-
Printer error: file corrupt	An error occurred with the image file to be printed. Tap <b>Cancel</b> to cancel printing.	-

 *  See the documentation provided with your printer for further guidance and information.



# C - Technical Notes and Index

Maximizing Camera Life and Performance	ò-2
The Camera	Ö ⁻ 2
The Battery	Ò-3
Charging AC Adapter	Ö ⁻ 4
Memory Cards	Ò-5
Cleaning and Storage	
Cleaning	Ò-6
Storage	Ò 6
Troubleshooting	
Specifications	
Supported Standards	
Approved Memory Cards	
Index	

# **Maximizing Camera Life and Performance**

## The Camera

To ensure continued enjoyment of this Nikon product, observe the precautions described below in addition to the warnings in "For Your Safety" ( $\Box$ viii-x) when using or storing the device.

# 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.

# Keep Dry

The device will be damaged if immersed in water or subjected to high humidity.

## 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.

## 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.

# 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 image sensor, producing a white blur effect in photographs.

## V Turn the Product off Before Removing or Disconnecting the Power Source

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.

## Notes About the Monitor

- Monitors and electronic viewfinders are constructed with extremely high precision; at least 99.99%
  of pixels are effective, with no more than 0.01% being missing or defective. Hence while these
  displays may contain pixels that are always lit (white, red, blue, or green) or always off (black), this is
  not a malfunction and has no effect on images recorded with the device.
- Images in 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 in "For Your Safety" (QViii-x) before use.

- 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 charging the battery inserted into the COOLPIX S6400 using the Charging AC Adapter EH-69P or a computer, the battery is not charged at battery temperatures below 0°C (32°F) or above 45°C (113°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. If an exhausted battery is used at a low
  temperature, the camera will not turn on. 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.
- If the battery will not be used for some time, insert it in the camera and completely exhaust it 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 optional 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.
- 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 optional battery charger, put the battery in the included battery case 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-EL19 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.

# **Charging AC Adapter**

Be sure to read and follow the warnings in "For Your Safety" (QViii-x) before use.

- The Charging AC Adapter EH-69P is for use only with compatible devices. Do not use with another make or model of device.
- The EH-69P is compatible with AC 100-240 V, 50/60 Hz electrical outlets. When using in other countries, use a plug adapter (commercially available) as necessary. For more information about plug adapters, consult your travel agency.
- Do not, under any circumstances, use another make or model of AC adapter other than Charging AC Adapter EH-69P or USB-AC adapter. Failure to observe this precaution could result in overheating or in damage to the camera.

## **Memory Cards**

- Use only Secure Digital memory cards. See "Approved Memory Cards" (23) for recommended memory cards.
- Observe the precautions noted in the documentation included with your memory card.
- Do not affix labels or stickers to the memory card.
- Do not format the memory card using a computer.
- 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. We recommend formatting new memory cards with this camera before using them with this camera.
- Note that formatting a memory card permanently deletes all images and other data on the memory card. If there is data saved on the memory card that you wish to keep, copy that data to a computer before formatting.
- If the message Card is not formatted. Format card? is displayed when the camera is turned on, the memory card must be formatted. If there is data on the memory card that you do not want to delete, tap No. Copy that data to a computer before formatting. To format the memory card, tap Yes. The confirmation dialog will be displayed. To start formatting, tap OK.
- Observe the following precautions while formatting the memory card, saving and deleting images, and copying images to a computer, otherwise data or the memory card itself may be damaged.
  - Do not open the battery-chamber/memory card slot cover or remove the memory card or battery.
  - Do not turn off the camera.
  - Do not disconnect the AC adapter.

# **Cleaning and Storage**

## Cleaning

Do not use alcohol, thinner, or other volatile chemicals.

Lens	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 or other stains that cannot be removed with a blower, wipe the lens with a soft cloth, using a spiral motion that starts at the center of them and working toward the edges. 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 and other stains, clean the monitor with a soft, dry cloth, being careful not to apply pressure.
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</b> <b>covered by the warranty</b> .

## Storage

Turn the camera off when not in use. Be sure that the power-on lamp is off before putting the camera away. 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. For storing the battery, follow the precautions in "The Battery" ( $\overset{\circ}{\mathcal{L}}$ 3) in "Maximizing Camera Life and Performance" ( $\overset{\circ}{\mathcal{L}}$ 2).

