PowerShot ZOOM

Advanced User Guide

This manual is for PowerShot ZOOM with firmware version 1.1.0 or later installed.

E

CT2-D116-D

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Introduction

Read before you start shooting

To avoid shooting problems and accidents, first read the Safety Instructions and Handling Precautions. Also read this Advanced User Guide carefully to ensure that you use the camera correctly.

Take some test shots, and understand about product liability

After shooting, play images back and check whether they have been properly recorded. If the camera or memory card is faulty and the images cannot be recorded or downloaded to a computer, Canon cannot be held liable for any loss or inconvenience caused.

Copyrights

Unauthorized public use of images captured with the camera that include copyrighted subjects may be prohibited by law. Also be aware that certain public performances, exhibitions, etc. may prohibit photography even for private enjoyment.

Firmware version

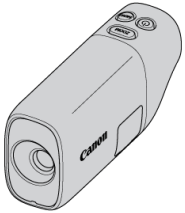
Update the firmware by downloading the latest version from the Canon website. Updating the firmware will automatically turn the camera off.

Connecting other devices
Use the included interface cable or a Canon cable when connecting the camera to a computer or other device. Use of cables that are no longer than 2.5m is recommended.

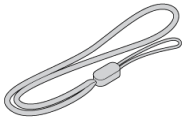
- Package Contents
- Instruction Manuals
- Steps to Use the Camera Immediately
- About This Guide
- Compatible Cards
- Safety Instructions
- Handling Precautions
- Part Names

Package Contents

Before use, make sure the following items are included in the package. If anything is missing, contact your dealer.



Camera



Wrist strap

Interface cable

- A memory card ( ) is not included.
- The battery is built into the camera.
- Be careful not to lose any of these items.

Caution

- The transmission rate with the included interface cable is equivalent to Hi-Speed USB (USB 2.0).

Instruction Manuals

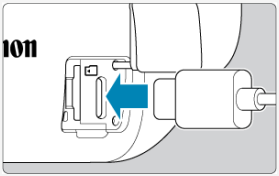
The Instruction Manual, which describes camera features and provides instructions up to turning the camera on, is included with the camera.

- **Advanced User Guide**

  Complete instructions are provided in this Advanced User Guide.
  For the latest Advanced User Guide, refer to the following website.
  https://cam.start.canon/C008/

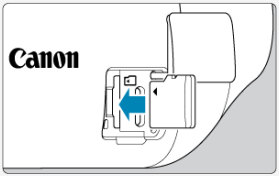
Steps to Use the Camera Immediately

1. **Charge the camera ( ).**

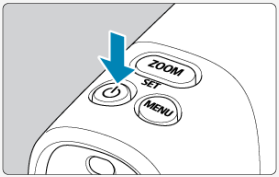


- Charge the camera initially before use ( ).

2. **Insert a card ( ).**

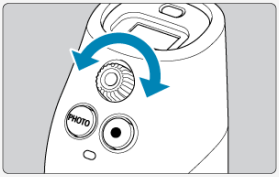


3. **Turn the camera on ( ).**



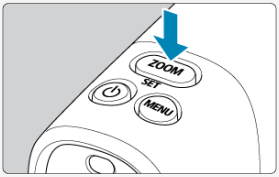
- Press the < > button.

4. Adjust the viewfinder ( ).



- Turn the dioptric adjustment dial until the image in the viewfinder looks the sharpest.

5. Zoom in.



- Each press of the < ZOOM > button switches between three zoom levels.

6. Focus on the subject ( ).

- Look through the viewfinder and center the subject on the screen.
- Press the shutter button halfway, and the camera will focus on the subject.
- To shoot, press the shutter button completely.

7. Review the picture.

- Press the < MENU > button, then select the [▶: **Play**] menu ( ).

About This Guide

Icons in This Guide

Basic Assumptions for Operational Instructions and Sample Photos

Icons in This Guide

< SET >	Indicates the Set button.

- In reference to buttons or setting positions, the guide also uses the same icons or display items found on camera buttons and in the viewfinder.

	Links to pages with related topics.
	Warning to prevent shooting problems.
	Supplemental information.

Basic Assumptions for Operational Instructions and Sample Photos

- Instructions apply to the camera with the power on ( ).
- It is assumed that all menu settings are set to defaults.
- Sample photos in this guide are only for illustration.

Compatible Cards

In this guide, all supported memory cards are simply referred to as “the card.”
The following cards can be used with the camera regardless of capacity. **If the card is new or was previously formatted (initialized) by another camera or computer, format the card with this camera** ( ).

- **microSD / microSDHC / microSDXC memory cards**
  * SD speed class compatible.
  * UHS speed class compatible.
  * UHS-I compatible.

