

DIGITAL CAMERA

COOLPIX W150

Reference Manual



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- · Read this manual thoroughly before using the camera.
- To ensure proper use of the camera, be sure to read "ᢒFor your safety (page 11)" and "ᢒ<Important> Notes about shockproof, waterproof, and dustproof performance and condensation (page 15)".
- After reading this manual, keep it in a readily accessible place for future reference.

Types of manuals

The following manuals are available for this camera.

Manual	Description
Reference Manual (this manual)	Explains details about using the camera.
Online Manual	You can view the Reference Manual content online. https://onlinemanual.nikonimglib.com/w150/en/
SnapBridge Online Help	Explains details about using the app for smart devices, "SnapBridge". https://nikonimglib.com/snbr/onlinehelp/en/index.html
Quick Start Guide	A manual included with the camera. Explains preparation for shooting and basic operations.





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Read this first

Symbols and conventions

· Symbols

Symbol	Description
	This icon marks cautions and information that should be read before using the camera.
	This icon marks notes and information that should be read before using the camera.
•	This icon marks other pages containing relevant information.

- SD, SDHC, and SDXC memory cards are referred to as "memory cards" in this manual.
- · Smartphones and tablets are referred to as "smart devices."
- The setting at the time of purchase is referred to as the "default setting."
- The names of menu items displayed on the camera screen, and the names of buttons or messages displayed on a computer screen are enclosed in [] (brackets).
- Images are sometimes omitted from screen display samples so that screen indicators can be more clearly shown.

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 websites:

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

Visit these websites 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 website below for contact information. https://imaging.nikon.com/

• 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.

• 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, AC adapters, and USB cables) 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

A holographic seal that indicates an accessory as an authentic Nikon product is affixed to the dedicated rechargeable Li-ion battery.



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.

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.
- Illustrations and screen content shown in this manual may differ from the actual product.
- 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).

• Comply with copyright notices

Under copyright law, photographs or recordings of copyrighted works made with the camera can not be used without the permission of the copyright holder. Exceptions apply to personal use, but note that even personal use may be restricted in the case of photographs or recordings of exhibits or live performances.

• 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, make sure to reset all of the camera's settings using the camera settings menu → [Reset all]. After resetting, erase all data in the device using commercial deletion software, or format the device using the camera settings menu → [Format memory] or [Format card], then completely refill it with images containing no private information (for example, images of empty sky). Also replace the image in the camera settings menu → [Welcome screen] → [On: Photo] with another image in the same manner before discarding or transferring. Care should be taken to avoid injury or damage to property when physically destroying memory cards.

• Conformity marking

Follow the procedure below to display some of the conformity markings that the camera complies with.

Enter shooting mode or playback mode \rightarrow flexible button 4 (\P) \rightarrow \P Camera settings \rightarrow \square Conformity marking

For your safety

To prevent damage to property or injury to yourself or to others, read "For your safety" in its entirety before using this product.

Keep these safety instructions where all those who use this product will read them.



DANGER

Failure to observe the precautions marked with this icon carries a high risk of death or severe injury.



WARNING

Failure to observe the precautions marked with this icon could result in death or severe injury.



CAUTION

Failure to observe the precautions marked with this icon could result in injury or property damage.



WARNING

- Do not use while walking or operating a vehicle. Failure to observe this precaution could result in accidents or other injury.
- Do not disassemble or modify this product. Do not touch internal parts that become exposed as the result of a fall or other accident. Failure to observe these precautions could result in electric shock or other injury.
- Should you notice any abnormalities such as the product producing smoke, heat, or unusual odors, immediately disconnect the battery or **power source.** Continued operation could result in fire, burns or other injury.
- Do not handle the plug with wet hands. Failure to observe this precaution could result in fire or electric shock
- Do not let your skin remain in prolonged contact with this product while it is on or plugged in. Failure to observe this precaution could result in lowtemperature burns.

- Do not use this product in the presence of flammable dust or gas such as propane, gasoline or aerosols. Failure to observe this precaution could result in explosion or fire.
- Do not aim the flash at the operator of a motor vehicle. Failure to observe this
 precaution could result in accidents.
- Keep this product out of reach of children. Failure to observe this precaution could result in injury or product malfunction. In addition, note that small parts constitute a choking hazard. Should a child swallow any part of this product, seek immediate medical attention.
- Do not entangle, wrap or twist the straps around your neck. Failure to observe this precaution could result in accidents.
- Do not use batteries, chargers, AC adapters, or USB cables not specifically designated for use with this product. When using batteries, chargers, AC adapters, and USB cables designated for use with this product, do not:
 - Damage, modify, forcibly tug or bend the cords or cables, place them under heavy objects, or expose them to heat or flame.
 - Use travel converters or adapters designed to convert from one voltage to another or with DC-to-AC inverters.
 - Failure to observe these precautions could result in fire or electric shock.
- Do not handle the plug when charging the product or using the AC adapter during thunderstorms. Failure to observe this precaution could result in electric shock.
- Do not handle with bare hands in locations exposed to extremely high or low temperatures. Failure to observe this precaution could result in burns or frostbite.

CAUTION

- Do not leave the lens pointed at the sun or other strong light sources. Light focused by the lens could cause fire or damage to product's internal parts. When shooting backlit subjects, keep the sun well out of the frame.
- Turn this product off when its use is prohibited. Disable wireless features
 when the use of wireless equipment is prohibited. The radio-frequency
 emissions produced by this product could interfere with equipment onboard
 aircraft or in hospitals or other medical facilities.

- Remove the battery and disconnect the AC adapter if this product will not be used for an extended period. Failure to observe this precaution could result in fire or product malfunction.
- · Do not fire the flash in contact with or in close proximity to the skin or **objects.** Failure to observe this precaution could result in burns or fire.
- · Do not leave the product where it will be exposed to extremely high temperatures, for an extended period such as in an enclosed automobile or in direct sunlight. Failure to observe this precaution could result in fire or product malfunction.
- Do not transport the camera with a tripod or similar accessory attached. Failure to observe this precaution could result in injury or product malfunction.

DANGER for batteries

- Do not mishandle batteries. Failure to observe the following precautions could result in the batteries leaking, overheating, rupturing, or catching fire:
 - Use only rechargeable batteries approved for use in this product.
 - Do not expose batteries to flame or excessive heat.
 - Do not disassemble.
 - Do not short-circuit the terminals by touching them to necklaces, hairpins, or other metal objects.
 - Do not expose batteries or the products in which they are inserted to powerful physical shocks.
- Charge only as indicated. Failure to observe this precaution could result in the batteries leaking, overheating, rupturing, or catching fire.
- If battery liquid comes into contact with the eyes, rinse with plenty of clean water and seek immediate medical attention. Delaying action could result in eye injuries.



WARNING for batteries

• Keep batteries out of reach of children. Should a child swallow a battery, seek immediate medical attention.

- Do not immerse batteries in water or expose to rain. Failure to observe this precaution could result in fire or product malfunction. Immediately dry the product with a towel or similar object should it become wet.
- · Discontinue use immediately should you notice any changes in the batteries, such as discoloration or deformation. Cease charging EN-EL19 rechargeable batteries if they do not charge in the specified period of time. Failure to observe these precautions could result in the batteries leaking, overheating, rupturing, or catching fire.
- · When batteries are no longer needed, insulate the terminals with tape. Overheating, rupture, or fire may result should metal objects come into contact. with the terminals
- · If battery liquid comes into contact with a person's skin or clothing, immediately rinse the affected area with plenty of clean water. Failure to observe this precaution could result in skin irritation.

<Important> Notes about shockproof, waterproof, and dustproof performance and condensation

- The shockproof, waterproof, and dustproof performance described here do not guarantee that the camera will remain completely waterproof or free from damage and trouble under all conditions.
- Do not subject the camera to excessive shock, vibration or pressure by dropping it, hitting it, or placing a heavy object on it. Failure to observe this precaution could deform the camera, cause water to seep inside, or damage the airtight seals, resulting in camera malfunction.
- Your Nikon warranty may not cover troubles caused by water seeping inside the camera due to improper handling of the camera.

Notes about shockproof performance

This camera has passed Nikon's in-house test (drop test from a height of 180 cm (5 ft 10 in.) on a 5 cm (2 in.) thick plywood panel) compliant with the MIL-STD-810G w/Change 1 Method 516.7-Shock* standard.

Changes in appearance, such as paint peeling off and deformation of the camera, are not measured in Nikon's in-house test.

* U.S. Department of Defense test method standard. This test is defined by preparing 5 cameras and making sure that the test is passed within 5 cameras by dropping in 26 directions (8 corners, 12 edges, and 6 faces) from a height of 122 cm (4 ft).

Notes about waterproof and dustproof performance

The camera is rated equivalent to JIS/IEC waterproof class 8 (IPX8) and JIS/IEC dustproof class 6 (IP6X) and can shoot images underwater at a depth of 10 m (33 ft) for up to 60 minutes.*

- * This rating indicates that the camera has been designed to withstand the specified water pressure for the specified period of time when the camera is used according to the methods defined by Nikon.
- The waterproof performance of this camera was tested in fresh water (swimming pools, rivers, and lakes) and salt water only.
- The inner portion of this camera is not waterproof. Water seeping inside the camera could cause the components to rust, resulting in high repair costs or irreparable damage.
- · Accessories are not waterproof.



▼ Precautions when cleaning

- Do not puncture the microphone or speaker openings with a sharp implement. If the inside of the camera is damaged, the waterproof performance will deteriorate.
- Do not use soap, neutral detergents, or chemicals such as benzene.

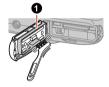
Notes about shockproof, waterproof, and dustproof performance

- Do not drop the camera, strike it against a hard object such as a rock, or throw it
 against a water surface.
- Do not subject the camera to shock when using it underwater.
 - Do not subject the camera to water pressure by exposing it to rapids or waterfalls.
 - Do not expose to depths greater than 10 m (33 ft) underwater.
 - Make sure not to drop the camera underwater. This camera does not float in water.
- Do not continuously use the camera underwater for 60 minutes or more.
- Do not insert a wet memory card or battery in the camera.
 - Do not open the battery-chamber/memory card slot cover when the camera or your hands are wet. Doing so may cause water to seep inside the camera or result in camera malfunction.
- Do not open the battery-chamber/memory card slot cover underwater.

- If moisture such as water droplets adheres to the outside of the camera or inside of the battery-chamber/memory card slot cover, immediately wipe it off with a soft dry cloth.
 - If a foreign substance adheres to the outside of the camera or inside of the battery-chamber/memory card slot cover, immediately remove it with a blower or a soft cloth.



If a foreign substance adheres to the waterproof packing (1) inside the battery-chamber/memory card slot cover, remove it with the included brush. Do not use the included brush for anything other than cleaning the waterproof packing.



- Do not leave the camera in cold conditions or in hot conditions of 40°C (104°F) or more for a long period of time.
 - Doing so could cause deterioration of the waterproof performance.
 - When using the camera underwater, make sure the water temperature is from 0°C to 40°C (32°F to 104°F).
- · Do not use the camera at hot springs.

Before using the camera underwater

Check the items below before using the camera underwater.

- Make sure that there are no foreign substances inside the battery-chamber/ memory card slot cover.
- Make sure that the waterproof packing of the battery-chamber/memory card slot cover is not cracked or deformed.
 - Make sure that the waterproof packing is not detached from the camera.



- Make sure that the battery-chamber/memory card slot cover is firmly closed.
 - Slide the cover until it locks in place with a click.

Notes about operating temperature, humidity, and condensation

The operation of this camera has been tested at temperatures from -10° C to $+40^{\circ}$ C (14°F to 104°F).

When you use the camera in cold climate regions or at high altitudes, observe the following precautions.

- Battery performance deteriorates temporarily when cold. Keep the camera and batteries warm under your clothing before use.
- Camera performance may deteriorate temporarily if it is exposed to extreme cold for an extended period. For example, the monitor may appear darker than normal immediately after the camera is turned on, or residual images may be produced.

• Environmental conditions that are likely to cause condensation

Fogging (condensation) may occur on the inside of the monitor or lens when there are sharp temperature changes or high humidity, such as in the environmental conditions described below. This is not a camera malfunction or defect.

- The camera is suddenly immersed in cold water after being in a hot place on land.
- The camera is brought to a warm place such as inside a building after being in the cold outdoors.
- The battery-chamber/memory card slot cover is opened or closed in a highhumidity environment.

• Reducing condensation

- Open the battery-chamber/memory card slot cover, put the camera and a commercially-available desiccant in a container such as a plastic bag, and seal the container.
 - Condensation is less likely to occur if the humidity inside the camera is reduced.
- Before using the camera underwater, avoid storing it in locations where the camera may become hot (such as under direct sunlight).
 If you submerge the camera underwater while it is hot, the sudden change in
 - If you submerge the camera underwater while it is hot, the sudden change in temperature may cause condensation.

• Clearing the fogging

Turn off the camera and open the battery-chamber/memory card slot cover while
in a place where the ambient temperature is stable (avoid places with high
temperature, high humidity, sand, or dust).

To clear the fogging, remove the battery and memory card, and leave the battery-chamber/memory card slot cover open to allow the camera to adjust to the ambient temperature.





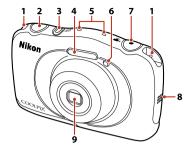
Inspection and repair

- If the camera is exposed to shock, it is recommended to consult your retailer or Nikon-authorized service representative to confirm the waterproof performance (charged service).
- If the waterproof packing begins to deteriorate, consult your retailer or Nikonauthorized service representative. The waterproof performance of the waterproof packing may start to deteriorate after one year.
- If water seeps inside the camera, immediately stop using it and take it to your Nikon-authorized service representative.

Parts of the camera

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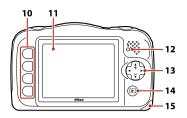
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9	Lens (with protective glass)

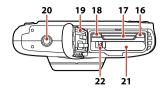




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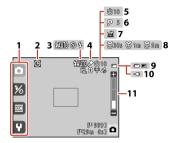
Screen indicators

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

Some information is not displayed if no operations are performed for several seconds. Information is displayed again when either a flexible button or the multi selector is pressed.

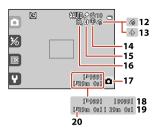
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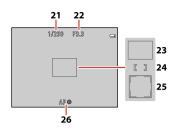
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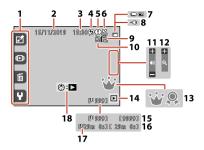


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Using the flexible buttons

If you press a flexible button while in the shooting screen or playback screen, the menu for the current mode is displayed, and you can change various settings.



- 1: Flexible button 1
- 2: Flexible button 2
- 3: Flexible button 3
- 4: Flexible button 4

1 Press a flexible button to display the menu.



 Depending on the camera's settings, the menu will not be displayed even if you press a flexible button.

Press a flexible button to select an item.

• When \circlearrowleft is displayed, press flexible button 1 (\circlearrowleft) to return to the previous screen.



 Certain options cannot be selected or displayed depending on the camera's settings.



3 Press a flexible button to select an item.

When the menu content continues on another page, a guide (1) indicating the
page position is displayed. To display the previous or next page, press the multi
selector ▼ ▲.



4 Press a flexible button to confirm the setting.

• The current setting is displayed with a yellow bar (1).



The power-on lamp

The power-on lamp turns on or flashes in the following situations.



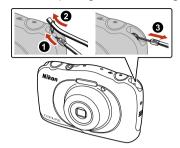
Status	Meaning	
On	 Turns on immediately after the camera is turned on. The camera is connected to a computer with the USB cable. The power-on lamp turns on even if the camera is off when communicating with a smart device through the camera settings men → [Network menu] → [Bluetooth] → [Send while off]. 	
Flashing	The camera is in standby mode because it has not been operated for about three minutes. The auto off function (page 44) The camera detects a human face when using [Underwater face framing] in [Choose a style]. The camera is shooting while [Choose a style] is set to [Shoot at intervals].	
Flashing quickly	[Battery exhausted.] is displayed on the screen. Charge or replace the battery. The inside of the camera or the battery has become hot. The camera turns off automatically. Wait until the camera or battery temperature has cooled before resuming use.	

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Attaching the strap

Pass the strap through either the left or right strap eyelet and attach the strap.



Inserting the battery and memory card

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





Insert the battery and memory card.





- With the battery's positive and negative terminals oriented correctly, move the yellow battery latch (1), and fully insert the battery (2).
- With the memory card oriented correctly, slide it into the memory card slot until it clicks into place (3).
- Be careful not to insert the battery or memory card upside-down or backward, as this could cause a malfunction.
- If the write-protect switch of the memory card is locked, you cannot shoot, delete images, or format the memory card.
- Camera data, including images and movies, can be saved either on a memory card
 or in the internal memory. To use the internal memory, remove the memory card.

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

• Lay the cover completely flat in the direction indicated by the arrow (1), and fully slide it in (2)



· Sliding the cover while it is open may damage the camera.



▼ Notes about waterproof and dustproof performance

Notes about shockproof, waterproof, and dustproof performance (page 16)

▼ Formatting a memory card

The first time you insert a memory card that has been used in another device into this camera, make sure to format it with this camera.

- Note that formatting a memory card permanently deletes all images and other data on the memory card.
 - Be sure to make copies of any images you wish to keep before formatting the memory card.
- Insert the memory card into the camera and select the camera settings menu >
 [Format card].

Removing the battery or memory card

Turn the camera off and make sure that the power-on lamp and screen have turned off, and then open the battery-chamber/memory card slot cover.

- · Move the yellow battery latch to eject the battery.
- Gently push the memory card into the camera to partially eject the memory card.
- Be careful when handling the camera, battery, and memory card immediately after using the camera, as they may be hot.

Memory cards that can be used

The camera supports SD, SDHC, and SDXC memory cards.



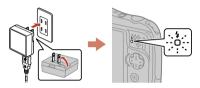
- Memory cards with an SD Speed Class rating of 6 (Video Speed Class V6) or faster are recommended for recording movies. When using a memory card with a lower Speed Class rating, movie recording may stop unexpectedly.
- If you use a card reader, make sure that it is compatible with your memory card.
- Contact the manufacturer for information on features, operation, and limitations on use.

Charging the battery

 Use the USB cable (included) to connect the Charging AC Adapter to the camera with the battery inserted.



2 Insert the plug of the Charging AC Adapter into an electrical outlet.



- A plug adapter is attached depending on the country or region of purchase. The shape of the plug adapter varies with the country or region of purchase.
- When charging starts, the charge lamp flashes slowly. The charging time for a fully exhausted battery is about 1 hour and 40 minutes.
- · When charging is complete, the charge lamp turns off.
- The battery cannot be charged when the charge lamp quickly flashes, possibly due to one of the reasons described below.
 - The ambient temperature is not suited to charging.
 - The USB cable or Charging AC Adapter is not properly connected.
 - The battery is damaged.
- 3 When charging is complete, unplug the Charging AC Adapter from the electrical outlet, and disconnect the USB cable.

Notes about the USB cable

- Do not use a USB cable other than the UC-E21. Using a USB cable other than the UC-E21 could result in overheating, fire or electric shock.
- Check the shape and direction of the plugs and do not insert or remove the plugs at an
 angle.



☑ Notes about charging the battery

- Do not, under any circumstances, use another make or model of AC adapter other than
 the EH-73P/EH-73PCH Charging AC Adapter, and do not use a commercially available
 USB-AC adapter or a battery charger for a mobile phone. Failure to observe this
 precaution could result in overheating or in damage to the camera.
- You can use the camera while it is charging, but the charging time will take longer.
 However, if the battery level is extremely low, you may not be able to use the camera while the battery is charging.