## 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.

#### Power, Display, Settings Issues

Problem	Cause/Solution	
The camera is on but does not respond.	Wait for recording to end. If the problem persists, turn the camera off. If the camera does not turn off, remove and reinsert the battery or batteries or, if you are using an AC adapter, disconnect and reconnect the AC adapter. Note that although any data currently being recorded will be lost, data that have already been recorded will not be affected by removing or disconnecting the power source.	25, <b>🏍</b> 119
Battery inserted in the camera cannot be charged.	<ul> <li>Confirm all connections.</li> <li>Off is selected for Charge by computer in the setup menu.</li> <li>When charging by connecting the camera to a computer, battery charging stops when the camera is turned off.</li> <li>When charging by connecting the camera to a computer, battery charging stops if the computer is suspended (sleeping), and the camera may turn off.</li> <li>Depending upon computer specifications, settings, and status, charging the battery inserted in the camera may not be possible via computer connection.</li> </ul>	16 105, ➡106 105 105
Camera cannot be turned on.	Battery is exhausted.	24

Problem	Cause/Solution	
	<ul> <li>Battery is exhausted.</li> <li>The camera automatically turns off to save power if no operations are performed for an extended period of time.</li> </ul>	24 105
	<ul> <li>The camera or battery have become too cold and cannot operate properly.</li> </ul>	<b>ö</b> -3
Camera turns off without warning.	• The camera turns off if the Charging AC Adapter is connected while the camera is on.	16
	<ul> <li>The camera turns off if the USB cable connecting it to a computer or printer is disconnected. Reconnect the USB cable.</li> </ul>	86, 91, •••39
	Inside of the camera has become hot. Leave the camera off until the inside of the camera has cooled, and then try turning it on again.	-
	<ul> <li>Camera is off.</li> <li>Standby mode for saving power: press the power switch, the shutter-release button,</li></ul>	25 2, 25
Monitor is blank.	<ul> <li>When flash amp flashes, wait until flash has charged.</li> </ul>	58
	<ul> <li>Camera and computer are connected via USB cable.</li> </ul>	86, 91
	<ul> <li>Camera and TV are connected via audio/video cable or HDMI cable.</li> </ul>	86, <b>54</b> 34
Monitor is hard to read.	<ul><li> Adjust monitor brightness.</li><li> Monitor is dirty. Clean monitor.</li></ul>	104, 🏍 93 🖉 6

Problem	Cause/Solution	
Date and time of recording are not correct.	<ul> <li>If camera clock has not been set, "Date not set" indicator flashes during shooting and movie recording. Images and movies recorded before clock is set are dated "01/01/2012 00:00". Set the correct time and date from the <b>Time zone and date</b> option in the setup menu.</li> <li>The camera clock is not as accurate as ordinary watches or clocks. Periodically compare the time of the camera clock with that of a more accurate timepiece and reset as required.</li> </ul>	20, 104, ☎ 90
No indicators displayed in monitor.	Auto info is selected for Photo info in Monitor settings in the setup menu.	104, 🏍 93
Print date not available.	Time zone and date has not been set in the setup menu.	20, 104, •••90
Date not imprinted on images even when <b>Print</b> <b>date</b> is enabled.	<ul> <li>The current shooting mode is one that does not support <b>Print date</b>.</li> <li>The date cannot be imprinted on movies.</li> </ul>	104, 🏍 95
Screen for setting time zone and date is displayed when camera is turned on.	Clock battery is exhausted; all settings were restored to their default values.	20, 22
Camera settings reset.		
Monitor turns off, and the power-on lamp flashes quickly.	Battery temperature is high. Turn off camera and allow battery to cool down before resuming use. After the lamp flashes for three minutes, the camera will turn off automatically. Pressing the power switch also turns off the camera.	25
Camera becomes hot.	The camera may become hot when used for an extended period of time to shoot movies or send images using an Eye-Fi card, or when used in a hot environment; this is not a malfunction.	-

## **Shooting Issues**

Problem	Cause/Solution	m
Cannot switch to shooting mode.	<ul> <li>Disconnect HDMI cable or USB cable.</li> <li>The camera cannot be switched to shooting mode while connected to a power outlet via the Charging AC Adapter.</li> </ul>	86, 91, ☎ 34, ☎ 39 17
No image captured when the shutter-release button is pressed.	<ul> <li>When camera is in playback mode or a menu is displayed, press the  to button, the shutter-release button, or the ● (* movie-record) button.</li> <li>Battery is exhausted.</li> <li>When flash lamp flashes, flash is charging.</li> </ul>	10, 32 24 58
Cannot take 3D pictures.	In some shooting conditions, such as when the subject is moving, dark, or low in contrast, the second shot may not be taken or the 3D image may not be saved.	-
Camera cannot focus.	<ul> <li>Subject is too close. Try shooting using macro mode, or the Scene auto selector or Close-up scene mode.</li> <li>The intended subject is one with which autofocus does not perform well.</li> <li>Set AF assist in the setup menu to Auto.</li> <li>Turn camera off and then on again.</li> </ul>	42, 45, 63 77 104, <b>50</b> 99 25
Images are blurred.	<ul> <li>Use flash.</li> <li>Increase the ISO sensitivity value.</li> <li>Enable vibration reduction or motion detection.</li> <li>Use BSS (Best Shot Selector).</li> <li>Use a tripod to stabilize the camera when shooting (using the self-timer at the same time is more effective).</li> </ul>	58 69 104 46, 69, €€59 61
Bright specks appear in images captured with flash.	Flash is reflecting off particles in air. Set the flash mode setting to <b>③</b> (off).	59

Problem	Cause/Solution	
Flash does not fire.	<ul> <li>The flash mode is set to ③ (off).</li> <li>Scene mode with which the flash does not fire is selected.</li> <li>On is selected for Blink proof in smart portrait menu.</li> <li>Another function that restricts flash is enabled.</li> </ul>	58 66 70 71
Digital zoom cannot be used.	<ul> <li>Digital zoom is set to Off in the setup menu.</li> <li>Digital zoom cannot be used in the following situations.</li> <li>When Touch shooting in the shooting menu is set to Subject tracking</li> <li>When Continuous in the shooting menu is set to Multi-shot 16</li> <li>When Scene auto selector, Portrait, Night portrait, Night landscape, Backlighting (when HDR is set to On), Easy panorama, Pet portrait, or 3D photography is selected in scene mode</li> <li>When smart portrait mode is selected</li> </ul>	104, <b>6</b> 9, <b>6</b> 55 <b>6</b> 9, <b>6</b> 59 <b>4</b> 2, <b>4</b> 3, <b>4</b> 9 54
Image mode not available.	Another function that restricts the <b>Image mode</b> option is enabled.	71
No sound when shutter is released.	Off is selected for Sound settings > Shutter sound in setup menu. No sound is produced with some shooting modes and settings, even when On is selected.	104, <b>~•</b> 101
AF-assist illuminator does not light.	Off is selected for the <b>AF assist</b> option in the setup menu. AF-assist illuminator may not light depending on the position of the focus area or the current scene mode, even when <b>Auto</b> is selected.	104, <b>🏍</b> 99
Images appear smeared.	Lens is dirty. Clean lens.	<b>Ö</b> -6
Colors are unnatural.	White balance or hue is not adjusted properly.	46, 69, <b>6</b> 62

Problem	Cause/Solution	
Randomly spaced bright pixels ("noise") appear in image.	The subject is dark, so shutter speed is too slow or ISO sensitivity is too high. Noise can be reduced by: • Using flash. • Specifying a lower ISO sensitivity setting.	58 69, <b>ക്</b> 58
lmages are too dark (underexposed).	<ul> <li>The flash mode 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>Increase ISO sensitivity.</li> <li>Subject is backlit. Select Backlighting scene mode or set the flash mode setting to ♥ (fill flash).</li> </ul>	58 28 58 65 69,
Images are too bright (overexposed).	Adjust exposure compensation.	65
Unexpected results when flash set to <b>∲⊚</b> (auto with red-eye reduction).	When taking pictures with <b>\$</b> (auto with red-eye reduction) or fill flash with slow sync and red-eye reduction in <b>Night portrait</b> scene mode, In-Camera Red Eye Fix may be applied to areas not affected by red-eye in rare cases. Use any scene mode other than <b>Night portrait</b> , and change the flash mode to any setting other than <b>\$</b> (auto with red-eye reduction) and try taking a picture again.	43, 58
Skin tones are not softened.	<ul> <li>In some shooting conditions, facial skin tones may not be softened.</li> <li>For images containing four or more faces, try using the Skin softening effect in Glamour retouch, in the retouch menu.</li> </ul>	55 56, 84