Camera setup

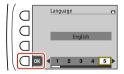
Use the flexible buttons and multi selector to select and adjust settings.



- 1: Flexible button 1
- 2: Flexible button 2
- 3: Flexible button 3
- 4: Flexible button 4
- 6: Multi selector
- 1 Press the power switch to turn on the camera.



Press ◀► on the multi selector to select a language and press flexible button 4 (OK) to confirm the selection.



- The displayed languages vary depending on the country or region.
- The language can be changed at any time using the camera settings menu > [Language].



3 Press flexible button 3 (O [Yes]).



- 4 Press flexible button 2, 3, or 4 to select a date format.
- 5 Set the date and time.



- Select the minute field and press flexible button 4 (**OK**) to confirm the setting.
- Press flexible button 3 (%) to set daylight saving time. When it is on, the time is one
 hour earlier and % is displayed. If you press flexible button 3 (%) again to turn it off,
 the time goes back one hour.
- When the confirmation dialog is displayed, press flexible button 3 (O [Yes]).
 - You can change the date and time using the camera settings menu → [Date and time].
- 7 Use ◀ ▶ to select a background design and press flexible button 4 (OK).



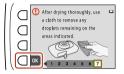
- To restore the default background designs, press flexible button 3 (RESET).
- You can change the background design using the camera settings menu → [Menu background].



8 Read the message about the waterproof function, and press ▶.



- Waterproofing-related messages are displayed at times such as when turning on the camera for the first time or after charging.
- **9** Confirm the last message and press flexible button 4 (**OK**).



• Setup is complete and the camera switches to the shooting screen.

Basic shooting and playback operations

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Shooting images

- [Point and shoot] is used here as an example. In [[Point and shoot]], the camera recognizes the shooting conditions when you frame a picture, and you can take pictures in accordance with the conditions.
- Press flexible button 1 () to display the [Point and shoot] shooting screen.
 - In **[Point and shoot**], **[Discrete Property of the screen]**



2 Check the battery level and number of exposures remaining.

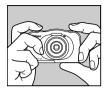


- Battery level (1)
 - : The battery level is high.
 - : The battery level is low.
- Number of exposures remaining (2)
 - \blacksquare is displayed when no memory card is inserted in the camera, and images are saved in the internal memory.



3 Hold the camera steady.

 Keep fingers and other objects away from the lens, flash, AF-assist illuminator, microphone, and speaker.





4 Frame the picture.

Use the multi selector to change the zoom lens position.
 To zoom out: Press ★.
 To zoom out: Press ▼.



5 Press the shutter-release button halfway.

• To press the shutter-release button "halfway" means to press and hold the button at the point where you feel a slight resistance.



• When the subject is in focus, the focus area or focus indicator is displayed in green.



- When you are using digital zoom, the camera focuses in the center of the frame and the focus area is not displayed.
- If the focus area or focus indicator flashes, the camera is unable to focus. Modify the composition and try pressing the shutter-release button halfway again.



6 Without lifting your finger, press the shutter-release button all the way down.



Notes about saving images or movies

The indicator showing the number of exposures remaining or the indicator showing the remaining recording time flashes, or [Please wait for the camera to finish recording.] is displayed while images or movies are 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.

The auto off function

- When no operations are performed for about three minutes, the screen turns off, the camera enters standby mode, and then the power-on lamp flashes. The camera turns off after remaining in standby mode for about three minutes.
- To turn the screen back on while the camera is in standby mode, perform an operation such as pressing the power switch or shutter-release button.

Using a tripod

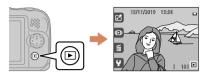
We recommend using a tripod to stabilize the camera in the following situations:

- When shooting in dim lighting with [Flash] set to [Flash off]
- · When the zoom is at a telephoto position



Playing back images

Press the (shooting/playback mode) button to enter fullframe playback mode.



- If you press and hold down the D button while the camera is turned off, the camera turns on in playback mode.



- Press and hold down ◀ ▶ to scroll through the images guickly.
- To play back a recorded movie, press ▲.
- To return to shooting mode, press the **b** button or shutter-release button.
- Press ▲ in full-frame playback mode to zoom in on an image.
 - → Playback zoom (page 84)
- In full-frame playback mode, press

 ▼ to switch to thumbnail playback mode and display multiple images on the screen.
 - Thumbnail playback (page 86)

Deleting images

1 In full-frame playback mode, press flexible button 3 (面).



2 Use flexible button 2, 3, or 4 to select the desired deletion method.



- If you selected [[Erase this picture only] or ALL [Erase all pictures], proceed to step 5.
- To exit without deleting, press flexible button 1 (5).
- 3 Use the multi selector **◄** ► to select an image to be deleted, and then press flexible button 2 (�).



- The selected image is indicated by a check mark.
- A check mark is displayed or removed each time you press flexible button 2 (�).
- Press flexible button 3 (**RESET**) to remove all check marks.
- 4 Add check marks to all images that you want to delete and then press flexible button 4 (**OK**) to confirm the selection.



- When the confirmation dialog is displayed, press flexible button 3 (O [Yes]).
 - · Deleted images cannot be recovered.

Restricting image deletion (image lock)

To prevent accidental deletion of images, you can lock image deletion.

- When image lock is set, [Format card] and [Format memory] are also locked.
- To remove image lock, follow the same procedure used to set image lock.
- 1 Press and hold down flexible buttons 1 and 4 at the same time while in shooting mode or playback mode.



- When the confirmation dialog is displayed, press flexible button 3 (O [Yes]).
 - When image lock is set, $\textcircled{\textbf{6}}$ is displayed on the screen.





Shooting features

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Shooting menu list

You can use the functions below when you press a flexible button in shooting mode.

Flexible button	Description
Point and shoot	Sets the shooting mode to [Point and shoot (page 50)]. The camera recognizes the shooting conditions when you frame a picture, and you can take pictures in accordance with the conditions.
% Flash mode/ self-timer	7 Flash (page 52) Allows you to change the flash settings to match the shooting conditions.
	♦ Self-timer (page 53) The camera is equipped with a self-timer that releases the shutter 10 seconds or 5 seconds after you press the shutter-release button. You can also set [Smile timer (page 55)].
More picture options	When a style (shooting conditions and effects) is selected, camera settings are automatically optimized for the selected condition.
	Decorate (page 71) Allows you to add a frame around your images when taking pictures.
	Allows you to adjust the brightness (exposure compensation) or vividness, or keep a specified color in the image and change the other colors to black and white.
¥ Settings	Change sounds (page 73) Allows you to configure the shutter and button sounds.
	Allows you to set the size of still images and movies.
	Y Camera settings Allows you to change a number of general settings. ③ Using the camera settings menu (page 128)



Point and shoot

When you use this camera for the first time, the shooting mode is set to **[Point and shoot**]. The camera recognizes the shooting conditions when you frame a picture, and you can take pictures in accordance with the conditions.

[Point and shoot] is the default shooting mode for this camera.

Shooting mode → flexible button 1 (□)

- When the camera detects the main subject, it focuses on that subject (target finding AF).
- · The flash may fire when shooting in low light.
- · When shooting in low light, the use of a tripod is recommended.
- When the digital zoom is in effect, the camera does not recognize the shooting conditions.

Using target finding AF

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

 The camera detects the main subject and focuses on it. When the subject is in focus, the focus area is displayed in green. If a human face is detected, the camera automatically sets focus priority on it.



 If no main subject is detected, the camera focuses on the area in the center of the frame.



▼ 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 subject 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 screen
 - When the main subject is composed of a repeating pattern

Flash

You can change the flash settings to match the shooting conditions.

Shooting mode → flexible button 2 (%) → 5 Flash

Flexible button	Description
≯ AUTO Auto flash	The flash fires when necessary, such as in dim lighting.
3 Flash off	The flash does not fire. We recommend using a tripod to stabilize the camera when shooting in dark surroundings.
≯ Always fire flash	The flash fires whenever a picture is taken. Use to "fill-in" (illuminate) shadows and backlit subjects.

Notes about [Flash]

This function may not be available to use in combination with other functions.

Functions that cannot be used simultaneously when shooting (page 81)

Notes about shooting with the flash

When you use the flash at the wide-angle zoom position, the edge of the image may be dark depending on the shooting distance. This may be improved if you move the zoom control slightly toward the telephoto position.

The flash lamp



The status of the flash can be confirmed by pressing the shutter-release button halfway.

- On: The flash fires when you press the shutter-release button all the way down.
- Flashing: The flash is charging. The camera cannot shoot images.
- Off: The flash does not fire when a picture is taken.

The flash setting

- The setting may not be changed when using some shooting modes or settings. Default settings list for flash and self-timer (page 80)
- The setting applied in [Point and shoot] is saved in the camera's memory even after the camera is turned off



Self-timer

The camera is equipped with a self-timer that releases the shutter 10 seconds or 5 seconds after you press the shutter-release button.

Shooting mode → flexible button 2 (%) → 🖒 Self-timer

Flexible button	Description
OFF off	The self-timer is not used.
10s 10 s	The camera releases the shutter 10 seconds after you press the shutter-release button. Use on important occasions, such as weddings.
Self-portrait timer	The camera releases the shutter 5 seconds after you press the shutter-release button. Use for self-portraits.
ভ্ৰঁ Smile timer	When the camera detects a smiling face, you can take a picture automatically without pressing the shutter-release button.

- 1 Press flexible button 3 (10s [10 s]) or flexible button 4 (**?** [Self-portrait timer]).
- **2** Frame the picture and press the shutter-release button halfway.
 - When using 10s [10s], make sure that the subjects are in focus.
 - When using **9** [**Self-portrait timer**], press the shutter-release button all the way down in step 3, and then frame the picture.
- **3** Press the shutter-release button all the way down.
 - · Countdown starts.



 The self-timer lamp flashes and then glows steadily about one second before the shutter is released.



- · When the shutter is released, the self-timer is set to **OFF** [**Off**].
- To stop the countdown, press the shutter-release button again.





▼ Notes about [Self-timer]

This function may not be available to use in combination with other functions.

Functions that cannot be used simultaneously when shooting (page 81)

Focus and exposure when shooting with the self-timer

- 10s [10 s]: The focus and exposure are locked when you press the shutter-release button all the way down.
- P [Self-portrait timer]: The focus and exposure are set immediately before the shutter is released.

The self-timer setting

The setting may not be changed when using some shooting modes or settings.

Default settings list for flash and self-timer (page 80)

Smile timer

When the camera detects a smiling face, you can take a picture automatically without pressing the shutter-release button. The skin softening function makes the skin tones of human faces smoother.

Shooting mode → flexible button 2 (%) → 🖒 Self-timer → 😇 Smile timer

- 1 Frame the picture.
 - Point the camera at a human face
- 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.
 - Whenever the camera detects a smiling face, it automatically releases the shutter.
 - · The shutter-release button can also be used for shooting.

3 End automatic shooting.

Press flexible button 2 (%) → ☼ [Self-timer] → OFF [Off].

▼ Notes about [Smile timer]

- This function may not be available to use in combination with other functions.
- ●Functions that cannot be used simultaneously when shooting (page 81)
- Under some shooting conditions, the camera may be unable to detect faces or smiles.
 Notes about face detection (page 78)

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.

Using skin softening

If human faces are detected, the camera processes the image to soften facial skin tones before saving the image (up to three faces).

[Make skin prettier] can also be applied to saved images by using [Add makeup] in playback mode.

◆Add makeup (page 92)

▼ Notes about skin softening

• It may take more time than usual to save images after shooting.





• Under some shooting conditions, the desired results may not be achieved, and effects may be applied to areas of the image where there are no faces.

Choose a style

When a style (shooting conditions and effects) is selected, camera settings are automatically optimized for the selected condition.

1 In shooting mode, press flexible button 3 (some).



Press flexible button 2 (ஊ [Choose a style]).



3 Use the multi selector ◀ ► to select a style and press flexible button 4 (OK).



You can select from the following.

- Shoot night scenes (page 58)
- Shoot close-ups (page 58)
- ◆Photograph food (page 59)
- Shoot under water (page 59)
- Underwater face framing (page 60)
- Shoot at intervals (page 61)
- ◆Take a series of pictures (page 62)
- Photograph fireworks (page 63)
- Shoot backlit scenes (page 63)



- Mirror (page 64)
- → Add a bubble effect (page 64)
- ◆Add a neon effect (page 65)
- ◆Add a cartoon effect (page 66)
- → Take soft pictures (page 66)
- Create a diorama effect (page 66)
- Shoot a movie miniature (page 67)
- ◆Add light trails (page 68)
- ◆Picture-in-picture (page 69)

Notes about [Choose a style]

The expected effect may not be achieved depending on the subject.

Shoot night scenes

The camera captures several images of a night scene and composites them into a single image.

Shooting mode \rightarrow flexible button 3 () \rightarrow Choose a style \rightarrow use \blacktriangleleft ▶ to select \blacksquare \rightarrow flexible button 4 (OK)

- · The camera focuses at infinity.
- When the shutter-release button is pressed all the way, the camera captures a series of images which are 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 screen switches to the shooting screen.

▼ Notes about [Shoot night scenes]

- The angle of view (i.e., the area visible in the frame) seen in the saved image is narrower than that seen on the shooting screen.
- Taking a series of pictures may not be possible in certain shooting conditions.
- $\bullet\,$ This function may not be available to use in combination with other functions.
- Functions that cannot be used simultaneously when shooting (page 81)

Shoot close-ups

You can shoot subjects up close.

Shooting mode \Rightarrow flexible button 3 (\overline{ss}) \Rightarrow \overline{ss} Choose a style \Rightarrow use \blacktriangleleft \blacktriangleright to select \$ \Rightarrow flexible button 4 (OK)

· The camera focuses on the area in the center of the frame.





- The camera automatically zooms to the closest position at which it can focus.
- When the zoom is set to a position where the zoom indicator turns green, the camera can focus on subjects as close as about 20 cm (7.9 in.) from the front of the protective glass, or about 5 cm (2 in.) at the maximum wide-angle position.

✓ Notes about [Shoot close-ups]

This function may not be available to use in combination with other functions.

Functions that cannot be used simultaneously when shooting (page 81)

Photograph food

The camera adjusts the hue and captures images of food.

Shooting mode → flexible button 3 ($\underline{\infty}$) → $\underline{\infty}$ Choose a style → use \blacktriangleleft ▶ to select $\forall \P$ → flexible button 4 (OK)

- 1 Use the multi selector ◀► to adjust the hue setting and press flexible button 4 (OK).
 - The hue setting is saved in the camera's memory even after the camera is turned off.
- 2 Frame the subject and take a picture.
 - The camera focuses on the area in the center of the frame.
 - The camera automatically zooms to the closest position at which it can focus.
 - When the zoom is set to a position where the zoom indicator turns green, the camera can focus on subjects as close as about 20 cm (7.9 in.) from the front of the protective glass, or about 5 cm (2 in.) at the maximum wide-angle position.

▼ Notes about [Photograph food]

This function may not be available to use in combination with other functions.

●Functions that cannot be used simultaneously when shooting (page 81)

Shoot under water

The camera performs image processing suited for shooting underwater.

Shooting mode → flexible button 3 ($\underline{\infty}$) → $\underline{\infty}$ Choose a style → use \blacktriangleleft ▶ to select $\overset{\bullet}{\Rightarrow}$ → flexible button 4 (OK)

See " <a><!mportant > Notes about shockproof, waterproof, and dustproof performance and condensation (page 15)" for more information on shooting underwater.

- 1 Confirm the messages related to waterproofing.
 - Press the multi selector

 to display the next message. Press flexible button 4 (OK) to skip the messages and change to the shooting screen.

2 Frame the subject and take a picture.

- The camera focuses on the area in the center of the frame.
- When the zoom is set to a position where the zoom indicator turns green, the camera can focus on subjects as close as about 20 cm (7.9 in.) from the front of the protective glass, or about 5 cm (2 in.) at the maximum wide-angle position.

Clean the camera within 60 minutes after using it underwater or at the beach.

OCleaning after using the camera underwater (page 193)

▼ Notes about [Shoot under water]

- This function may not be available to use in combination with other functions.
 Functions that cannot be used simultaneously when shooting (page 81)
- Wireless communication is not available when the camera is underwater.

Underwater face framing

You can take pictures of human faces underwater automatically without submerging your face.

Shooting mode → flexible button 3 ($\underline{\infty}$) → $\underline{\infty}$ Choose a style → use \blacktriangleleft \blacktriangleright to select Ξ → flexible button 4 (OK)

See "O
Important> Notes about shockproof, waterproof, and dustproof performance and condensation (page 15)" for more information on shooting underwater.

- 1 Confirm the messages related to waterproofing.
 - Press the multi selector

 to display the next message. Press flexible button 4 (OK) to skip the messages and change to the shooting screen.
- **2** Press the shutter-release button all the way down in shooting mode for shooting to start automatically.



3 Submerge the camera into the water, and point it at a human face underwater.

- When the camera detects a human face, the power-on lamp and self-timer lamp flash, and the shutter is automatically released.
- When the shutter is released, the lamps flash quickly.
- The zoom position is fixed at wide-angle position.

Press the shutter-release button all the way again to stop shooting.

- When four images are captured or the camera remains in automatic shooting mode for about 30 seconds, shooting ends automatically.
- When shooting ends, the captured images are displayed on the screen. Press flexible button 4 (OK) to return to the shooting screen.

Clean the camera within 60 minutes after using it underwater or at the beach.

OCleaning after using the camera underwater (page 193)

☑ Notes about [Underwater face framing]

- This function may not be available to use in combination with other functions.
 Functions that cannot be used simultaneously when shooting (page 81)
- The camera may not be able to detect faces depending on the clarity of the water or the shape of the goggles used.
- · Wireless communication is not available when the camera is underwater.

Shoot at intervals

The camera can automatically capture still images at pre-determined intervals.

Shooting mode → flexible button 3 ($\overline{\infty}$) → $\overline{\infty}$ Choose a style → use \blacktriangleleft ▶ to select $\stackrel{\sim}{\leftarrow}$ → flexible button 4 (OK)

- Images captured in one shooting are saved in one folder and can be viewed in a slide show.
 - ◆Play back a series (page 114)
- · Use of a tripod is recommended.

Flexible button	Description
	Captures an image every 30 seconds. Maximum number of images that can be captured: Approx. 280 images



Flexible button	Description
1m Shoot once a minute	Captures an image every minute. Maximum number of images that can be captured: Approx. 140 images
5m Shoot every 5 minutes	Captures an image every five minutes. Maximum number of images that can be captured: Approx. 30 images

- Use flexible button 2, 3, or 4 to select the shooting interval.
- Press the shutter-release button all the way to shoot the first image.
 - When the camera detects a human face, it focuses on that face. Using face detection (page 77)
 - In between each shot, the screen turns off and the power-on lamp flashes.
 - The screen automatically turns on again just before the next image is captured.
- 3 Press the shutter-release button halfway to stop shooting.
 - When the maximum number of images are captured, shooting ends automatically.

Notes about [Shoot at intervals]

- Use a sufficiently charged battery to prevent the camera from turning off during shooting.
- Do not remove the memory card until shooting ends.
- This function may not be available to use in combination with other functions.
 - Functions that cannot be used simultaneously when shooting (page 81)

Take a series of pictures

While the shutter-release button is held all the way down, the camera shoots images continuously.