Problem	Cause/Solution	
Saving images takes time.	<ul> <li>It may take more time to save images in the following situations.</li> <li>When the noise reduction function is in operation, such as when shooting in a dark environment.</li> <li>When the flash mode is set to  \$③ (auto with redey ereduction).</li> <li>When shooting in Night landscape, Night portrait, or Backlighting (when HDR is set to On) scene mode</li> <li>When the skin softening function is applied while shooting.</li> <li>When using continuous shooting mode</li> </ul>	- 60 43, 45, 47 42, 43, 70 69, <b>*</b> 59
A ring-shaped belt or rainbow-colored stripe appears in the monitor or images.	When shooting with backlighting or when a very strong light source (such as sunlight) is in the frame, a ring-shaped belt or rainbow-colored stripe (ghosting) may occur. Change the position of the light source, or frame the picture so that the light source does not enter the frame and try again.	-

## **Playback Issues**

Problem	Cause/Solution	
File cannot be played back.	<ul> <li>File or folder was overwritten or renamed by computer or other make of camera.</li> <li>The COOLPIX S6400 is not able to play back movies recorded with another make or model of digital camera.</li> </ul>	- 101
Cannot zoom in on image.	<ul> <li>Playback zoom cannot be used with movies, small pictures, or images that have been cropped to a size of 640 × 360.</li> <li>3D images cannot be enlarged when the camera is connected via HDMI and they are played back in 3D.</li> <li>The COOLPIX S6400 may not be able to zoom in on images captured with another make or model of digital camera.</li> </ul>	- 50 -
Cannot record voice memos.	<ul> <li>Voice memos cannot be attached to movies.</li> <li>Voice memos cannot be attached to images captured with other cameras. Voice memos attached to images using another camera cannot be played back on this camera.</li> </ul>	- 85, <b>**</b> 78
Cannot edit images.	<ul> <li>Editing functions used for still images are not available for movies.</li> <li>Confirm the conditions that are required for editing images.</li> <li>Camera is unable to edit images captured with other cameras.</li> </ul>	- 84, <b>C</b> 18, <b>C</b> 19 84, <b>C</b> 18, <b>C</b> 19
Cannot rotate image.	The COOLPIX S6400 cannot rotate images captured with another make or model of digital camera, or ones captured with <b>3D photography</b> .	-

Problem	Cause/Solution	
Images are not displayed on TV.	<ul> <li>Video mode or HDMI is not correctly set in the TV settings setup menu.</li> <li>Cables are connected to the HDMI mini connector (Type C) and to the USB/audio/video output connector simultaneously.</li> <li>Memory card contains no images. Replace the memory card. Remove the memory card to play back images from the internal memory.</li> </ul>	105,
Album icons are reset to their default icons, images added to albums cannot be displayed in favorite pictures mode.	Data saved in the internal memory or on the memory card may not be played back correctly if overwritten by a computer.	-
The saved images are not displayed in auto sort mode.	<ul> <li>The desired image was sorted into a category other than the category currently displayed.</li> <li>Images saved by a camera other than the COOLPIX S6400 and images copied using the Copy option cannot be displayed in auto sort mode.</li> <li>Images saved in the internal memory or on the memory card may not be played back correctly if overwritten by a computer.</li> <li>Up to 999 images and movies in total can be added to each category. If the desired category already contains 999 images or movies in total, new images or movies cannot be added.</li> </ul>	82, 🍽 11 82, 🝽 11 - 82, 🝽 11
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 system requirements.</li> <li>Computer is not set to start Nikon Transfer 2 automatically. For more information about Nikon Transfer 2, refer to help information contained in ViewNX 2.</li> </ul>	25 24 86,91 - 88 93

Problem	Cause/Solution	
The PictBridge startup screen is not displayed when the camera is connected to a printer.	With some PictBridge-compatible printers, the PictBridge startup screen may not be displayed and it may be impossible to print images when <b>Auto</b> is selected for the <b>Charge by computer</b> option in the setup menu. Set the <b>Charge by computer</b> option to <b>Off</b> and reconnect the camera to the printer.	105, ♣106
Images to be printed are not displayed.	<ul> <li>Memory card contains no images. Replace the memory card.</li> <li>Remove the memory card to print images from the internal memory.</li> <li>Images captured using <b>3D photography</b> cannot be printed.</li> </ul>	18 19 50
Cannot select paper size with camera.	Paper size cannot be selected from the camera in the following situations, even when printing from a PictBridge-compatible printer. Use the printer to select paper size. • The printer does not support the paper sizes specified by the camera. • The printer automatically selects the paper size.	86, <b>4</b> 2, <b>6</b> 43 -