Shooting mode → flexible button 3 ((SSEE) → (SSEE) Choose a style → use ◆ to select □ → flexible button 4 (OK)

- The camera shoots up to 11 images continuously at a rate of about 4.8 frames per second (fps) (when [Choose a size] → [Photo size] is set to [Large (13 megapixels)]).
- · When the camera detects a human face, it focuses on that face. Using face detection (page 77)







Notes about [Take a series of pictures]

- The frame rate for continuous shooting may vary depending on the current photo size setting, the memory card used, or shooting condition.
- Focus, exposure, and hue for the second and subsequent images are fixed at the values determined with the first image.
- This function may not be available to use in combination with other functions.
 - Functions that cannot be used simultaneously when shooting (page 81)

Photograph fireworks

The camera captures fireworks at a slow shutter speed.

Shooting mode \rightarrow flexible button 3 (SSE) \rightarrow SSE Choose a style \rightarrow use \triangleleft to select : → flexible button 4 (OK)

- · The camera focuses at infinity.
- The shutter speed is fixed at four seconds.
- Use of a tripod is recommended because the shutter speed is slow.

▼ Notes about [Photograph fireworks]

This function may not be available to use in combination with other functions.

Functions that cannot be used simultaneously when shooting (page 81)

Shoot backlit scenes

When there are very bright and dark areas in the same frame, the high dynamic range (HDR) compositing is applied and loss of details in highlights or shadows is minimized.

Shooting mode \rightarrow flexible button 3 (SSE) \rightarrow SSE Choose a style \rightarrow use \triangleleft to select 🔁 → flexible button 4 (OK)

- The camera focuses on the area in the center of the frame.
- When the shutter-release button is pressed all the way, the camera shoots images continuously 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
- 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 screen switches to the shooting screen.
- If HDR compositing could not be performed, the camera saves a non-HDR composite image and an image in which dark areas are corrected.





If there is only enough memory to save one image, an image processed at the time
of shooting, in which dark areas of the image are corrected, is the only image
saved.

▼ Notes about [Shoot backlit scenes]

- The angle of view (i.e., the area visible in the frame) seen in the saved image is narrower than that seen on the shooting screen.
- Under some shooting conditions, dark shadows may appear around bright subjects or bright areas may appear around dark subjects.
- This function may not be available to use in combination with other functions.
- Functions that cannot be used simultaneously when shooting (page 81)

Mirror

You can take pictures that are vertically or horizontally symmetrical over the center of the frame.

Shooting mode → flexible button 3 ($\overline{\textcircled{se}}$) → $\overline{\textcircled{se}}$ Choose a style → use \blacktriangleleft ▶ to select \emptyset → flexible button 4 (OK)

Flexible button	Description	
™ Top → bottom	The top half of the screen is flipped over the bottom half, and the image is composited and displayed.	
I Left → right	The left half of the screen is flipped over the right half, and the image is composited and displayed.	

1 Use flexible button 2 or 3 to select the flipping direction.

2 Frame the subject and take a picture.

- The camera focuses on the area in the center of the frame.
- When the zoom is set to a position where the zoom indicator turns green, the camera can focus on subjects as close as about 20 cm (7.9 in.) from the front of the protective glass, or about 5 cm (2 in.) at the maximum wide-angle position.

▼ Notes about [Mirror]

This function may not be available to use in combination with other functions.

◆Functions that cannot be used simultaneously when shooting (page 81)

Add a bubble effect

This effect makes the image appear to be projected on a bubble.





Shooting mode → flexible button 3 ($\overline{\textcircled{sm}}$) → $\overline{\textcircled{sm}}$ Choose a style → use \P ▶ to select \mathbb{O} → flexible button 4 (OK)

1 Frame the main subject in the framing guide displayed on the shooting screen.

2 Shoot.

- The camera focuses on the area in the center of the frame.
- When the zoom is set to a position where the zoom indicator turns green, the camera can focus on subjects as close as about 20 cm (7.9 in.) from the front of the protective glass, or about 5 cm (2 in.) at the maximum wide-angle position.

▼ Notes about [Add a bubble effect]

This function may not be available to use in combination with other functions.

Functions that cannot be used simultaneously when shooting (page 81)

Add a neon effect

This effect makes the outlines of the image appear to glow with neon tubing.

Shooting mode \rightarrow flexible button 3 () \rightarrow Choose a style \rightarrow use \blacktriangleleft ▶ to select \mathscr{C} \rightarrow flexible button 4 (OK)

- 1 Use the multi selector ◀ ▶ to select the outline color and press flexible button 4 (OK).
 - The color setting is saved in the camera's memory even after the camera is turned off.

2 Frame the subject and take a picture.

- · The camera focuses on the area in the center of the frame.
- When the zoom is set to a position where the zoom indicator turns green, the camera can focus on subjects as close as about 20 cm (7.9 in.) from the front of the protective glass, or about 5 cm (2 in.) at the maximum wide-angle position.
- After taking a picture, do not turn the camera off before the screen switches to the shooting screen.

▼ Notes about [Add a neon effect]

This function may not be available to use in combination with other functions.

Functions that cannot be used simultaneously when shooting (page 81)



Add a cartoon effect

Performs tone compensation and makes the image appear like a cartoon.

Shooting mode → flexible button 3 ($\overline{\infty}$) → $\overline{\infty}$ Choose a style → use \blacktriangleleft ▶ to select $\ \Rightarrow$ $\$ ↑ flexible button 4 (OK)

- The camera focuses on the area in the center of the frame.
- When the zoom is set to a position where the zoom indicator turns green, the camera can focus on subjects as close as about 20 cm (7.9 in.) from the front of the protective glass, or about 5 cm (2 in.) at the maximum wide-angle position.
- After taking a picture, do not turn the camera off before the screen switches to the shooting screen.

Take soft pictures

The camera applies a slight soft-focus effect outside the framing guide for a softer image.

Shooting mode → flexible button 3 ($\overline{\text{ss}}$) → $\overline{\text{ss}}$ Choose a style → use \blacktriangleleft \blacktriangleright to select \bigcirc → flexible button 4 (OK)

1 Frame the main subject in the framing guide displayed on the shooting screen.

2 Shoot.

- The camera focuses on the area in the center of the frame.
- When the zoom is set to a position where the zoom indicator turns green, the camera can focus on subjects as close as about 20 cm (7.9 in.) from the front of the protective glass, or about 5 cm (2 in.) at the maximum wide-angle position.

▼ Notes about [Take soft pictures]

This function may not be available to use in combination with other functions.

Functions that cannot be used simultaneously when shooting (page 81)

Create a diorama effect

The camera applies a slight soft-focus effect everywhere except the center of the screen for a diorama-like image.

This effect is well-suited for images captured from a high vantage point with the main subject in the center of the image.







Shooting mode → flexible button 3 ($\overline{\textcircled{sm}}$) → $\overline{\textcircled{sm}}$ Choose a style → use \blacktriangleleft ▶ to select S → flexible button 4 (OK)

1 Frame the main subject in the framing guide displayed on the shooting screen.

2 Shoot.

- The camera focuses on the area in the center of the frame.
- When the zoom is set to a position where the zoom indicator turns green, the camera can focus on subjects as close as about 20 cm (7.9 in.) from the front of the protective glass, or about 5 cm (2 in.) at the maximum wide-angle position.

▼ Notes about [Create a diorama effect]

This function may not be available to use in combination with other functions.

Functions that cannot be used simultaneously when shooting (page 81)

Shoot a movie miniature

Captures miniature-like still images every two seconds and joins the still images to create a movie with a maximum length of 10 seconds.

This effect is well-suited for images captured from a high vantage point with the main subject in the center of the image.

Shooting mode → flexible button 3 ($\overline{\cancel{m}}$) → $\overline{\cancel{m}}$ Choose a style → use \blacktriangleleft ▶ to select $^{\mbox{\tiny N}}$ → flexible button 4 (OK)

- · Use of a tripod is recommended.
- 1 Frame the main subject in the framing guide displayed on the shooting screen.
- **2** Press the shutter-release button to capture the first image.
 - The camera focuses on the area in the center of the frame.
 - When the zoom is set to a position where the zoom indicator turns green, the camera can focus on subjects as close as about 20 cm (7.9 in.) from the front of the protective glass, or about 5 cm (2 in.) at the maximum wide-angle position.
 - The camera releases the shutter automatically after the first image.
 - · The screen may turn off in between each shot.
- **3** To end shooting, press flexible button 1 (♂).
 - When 300 images are captured, shooting ends automatically.



☑ Notes about [Shoot a movie miniature]

- Use a sufficiently charged battery to prevent the camera from turning off during shooting.
- · You cannot shoot when a memory card is not inserted.
- · Do not remove the memory card until shooting ends.
- Focus, exposure, and hue are fixed at the values determined with the first image.
- · Sound and still images are not recorded.
- The movie frame size is fixed at [Large (1080p)].
- This function may not be available to use in combination with other functions.
 - Functions that cannot be used simultaneously when shooting (page 81)

Add light trails

Light trails such as the flow of car lights or motion of stars are captured. The camera automatically captures moving subjects at regular intervals, compares each image and composites only their bright areas, and then saves them as one image.

• Use of a tripod is recommended because the shutter speed is slow.

Flexible button	Description
Night scenes	Use to capture the flow of car lights against a night landscape background. The camera focuses on the area in the center of the frame. Shots are taken at a shutter speed of 4 seconds. When 50 shots are taken, the camera automatically stops shooting. For every 10 shots taken, one composite image with trails overlapped from the start of shooting is automatically saved. The size of still images is fixed at 1280 × 960 pixels.
☑ Night sky	Use to capture the motion of stars. The camera focuses at infinity. Shots are taken at a shutter speed of 25 seconds. When 300 shots are taken, the camera automatically stops shooting. For every 30 shots taken, one composite image with trails overlapped from the start of shooting is automatically saved. The size of still images is fixed at 2048 × 1536 pixels.

1 Press flexible button 2 or 3 to select the setting.





2 Start shooting.

- The screen may turn off during the shooting interval.
- 3 To end shooting before it automatically ends, press flexible button 1 (⇔).
 - When you have obtained the desired trails, end shooting. If you continue shooting, details in the composited areas may be lost.

Notes about [Add light trails]

- Use a sufficiently charged battery to prevent the camera from turning off during shooting.
- You cannot shoot when a memory card is not inserted.
- Do not remove the memory card until shooting ends.
- This function may not be available to use in combination with other functions.
 Functions that cannot be used simultaneously when shooting (page 81)

☑ Time remaining

You can check the time remaining until shooting automatically ends on the screen.



Picture-in-picture

The camera composites a captured image and background to create an image as if one picture was taken with an instant print camera and placed in another background picture.

Shooting mode → flexible button 3 ($\underline{\infty}$) → $\underline{\infty}$ Choose a style → use \blacktriangleleft ▶ to select \Box → flexible button 4 (OK)

1 Use the multi selector ◀ ► to select a captured image and press flexible button 4 (**OK**).



2 Frame and shoot the background.

- The background is slightly blurred.
- · The focus area is not displayed.

☑ Notes about [Picture-in-picture]

- You cannot select [Picture-in-picture] if there are no images saved on the memory card
 or in the internal memory.
- This function may not be available to use in combination with other functions.
 - Functions that cannot be used simultaneously when shooting (page 81)

Decorate

You can add a frame around your images when taking pictures.

Shooting mode → flexible button 3 (() → III Decorate

- This function is not displayed when [Variety menu (page 136)] is set to [Off].
- Use the multi selector ◀ ▶ to select the desired frame and press flexible button 4 (OK).



- Press flexible button 3 (
) to remove the frame.
- Frame the subject and take a picture.

▼ Notes about [Decorate]

- The area that is captured becomes smaller depending on the design of the frame.
- · When using borderless printing to print images that you have added frames to, the frames may not be printed.
- This function may not be available to use in combination with other functions.
 - Functions that cannot be used simultaneously when shooting (page 81)

Change colors

You can adjust the brightness (exposure compensation) or vividness, or keep a specified color in the image and change the other colors to black and white.

Shooting mode → flexible button 3 ((SEE) → A Change colors

Flexible button	Description
☑ Brighter/darker	Adjust the brightness (exposure compensation) of the entire image.
♦ More vivid/less vivid	Adjust the vividness of the entire image.
Highlight colors	Select the color you want to highlight. Colors not selected are changed to black and white.

- 1 Use flexible button 2, 3, or 4 to select the setting.
- 2 Use the multi selector ◀ ► to adjust colors and press flexible button 4 (OK).



- Press flexible button 3 (RESET) to turn the effect off.
- When colors are adjusted, 🔗 is displayed on the shooting screen.
- 3 Frame the subject and take a picture.
 - The setting is saved in the camera's memory even after the camera is turned off.

▼ Notes about [Change colors]

This function may not be available to use in combination with other functions.

Functions that cannot be used simultaneously when shooting (page 81)



Change sounds

You can configure the shutter and button sounds.

Shooting mode → flexible button 4 (♀) → ♪ Change sounds

Flexible button	Description
Pick a	Allows you to configure the shutter and focus sounds.
snutter sound	 When recording movies, the shutter sound is not heard. When [Variety menu (page 136)] is set to [Off], you cannot select the type of sound.
☐ Pick a	Allows you to select the beep heard when you use the menus, etc.
button sound	You cannot select the sounds that are heard when the camera is turned on and when an error occurs. When [Variety menu (page 136)] is set to [Off], you cannot select the type of sound.
♪ Turn sounds	Turn all sounds on or off.
on or off	• ♪ [Turn sounds on]: Turns on all sounds. • ≫ [Turn sounds off]: Mutes all sounds. • This function is not displayed when [Variety menu (page 136)] is set to [Off].

- 1 Press flexible button 2 or flexible button 3.
- 2 Use the multi selector ◀▶ to select the type of sound.



- 'a: Set the standard sounds.
- >: Sounds are not heard.
- Press flexible button 3 () to play the selected sound.
- 3 Press flexible button 4 (OK).
 - · The sound is set.



Choose a size

Photo size

Select the combination of image size and compression ratio to be used when saving images.

Shooting mode → flexible button 4 (\P) → \blacksquare Choose a size → \square Photo size

The larger the image size, the larger the size at which it can be printed, and the lower the compression ratio, the higher the quality of the images, but the number of images that can be saved is reduced.

The changed setting is also applied to [Choose a style] and [Change colors].

Flexible button*	Image size* (pixels) Aspect ratio (horizontal to vertical)	Compression ratio
Large (13 megapixels) (default setting)	4160×3120 4:3	Approx. 1:4
■ Medium (4 megapixels)	2272×1704 4:3	Approx. 1:8
■ Small (2 megapixels)	1600×1200 4:3	Approx. 1:8

^{*} The numerical values indicate the number of pixels that are captured.

Example: ■ Large (13 megapixels) = approx. 13 megapixels, 4160 × 3120 pixels

▼ Notes about [Photo size]

This function may not be available to use in combination with other functions.

Functions that cannot be used simultaneously when shooting (page 81)

Number of images that can be saved

 The approximate number of images that can be saved can be checked on the screen when shooting.



- Note that due to JPEG compression, the number of images that can be saved may vary
 greatly depending on the image content, even when using memory cards with the same
 capacity and the same photo size setting. In addition, the number of images that can be
 saved may vary depending on the make of the memory card.
- If the number of exposures remaining is 10,000 or more, the number of exposures remaining display shows "9999".

Movie frame size

Select the desired movie option to record.

Shooting mode → flexible button 4 (\P) → \blacksquare Choose a size → \P Movie frame size

Flexible button	lmage size Aspect ratio (horizontal to vertical)	Frame rate
Large (1080p) ¹ (default setting)	1920×1080 16:9	Approx. 30 fps
Ⅲ Small (640)	640×480 4:3	Approx. 30 fps
Small (old-fashioned) ²	640×480 4:3	Approx. 15 fps

- 1 Cannot be selected when you are using the internal memory.
- 2 Allows you to record movies with an atmosphere and hue similar to movies shot on old 8mm film.



Using the zoom

When you press the multi selector $\blacktriangle \nabla$, the zoom lens position changes.

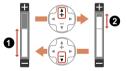


- To zoom in (telephoto position): Press ▲.
- To zoom out (wide-angle position): Press ▼. When you turn the camera on, the zoom moves to the maximum wide-angle position.
- A zoom indicator is displayed on the shooting screen when ▲ ▼ is pressed.



 Digital zoom (2), which allows you to further magnify the subject up to approximately 4x the maximum optical zoom ratio, can be activated by pressing

 \triangle when the camera is zoomed in to the maximum optical zoom position (\bigcirc).



Digital zoom and Dynamic Fine Zoom

The zoom indicator changes to blue when the digital zoom is activated, and it changes to yellow when the zoom magnification is increased further.

- Zoom indicator is blue: Image quality is not noticeably reduced by using the Dynamic Fine Zoom.
- Zoom indicator is yellow: There may be cases in which image quality is noticeably reduced compared to cases when the zoom indicator is blue.
- The indicator remains blue across a wider area when the image size is smaller.

Focusing

The shutter-release button

Operation	Description	
Press halfway	To press the shutter-release button "halfway" means to press and hold the button at the point where you feel a slight resistance.	
	 Focus and exposure (shutter speed and f-number) are set when you press the shutter-release button halfway. Focus and exposure remain locked while the button is pressed halfway. The focus area varies depending on the shooting mode and settings. 	
Press all the way	To press the shutter-release button "all the way" means to press the button down completely.	
	 The shutter is released when the shutter-release button is pressed all the way. Do not use force when pressing the shutter-release button, as this may result in camera shake and blurred images. Press the button gently. 	

Using face detection

In the following settings, the camera uses face detection to automatically focus on human faces.

- · [Point and shoot]
- [Underwater face framing], [Shoot at intervals], and [Take a series of pictures] in [Choose a style]
- · [Smile timer]



If the camera detects more than one face, a double border is displayed around the face that the camera focuses on, and single borders are displayed around the other faces.



If no faces are detected when the shutter-release button is pressed halfway:

- When [Point and shoot] is selected, the focus area changes depending on the shooting conditions that the camera recognizes.
- In [Shoot at intervals], [Take a series of pictures], or [Smile timer], the camera
 focuses 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.
- The camera cannot 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

Subjects not suitable for autofocus

The camera may not focus as expected in the following situations. In rare cases, the subject may not be in focus despite the fact that the focus area or the focus indicator is displayed in green:

- · Subject is very dark
- Objects of sharply differing brightness are included in the scene (e.g. the sun behind the subject makes that subject appear very dark)
- No contrast between the subject and surroundings (e.g. a portrait subject wearing a white shirt is standing in front of a white wall)
- Point sources of light such as illuminations and night views, or subjects in which brightness changes such as neon lights
- 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.

◆Focus lock (page 79)

Focus lock

Focus lock shooting is recommended when the camera does not activate the focus area that contains the desired subject. The following explains how to use focus lock when the focus area is displayed in the center of the frame.

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





- The camera focuses on the subject and the focus area is displayed in green.
- · Exposure is also locked.
- **2** Without lifting your finger, recompose the picture.
 - Make sure to maintain the same distance between the camera and the subject.



Press the shutter-release button all the way down to take the picture.



Default settings list for flash and self-timer

Shooting functions	Flash	Self-timer
Point and shoot	≯ AUTO	OFF
Shoot night scenes	⊕*	OFF
Shoot close-ups	3	OFF
Photograph food	(3)∗	OFF
Shoot under water	3	OFF
Underwater face framing	3	OFF*
Shoot at intervals	≯ AUTO	OFF*
Take a series of pictures	⊕*	OFF*
Photograph fireworks	⊕*	OFF*
Shoot backlit scenes	⊕*	OFF
Mirror	\$ AUTO	OFF
Add a bubble effect	≯ AUTO	OFF
Add a neon effect	≯ AUTO	OFF
Add a cartoon effect	≯ AUTO	OFF
Take soft pictures	≯ AUTO	OFF
Create a diorama effect	3	OFF
Shoot a movie miniature	⊕*	OFF
Add light trails	⊕*	2 s
Picture-in-picture	≯ AUTO	OFF

^{*} Cannot be changed.



Functions that cannot be used simultaneously when shooting

Some functions cannot be used with other menu options.

Restricted function	Description
Flash	When [Choose a style] is set to the following, the flash cannot be used. • [Shoot night scenes] • [Photograph food] • [Take a series of pictures] • [Photograph fireworks] • [Shoot backlit scenes] • [Shoot a movie miniature] • [Add light trails]
Self-timer	When [Choose a style] is set to the following, the self-timer cannot be used. • [Underwater face framing] • [Shoot at intervals] • [Take a series of pictures] • [Photograph fireworks]
Self-portrait timer	When [Choose a style] is set to the following, [Self-portrait timer] cannot be used. • [Shoot night scenes] • [Add light trails]
Smile timer	When any of the following are enabled, [Smile timer] cannot be used. • [Choose a style] • [Highlight colors]
Decorate	When any of the following are enabled, [Decorate] cannot be used. • [Smile timer] • [Choose a style]
Change colors	When any of the following are enabled, [Change colors] cannot be used. • [Smile timer] • [Choose a style]

Restricted function	Description
Photo size	When [Choose a style] is set to the following, [Photo size] cannot be used.
	- [Shoot a movie miniature] - [Add light trails] • When [Choose a style] is set to [Picture-in-picture], the setting is fixed at [Small (2 megapixels)]. • When [Decorate] is selected, the setting is fixed at [Small (2 megapixels)].
Date stamp	When [Choose a style] is set to the following, the date and time cannot be stamped on images.
	[Take a series of pictures] [Shoot a movie miniature] [Add light trails]
Electronic VR	When [Choose a style] is set to the following, electronic VR is disabled.
	[Shoot night scenes] [Shoot at intervals] [Take a series of pictures] [Photograph fireworks] [Shoot backlit scenes] [Add light trails]
Digital zoom	When [Smile timer] is selected, digital zoom cannot be used. When [Choose a style] is set to the following, digital zoom cannot be used.
	- [Shoot night scenes] - [Shoot under water] - [Underwater face framing] - [Shoot backlit scenes] - [Take soft pictures] - [Create a diorama effect] - [Shoot a movie miniature]

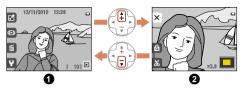


Playback features

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Playback zoom

Pressing the multi selector ▲ in full-frame playback mode (1) zooms in on the image (2).



Operations during playback zoom

Function	Operation
Adjust the magnification rate	Press ▲ ▼.
Move the display position	Press flexible button 3 (a) to lock the magnification rate and press ▲ ▼ ◀ ▶. To adjust the magnification rate again, press flexible button 3 (a) to unlock the magnification rate.
Trim the image	Press flexible button 4 (%). ② Crop (page 85)
Return to full-frame playback mode	Press flexible button 1 (X).

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Crop

Trim images down only to the parts you need.

- See "Defore editing images (page 88)" for information about restrictions on editing.
- 1 Press the multi selector ▲ in full-frame playback mode to zoom in on the image.



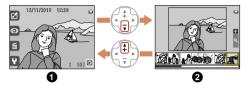
- 2 Adjust the magnification rate and display position to display only the part to trim down.
 - You can change the magnification rate by pressing ▲ ▼.
 - To view a different area of the image, press flexible button 3 (♠) to lock the magnification rate and press ♠ ▼ ◆ ▶. To adjust the magnification rate again, press flexible button 3 (♠) to unlock the magnification rate.
- 3 Press flexible button 4 (%).



4 When the confirmation dialog is displayed, press flexible button 3 (O [Yes]).

Thumbnail playback

Pressing the multi selector ∇ in full-frame playback mode (1) displays images in contact sheets of thumbnail images (2).



While using thumbnail playback mode, press ◀ ▶ to select an image, and the
selected image is magnified and displayed at the center of the screen. Select an
image and press ▲, and the selected image is displayed in the full-frame playback
mode.

Playback menu list

When viewing images in full-frame playback mode, you can press one of the flexible buttons and use the functions below.

Flexible button	Description
Have fun with pictures	P Exchange messages (page 89) Allows you to add voice messages to your still images. You can also record a reply to the added message.
	Picture play (page 92) Allows you to edit your still images using a variety of functions.
	W Grading (page 104) Allows you to add grade marks to your images. Graded images are protected. You can play back only the images that have grade marks.
	Allows you to add your images to favorites. Images added to favorites are protected. You can play back only the images added to favorites.
I View	Milew by date (page 111) Allows you to play back images by selecting the shooting date from the calendar.
	Slide show (page 112) Allows you to view images in an automated slide show.
m Erase	Erase this picture only Allows you to delete only the image currently displayed. ○ Deleting images (page 46)
	■ Erase selected pictures Allows you to select multiple images and delete them. Deleting images (page 46)
	ALL Erase all pictures Allows you to delete all images. Deleting images (page 46)
¥ Settings	✓ Mark for upload (page 117) Allows you to select still images on the camera's playback screen to automatically upload them to a smart device.

Flexible button	Description
¥ Settings	Metouch (page 119) Allows you to copy or rotate images or create a small copy of the current image.
	Y Camera settings Allows you to change a number of general settings. ② Using the camera settings menu (page 128)

Before editing images

You can use the following image editing functions with this camera.

- "♠Crop (page 85)"
- [Picture play (page 92)]
- [Small picture (page 120)] in [Retouch]

Images created by editing are saved as files separate from the original images. ◆File names (page 195)

Images created by editing are saved with the same shooting date and time as the original images.

Restrictions on image editing

- · An image can be edited up to 10 times.
- · You may not be able to edit images of a certain size or with certain editing functions.

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Exchange messages

Allows you to add voice messages to your still images. You can also record a reply to the added message.

Playback mode → select an image → flexible button 1 (🖆) → 🕸 Exchange messages

- This function is not displayed when [Variety menu (page 136)] is set to [Off].
- · Not available when a movie is displayed.
- You can attach up to two messages to each image (one each from [Leave a message] and [Leave a reply]).

Leave a message

Allows you to add voice messages to your still images.

Playback mode → select an image → flexible button 1 (🖆) → 🕸 Exchange messages → O Record

- 1 Press flexible button 2 (D [Leave a message]).
 - You cannot select this option if the image already has a message attached to it.
- Press flexible button 2 (O) to start recording.



- You can record for up to about 20 seconds. Do not touch the microphone.
- Press flexible button 2 (O) again to stop recording.
- Press flexible button 3 () to play back the message.
- You can re-record the message as long as you do not save it by pressing flexible button 4 (OK).

3 Press flexible button 4 (**OK**) to save the message.



- For images with recorded messages, \mathcal{Q} is displayed on the playback screen.
- Delete the current message before recording a new message.
 Erase recordings (page 91)

Leave a reply

You can record a reply to messages recorded with [Leave a message].

Playback mode → select an image → flexible button 1 (🖆) → 🕸 Exchange messages → O Record

- Press flexible button 3 ([Leave a reply]).
 - · You cannot select this option if the image does not have a message attached to it.
- 2 Press flexible button 2 (O) to start recording.



- Once recording starts, the operations are the same as explained in "
 Leave a message (page 89)".
- For images with recorded replies, **9** is displayed on the playback screen.

Play recordings

Playback mode → select an image → flexible button 1 (🗗) → 🕸 Exchange messages

1 Press flexible button 3 ([Play recordings]).

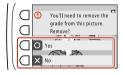


- The camera plays the message. If two messages have been recorded, they are played back to back.
- Press flexible button 1 (5) to stop playback.
- Use the multi selector ▲ ▼ during playback to adjust playback volume.

Erase recordings

Playback mode → select an image → flexible button 1 (E) → S Exchange messages

- 1 Press flexible button 4 (♀ [Erase recordings]).
 - If you select an image that has a grade mark, a confirmation dialog is displayed. If
 you select O [Yes], the grade is removed, and the screen in step 2 is displayed.



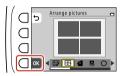
- When the confirmation dialog is displayed, press flexible button 3 (O [Yes]).
 - Only the recording is deleted. If both a message and a reply have been recorded, they are both deleted.



Picture play

Allows you to edit your still images using a variety of functions.

- · Not available when a movie is displayed.
- See "Defore editing images (page 88)" for information about restrictions on editing.
- 1 In playback mode, press flexible button 1 (ば).
- 🙎 Press 🗹 [Picture play].
- 3 Use the multi selector **◄ ►** to select the desired function and press flexible button 4 (**OK**).



You can select from the following.

- ◆Add makeup (page 92)
- Arrange pictures (page 94)
- ◆Add a fisheye effect (page 95)
- Toy camera (page 95)
- Soften pictures (page 96)
- →Add starbursts (page 96)
- Add a diorama effect (page 96)
- Change colors (page 97)
- Highlight colors (page 97)
- Decorate (page 98)
- → Add cartoon effects (page 98)
- Stamp (page 99)
- Add clarity under water (page 102)
- ◆Add a "little planet" effect (page 102)
- ◆Curve pictures (page 103)

Add makeup

Detect human faces in images and enhance them.

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Playback mode → select an image → flexible button 1 ($\[\] \]$) → $\[\] \]$ Picture play → use $\[\] \]$ ► to select $\[\] \]$ → flexible button 4 (OK)

1 Use the multi selector ▲ ▼ ◀ ▶ to select the face that you want to retouch and press flexible button 4 (**OK**).



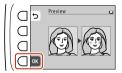
- When only one face is detected, proceed to step 2.
- 2 Use ◀► to select the effect, use ▲ ▼ to select the effect level, and press flexible button 4 (OK).



- You can simultaneously apply multiple effects.

 Adjust or check the settings for all effects before pressing flexible button 4 (**OK**).

 U [Make faces smaller], □ [Make skin prettier], □ [Color faces], □ [Make skin less shiny], □ [Mitten eye bags], □ [Make eyes bigger], □ [Whiten eyes], □ [Add eye shadow], □ [Add mascara], □ [Whiten teeth], □ [Color lips], □ [Redden cheeks]
- Press flexible button 1 (5) to return to the screen for selecting a person.
- 3 Preview the result and press flexible button 4 (OK).



• To change the settings, press flexible button 1 (5).



▼ Notes about [Add makeup]

- One face can be edited at a time. To add makeup to another face, edit the edited image
 again.
- Depending on the direction in which faces are looking, or the brightness of faces, the camera may be unable to accurately detect faces, or the function may not perform as expected.
- If no faces are detected, a warning is displayed and the screen returns to the playback menu.
- Only images captured at an image size of 640×480 or larger can be edited.

Arrange pictures

Arrange still images to create a collage.

Playback mode → flexible button 1 (I) → I Picture play → use \blacktriangleleft ▶ to select \boxdot → flexible button 4 (OK)

- This function is not displayed when [Variety menu (page 136)] is set to [Off].
- 1 Use the multi selector ◀ ► to select the desired design and press flexible button 4 (OK).



2 Use ◀► to select images (up to four) and press flexible button 2 (♦).



- Numbers are displayed on the images. The collage is arranged in the order in which
 the images were selected.
- The number is displayed or removed each time you press flexible button 2 (❖).
- Press flexible button 3 (RESET) to cancel all selections.





- 3 When you are finished selecting images, press flexible button 4 (OK).
- 4 Confirm the created collage and press flexible button 4 (**OK**).



▼ Notes about [Arrange pictures]

- Movies cannot be selected.
- · Images captured with other cameras cannot be selected.

Image size

The size of the created image is [Small (2 megapixels)] (1600×1200).

Add a fisheye effect

Make an image look as if it were captured with a fisheye lens. This effect is well-suited for images captured using [**Shoot close-ups**].

Playback mode \Rightarrow select an image \Rightarrow flexible button 1 (\checkmark) \Rightarrow \checkmark Picture play \Rightarrow use \blacktriangleleft \blacktriangleright to select \checkmark \Rightarrow flexible button 4 (OK)

1 Confirm the effect and press flexible button 4 (**OK**).

Toy camera

Make an image look as if it were shot with a toy camera. This effect is well-suited for landscapes.

Confirm the effect and press flexible button 4 (**OK**).



Soften pictures

Soften the image by adding a slight blur around the center of the image.

Playback mode \rightarrow select an image \rightarrow flexible button 1 (🗗) \rightarrow 🗗 Picture play \rightarrow use \blacktriangleleft \triangleright to select \bigcirc \rightarrow flexible button 4 (OK)

1 Use the multi selector ◀► to select the area to be blurred and press flexible button 4 (OK).



• To add a slight blur to the entire image, press [ALL].

Add starbursts

Produce star-like rays of light that radiate outward from bright objects such as sunlight reflections or street lights.

This effect is suitable for night scenes.

Playback mode → select an image → flexible button 1 (\checkmark) → \checkmark Picture play → use \checkmark to select * → flexible button 4 (OK)

1 Confirm the effect and press flexible button 4 (OK).

Add a diorama effect

Make an image look like a miniature scene captured in macro mode. This effect is well-suited for images captured from a high vantage point with the main subject at the center of the image.

Playback mode → select an image → flexible button 1 ($\[\] \]$) → $\[\] \]$ Picture play → use $\[\] \]$ ► to select $\[\] \]$ + flexible button 4 (OK)

1 Confirm the effect and press flexible button 4 (OK).

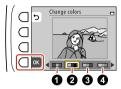


Change colors

Adjust image colors.

Playback mode → select an image → flexible button 1 (\checkmark) → \checkmark Picture play → use \checkmark to select \checkmark → flexible button 4 (OK)

1 Use the multi selector **♦** to select the desired setting and press flexible button 4 (**OK**).



- 1: Use to achieve a vivid, photoprint effect.
- 2: Save images in black-and-white.
- 3: Save images in sepia tones.
- 4: Save images in cyan-blue monochrome.

Highlight colors

Create a black and white image in which only the specified color remains.

Playback mode → select an image → flexible button 1 (\checkmark) → \checkmark Picture play → use \checkmark to select \checkmark → flexible button 4 (OK)

1 Use the multi selector ◀ ➤ to select a color and press flexible button 4 (OK).



Decorate

Add a frame around your images.

Playback mode \rightarrow select an image \rightarrow flexible button 1 (🗗) \rightarrow 🗗 Picture play \rightarrow use \blacktriangleleft \blacktriangleright to select \blacksquare \rightarrow flexible button 4 (OK)

1 Use the multi selector ◀ ➤ to select the desired frame and press flexible button 4 (OK).



• Press flexible button 3 (\(\overline{\mathbb{N}}\)) to remove the frame.

▼ Notes about [Decorate]

- The frame is placed on top of the image, therefore a large area of the image is covered depending on the design of the frame.
- When using borderless printing to print images that you have added frames to, the frames may not be printed.

Image size

The image size of the edited copy varies depending on the size of the original image.

- When the original image is [Small (2 megapixels)] (1600 × 1200) or larger, the copy is saved at [Small (2 megapixels)] (1600 × 1200).
- When the original image is smaller than [Small (2 megapixels)] (1600 × 1200), the copy is saved at the same size as the original.

Add cartoon effects

Make a captured image look like a panel from a comic by drawing lines.

Playback mode → select an image → flexible button 1 (\checkmark) → \checkmark Picture play → use \checkmark ► to select \checkmark \checkmark + flexible button 4 (OK)

1 Use the multi selector ◀ ► to select the subject to which the effect will be applied and press flexible button 4 (**OK**).



- When only one subject is detected, proceed to step 2.
- 2 Use ◀► to select an effect and press flexible button 4 (OK).



- 3 Confirm the effect and press flexible button 4 (OK).
 - To change the settings, press flexible button 1 (5).

▼ Notes about [Add cartoon effects]

If no faces or main subjects are detected, a warning is displayed and the screen returns to the playback menu.

Stamp

Add stamps to an image.

You can enlarge or shrink, move, and rotate the stamps.

Playback mode \Rightarrow select an image \Rightarrow flexible button 1 (🗗) \Rightarrow 🗗 Picture play \Rightarrow use \blacktriangleleft \blacktriangleright to select ≗ \Rightarrow flexible button 4 (OK)

1 Use the multi selector ◀ ▶ to select the subject to which the stamp will be applied and press flexible button 4 (**OK**).



- When only one subject is detected, proceed to step 2.
- 2 Use ▲ ▼ to select a stamp type.





- 3 Use **♦** to select a stamp adjustment method and press flexible button 4 (OK).
 - **Q** (enlarge or shrink), **4** (move), and **C** (rotate) are available for adjustment.



• In **Q** (enlarge or shrink), press flexible button 2 (+) or flexible button 3 (_) to adjust the size of the stamp, and then press flexible button 4 (**OK**).

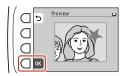




• In **C** (rotate), press flexible button 2 (**C**) or flexible button 3 (**5**) to adjust the direction of the stamp, and press flexible button 4 (OK).



- 4 Confirm the effect and press flexible button 4 (OK).
 - To change the settings, press flexible button 1 (**೨**).



▼ Notes about [Stamp]

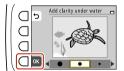
You may not be able to adjust stamps depending on their type.

Add clarity under water

The camera compensates for the blues of images captured underwater.

Playback mode \rightarrow select an image \rightarrow flexible button 1 ($\stackrel{\square}{\text{Cl}}$) \rightarrow $\stackrel{\square}{\text{Cl}}$ Picture play \rightarrow use \triangleleft \triangleright to select @ \rightarrow flexible button 4 (OK)

1 Use the multi selector ◀ ➤ to select the effect level and press flexible button 4 (OK).



Add a "little planet" effect

The camera creates an image of a small planet. This effect is well-suited for images captured in the landscape orientation.

Playback mode \Rightarrow select an image \Rightarrow flexible button 1 (\checkmark) \Rightarrow \checkmark Picture play \Rightarrow use \blacktriangleleft \blacktriangleright to select x \Rightarrow flexible button 4 (OK)

1 Confirm the effect and press flexible button 4 (OK).

Notes about [Add a "little planet" effect]

- Lines appear in the image due to image processing.
- The expected effect may not be achieved in images captured in the portrait orientation.
- Images created by [Add a "little planet" effect] cannot be edited.
- Playback zoom cannot be used with images created by [Add a "little planet" effect].

Image size

The size of the created image is 1536×1536 pixels.

Curve pictures

The camera makes the image rounder. This effect is well-suited for images captured in the landscape orientation.

Playback mode \rightarrow select an image \rightarrow flexible button 1 (\checkmark) \rightarrow \checkmark Picture play \rightarrow use $\triangleleft \triangleright$ to select $\omega \rightarrow$ flexible button 4 (OK)

Confirm the effect and press flexible button 4 (OK).

Notes about [Curve pictures]

- Lines appear in the image due to image processing.
- The expected effect may not be achieved in images captured in the portrait orientation.
- Images created by [Curve pictures] cannot be edited.
- Playback zoom cannot be used with images created by [Curve pictures].

Image size

The size of the created image is 1024×1024 pixels.

Grading

Allows you to add grade marks to your images. Graded images are protected. You can play back only the images that have grade marks.

Playback mode → flexible button 1 (1) → 😈 Grading

• This function is not displayed when [Variety menu (page 136)] is set to [Off].