# **Specifications**

#### Nikon COOLPIX S6400 Digital Camera

Туре		Compact digital camera
Num	ber of effective pixels	16.0 million
Imag	e sensor	¹ /2.3-in. type CMOS; approx. 16.79 million total pixels
Lens		12× optical zoom, NIKKOR lens
Fo	ocal length	4.5-54.0 mm (angle of view equivalent to that of 25-300 mm lens in 35mm [135] format)
f/-	number	f/3.1-6.5
Co	onstruction	8 elements in 8 groups (1 ED lens element)
	al zoom nification	Up to 4x (angle of view equivalent to that of approx. 1200 mm lens in 35mm [135] format)
Vibra	ition reduction	Lens shift
Motio	on blur reduction	Motion detection (still pictures)
Auto	focus (AF)	Contrast-detect AF
Fo	ocus range	<ul> <li>[W]: Approx. 50 cm (1 ft 8 in.)-∞</li> <li>[T]: Approx. 1.2 m (4 ft)-∞</li> <li>Macro mode: Approx. 10 cm (4 in.)-∞(wide-angle position)</li> <li>(All distances measured from center of front surface of lens)</li> </ul>
Fo	ocus-area selection	Face priority, auto (9-area automatic selection), center, manual (focus area can be selected using the touch panel), subject tracking, Target finding AF
Monitor		7.5 cm (3-in.), widescreen, approx. 460k-dot, TFT LCD (touch panel) with anti-reflection coating and 5-level brightness adjustment
	ame coverage hooting mode)	Approx. 96% horizontal and 96% vertical
	ame coverage layback mode)	Approx. 96% horizontal and 96% vertical

Storage		
Media		Internal memory (approx. 78 MB), SD/SDHC/SDXC memory card
File system		DCF, Exif 2.3, DPOF, and MPF compliant
	File formats	Still pictures: JPEG 3D images: MPO Sound files (Voice Memo): WAV Movies: MOV (Video: H.264/MPEG-4 AVC, Audio: AAC stereo)
Image size (pixels) ISO sensitivity (Standard output sensitivity) Exposure Metering mode		<ul> <li>16M (High) [4608 × 3456★]</li> <li>16M [4608 × 3456]</li> <li>8M [3264 × 2448]</li> <li>4M [2272 × 1704]</li> <li>2M [1600 × 1200]</li> <li>VGA [640 × 480]</li> <li>16:9 [4608 × 2592]</li> </ul>
		<ul><li>ISO 125-1600</li><li>ISO 3200 (available when using Auto mode)</li></ul>
		256-segment matrix, center-weighted (digital zoom less than 2×), spot (digital zoom 2× or more)
	Exposure control	Programmed auto exposure and exposure compensation (–2.0 – +2.0 EV in steps of $^1\!/3$ EV)
S	nutter	Mechanical and CMOS electronic shutter
	Speed	<ul> <li>¹/2000-1 s</li> <li>¹/4000 s (maximum speed during high-speed continuous shooting)</li> <li>4 s (Fireworks show scene mode)</li> </ul>
A	perture	Electronically-controlled ND filter (-2 AV) selection
	Range	2 steps (f/3.1 and f/6.2 [W])
Se	elf-timer	Can be selected from 10 s and 2 s

Flash	
Range (approx.) (ISO sensitivity: Auto)	[W]: 0.5–6.2 m (1 ft 8 in.–20 ft) [T]: 1.2–2.9 m (4 ft–9 ft 6 in.)
Flash control	TTL auto flash with monitor preflashes
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 (A/V) output; digital I/O (USB) HDMI mini connector (Type C) (HDMI output)
Supported languages	Arabic, Bengali, Chinese (Simplified and Traditional), Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hindi, Hungarian, Indonesian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese (European and Brazilian), Romanian, Russian, Spanish, Swedish, Tamil, Thai, Turkish, Ukrainian, Vietnamese
Power sources	One Rechargeable Li-ion Battery EN-EL19 (included) AC Adapter EH-62G (available separately)
Charging time	Approx. 3 h (when using Charging AC Adapter EH-69P and when no charge remains)
Battery life ¹	
Still pictures	Approx. 160 shots when using EN-EL19
Movies (actual battery life for recording) ²	<ul> <li>HD 1080p★ (1920×1080): Approx. 20 min when using EN-EL19</li> <li>HD 1080p (1920×1080): Approx. 20 min when using EN-EL19</li> <li>HD 720p (1280×720): Approx. 25 min when using EN-EL19</li> </ul>
Tripod socket	1/4 (ISO 1222)
Dimensions (W $\times$ H $\times$ D)	Approx. 95.4 $\times$ 58.6 $\times$ 26.7 mm (3.8 $\times$ 2.4 $\times$ 1.1 in.) (excluding projections)
Weight	Approx. 150 g (5.3 oz) (including battery and SD memory card)
Operating environment	
Temperature	0°C-40°C (32°F-104°F)
Humidity	85% or less (no condensation)

- Unless otherwise stated, all figures assume a fully-charged battery and an ambient temperature of 23 ±3°C (73.4 ±5.4°F) as specified by the Camera and Imaging Products Association (CIPA).
- ¹ Figures based on the Camera and Imaging Products Association (CIPA) standards for measuring the endurance of camera batteries. Performance for still pictures measured under the following test conditions: **26** 4608×2592 selected for Image mode, zoom adjusted with each shot, and flash fired with every other shot. Movie recording time assumes that HD 1080p★ (1920×1080) is selected for Movie options. Figures may vary with use, the interval between shots, and the length of time menus and images are displayed.
- ² Individual movie files cannot exceed 4 GB in size or 29 minutes in length. Recording may end before this limit is reached if camera temperature becomes elevated.

#### **Rechargeable Li-ion Battery EN-EL19**

Туре	Rechargeable lithium-ion battery	
Rated capacity	DC 3.7 V, 700 mAh	
Operating temperature	0°C-40°C (32°F-104°F)	
Dimensions (W $\times$ H $\times$ D)	Approx. 31.5 × 39.5 × 6 mm (1.3 × 1.6 × 0.3 in.)	
Weight	Approx. 14.5 g (0.5 oz) (excluding battery case)	

### **Charging AC Adapter EH-69P**

Rated input	AC 100-240 V, 50/60 Hz, 0.068-0.042 A
Rated output	DC 5.0 V, 550 mA
Operating temperature	0°C-40°C (32°F-104°F)
Dimensions (W $\times$ H $\times$ D)	Approx. $55 \times 22 \times 54$ mm (2.2 × 0.9 × 2.2 in.) (excluding plug adapter) For Argentina: Approx. $55 \times 59 \times 63$ mm (2.2 × 2.4 × 2.5 in.) For Korea: Approx. $55 \times 59 \times 66.5$ mm (2.2 × 2.4 × 2.7 in.)
Weight	Approx. 55 g (2.0 oz) (excluding plug adapter) For Argentina and Korea: Approx. 80 g (2.9 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 images to be printed from print orders saved on memory cards.
- **Exif version 2.3**: Exchangeable image file format (Exif) version 2.3 for digital still cameras is a standard that allows information saved with photographs to be used for optimal color reproduction when images are output from Exif-compliant printers.
- **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.

## **Approved Memory Cards**

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

 Memory cards with an SD Speed Class rating of 6 or faster are recommended for recording movies. When using a memory card with a lower Speed Class rating, movie recording may stop unexpectedly.

	SD memory card	SDHC memory card ²	SDXC memory card ³
SanDisk	2 GB ¹	4 GB, 8 GB, 16 GB, 32 GB	64 GB, 128 GB
TOSHIBA	2 GB ¹	4 GB, 8 GB, 16 GB, 32 GB	64 GB
Panasonic	2 GB ¹	4 GB, 8 GB, 16 GB, 32 GB	64 GB
Lexar	-	4 GB, 8 GB, 16 GB, 32 GB	64 GB, 128 GB

If the memory card will be used with a card reader or similar device, make sure that the device supports 2 GB cards.

² SDHC compliant.

If the memory card will be used with a card reader or similar device, make sure that the device supports SDHC.

³ SDXC compliant.

If the memory card will be used with a card reader or similar device, make sure that the device supports SDXC.

• Contact the manufacturer for details on the above cards. We cannot guarantee camera performance when using memory cards made by other manufacturers.