Grade pictures

Grade images by using **\vec{\vec{v}}** [Excellent] or **\mathbb{Q}** [Good].

Playback mode → flexible button 1 (🗹) → 👿 Grading → 👿 Grade pictures

1 Use the multi selector ◀ ► to select an image and press flexible button 2 (₩) or flexible button 3 (♠).



 Graded images are indicated with grade marks ([™] or [®]) on the playback screen, and are protected.



• You cannot add two grade marks to a single image.

▼ Notes about graded images

Formatting the memory card or the camera's internal memory permanently deletes all data, including graded images.

[Grading]

- Graded images are also added to [Favorites]. Removing the grade also removes the image from favorites.
 - Favorites (page 108)
- Grade mark ⁸⁵ can be added to up to a total of 999 images that includes the images added to favorites. Grade mark ⁸⁰ can be added to up to a total of 999 images.

Changing or removing grades from individual images

- 1 In step 1 of "⊙Grade pictures (page 104)", select the image with the grade you want to change or remove.
- **2** Change or remove the grade.



- Press flexible button 2 (₩) or flexible button 3 (₦) to remove the grade of the selected image.

View graded pictures

You can play back only the images that have grade marks.

Playback mode → flexible button 1 (🖆) → 😈 Grading → 🕨 View graded pictures

1 Press flexible button 2 (**i** [Excellent]) or flexible button 3 (**a** [Good]).



- Only images with the grade mark you selected are displayed.
- 2 Use the multi selector ◀ ► to view images.



• Press flexible button 4 (X) to return to full-frame playback mode.

✓ Notes about [View graded pictures]

Images cannot be edited, including changing or removing grades, when they are played back using [View graded pictures].

Remove all grades

Playback mode \Rightarrow flexible button 1 (E) \Rightarrow $\$ Grading \Rightarrow QEAR Remove all grades

1 Press flexible button 2 ([Excellent]) or flexible button 3 ([Good]).



- When the confirmation dialog is displayed, press flexible button 3 (O [Yes]).
 - The selected grade mark is removed from all images.

Favorites

Allows you to add your images to favorites. Images added to favorites are protected. You can play back only the images added to favorites.

• This function is not displayed when [Variety menu (page 136)] is set to [On].

Add to favorites

Playback mode \rightarrow flexible button 1 (13) \rightarrow \bigcirc Favorites \rightarrow \bigcirc Add to favorites

Use the multi selector ◀ ▶ to select a favorite image and press flexible button 2 (폐).



• Images added to favorites are displayed with 🗟 on the playback screen, and are protected.



Notes about images added to favorites

Formatting the memory card or the camera's internal memory permanently deletes all data, including images added to favorites.

[Favorites]

- Grade mark $rac{89}{10}$ is added to images that are added to favorites.
 - Grading (page 104)

Removing the image from favorites also removes the grade.

108

• Up to a total of 999 images can be added to favorites, which includes graded images.

Removing favorites from individual images

- In step 1 of "Add to favorites (page 108)", select the image that you want to remove from favorites.
- Press flexible button 2 (⋈).



· The selected image is removed from favorites.

View favorites

You can play back only the images added to favorites.

Playback mode → flexible button 1 (🗗) → 🖼 Favorites → 🕨 View favorites

1 Use the multi selector ◀ ▶ to view images.



• Press flexible button 4 (X) to return to full-frame playback mode.

▼ Notes about [View favorites]

Images cannot be edited, including removing from favorites, when they are played back using [View favorites].

Removing all favorites from images

Playback mode → flexible button 1 (🗗) → 🖼 Favorites → CLEAR Remove from favorites

- 1 When the confirmation dialog is displayed, press flexible button 3 (O [Yes]).
 - All images added to favorites are removed.

View by date

Allows you to play back images by selecting the shooting date from the calendar.

Playback mode → flexible button 2 (1 → 1 View by date

1 Use the multi selector ▲ ▼ ◀ ▶ to select the desired date and press flexible button 4 (OK).



- · A white background of a date indicates that images were recorded on that date.
- Images are selected based on the selected date. The first image captured on that date is displayed.
- Press flexible button 2 (►) to display the next month. Press flexible button 3 (►) to display the previous month.
- 2 Use **◄** ► to view images.



- Press flexible button 4 ($f{X}$) to return to full-frame playback mode.

☑ Notes about [View by date]

- The 9,000 most recent images can be displayed.
- Images captured when the camera's date is not set are treated as images captured on January 1, 2019.
- · When movie files are played back, only the first frame of each movie is displayed.
- Images cannot be edited when they are played back using [View by date].

Slide show

Allows you to view images in an automated slide show.

Playback mode → flexible button 2 (��) → 📮 Slide show

- When movie files are played back, only the first frame of each movie is displayed.
- The background music selected in [Choose a theme (page 116)] is played during playback.
- The maximum playback time is up to about 30 minutes.

Play back all images

Playback mode → flexible button 2 (��) → 🖳 Slide show

1 Press flexible button 2 (▶ [Start]).



• The slide show begins.



Operations during slide show playback

Function	Operation
Change the displayed image	Press the multi selector ◀ ▶. Press and hold them down to change images quickly.
End the slide show	Press flexible button 1 ('D).

Function	Operation
Pause	Press flexible button 4 (10). The operations listed below can be performed while paused.
	 End the slide show: Press flexible button 1 (X). Change the displayed image: Press flexible button 2 (♠) or flexible button 3 (♠). Resume playback: Press flexible button 4 (♠).
Adjust the background music volume	Press ▲ ▼.

Play back only graded images or images added to favorites

Playback mode → flexible button 2 (��) → 🍱 Slide show → 🐻 Choose pictures

1 Press flexible button 2 (₩ [View graded pictures] or [View favorites]).



Press flexible button 2 (▶ [Start]).



- Only graded images or images added to favorites are played back.
- Once the slide show starts, the operations are the same as explained in "SPlay back all images (page 112)".







Play back only images captured on the same day

Playback mode → flexible button 2 (��) → \P Slide show → \P Choose pictures

1 Press flexible button 3 ([Choose by date]).



2 Use the multi selector ▲▼◀► to select the desired date and press flexible button 4 (OK).



- A white background of a date indicates that images were recorded on that date.
- Press flexible button 2 (►) to display the next month. Press flexible button 3 (◄) to display the previous month.
- 3 Press flexible button 2 ([Start]).



 Once the slide show starts, the operations are the same as explained in "Play back all images (page 112)".

Play back a series

Images captured using [Shoot at intervals (page 61)] are played back consecutively.



Playback mode \Rightarrow flexible button 2 (E) \Rightarrow a Slide show \Rightarrow b Choose pictures

1 Press flexible button 4 (★ [Pick a series]).



- This option can be selected only when images have been captured using [Shoot at intervals].
- Press flexible button 2 (職 [Choose pictures]).



- The first image in the folder where images captured using [Shoot at intervals] are saved is displayed.
- 3 Use flexible button 2 (▶ [Next series]) or flexible button 3 (◄ [Previous series]) to select the folder and press flexible button 4 (OK).
- 4 Press flexible button 3 ([Pick a speed]).



- 5 Select a playback speed.
 - Select 1 [Fast], 2 [Normal] (default setting), or 3 [Slow].



6 Press flexible button 4 (OK).



7 Press flexible button 2 (**○** [Start]).



 Once the slide show starts, the operations are the same as explained in "Play back all images".

Choose a theme

Select a theme for slide show playback.

Playback mode \Rightarrow flexible button 2 (\P) \Rightarrow \P Slide show \Rightarrow \P Choose a theme

Mark for upload

Select still images on the camera's playback screen to automatically upload them to a smart device.

Playback mode → flexible button 4 (🖞) → 🗹 Mark for upload

1 Use the multi selector ◀ ▶ to select an image to upload to the smart device, and press flexible button 2 (⋄).



- The selected image is indicated by a check mark.
- A check mark is displayed or removed each time you press flexible button 2 (♥).
- · Press flexible button 3 (RESET) to remove all check marks.
- 2 Add check marks to all still images that you want to upload, and then press flexible button 4 (**OK**) to confirm the selection.
- 3 Install the SnapBridge app on the smart device.
 - The SnapBridge app (page 164)
- 4 Use the SnapBridge app to establish a Bluetooth connection between the camera and smart device.
 - Pairing (Bluetooth connection) (page 166)
- 5 SnapBridge app →

 tab → [Auto link] → enable [Auto download].
 - · The selected still images are uploaded to the smart device.

▼ Notes about [Mark for upload]

- Still images are uploaded at an image size of up to 2 megapixels.
- Movies cannot be selected for upload.
- To upload still images at their original size or to upload movies, use [Download pictures] in the SnapBridge app.





When you select the camera settings menu → [Reset all] or the camera settings menu
 → [Network menu] → [Restore default settings], the Mark for upload settings that
you made are canceled.

[Send while shooting]

When you use the camera settings menu → [Network menu (page 130)] → [Send while shooting], still images can be sent automatically to a smart device every time they are captured with the camera.

Retouch

Allows you to copy or rotate images or create a small copy of the current image.

Copy

Images can be copied between a memory card and the internal memory.

Playback mode \rightarrow flexible button 4 (\checkmark) \rightarrow \checkmark Retouch \rightarrow 🖹 Copy

- When a memory card that contains no images is inserted and the camera is switched to playback mode, [Memory contains no images.] is displayed. In that case, press a flexible button and select flexible button 3 (M [Retouch]) to select Copy].
- Use flexible button 2 ([Camera to card]) or flexible button 3 ([Card to camera]) to select the copy source and destination.
- Use flexible button 2 (限 [Selected images]) or flexible button 3 (Marges]) to select the copy method.
 - When [iii [All images] is selected, proceed to step 5.
- Use the multi selector ◀▶ to select an image and press flexible button 2 (�/).



- · The selected image is indicated by a check mark.
- A check mark is displayed or removed each time you press flexible button 2 (♥).
- Press flexible button 3 (RESET) to remove all check marks.
- · Repeat step 3 to select additional images.
- Press flexible button 4 (OK) to apply image selection.
- When the confirmation dialog is displayed, press flexible button 3 (O [Yes]).
 - · Images are copied.





▼ Notes about [Copy]

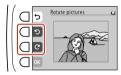
- Only files in formats that this camera can record can be copied.
- Operation is not guaranteed with images captured with another make of camera or that have been modified on a computer.
- The [Grade pictures] and [Add to favorites] settings configured for images are not copied.

Rotate pictures

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

Playback mode \Rightarrow select an image \Rightarrow flexible button 4 (Ψ) \Rightarrow Ø Retouch \Rightarrow B Rotate pictures

1 Press flexible button 2 (5) or flexible button 3 (C).



2 Press flexible button 4 (OK).



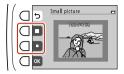
• The displayed orientation is applied, and the orientation information is saved with the image.

Small picture

Create a small copy of images.

Playback mode → select an image → flexible button 4 (\P) → $rac{1}{2}$ Retouch → $rac{1}{2}$ Small picture

- See "Defore editing images (page 88)" for information about restrictions on editing.
- 1 Use flexible button 2 (■) or flexible button 3 (■) to select the desired copy size.



- 2 Press flexible button 4 (**OK**).
 - A new, edited copy is saved as a separate image with a compression ratio of about

Notes about [Small picture]

- Images with an image size of 640 × 480 or smaller cannot be edited using [Small picture].
- Images with an aspect ratio other than 4:3 cannot be edited using [Small picture].

Movies

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Recording and playing back movies

- 1 Display the shooting screen.
 - Check the remaining amount of movie recording time on the screen.



Press the ● (► movie-record) button.



• The camera starts recording a movie. The camera focuses in the center of the frame.



- 3 Press the (🔻) button to end recording.
- 4 Select a movie in full-frame playback mode and press the multi selector ▲.
 - An image with the movie playback guide (1) displayed is a movie.



Area captured in movies

- The area that is captured in a movie varies depending on [Movie frame size].
- When recording movies while the camera settings menu → [Electronic VR] is set to [Auto], the angle of view (i.e., the area visible in the frame) is narrow compared to that of still images.

Maximum movie recording time

Individual movie files cannot exceed 29 minutes in length, even when there is sufficient free space on the memory card for longer recording. The maximum size of a single movie file is 4 GB.

If a file exceeds 4 GB even when you record for less than 29 minutes, recording ends.

- The remaining recording time for a single movie is displayed on the shooting screen
- · The actual remaining recording time may vary depending on the movie content, subject movement, or type of memory card.
- Memory cards with an SD Speed Class rating of 6 (Video Speed Class V6) or faster are recommended for recording movies. When using a memory card with a lower Speed Class rating, movie recording may stop unexpectedly. Memory cards that can be used (page 34)

Notes about camera temperature

- · The camera may become hot when recording 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. The amount of time remaining until the camera stops recording (410s) is displayed and a countdown starts.

After the camera stops recording, it turns itself off.

Leave the camera off until the inside of the camera has cooled

Notes about movie recording

Notes about saving images or movies

The indicator showing the number of exposures remaining or the indicator showing the remaining recording time flashes, or [Please wait for the camera to finish recording.] is displayed while images or movies are 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 recorded movies

- The optical zoom ratio cannot be changed once recording starts.
- There may be some degradation in image quality when digital zoom is used.



- The sounds of multi selector operation, autofocus lens drive movement, and aperture operation when brightness changes may be recorded.
- The following phenomena may be seen on the screen 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, colored stripes may appear on subjects with repeating patterns (fabrics, lattice windows, etc.) 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.

Notes about autofocus for movie recording

For "②Subjects not suitable for autofocus (page 78)", autofocus may not perform as expected. Should this occur, try the following:

Frame another subject (positioned at the same distance from the camera as the intended subject) in the center of the frame, press the \bigcirc ($^*\overline{\mathbf{x}}$ movie-record) button to start recording, and modify the composition.

Operations during movie playback

While a movie is playing, you can press the multi selector $\blacktriangle \nabla$ to adjust the volume (\bullet) .



You can use the flexible buttons to perform the following operations.

Flexible button	Description
Advance	Hold down the button to advance the movie.
Rewind	Hold down the button to rewind the movie.
① Pause	Pause playback. The operations listed below can be performed while paused. The image is a continuous advancing. The image is a continuous advancing.
X End	Return to full-frame playback mode.

General camera setup

Using the camera settings menu	.128
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Using the camera settings menu

In the camera settings menu, you can change various settings related to the camera.

1 In shooting mode or playback mode, press flexible button 4 (♥).



2 Press flexible button 4 (♥ [Camera settings]).



3 Select the option whose settings you want to change.

You can set the following options.

- Network menu (page 130)
- ♦ Welcome screen (page 134)
- Date and time (page 135)
- ◆Variety menu (page 136)
- ⇒Brightness (page 137)
- Date stamp (page 138)
- Electronic VR (page 139)
- ◆AF assist (page 140)
- ●Format card (page 141)
- ◆Format memory (page 142)
- Language (page 143)
- ◆Image comment (page 144)
- Copyright information (page 145)
- Location data display (page 146)
- Menu background (page 147)
- Charge by computer (page 148)
- → Reset all (page 149)



- **ᢒ**Conformity marking (page 150)
- ●Firmware version (page 151)

Network menu

Configure settings when establishing a wireless connection between the camera and a smart device

Shooting mode or playback mode \rightarrow flexible button 4 (Ψ) $\rightarrow \Psi$ Camera settings $\rightarrow {}^{(\uparrow)}$ Network menu

Connecting to a smart device

When you connect to a smart device, you can upload images captured with the camera to the smart device or operate the camera remotely with the smart device. Install the SnapBridge app on the smart device.

- ◆The SnapBridge app (page 164)
- · The connection methods are as follows.
 - Bluetooth connection: You can automatically upload still images (uploaded at an image size of up to 2 megapixels). When establishing a Bluetooth connection for the first time, use the network menu → [Connect to smart device] to pair the camera and smart device
 - You can also switch to a Wi-Fi connection after establishing a Bluetooth connection.
 - ◆Pairing (Bluetooth connection) (page 166)
 - Wi-Fi connection: You can download still images (2 megapixels or original size) and movies to the smart device or perform remote photography.
 - Using [Download pictures]/[Remote photography] (Wi-Fi connection) (page 169)
- For details about the SnapBridge app, see the online help for the SnapBridge app (https://nikonimglib.com/snbr/onlinehelp/en/index.html).

Network menu list

Flexible button	Description
★ Airplane mode	Select [On] to turn off all wireless connections.
☐ Connect to smart device	Pair when connecting to a smart device through Bluetooth for the first time. Pairing (Bluetooth connection) (page 166)

Flexib	le button	Description
Send while shooting	☐ Still images	When set to [On], still images can be sent automatically to a smart device connected through Bluetooth every time they are captured.
		To send automatically, the SnapBridge app must also be configured. SnapBridge app → □ tab → [Auto link] → enable [Auto download]. Still images are uploaded at an image size of up to 2 megapixels. To upload at their original size, use the SnapBridge app → [Download pictures]. If you use the playback menu → [Settings] → [Mark for upload (page 117)], you can select still images on the camera's playback screen to automatically upload them to a smart device.
	ਯੇ Upload (photos)	Set the conditions for automatically sending still images.
⁽⁽ Τ ³⁾ Wi-Fi	₩ Network settings	[SSID]: Set a 1- to 32-character alphanumeric SSID. ●Inputting characters (page 132)
		[Auth./encryp.]: Select whether to encrypt communications. Communications are not encrypted when [Open] is selected.
		[Password]: Set an 8- to 36-character alphanumeric password. ◆Inputting characters (page 132)
		To protect your privacy, we recommend that you change the password regularly.
		[Channel]: Select the channel used for the Wi-Fi connection. If the communication quality is poor or the image upload speed is extremely slow when using a Wi-Fi connection, try changing the channel.
	❸ Current settings	Confirm the current [Network settings] in a list.
8 Bluetooth	8 Connection	Select [Enable] or [Disable] for Bluetooth communication.

Flexibl	e button	Description
3 Bluetooth	句 Paired devices	Display smart devices that have been paired. You can change the smart device to connect with, or delete paired smart devices.
		 This camera can be paired with up to five smart devices (only one device can be connected at a time).
	ன் Send while off	Select [On] or [Off] to set whether the camera communicates with the smart device when the camera is off or in standby mode (O The auto off function (page 44)).
		During communication through (Send while off), the power-on lamp turns on even though the camera is off.
• Restore def	ault settings	Restore all network menu settings to their default values.

Bluetooth communication indicator and Wi-Fi communication indicator on the shooting screen

- · About the Bluetooth communication indicator
 - When the camera is connected to a smart device via Bluetooth, (3) is displayed.
 - When the camera is waiting for the connection to a smart device to be reestablished,
 flashes. It also flashes when Bluetooth communication is disconnected while uploading images.
- About the Wi-Fi communication indicator.
 - When the camera is preparing to connect to a smart device via Wi-Fi, 🙌 flashes.
 - When the camera is connected to a smart device via Wi-Fi, 👣 is displayed.

Inputting characters





- Use the multi selector ▲▼◀▶ to select alphanumeric characters on the keyboard (①). Press flexible button 3 (OK) to enter the selected character in the text field (②) and move the cursor to the next space.
- To move the cursor in the text field, select ← or → on the keyboard, and press
 flexible button 3 (OK).
- To delete one character, press flexible button 2 (▼).
- To apply the setting, select ← on the keyboard and press flexible button 3 (**OK**).

Welcome screen

Configure the welcome screen that is displayed when you turn on the camera.

Shooting mode or playback mode \rightarrow flexible button 4 (Ψ) \rightarrow Ψ Camera settings \rightarrow \square Welcome screen

• This function is not displayed when [Variety menu (page 136)] is set to [Off].