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# Index

# <u>Symbols</u>

Auto mode	
Scene mode	40
Special effects mode	52
Smart portrait mode	
▶ Playback mode	
Favorite pictures mode	82, 🍋7
Auto sort mode	
List by date mode	. 82, 🍋 13
Y Setup menu	
T (Telephoto)	
W (Wide-angle)	
<b>Q</b> Playback zoom	
Thumbnail display	
Shooting mode button	
▶ Playback button	
● (▶ movie-record) button	3, 96
Menu icon 10, 68, 8	4, 99, 103
Sexit icon	10
Deturn icon	10
AE/AF-L	50
<u>Numerics</u>	
3D photography 3D	50
3D pictures	
A	
AC adapter	25, 🏍 119

AF area mode	
AF assist <b>2</b> ,	, 104, 🏍99
Album	🍋 10
adding images to	
removing images fror	m 84
Aperture value	
Audio/video cable	87, 🏍 34
Audio/video-in jack	87, 🏍 34
Auto flash	
Auto mode	
Auto off 25,	105, 🏍 102
Auto sort mode	82, 🍽 11
Autofocus	99, 🏍88
<u>B</u>	
-	
_ Backlighting 🖀	
-	14, 16, 22
Backlighting 🎦 Battery	14, 16, 22 3
Backlighting 🎦 Battery Battery chamber	14, 16, 22 
Backlighting 🎦 Battery Battery chamber Battery charger	14, 16, 22 
Backlighting 🎦 Battery Battery chamber Battery charger Battery latch	14, 16, 22 3 17, 🗢 119 14 24
Backlighting 🎦 Battery Battery chamber Battery charger Battery latch Battery level indicator Battery-chamber/memory o	14, 16, 22 3 17, 🗢 119 14 24 card slot cover
Backlighting 巀 Battery Battery chamber Battery charger Battery latch Battery level indicator	14, 16, 22 3 17, 🗢 119 14 24 card slot cover 3, 14, 18
Backlighting 🎦 Battery Battery chamber Battery charger Battery latch Battery level indicator Battery-chamber/memory o	14, 16, 22 3 17, 00119 14 24 card slot cover 3, 14, 18 44
Backlighting 2 Battery Battery chamber Battery charger Battery latch Battery level indicator Battery-chamber/memory of Beach 2 Best Shot Selector	14, 16, 22 
Backlighting 2 Battery Battery chamber Battery charger Battery latch Battery level indicator Battery-chamber/memory of Beach 2	14, 16, 22 

Blink warning 105,	<b>6</b> 108
Brightness	🏍 93
BSS 46	5, <b>60</b> 60
Button sound	🍋 101

## <u>C</u>

Charge by computer	. 105, 🍽 106
Charge lamp	
Charger	16, 🏍 119
Charging AC Adapter	
Choose key picture 85,	<b>6</b> 014, <b>6</b> 082
Close-up 🗱	
Compression ratio	🏍 49
Computer	
Connector cover	2
Continuous 4	9, 69, 🏍 59
Copying images	85, 🏍80
Crop	
Cross process 💸	

# D

Date	. 20,	104,	ð <b>ð</b> 90
Date and time	. 20,	104,	ð <b>ð</b> 90
Date format		21,	ð <b>ð</b> 90
Daylight			<b>6</b> 62
Daylight saving time	21	, 22,	ð <b>ð</b> 92
Delete 3	4, 8	<b>0</b> 16,	ð <b>ð</b> 79
Digital zoom	······ ·	104, (	<b>5</b> 0100
Direct print		87,	ð <b>ð</b> 38
D-Lighting		84,	<b>6</b> 026

DPOF		Ø	22
DPOF print		🔶	45
Drag			
Draw 🗹	4	7, 8	02
DSCN		<b>6</b>	117
Dusk/dawn 齝			44
<u>E</u>			
Easy panorama 🗖	4	8, ð	03
Easy panorama playback	48	8, ð	06
EH-69P		ii,	16
EN-EL19	ii,	14,	16
Exposure compensation			65
Extension		$\sim$	117
Eye-Fi upload	105,	<b>~</b>	111
Eyelet for camera strap			2
<u>F</u>			
Face detection 42, 43,	49,	54,	75
Favorite pictures mode	8	2, 8	67
File name			
Fill flash			59
Fireworks show 🏵			46
Firmware version	105,	<b>6-0</b>	116
Fixed range auto		🔶	58
Flash		2,	58
Flash lamp		3,	58
Flash mode		58,	59
Flash off			59
Focus	, 70,	. 🔶	66