Flexible button	Description
☐ Off	Does not display the welcome screen.
CIPX On	Displays an animated welcome screen. The characters and background that are displayed change according to how often you use the camera, how many images you have taken with the camera, etc.
On: Photo	Displays a captured image as the welcome screen. An image selection screen is displayed. Use the multi selector ◀ ▶ to select an image and press flexible button 4 (OK) to register it. The welcome screen stays the same even if you delete the original image because the registered image is saved in the camera. An image cannot be selected if the image size is extremely small after the small picture or crop function is applied.

Date and time

Set the camera clock.

Shooting mode or playback mode \Rightarrow flexible button 4 (\P) \Rightarrow \P Camera settings \Rightarrow 9 Date and time

Flexible button	Description
€ Date format	Select [Year/Month/Day], [Month/Day/Year], or [Day/Month/Year].
⑤ Date and time	Select a field: Press the multi selector ►. Edit the date and time: Press ▲ ▼. Apply the setting: Select the minute setting and press flexible button 4 (OK). Set daylight saving time: Press flexible button 3 (%) to display % on the screen and enable daylight saving time. To disable daylight saving time, press flexible button 3 (%) again.



Variety menu

Allows you to set whether to use all of the camera's functions.

Shooting mode or playback mode → flexible button 4 (♀) → ♀ Camera settings → ♡ Variety menu

Flexible button	Description
Ö On	Enables use of all functions.
OFF off	Some functions are restricted as follows.

When **OFF** [**Off**] is selected, the following functions are disabled.

- · Shooting functions
 - SCENE → Decorate
 - ¥ → [Change sounds] → [Turn sounds on or off]
 - ♥ → [Choose a size] → [Movie frame size] → [Small (old-fashioned)]
- · Playback functions
 - **☑** → [Exchange messages]
 - Picture play] → [Arrange pictures]
 - **I** → [Slide show] → [Choose a theme]
- Camera settings
 - [Welcome screen]

The following functions change.

- You will not be able to select sounds by using ¥ → [Change sounds] → [Pick a shutter sound] and [Pick a button sound]
- ☑ → [Grading] changes to [Favorites]

Brightness

Adjust the brightness.

Shooting mode or playback mode \Rightarrow flexible button 4 (\P) \Rightarrow \P Camera settings \Rightarrow \Leftrightarrow Brightness

The default setting is [3].

 Use the multi selector ◀ ▶ to select the desired brightness and press flexible button 4 (OK).

Date stamp

The shooting date and time can be stamped on images when shooting.

Shooting mode or playback mode → flexible button 4 (♀) → ♀ Camera settings → Date stamp



Flexible button	Description
Date	Date is stamped on images.
To Date and time	Date and time are stamped on images.
OFF Off (default setting)	Date and time are not stamped on images.

▼ Notes about [Date stamp]

- Stamped dates and times form a permanent part of image data and cannot be deleted.
 The date and time cannot be stamped on images after they have been captured.
- The date and time cannot be stamped on movies.
- This function may not be available to use in combination with other functions.
 Functions that cannot be used simultaneously when shooting (page 81)

Electronic VR

Select the electronic VR (vibration reduction) setting used when shooting.

Shooting mode or playback mode → flexible button 4 (♀) → ♀ Camera settings → ঋ Electronic VR

Flexible button	Description
《₩》Auto	In the following conditions, the effects of camera shake are reduced when shooting.
	When the (Flash) is set to (Flash off) When the shutter speed is slow When the subject is dark
	Vibration reduction is always applied during movie recording.
OFF Off (default setting)	Electronic VR is disabled.

Notes about [Electronic VR]

- · Electronic VR is disabled while the flash is used.
- If the exposure period exceeds a certain period of time, electronic VR will not function.
- Even when [Electronic VR] is set to [Auto], depending on the shooting conditions automatically selected by the camera when using [Point and shoot] mode, the electronic VR may not function.
- The effectiveness of electronic VR decreases as camera shake increases.
- · Images may contain noise.
- This function may not be available to use in combination with other functions.
 - ●Functions that cannot be used simultaneously when shooting (page 81)



AF assist

Allows you to enable or disable the AF-assist illuminator.

Shooting mode or playback mode → flexible button 4 (4) → 4 Camera settings → ED AF assist

Flexible button	Description
ÁUTO Auto (default setting)	The AF-assist illuminator automatically lights up when you press the shutter-release button under dim lighting.
	The illuminator has a range of about 1.9 m (6 ft 2 in.) at the maximum wide-angle position and about 1.7 m (5 ft 6 in.) at the maximum telephoto position. Note that for some settings, the AF-assist illuminator may not light.
OFF off	The AF-assist illuminator does not light.

Format card

Use this option to format a memory card.

Shooting mode or playback mode → flexible button 4 (♀) → ♀ Camera settings → 图 Format card

Formatting the memory cards permanently deletes all data. Data that has been deleted cannot be recovered. Make sure to save important images to a computer before formatting.

To start formatting, press flexible button 3 (\pmb{O} [\pmb{Format}]) on the screen that is displayed.

- Do not turn the camera off or open the battery-chamber/memory card slot cover during formatting.
- You may not be able to select this setting while a wireless connection is established.

▼ Notes about [Format card]

You cannot format while image lock is set. Remove image lock.

Restricting image deletion (image lock) (page 47)

General camera setup



Format memory

Use this option to format the internal memory.

Shooting mode or playback mode \rightarrow flexible button 4 (\P) \rightarrow \P Camera settings \rightarrow \blacksquare Format memory

Remove the memory card from the camera in advance.

Formatting the internal memory permanently deletes all data. Data that has been deleted cannot be recovered. Make sure to save important images to a computer before formatting.

To start formatting, press flexible button 3 (**O** [**Format**]) on the screen that is displayed.

- Do not turn the camera off or open the battery-chamber/memory card slot cover during formatting.
- You may not be able to select this setting while a wireless connection is established.

▼ Notes about [Format memory]

You cannot format while image lock is set. Remove image lock.

Restricting image deletion (image lock) (page 47)

Language

Select a language for display of camera menus and messages.

Shooting mode or playback mode \rightarrow flexible button 4 (Ψ) $\rightarrow \Psi$ Camera settings $\rightarrow \bowtie$ Language

Image comment

Allows you to attach a comment that was previously registered to images that will be captured.

Shooting mode or playback mode \rightarrow flexible button 4 (Ψ) $\rightarrow \Psi$ Camera settings $\rightarrow \bigcirc$ Image comment

- You can imprint the attached comment to images that will be sent to a smart device using the SnapBridge app. You must configure the SnapBridge app in advance. For details, see the online help for the SnapBridge app (https://nikonimglib.com/snbr/onlinehelp/en/index.html).
- You can also check the attached comment using ViewNX-i metadata.

Flexible button	Description
Attach comment	A comment registered with [Input comment] is attached to images.
	When you press flexible button 2 ((P [On]), the setting is enabled, and the comment will be attached to the images captured afterwards.
	You can register a comment of up to 36 alphanumeric characters. ◆ Inputting characters (page 132)

Notes about [Image comment]

Image comments cannot be attached to movies.

Image comments display

Image comments are not displayed even if images are played back on the camera.

Copyright information

Allows you to attach the copyright information that was previously registered to images that will be captured.

Shooting mode or playback mode \rightarrow flexible button 4 (Ψ) $\rightarrow \Psi$ Camera settings $\rightarrow \odot$ Copyright information

- You can imprint the attached copyright information to images that will be sent to a smart device using the SnapBridge app. You must configure the SnapBridge app in advance. For details, see the online help for the SnapBridge app (https:// nikonimglib.com/snbr/onlinehelp/en/index.html).
- You can also check the attached copyright information using ViewNX-i metadata.

Flexible button	Description	
© Attach copyright info	Copyright information registered with [Artist] and [Copyright] is attached to images.	
	When you press flexible button 2 (© [On]), the setting is enabled, and the copyright information will be attached to the images captured afterwards.	
♣ Artist	You can register an artist name of up to 36 alphanumeric characters. Inputting characters (page 132)	
ଔ Copyright	You can register a copyright owner name of up to 54 alphanumeric characters. Oliphytting characters (page 132)	

▼ Notes about [Copyright information]

- Copyright information cannot be attached to movies.
- To prevent illegal use of artist names and copyright owner names when lending or transferring ownership of the camera, make sure to disable the [Attach copyright info] setting. Also, make sure that the artist name and copyright owner name are blank.
- Nikon is not responsible for any kind of trouble or damage resulting from the use of **[Copyright information**].

Copyright information display

- Copyright information is not displayed even if images are played back on the camera.
- If you input both [Artist] and [Copyright], only the copyright owner name is imprinted to images in the SnapBridge app.



Location data display

Display the location information obtained from a smart device.

Shooting mode or playback mode \rightarrow flexible button 4 (Ψ) $\rightarrow \Psi$ Camera settings $\rightarrow \Theta$ Location data display

Obtaining location information from a smart device

- 1 Install the SnapBridge app on the smart device.
 - The SnapBridge app (page 164)
- 2 Use the SnapBridge app to establish a Bluetooth connection between the camera and smart device.
 - Pairing (Bluetooth connection) (page 166)
- 3 SnapBridge app → □ tab → [Auto link] → enable [Synchronize location data].

 - When $\ensuremath{\mathcal{B}}$ is displayed, location information is recorded on captured images.
 - To stop obtaining location information, disable [Synchronize location data].

Menu background

Select a background design for the screen.

Shooting mode or playback mode \rightarrow flexible button 4 (\P) $\rightarrow \P$ Camera settings $\rightarrow \blacksquare$ Menu background

The default setting is [1].

- To restore the default setting, press flexible button 3 (**RESET**).

Charge by computer

Allows you to set whether or not the battery in the camera is charged when the camera is connected to a computer.

Shooting mode or playback mode → flexible button 4 (♥) → ♥ Camera settings → stational Charge by computer

Flexible button	Description
ÄUTO Auto (default setting)	When the camera is connected to a computer that is running (Transferring images to a computer with ViewNX-i (page 159)), the battery inserted into the camera is automatically charged using power supplied by the computer.
OFF Off	The battery inserted into the camera is not charged when the camera is connected to a computer.

Notes about charging with a computer

- When connected to a computer, the camera turns on and starts charging. If the camera is turned off, charging stops.
- About 2 hours and 30 minutes are required to charge a fully exhausted battery. Charging time increases when images are transferred while the battery is charging.
- The camera turns off automatically if there is no communication with the computer for 30 minutes after the battery has finished charging.

When the charge lamp quickly flashes

Charging cannot be performed, possibly due to one of the reasons described below.

- 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 is not connected correctly, or the battery is faulty. Make sure the USB cable is connected correctly or replace the battery if necessary.
- The computer is in sleep mode and is not supplying power. Wake up the computer.
- The battery cannot be charged because the computer cannot supply power to the camera due to the computer's settings or its specifications.



Reset all

Allows you to reset the camera's settings to their default values.

Shooting mode or playback mode \rightarrow flexible button 4 (Ψ) \rightarrow Ψ Camera settings \rightarrow \bigcirc Reset all

When flexible button 3 (**O** [**Reset**]) is selected, the camera's settings are restored to their default values.

- The network menu settings are also restored to their default values.
- Some settings, such as [Date and time] or [Language], are not reset.
- You may not be able to select this setting while a wireless connection is established.

Resetting file numbering

To reset file numbering to "0001", delete all images saved on the memory card or in the internal memory before selecting [**Reset all**].

Conformity marking

View some of the conformity markings that the camera complies with.

Shooting mode or playback mode \rightarrow flexible button 4 (Ψ) $\rightarrow \Psi$ Camera settings $\rightarrow \square$ Conformity marking

Firmware version

View the current camera firmware version.

Shooting mode or playback mode \Rightarrow flexible button 4 (\P) \Rightarrow \P Camera settings \Rightarrow Ver. Firmware version

 You may not be able to select this setting while a wireless connection is established.

Connecting the camera to a TV, printer, or computer

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Viewing images on a TV

You can connect the camera to a TV with a commercially available HDMI cable to view images and movies captured with the camera on the TV.

☑ Notes about connecting to a TV

- Make sure to turn the camera off before openning the cover. Check there are no water droplets. If there are water droplets, wipe the camera with a soft dry cloth.
- Make sure that the camera battery is sufficiently charged. If the EH-62G AC Adapter (available separately) is used, this camera can be powered from an electrical outlet. Do not, under any circumstances, use an AC adapter other than the EH-62G. Failure to observe this precaution could result in overheating or in damage to the camera.
- For information about the connection methods and subsequent operations, refer to the documentation included with the TV in addition to this document.

Turn off the camera.

- Use a commercially available HDMI cable to connect the camera's HDMI micro connector (Type D) and the TV's HDMI input port.
 - Check the shape and direction of the plugs and do not insert or remove the plugs at an angle.



- 3 Set the TV's input to external input.
 - · See the documentation provided with your TV for details.



4 Press and hold down the ► (shooting/playback mode) button to turn on the camera.



- Images are displayed on the TV.
- The camera screen does not turn on.



Printing images with a printer

Users of PictBridge-compatible printers can connect the camera directly to the printer and print images without using a computer.

Connecting to a PictBridge-compatible printer

Notes about connecting to a printer

- Make sure to turn the camera off before openning the cover. Check there are no water droplets. If there are water droplets, wipe the camera with a soft dry cloth.
- · Make sure that the camera battery is sufficiently charged. If the EH-62G AC Adapter (available separately) is used, this camera can be powered from an electrical outlet. Do not, under any circumstances, use an AC adapter other than the EH-62G. Failure to observe this precaution could result in overheating or in damage to the camera.
- Operation is not guaranteed if the camera is connected to the printer via a USB hub.
- For information about the connection methods and subsequent operations, refer to the documentation included with the printer in addition to this document.
 - Turn on the printer.
- Turn off the camera.
- Connect the camera to the printer using the USB cable.
 - Check the shape and direction of the plugs and do not insert or remove the plugs at an angle.



- 4 The camera is automatically turned on.
 - The [PictBridge] startup screen is displayed on the camera screen, followed by the [Print selection] screen.



☑ If the PictBridge startup screen is not displayed

When the camera settings menu → [Charge by computer] is set to [Auto], it may be impossible to print images with direct connection of the camera to some printers. If the PictBridge startup screen is not displayed after the camera is turned on, turn the camera off and disconnect the USB cable. Set [Charge by computer] to [Off] and reconnect the camera to the printer.

Printing images one at a time

1 Use the multi selector **♦** to select the desired image and press flexible button 4 (**OK**).



2 Press flexible button 3 ([Copies]).



3 Use ▲▼ to set the desired number of copies (up to 9) and press flexible button 4 (OK).



4 Press flexible button 4 (☐ [Paper size]).



- 5 Use ◀ ▶ to select the paper size and press flexible button 4 (OK).
 - To print with the paper size setting configured on the printer, select [**Default**].
 - The paper size options available on the camera vary depending on the printer that you use.
- 6 Press flexible button 2 (凸 [Start print]) to start printing.



Printing multiple images

1 When the [Print selection] screen is displayed, press flexible button 3 (MENU).



Press flexible button 4 (☐ [Paper size]).





- 3 Use **♦** to select the paper size and press flexible button 4 (**OK**).
 - To print with the paper size setting configured on the printer, select [**Default**].
 - The paper size options available on the camera vary depending on the printer that you use.
- 4 Press flexible button 2 or 3 to select the print method.



- **III** [Print selection]: Select images (up to 99) and the number of copies (up to 9) of each.
- ALL [Print all images]: One copy each of all images saved in the internal memory, or on the memory card, is printed. Proceed to step 6.
- 5 Select images (up to 99) and the number of copies (up to 9) of each.



- Use the multi selector ◀ ► to select images, and use flexible button 2 (+) or flexible button 3 (_) to specify the number of copies to be printed.
- Images selected for printing are indicated by a check mark and the number of copies to be printed. To cancel the print selection, set the number of copies to 0.
- Press flexible button 4 (**OK**) when setting is complete.
- When the screen for confirming the number of print copies is displayed, press flexible button 2 (鱼 [Start print]) to start printing.



Transferring images to a computer

You can transfer images and movies to a computer for viewing and editing.

Installing ViewNX-i

ViewNX-i is Nikon software that enables you to transfer images and movies to your computer for viewing and editing.

To install ViewNX-i, download the latest version of the ViewNX-i installer from the following website and follow the on-screen instructions to complete installation. https://downloadcenter.nikonimglib.com

For system requirements and other information, see the Nikon website for your region.

Transferring images to a computer with ViewNX-i

For more information about using ViewNX-i, refer to ViewNX-i help.

• The items displayed on your computer screen may change when you update the version of your operating system or software.

Notes about connecting the camera to a computer

- Make sure to turn the camera off before openning the cover. Check there are no water droplets. If there are water droplets, wipe the camera with a soft dry cloth.
- Make sure that the camera battery is sufficiently charged. If the EH-62G AC Adapter (available separately) is used, this camera can be powered from an electrical outlet. Do not, under any circumstances, use an AC adapter other than the EH-62G. Failure to observe this precaution could result in overheating or in damage to the camera.
- Operation is not guaranteed if the camera is connected to the computer via a USB hub.
- For information about the connection methods and subsequent operations, refer to the documentation included with the computer in addition to this document.

1 When connecting the camera to a computer, disconnect all USB-powered devices from the computer.

 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.



Prepare a memory card that contains images.

- You can use any of the methods below to transfer images from the memory card to a computer.
 - SD memory card slot/card reader: Insert the memory card into the card slot of your computer or the card reader (commercially available) that is connected to the computer
 - 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 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.
- · Check the shape and direction of the plugs and do not insert or remove the plugs at an angle.



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

- Selecting a program to start (page 161)
- 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.

After Nikon Transfer 2 starts, click [Start Transfer].



• Image transfer begins. When image transfer is complete, ViewNX-i starts and the transferred images are displayed.

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Connecting the camera to a TV, printer, or computer

- 5 Terminate the connection.
 - 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 memory card from the card reader or card slot.
 - If the camera is connected to the computer, turn the camera off and disconnect the USB cable.

Selecting a program to start

If you refer to "Transferring images to a computer with ViewNX-i (page 159)" to connect the camera to a computer and a message is displayed prompting you to select a program, follow the steps below to select Nikon Transfer 2.

In Windows 7

1 Under [Import pictures and videos], click [Change program].



- **2** Select Nikon Transfer 2 in the displayed dialog and click [OK].
- 3 Double-click the Nikon Transfer 2 icon.

In Windows 10 or Windows 8.1

1 Click the dialog and then click [Import File/Nikon Transfer 2].





In OS X or macOS

If Nikon Transfer 2 does not automatically start, launch the [Image Capture] application that comes bundled with Mac while the camera and your computer are connected, and select Nikon Transfer 2 as the default application to open when the camera is connected to your computer.

Connecting to a smart device (SnapBridge)

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The SnapBridge app

When you install the SnapBridge app and establish a wireless connection between a SnapBridge-supported camera and a smart device, you can upload images captured with the camera to the smart device or operate the camera remotely with the smart device



- Procedures are described using the SnapBridge app Version 2.5.
- · Use the latest versions of the SnapBridge app and the camera's firmware. The functions that can be used and the operating procedures may vary depending on the versions of the SnapBridge app and camera's firmware or the OS of the smart device
- See the documentation provided with the smart device for information on how to use it.

Installing the SnapBridge app

Download the app from the Apple App Store® for iOS, and from Google Play™ for Android™.