Focus area		
Focus indicator		7
Focus lock		
Folder name		
Food <b>II</b>		
Format internal memory		
Format memory cards	105,	00105
	105	<b>A</b> 102
,		
Formatting 19,		
FSCN		
Full-frame playback		
Full-time AF	99	, 🏍 88
<u>G</u>		
Glamour retouch	84	, 🍋 29
н		
HDMI		<b>∂−</b> 0105
HDMI 3D output		
HDMI cable		
HDMI device control		
HDMI mini connector		
HDR		
Help		40
High key <b>HI</b>		
High-contrast monochrom	e 🔲	52
High-speed continuous	69	, 🍋 59
HS movie	99	, 🏍84
1		
ldentifier		<b>∂−0</b> 117

Image copy       680         Image mode       69, 649         Image review       693         Image size       69, 649         Imprinting date and time       695         Internal memory       19
Internal memory indicator 
<u>J</u> JPG ↔ 117 L
Landscape       42         Language       105, ∞104         Lens       2, ⋩17         Lens cover       2         List by date mode       82, ∞13
Low key L0

**Technical Notes and Index** 

Movie AF mode         99, 6688           Movie editing         101, 6647           Movie length         98           Movie menu         99, 6683           Movie options         99, 6683           Movie playback         100           Movie recording         96, 6683
MPO #117 MSCN #117
Multi-shot 16
Museum 🟛 46
Night landscape       45         Night portrait       43         Nikon Transfer 2       90, 92         Nostalgic sepia       52         Number of exposures remaining       24, ∞50
Open with HS footage
Optical zoom
<u>P</u>
Paint
Paper size
Party/indoor X 44
Perspective control

Pet portrait auto relea	se	
Pet portrait 🦋		
Photo info		
PictBridge	87,	🗢 38, 🍎 22
Playback		
Playback menu		
Playback mode		
Playback zoom		
Pop <b>POP</b>		
Portrait 🙎		
Power		
Power switch		2, 24, 25
Power-on lamp		2, 24, 25
Preset manual		
Pre-shooting cache	69, (	<b>66</b> 59, <b>66</b> 61
Pressing halfway		
Print 84, 🏍	41, (	• 43, • 73
Print date	22	, 104, 🏍95
Print order		84, 🏍73
Print order date optio	n	22, 🏍76
Printer		87, 🏍 38
Protect		
Protect Q		
Q		84, 🏍71
	39, č	84, 🍋71
Q Quick effects 33,	39, č	84, 🍋71
Q Quick effects 33, 2 Quick retouch	39, (	84, &871 20, &65 84, &25

# **Technical Notes and Index**

# Ö-28

Recording slow motion movies

necolulity slow motion movies	
	4
Red-eye reduction 59	9
Remove from favorites	9
Reset all 105, 🍽 112	2
Retouch	
Rotate image 84, 377	7
RSCN 🖚 117	7
<u>S</u>	
Scene auto selector 🚟 42	2
Scene Effect 4	1
Scene mode 40, 42	
Selective color 🖋 52	2
Self-timer	
Self-timer lamp 2, 62	2
Sequence display options	
	)
Setup menu 104	
Shooting	
Shooting menu 69, 69,	
Shooting mode	
Shutter sound 🖚 10	
Shutter speed	
Shutter-release button	
Single 69, 🗢 59	
Single AF 99, 🕶 88	
Skin softening 56, 70, 🗢 67	
Slide show	)

Slow sync Small picture Smart portrait menu Smart portrait mode Smile timer Snow 🗟 Soft <b>SOFT</b> Sound settings Speaker Special effects mode Sports <b>2</b>  SCN Strap. Stretch Stylus Subject tracking	84, 0031 68, 0067 54 70, 0068 44 52 104, 00101 3 52 43 00117 4 84, 0027 5 .38, 69, 0055
Sunset 🚔 Super vivid <b>VIVID</b>	
Tap         Target finding AF.         Time difference         Time zone         Touch AF/AE         Touch shooting         Touch shutter         Toy camera effect 1 \$1.         Toy camera effect 2 \$2.	.70, 74, <b>*</b> 666 

Tripod socket
TV
TV settings 105, 🗢 105
<u>U</u>
USB cable
USB/audio/video output connector
V
Vibration reduction 104, 🗢 97
Video mode 🖚 105
ViewNX 2
Voice memo
Volume 100, 101, 🗢79
<u>W</u>
WAV 🗝 117
Welcome screen 104, +89
White balance
Wind noise reduction
Z
Zoom
Zoom control
Zoom in
Zoom out

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