The "SnapBridge 360/170 app" cannot be used with this camera.





Screens in the SnapBridge app



- 1: You can view the online help, as well as configure the app's settings.
- 2: Primarily perform connection settings for smart devices and cameras.
- You can play back images uploaded from the camera.

For detailed explanations about the SnapBridge app

See the SnapBridge app online help.

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Connecting to a smart device (SnapBridge)



Connecting the camera and a smart device

Pairing (Bluetooth connection)

When you connect to a smart device through a Bluetooth connection, you can use auto link features (automatic download of still images, time information synchronization, location data synchronization).

When connecting through Bluetooth for the first time, pair the camera with the smart device.

- · Insert a memory card with sufficient free space into the camera.
- Make sure that the remaining battery levels of the camera and smart device are sufficient.
- Enable Bluetooth on the smart device.
- Camera: Camera settings menu → in [⑤Network menu (page 130)], press flexible button 3 (☐ [Connect to smart device]).



<u>Camera</u>: Confirm that the dialog below is displayed. <u>Smart device</u>: Launch the SnapBridge app and tap [Connect to camera].





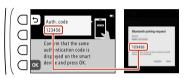
- When the list of camera categories is displayed on the smart device, tap the category of this camera.
- If you tapped [Skip] without connecting the camera when launching the SnapBridge app for the first time, tap the ☐ tab → [Connect to camera] and proceed to step 3.



3 Smart device: Tap the name of the camera you want to pair.



- For iOS, if a screen explaining the procedure is displayed after you tap the camera name, confirm the details and tap [Understood]. Tap the camera name again when the screen for selecting an accessory is displayed (it may take some time for the camera name to be displayed).
- 4 Camera/smart device: Confirm that the same number is displayed.



- For iOS, the number may not be displayed on the smart device depending on the OS version. In this case, proceed to step 5.
- Camera: Press flexible button 4 (OK). Smart device: Tap [PAIR].



- The actual name of the [PAIR] option may vary depending on the smart device.
- When pairing for the first time, set the auto link function using the smart device screen.





6 Finish the pairing.

- Camera: Press flexible button 4 (>).
- Smart device: Tap [OK].





• If you pair when connecting for the first time, the camera can connect to the smart device through Bluetooth from the next time without you having to perform the procedure above.

Automatic download of still images

While connected through Bluetooth, you can use the following features to automatically download still images to a smart device. Still images are uploaded at an image size of up to 2 megapixels.

SnapBridge app $\rightarrow \Box$ tab \rightarrow [Auto link] \rightarrow enable [Auto download] in advance.

Setting procedure	Description
Camera settings menu → [Network menu] → [Send while shooting] → [Still images]	Automatically upload still images to a smart device every time they are captured.
Camera playback menu → [Settings] → [Mark for upload]	Select still images on the camera's playback screen, and then automatically upload them to a smart device.

- · To upload still images at their original size or to upload movies, switch to a Wi-Fi connection and use [Download pictures].
 - Using [Download pictures]/[Remote photography] (Wi-Fi connection) (page 169)

Tips for pairing

If the camera and smart device cannot be paired

- Confirm that the settings in the camera settings menu → [Network menu] are configured as follows.
 - [Airplane mode]: [Off]
 - [Bluetooth] → [Connection]: [Enable]

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Connecting to a smart device (SnapBridge)



- If the camera displays [Could not connect.], press flexible button 3 (② [Reconnect])
 and repeat the procedure from step 2 to perform the pairing again. Press flexible button
 4 (✗ [Cancel]) to cancel the pairing.
- You may be able to finish the pairing successfully by closing the SnapBridge app completely, turning the camera off and then on again, and then performing the procedure in "●Pairing (Bluetooth connection) (page 166)".
- For iOS, you may not be able to pair the camera with the smart device if the camera is registered as a device. Delete the registered device (camera name) in the iOS settings app.



Disconnecting and reconnecting the Bluetooth connection

Use either of the following methods to switch the setting.

- Camera settings menu → [Network menu] → [Airplane mode] (You can set it to [On] to turn off all communication functions in places where wireless communication is prohibited.)
- Camera settings menu → [Network menu] → [Bluetooth] → [Connection]

Unpairing

SnapBridge app \Rightarrow \square tab \Rightarrow \square \Rightarrow [Forget camera] \Rightarrow Camera you want to unpair \Rightarrow tap [Yes] (during a Wi-Fi connection, tap \square , and then tap [Yes]).

For iOS, then tap $[\mathbf{Go}]$ and delete the registered device (camera name) in the iOS settings app.



Using [Download pictures]/[Remote photography] (Wi-Fi connection)

When the camera is connected to a smart device through a Wi-Fi connection, you can use the following features in the SnapBridge app.



Option	Description	
Download pictures	Download still images (2 megapixels or original size) and movies to a smart device.	
Remote photography	Operate the camera remotely using a smart device to capture still images.	
	Insert a memory card with sufficient free space into the camera.	

If you select [Download pictures] or [Remote photography] in the
 \(\begin{align*} \) tab of the SnapBridge app when connected through Bluetooth, the Wi-Fi connection dialog will be displayed. Tap [OK] to switch to a Wi-Fi connection.

 To return to the Bluetooth connection from the Wi-Fi connection, SnapBridge app
 \(\begin{align*} \Delta \) tab \(\begin{align*} \Phi \) at p [Yes].

If the [Camera and Wi-Fi connection] screen is displayed in iOS

Depending on the iOS version, the [Camera and Wi-Fi connection] screen may be displayed after you tap [OK] on the Wi-Fi connection dialog.



- Write down the camera SSID and password displayed on the screen.
- When you tap [View options], the iOS settings app launches. After tapping [Settings], tap [Wi-Fi], and select the SSID you wrote down. When connecting for the first time, input the password.

For details about operation, see the online help for the SnapBridge app (https://nikonimglib.com/snbr/onlinehelp/en/index.html).

SSID and password

You can confirm or change the SSID or password in the camera settings menu → [Network menu] → [Wi-Fi] → [Network settings].





If the camera cannot be connected or images cannot be uploaded

- When the camera is being operated, you may be unable to upload images or uploading may be canceled, or you may be unable to perform remote photography using the SnapBridge app.
- The issue may be solved by trying one or all of the following operations.
- · Turn the camera off and then on again.
 - Switch the tab of the SnapBridge app.
 - Close the SnapBridge app completely and then launch it again.
 - Restart the smart device.
 - Unpair once and then pair again.
 - Ounpairing (page 169)

If there is a problem

Troubleshooting	173
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Troubleshooting

If the camera fails to function as expected, check the following before consulting your retailer or Nikon-authorized service representative.

- Turning off the camera once may solve the issue.
- If you cannot find a relevant entry, also check "⊙Error messages (page 183)" or the Nikon website for your region.

Power, display, settings

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.

The camera cannot be turned on.

The battery is exhausted.

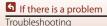
♦ Charging the battery (page 36), ♦ The battery (page 190)

The camera turns off without warning.

- The camera automatically turns off to save power (auto off function).
 - The auto off function (page 44)
- The camera and battery may not work properly at low temperatures.
 The battery (page 190)
- The inside of the camera or the battery has become hot. Leave the camera off until the inside of the camera has cooled, and then try turning it on again.

The monitor is blank.

- The camera is off.
 - ◆Camera setup (page 38)
- The battery is exhausted.
 - ♦ Charging the battery (page 36), ♦ The battery (page 190)
- The camera automatically turns off to save power (auto off function).
 - The auto off function (page 44)
- The camera is connected to a TV or computer.





- The camera is shooting while [Choose a style] is set to [Shoot at intervals].
- The camera is shooting while [Choose a style] is set to [Add light trails].

The camera becomes hot.

The camera may become hot when used for an extended period of time such as to shoot movies, or when used in a hot environment; this is not a malfunction.

The battery inserted in the camera cannot be charged.

- Confirm all connections
 - Charging the battery (page 36)
- The camera may not charge when connected to a computer for any of the reasons described below
 - [Charge by computer (page 148)] is set to [Off].
 - If the camera is turned off, charging stops.
 - Battery charging is not possible if the camera's display language and date and time have not been set, or the date and time were reset after the camera's clock battery was exhausted. Use the Charging AC Adapter to charge the battery.
 - Battery charging may stop when the computer enters sleep mode.
 - Depending on the computer specifications, settings, and status, battery charging may not be possible.

The monitor is hard to see.

- · Adjust the [Brightness (page 137)].
- The surroundings are too bright. Move to a darker place.

flashes on the screen.

- The camera clock has not been set. Set the date and time in [Date and time (page 135)].
- If the camera clock has not been set, images and movies saved before the clock is set are dated "00/00/0000 00:00" and "01/01/2019 00:00" respectively. The shooting date and time is not displayed during playback.

Date and time of recording are not correct.

Set the date and time in [**Date and time (page 135)**]. 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.

[Date stamp] not available.

The camera clock has not been set. Set the date and time in [Date and time (page 135)].





Screen for setting date and time is displayed when the camera is turned on.

The camera settings reset.

The clock battery is exhausted; all settings were restored to their default values. Configure the camera settings again.

The internal clock battery is used to power the camera clock and to retain certain settings. Charging time of the clock battery takes about 10 hours when you insert the battery into the camera or connect the AC adapter (available separately) to the camera, and the clock battery operates for several days even after the camera battery is removed.

Cannot select [Format card] or [Format memory].

- You cannot format while image lock is set. Remove image lock.
 Restricting image deletion (image lock) (page 47)
- You may not be able to select this setting while a wireless connection is established. Cancel the wireless connection.

Some menu options are not displayed.

Some options are not displayed depending on the [Variety menu (page 136)] settings. Change the settings.

The camera makes sound.

Depending on the settings, the camera may produce an audible focusing sound.

Shooting

Cannot switch to shooting mode.

Disconnect the HDMI cable or USB cable.

Cannot take pictures or record movies.

- - The camera body (page 21)
- When menus are displayed, press the shutter-release button or (*★) button.
 The camera body (page 21)
- The flash lamp flashes while the flash is charging. Wait until charging is complete.
 The flash lamp (page 52)
- Insert a memory card with sufficient free space into the camera.



- · The battery is exhausted.
 - ♦ Charging the battery (page 36), ♦ The battery (page 190)

The camera cannot focus.

- The subject is too close. Try [Shoot close-ups (page 58)] in [Choose a style].
- Set [AF assist (page 140)] to [Auto].
- · The subject is hard to focus on.
 - Subjects not suitable for autofocus (page 78)
- · Turn the camera off and then on again.

Images are blurred.

- · Use the flash.
 - ⇒Flash (page 52)
- Enable electronic VR.
 - ⇒Electronic VR (page 139)
- Use a tripod to stabilize the camera. Using the [Self-timer (page 53)] at the same time is more effective.

Bright specks appear in images captured with flash.

The flash is reflecting off particles in the air. Set the [Flash (page 52)] to [Flash off].

Flash does not fire.

- The [Flash (page 52)] is set to [Flash off].
- · A function that disables the flash is selected.

◆Default settings list for flash and self-timer (page 80), ◆Functions that cannot be used simultaneously when shooting (page 81)

Digital zoom cannot be used.

Digital zoom cannot be used when using certain settings in other functions.

• Functions that cannot be used simultaneously when shooting (page 81)

No sound when the shutter is released.

- [Change sounds (page 73)] → [Turn sounds on or off] is set to [Turn sounds off], or [Pick a shutter sound] is set to [※].
- · Do not block the speaker.
 - The camera body (page 21)



AF-assist illuminator does not light.

[AF assist (page 140)] is set to [Off]. AF-assist illuminator may not light depending on the current settings, even when [Auto] is selected.

Images appear smeared.

The lens is dirty. Clean the lens.

Cleaning and storage (page 193)

Colors are unnatural.

Hue is not adjusted properly.

◆Photograph food (page 59), ◆Change colors (page 72)

Randomly spaced bright pixels ("noise") appear in image.

The subject is dark and the shutter speed is too slow, or ISO sensitivity is too high. Noise can be reduced by using the flash.

Flash (page 52)

Images are too dark (underexposed).

- The [Flash (page 52)] is set to [Flash off].
- The flash window is blocked.
- The camera body (page 21)
- The subject is beyond the range of the flash. Check the range of the flash.
 Specifications (page 197)
- Adjust exposure compensation.
 - Change colors (page 72)
- The subject is backlit.
 - Use the flash.
 - ◆Flash (page 52)
 - Try [Shoot backlit scenes (page 63)] in [Choose a style].

Images are too bright (overexposed).

Adjust exposure compensation.

Change colors (page 72)

Skin tones are not softened.

- In some shooting conditions, facial skin tones may not be softened.
- For images containing four or more faces, try [Make skin prettier] in [Add makeup (page 92)].





Saving images takes time.

It may take more time to save images in the following situations:

- When the noise reduction function is in operation, such as when shooting in a dark environment
- When [Choose a style] is set to [Shoot night scenes], [Take a series of pictures], [Shoot backlit scenes], [Add a neon effect], or [Add a cartoon effect]
- When the skin softening function is applied while shooting
 Using skin softening (page 55)

A ring-shaped belt or rainbow-colored stripe appears on the screen 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, editing

File cannot be played back.

- This camera may not be able to play back images saved with another make or model of digital camera.
- This camera cannot play back movies recorded with another make or model of digital camera.
- This camera may not be able to play back data edited on a computer.

Cannot zoom in on image.

- Playback zoom cannot be used with movies, and images with an image size of 160 x 120 or smaller.
- Playback zoom cannot be used with images created by [Add a "little planet" effect] or [Curve pictures].
- When viewing small images, the playback zoom ratio that is displayed may not match the actual image zoom ratio.
- This camera may not be able to zoom in on images captured with another make or model of digital camera.

Cannot record messages.

Messages cannot be attached to movies.





- Use [Erase recordings (page 91)] to delete the message for an image before recording a new one.
- · Messages cannot be attached to images captured with other cameras.

Cannot edit images.

- Some images cannot be edited. Images that have already been edited may not be edited again.
- ⇒Before editing images (page 88)
- Images cannot be edited when they are played back using [View graded pictures], [View favorites], or [View by date].
- Images with an image size of 640 × 480 or smaller cannot be edited using [Small picture].
- Images with an aspect ratio other than 4:3 cannot be edited using [Small picture].
- There is not enough free space on the memory card or in the internal memory.
- This camera is unable to edit images captured with other cameras.
- · Editing functions used for images are not available for movies.

Cannot rotate image.

This camera cannot rotate images captured with another make or model of digital camera.

Cannot delete image.

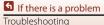
- Images cannot be deleted while image lock is set. Remove image lock.
 Restricting image deletion (image lock) (page 47)
- Graded images are protected. Remove the grade from the image.
 Changing or removing grades from individual images (page 105),
 Remove all grades (page 106)
- Images added to favorites are protected. Remove the image from favorites.
 ②Removing favorites from individual images (page 109),
 ③Removing all favorites from images (page 109)

TVs, printers, computers

Images are not displayed on the TV.

- · A computer or printer is connected to the camera.
- · The memory card contains no images.
- Remove the memory card to play back images in the internal memory.
 Removing the battery or memory card (page 34)







The PictBridge startup screen is not displayed when the camera is connected to a printer.

When [Charge by computer (page 148)] is set to [Auto], the PictBridge startup screen may not be displayed and it may be impossible to print images with some PictBridge-compatible printers. Set [Charge by computer] to [Off] and reconnect the camera to the printer.

Images to be printed are not displayed.

- The memory card contains no images.
- Remove the memory card to print images in the internal memory.
 Removing the battery or memory card (page 34)

Cannot select paper size with the camera.

The camera cannot be used to select the paper size in the following situations, even when printing from a PictBridge-compatible printer. Use the printer to select the paper size.

- The printer does not support the paper sizes specified by the camera.
- The printer automatically selects the paper size.

Nikon Transfer 2 does not start when the camera is connected to a computer.

- The camera is off
- · The battery is exhausted.
 - Charge by computer (page 148)
- The USB cable is not correctly connected.
 Transferring images to a computer with ViewNX-i (page 159)
- The camera is not recognized by the computer.
- The computer is not set to start Nikon Transfer 2 automatically. For more information about Nikon Transfer 2, refer to ViewNX-i help.

Smart devices, SnapBridge app

See "Connecting to a smart device (SnapBridge) (page 163)" and the SnapBridge online help (https://nikonimglib.com/snbr/onlinehelp/en/index.html).

Cannot select [Connect to smart device]. Cannot pair with a smart device using [Connect to smart device].

- · Use a sufficiently charged battery.
- Insert a memory card with sufficient free space into the camera.
- Disconnect the HDMI cable or USB cable.
- Set the following in the camera settings menu → [Network menu (page 130)].
- · [Airplane mode]: [Off]
 - [Bluetooth] → [Connection]: [Enable]
- Enable Bluetooth on the smart device.

Paired smart devices are not connected through Bluetooth automatically.

- Set the following in the camera settings menu → [Network menu (page 130)].
- · [Airplane mode]: [Off]
 - [Bluetooth] → [Connection]: [Enable]
- If the camera is paired with multiple smart devices, select the smart device you
 want to connect in the camera settings menu → [Network menu (page 130)] →
 [Bluetooth] → [Paired devices].
- If multiple cameras are registered in the SnapBridge app, switch to the camera you want to connect using the SnapBridge app.

Cannot upload images to a smart device that is connected with the SnapBridge app.

- You can upload automatically through the auto link feature only when connected through Bluetooth. To upload automatically, set the following.
- Camera settings menu → [Network menu (page 130)] → [Send while shooting] → [Still images]: [On]
 - SnapBridge app → □ tab → [Auto link] → [Auto download]: Enable
 - If the camera settings menu → [Network menu (page 130)] → [Bluetooth] → [Send while off] is set to [Off], change the setting to [On] or turn on the camera.
- When there is a large number of images to upload during Bluetooth communication, communication may be disconnected while uploading. If you turn the camera off and then on again, it is reconnected to the smart device.
 Uploading resumes after the camera is reconnected in the following situations.
- When the camera settings menu → [Network menu (page 130)] → [Send while shooting] → [Still images] is set to [On]
 - When images are marked for upload using the camera playback menu →
 [Settings] → [Mark for upload]



 You may not be able to upload images or uploading may be canceled while the camera is being operated.

Cannot download still images at the original size on the smart device that is connected with the SnapBridge app.

For [Send while shooting] and [Mark for upload] in the camera, still images are uploaded at an image size of up to 2 megapixels. To upload at their original size, use [Download pictures] in the SnapBridge app.

Cannot perform remote photography from a smart device that is connected with the SnapBridge app.

- You cannot perform remote photography when there is no free space in the internal memory or memory card. Delete unnecessary images or insert a memory card with sufficient free space.
- You may not be able to perform remote photography while the camera is being operated.

Communication quality is poor or image upload speed is extremely slow when using a Wi-Fi connection with the SnapBridge app.

In the camera settings menu → [Network menu (page 130)] → [Wi-Fi] → [Network settings] → [Channel], try changing the channel.

Error messages

Check the following if an error message is displayed.

If you cannot find a relevant entry, also check "€Troubleshooting (page 173)".

Battery temperature is elevated. The camera will turn off. The camera will turn off to prevent overheating.

The camera turns off automatically. Wait until the camera or battery temperature has cooled before resuming use.

Memory card is write protected.

The write-protect switch is locked. Unlock it.

This card cannot be used. This card cannot be read.

An error occurred while accessing the memory card.

- · Use an approved memory card.
- ◆Memory cards that can be used (page 34)
- · Check that the terminals are clean.
- · Confirm that the memory card is correctly inserted.
 - Inserting the battery and memory card (page 33)

Card is not formatted. Format card?

The memory card has not been formatted for use in the camera.

Formatting deletes all data saved on the memory card. If you need to keep copies of any images, make sure to press flexible button 4 (X [No]) and save the copies to a computer or other medium before formatting the memory card. Press flexible button 3 (O [Yes]) to format the memory card.

Memory cards (page 192)

Out of memory.

Delete images or insert a new memory card.

Image cannot be saved.

- · An error occurred while saving the image. Insert a new memory card or format the memory card or internal memory.
 - ⇒Format card (page 141), ⇒Format memory (page 142)



- The camera has run out of file numbers. Insert a new memory card or format the memory card or internal memory.
 - ⇒Format card (page 141), ⇒Format memory (page 142)
- The image cannot be registered to the [Welcome screen].
- There is insufficient space to save the copy. Delete images from the destination.

No further pictures can be graded.

Album is full. No further pictures can be added.

999 images have already been graded or added to favorites. Remove some grades or remove some images from favorites.

Changing or removing grades from individual images (page 105).
Remove all grades (page 106), Removing favorites from individual images (page 109), Removing all favorites from images (page 109)

Image cannot be modified.

Check that the images can be edited.

Restrictions on image editing (page 88), Cannot edit images. (page 179)

Cannot record movie.

A time-out error occurred while saving the movie on the memory card. Select a memory card with a faster write speed.

♦ Memory cards that can be used (page 34), ♦ Maximum movie recording time. (page 124)

Memory contains no images.

There are no images in the internal memory or on the memory card.

- Remove the memory card to play back images in the internal memory.
- To copy the images saved in the camera's internal memory to the memory card. use [Copy (page 119)].

File contains no image data.

The file was not created or edited with this camera. The file cannot be viewed on this camera. View the file using a computer or the device used to create or edit this file.

All images are hidden.

There are no images available for a slide show, etc.

Turn the camera off and then on again.

An error occurred in lens operation. If you turn the camera off and then on again, lens operation will return to normal.



The camera is on but does not respond. (page 173)

If the error persists even after turning the camera off and then on again, contact your retailer or Nikon-authorized service representative.

Communications error

An error occurred while communicating with the printer. Turn the camera off and reconnect the USB cable.

Printing images with a printer (page 155)

System error

An error occurred in the camera's internal circuitry. Turn the camera off, remove and reinsert the battery, and turn the camera on.

The camera is on but does not respond. (page 173)

If the error persists, contact your retailer or Nikon-authorized service representative.

Printer error: check printer status.

After solving the problem, press flexible button 3 (**O** [**Resume**]) to resume printing. See the documentation provided with your printer for further guidance and information.

Printer error: check paper.

Load the specified size of paper and press flexible button 3 (**O** [**Resume**]) to resume printing.

See the documentation provided with your printer for further guidance and information.

Printer error: paper jam.

Remove the jammed paper and press flexible button 3 (**O** [**Resume**]) to resume printing.

See the documentation provided with your printer for further guidance and information.

Printer error: out of paper.

Load the specified size of paper and press flexible button 3 ($\pmb{\mathsf{O}}$ [$\pmb{\mathsf{Resume}}$]) to resume printing.

See the documentation provided with your printer for further guidance and information

Printer error: check ink.

There is a problem with the printer's ink. Check the ink and press flexible button 3 (O [Resume]) to resume printing.

See the documentation provided with your printer for further guidance and information

Printer error: out of ink.

Replace the ink cartridge and press flexible button 3 (O [Resume]) to resume printing.

See the documentation provided with your printer for further guidance and information

Printer error: file corrupt.

There is a problem with the image file to be printed. Press flexible button 4 (X [Cancel]) to cancel printing.

Technical notes

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Notes about wireless communication functions

For precautions about wireless communications in your country of purchase, please refer to the manual included with the camera.



Caring for the product

Observe the precautions described below in addition to the warnings in "€For your safety (page 11)" and "€
(Important > Notes about shockproof, waterproof, and dustproof performance and condensation (page 15)" when using or storing the device

The camera

• Do not apply strong impact to the camera

The product may malfunction if subjected to strong shock or vibration. In addition, do not touch or apply force to the lens.

• 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. Doing so could result in loss of data or camera malfunction.

• 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 the image sensor to deteriorate or produce a white blur effect in photographs.

Turn the product off before removing or disconnecting the power source or memory card

Do not remove the battery while the product is on, or while images are being saved or deleted. Forcibly cutting power in these circumstances could result in loss of data or in damage to the memory card or internal circuitry.

Notes about the monitor

- Monitors (including 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.



• Do not apply pressure to the monitor, as this could cause damage or malfunction. 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.

The battery

Precautions for use

- · Note that the battery may become hot after use.
- Do not use the battery at ambient temperatures below 0°C (32°F) or above 40°C (104°F) as this could cause damage or malfunction.
- If you notice any abnormalities such as excessive heat, smoke, or an unusual smell coming from the battery, immediately discontinue use and consult your retailer or Nikon-authorized service representative.
- After removing the battery from the camera or optional battery charger, put the battery in a plastic bag, etc. in order to insulate it.

Charging the battery

Check the battery level before using the camera and replace or charge the battery if necessary.

- Charge the battery indoors with an ambient temperature of 5°C to 35°C (41°F to 95°F) before use
- A high battery temperature may prevent the battery from charging properly or completely, and may reduce battery performance. Note that the battery may become hot after use; wait for the battery to cool before charging. When charging the battery inserted into this camera using the Charging AC Adapter or a computer, the battery is not charged at battery temperatures below 5°C (41°F) or above 55°C (131°F).
- When the battery temperature is between 45°C-55°C (113°F-131°F), the chargeable capacity may decrease.
- Do not continue charging once the battery is fully charged as this will result in reduced battery performance.
- The battery temperature may increase during charging. However, this is not a malfunction

Carrying spare batteries

Whenever possible, carry fully charged spare batteries when taking pictures on important occasions.

Using the battery when cold

On cold days, the capacity of batteries tends to decrease.

If an exhausted battery is used at a low temperature, the camera may not turn on. Keep spare batteries in a warm place and exchange as necessary. Once warmed, a cold battery may recover some of its charge.







Battery terminals

Dirt on the battery terminals may prevent the camera from functioning. Should the battery terminals become dirty, wipe them off with a clean, dry cloth before use.

• Charging an exhausted battery

Turning the camera on or off while an exhausted battery is inserted in the camera may result in reduced battery life. Charge the exhausted battery before use.

Storing the battery

- Always remove the battery from the camera or optional battery charger when it is
 not being used. Minute amounts of current are drawn from the battery while it is in
 the camera, even when not in use. This may result in excessive battery drain and
 complete loss of function.
- Charging a used battery within six months is recommended. When storing the battery for long periods, recharge it at least once every six months and use the camera until the battery level indicator is

 before returning it to storage.
- Put the battery in a plastic bag, etc. in order to insulate it and store it in a cool place.
 The battery should be stored in a dry 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.

Battery life

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 battery.

• Recycling used batteries

Recycle rechargeable batteries in accord with local regulations, being sure to first insulate the terminals with tape.

The Charging AC Adapter

- The EH-73P/EH-73PCH Charging AC Adapter is for use only with compatible devices. Do not use with another make or model of device.
- Do not use any USB cable other than the UC-E21. Using a USB cable other than the UC-E21 could result in overheating, fire or electric shock.
- Do not, under any circumstances, use another make or model of AC adapter other than the EH-73P/EH-73PCH Charging AC Adapter, and do not use a commercially available USB-AC adapter or a battery charger for a mobile phone. Failure to observe this precaution could result in overheating or in damage to the camera.
- The EH-73P/EH-73PCH 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.

Memory cards

Precautions for use

- Use only Secure Digital memory cards.
 Memory cards that can be used (page 34)
- Be sure to follow the precautions described in the documentation included with the memory card.
- If the write-protect switch of the memory card is locked, you cannot shoot, delete images, or format the memory card.



· Do not put labels or stickers on memory cards.

Formatting

- · 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.
 - Be sure to make copies of any images you wish to keep before formatting the memory card.
- 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 that you
 do not want to delete, press flexible button 4 (X [No]). Copy the necessary data to
 a computer, etc. To start formatting, press flexible button 3 (O [Yes]).
- Do not perform the following during formatting, while data is being written to or deleted from the memory card, or during data transfer to a computer. Failure to observe this precaution could result in the loss of data or in damage to the camera or memory card:
 - Open the battery-chamber/memory card slot cover to remove/insert the battery or memory card.
 - Turn off the camera
 - Disconnect the AC adapter.



Cleaning and storage

Cleaning after using the camera underwater

Follow the procedure below to rinse the camera with fresh water within 60 minutes after using it underwater or at the beach.

1 Keep the battery-chamber/memory card slot cover closed and wash off the camera with fresh water.



- Immerse the camera in a shallow basin filled with fresh water for 10 minutes.
- Immerse the camera in fresh water and shake it sufficiently in the water to remove any foreign substances from the camera.
- When the camera is immersed in the water, a few air bubbles may come out from the water drain holes of the camera such as openings in the microphone or speakers. This is not a malfunction.
- Wipe off water droplets with a soft cloth and dry the camera in a well-ventilated and shady place.
 - · Place the camera on a dry cloth to dry it.
 - Do not dry the camera with hot air from a hair dryer or clothes dryer.
- 3 After making sure that there are no water droplets on the camera, open the battery-chamber/memory card slot cover and use a soft dry cloth to gently wipe off any water or sand remaining on the waterproof packing or inside the camera.
 - If the cover is closed when the inside is wet, this could cause condensation or a malfunction

Cleaning after using the camera in conditions other than underwater

Use a blower to remove any dust or lint that adheres to the lens, monitor, or camera body. To remove fingerprints or other stains that cannot be removed with a blower, gently wipe the parts with a soft dry cloth. If you wipe with too much pressure or with a rough cloth, it may damage the camera or cause a malfunction.

Storage

Remove the battery if the camera will not be used for an extended period. 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.

Do not store the camera in any of the following locations:

- Places that are poorly ventilated or subject to humidity of over 60%
- Places exposed to temperatures above 50°C (122°F) or below –10°C (14°F)
- Places next to equipment that produces strong electromagnetic fields, such as televisions or radios
- For storing the battery, follow the precautions in "The battery (page 190)" in "Caring for the product (page 189)".



File names

Files saved with this camera are assigned file names as follows.



Item	Description		
1 Identifier	Not shown on the screen of the camera.		
	DSCN: Original still images, movies RSCN: Cropped copies SSCN: Small picture copies FSCN: Images created by an image editing function other than crop and small picture XXXA: Messages recorded using [Leave a message] (the first three letters are the same as the image for which the message was recorded) XXXB: Messages recorded using [Leave a reply] (the first three letters are the same as the image for which the message was recorded)		
2 File number	Assigned in ascending order, starting with "0001" and ending with "9999."		
	A new folder is created each time a series of images are captured using [Shoot at intervals], and the images are saved in that folder with file numbers starting with "0001."		
3 Extension	Indicates file format.		
	JPG: Still images MP4: Movies WAV: Messages (File number is the same as the image for which the message was recorded.)		



Accessories

Туре	Product name		
Battery charger	MH-66 Battery Charger It takes about 1 hour and 50 minutes to charge a fully exhausted battery.		
AC adapter	EH-62G AC Adapter ②Connecting the EH-62G AC Adapter (page 196)		

Accessories

- · Accessories are not waterproof.
- · Availability may vary with country or region.
- · See our website or brochures for the latest information.

Connecting the EH-62G AC Adapter

- Open the battery-chamber/memory card slot cover, and remove the battery.
- 2 Fully insert the power connector cable in the power connector slot, and then insert the AC adapter into the battery chamber.



 The battery-chamber/memory card slot cover cannot be closed while using the AC adapter. Do not pull the power connector cable. If the cable is pulled, the connection between the camera and power source is interrupted, and the camera turns off.

Specifications

Nikon COOLPIX W150 Digital Camera

Ту	pe	Compact digital camera	
Number of effective pixels		13.2 million (Image processing may reduce the number of effective pixels.)	
lm	age sensor	4.7×3.5 mm (1/3.1-in. type) CMOS; approx. 14.17 million total pixels	
Lens		NIKKOR lens with 3× optical zoom	
Focal length		4.1–12.3 mm (angle of view equivalent to that of 30–90 mm lens in 35mm [135] format)	
	f/-number	f/3.3–5.9	
	Construction	6 elements in 5 groups	
Digital zoom magnification		Up to 4× (angle of view equivalent to that of approx. 360 mm lens in 35mm [135] format)	
Vil	oration reduction	Electronic VR (movies)	
Mo	otion blur reduction	Electronic VR (still images)	
Autofocus (AF)		Contrast-detect AF	
	Focus range	[W]: Approx. 5 cm (2 in.)—∞, [T]: Approx. 50 cm (1 ft 8 in.)—∞ (Distances measured from center of front surface of the protective glass)	
	Focus-area selection	Center, face detection, target finding AF	
М	onitor	6.7 cm (2.7-in.), approx. 230k-dot, TFT LCD with anti- reflection coating and 5-level brightness adjustment	
	Frame coverage (shooting mode)	Approx. 96% horizontal and vertical (compared to actual picture)	
	Frame coverage (playback mode)	Approx. 100% horizontal and vertical (compared to actual picture)	
Sto	orage		
	Media	Internal memory (approx. 21 MB), SD/SDHC/SDXC memory card	



	File system	DCF and Exif 2.31 compliant		
	File formats	Still images: JPEG Voice messages: WAV Movies: MP4 (Video: H.264/MPEG-4 AVC, Audio: AAC stereo)		
lm	age size			
	Still images	Large (13 M) (4160×3120), Medium (4 M) (2272×1704), Small (2 M) (1600×1200)		
	Movies	Large (1080p) (1920×1080), Small (640) (640×480), Small (old-fashioned) (640×480)		
	Sensitivity (Standard tput sensitivity)	ISO 125–1600		
Ex	posure			
	Metering mode	Matrix, center-weighted (digital zoom less than 2x), spot (digital zoom 2x or more)		
	Exposure control	Programmed auto exposure and exposure compensation (–2 EV, –1 EV, 0 EV, +0.7 EV, +1.5 EV)		
Sh	utter	Mechanical and CMOS electronic shutter		
	Speed	 1/2000–1 s 25 s ([Add light trails] in [Choose a style] is set to [Night sky]) 		
Ар	erture	Electronically-controlled ND filter (–2 AV) selection		
	Range	2 steps (f/3.3 and f/6.6 [W])		
Sel	f-timer	10 s, smile timer5 s (self-portrait timer)		
Fla	sh			
	Range (approx.) (ISO sensitivity: Auto)	[W]: 0.3–3.1 m (1 ft–10 ft) [T]: 0.6–1.7 m (2 ft–5 ft 6 in.)		
	Flash control	TTL auto flash with monitor preflashes		
Int	erface			
	USB connector	Micro-USB connector (Do not use any USB cable other than the included UC-E21 USB Cable.), Hi-Speed USB		
		Supports Direct Print (PictBridge)		



	HDMI output connector	HDMI micro connector (Type D)
Wi	-Fi (Wireless LAN)	
	Standards	IEEE 802.11b/g (standard wireless LAN protocol)
	Operating frequency	2412-2462 MHz (1-11 channels)
	Maximum output power	12.5 dBm (EIRP)
	Authentication	Open system, WPA2-PSK
Blu	ietooth	
	Communication protocols	Bluetooth Specification Version 4.1
	Operating frequency	Bluetooth: 2402–2480 MHz Bluetooth Low Energy: 2402–2480 MHz
	Maximum output power	Bluetooth: 3.5 dBm (EIRP) Bluetooth Low Energy: 3.5 dBm (EIRP)
Po	wer sources	One EN-EL19 Rechargeable Li-ion Battery (included) EH-62G AC Adapter (available separately)
Ch	arging time	Approx. 1 h 40 min (when using EH-73P/EH-73PCH Charging AC Adapter and when no charge remains)
Ba	ttery life ¹	
	Still images	Approx. 220 shots when using EN-EL19
	Movies (actual battery life for recording) ²	Approx. 1 h 35 min when using EN-EL19
Tri	pod socket	0.635 cm (1/4 in., ISO 1222)
Dir	mensions (W \times H \times D)	Approx. $109.5 \times 67.0 \times 38.0$ mm ($4.4 \times 2.7 \times 1.5$ in.) (excluding projections)
We	eight	Approx. 177 g (6.3 oz) (including battery and memory card)
Ор	erating environment	
	Temperature	$-10^{\circ}\text{C} - +40^{\circ}\text{C} (14^{\circ}\text{F}-104^{\circ}\text{F}) \text{ (for land use)}$ $0^{\circ}\text{C}-40^{\circ}\text{C} (32^{\circ}\text{F}-104^{\circ}\text{F}) \text{ (for underwater use)}$
	Humidity	85% or less (no condensation)



Waterproof	JIS/IEC protection class 8 (IPX8) equivalent (under our testing conditions) Capacity to shoot images underwater up to a depth of 10 m (33 ft) and for 60 minutes
Dustproof	JIS/IEC protection class 6 (IP6X) equivalent (under our testing conditions)
Shockproof	Cleared our testing conditions ³ compliant with MIL- STD-810G w/Change 1 Method 516.7-Shock

- All measurements are performed in conformity with Camera and Imaging Products Association (CIPA) standards or guidelines.
- 1 Battery life does not reflect the use of SnapBridge and may vary with the conditions of use, including temperature, the interval between shots, and the length of time that menus and images are displayed.
- Individual movie files cannot exceed 29 minutes in length, even when there is sufficient free space on the memory card for longer recording. The maximum size of a single movie file is 4 GB. If a file exceeds 4 GB even when you record for less than 29 minutes, recording ends.
- 3 Dropped from a height of 180 cm (5 ft 10 in.) onto a surface of 5 cm (2 in.) thick plywood (changes in appearance, such as paint peeling off and deformation of the drop shock portion and waterproof performance are not subject to the test). These tests do not guarantee that the camera will be free from damage or trouble under all conditions.

EN-EL19 Rechargeable Li-ion Battery

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. $31.5 \times 39.5 \times 6 \text{ mm} (1.3 \times 1.6 \times 0.3 \text{ in.})$
Weight	Approx. 14.5 g (0.5 oz)

EH-73P/EH-73PCH Charging AC Adapter

Rated input	AC 100-240 V, 50/60 Hz, MAX 0.14 A
Rated output	DC 5.0 V, 1.0 A, 5.0 W
Operating temperature	0°C-40°C (32°F-104°F)
Average active efficiency	73.77%
No-load power consumption	0.075 W
Dimensions (W × H × D)	Approx. $55 \times 22 \times 54$ mm ($2.2 \times 0.9 \times 2.2$ in.) (excluding plug adapter) For Argentina: Approx. $55 \times 63 \times 59$ mm ($2.2 \times 2.5 \times 2.4$ in.) For India: Approx. $55 \times 63.5 \times 59$ mm For Korea: Approx. $55 \times 67 \times 59$ mm
Weight	Approx. 51 g (1.8 oz) (excluding plug adapter) For Argentina: Approx. 76 g (2.7 oz) For India: Approx. 81 g For Korea: Approx. 73 g

The symbols on this product represent the following:

~ AC, — DC,

Class II equipment (The construction of the product is doubleinsulated.)

- 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
- The sample images displayed on the camera and the images and illustrations in the manual are for illustrative purposes only.

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See https://www.mpegla.com.

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