Cards That Can Record Movies

When recording movies, use a card with ample performance (fast enough writing and reading speeds) for the movie recording quality ( ).

Safety Instructions

Be sure to read these instructions in order to operate the product safely.
Follow these instructions to prevent injury or harm to the operator of the product or others.

⚠ WARNING: Denotes the risk of serious injury or death.

- Keep the product out of the reach of young children.

A strap wrapped around a person's neck may result in strangulation.
The parts or provided items of cameras or accessories are dangerous if swallowed. If swallowed, seek immediate medical assistance.

- Use only power sources specified in this Advanced User Guide for use with the product.
- Do not disassemble or modify the product.
- Do not expose the product to strong shocks or vibration.
- Do not touch any exposed internal parts.
- Stop using the product in any case of unusual circumstances such as the presence of smoke or a strange smell.
- Do not use organic solvents such as alcohol, benzine or paint thinner to clean the product.
- Do not get the product wet. Do not insert foreign objects or liquids into the product.
- Do not use the product where flammable gases may be present.

This may cause electric shock, explosion or fire.

- Do not touch the product connected to a power outlet during lightning storms.

This may cause electric shock.

- Observe the following instructions when using a battery charger or AC adapter.
  - Periodically remove any dust buildup from the power plug and power outlet using a dry cloth.
  - Do not plug in or unplug the product with wet hands.
  - Do not use the product if the power plug is not fully inserted into the power outlet.
  - Do not expose the power plug and terminals to dirt or let them come into contact with metallic pins or other metal objects.
  - Do not touch the battery charger or AC adapter connected to a power outlet during lightning storms.
- Do not wrap the product in cloth or other materials when in use or shortly after use when the product is still warm in temperature.
- Do not leave the product connected to a power source for long periods of time.
- Do not charge batteries/battery packs at temperatures outside the range of 5 - 40 °C (41 - 104 °F).

This may cause electric shock, explosion or fire.

- Do not allow the product to maintain contact with the same area of skin for extended periods of time during use.

This may result in low-temperature contact burns, including skin redness and blistering, even if the product does not feel hot.

- Follow any indications to turn off the product in places where its use is forbidden.

Not doing so may cause other equipment to malfunction due to the effect of electromagnetic waves and even result in accidents.

⚠ CAUTION: Follow the cautions below. Otherwise physical injury or property damage may result.

- Do not look through the viewfinder for extended periods of time.

This may induce symptoms similar to motion sickness. In such a case, stop using the product immediately and rest for a while before resuming use.

- Do not leave the product in places exposed to extremely high or low temperatures.

The product may become extremely hot/cold and cause burns or injury when touched.

- Strap is intended for use on the body only. Hanging the strap with any product attached on a hook or other object may damage the product. Also, do not shake the product or expose the product to strong impacts.
- Do not apply strong pressure on the lens or allow an object to hit it.

This may cause injury or damage to the product.

- If any abnormal skin reaction or irritation occurs during or following the use of this product, refrain from further use and get medical advice/attention.
- Do not touch the card immediately after extended use.

The card may be hot, which may cause burns.

- During use, do not touch the terminal or surrounding area for an extended period if the terminal cover is open.

This may cause low-temperature burns.

Handling Precautions

Camera care

- This camera is a precision instrument. Do not drop it or subject it to physical shock.
- The camera is not waterproof and cannot be used underwater. If the camera gets wet, contact a Canon Service Center immediately. Wipe off any water droplets with a clean, dry cloth, and if the camera is exposed to salty air, wipe it off with a clean, well-wrung wet cloth.
- If water gets on the camera, wipe it off with a dry and clean cloth. If dirt, dust, or salt gets on the camera, wipe it off with a clean, well-wrung wet cloth.
- Using the camera in dusty or dirty locations may lead to damage.
- Cleaning the camera after use is recommended. Allowing dirt, dust, water, or salt to remain on the camera may cause a malfunction.
- Never leave the camera near anything having a strong magnetic field such as a magnet or electric motor. Also, avoid using or leaving the camera near anything emitting strong radio waves, such as a large antenna. Strong magnetic fields can cause camera malfunction or destroy image data.
- Do not leave the camera in excessive heat, such as in a car in direct sunlight. High temperatures can cause the camera to malfunction.
- The camera contains precision electronic circuitry. Never attempt to disassemble the camera yourself.
- If the camera is suddenly brought in from the cold into a warm room, condensation may form on the camera and internal parts. To prevent condensation, first put the camera in a sealed plastic bag and let it adjust to the warmer temperature before taking it out of the bag.
- If condensation forms on the camera, to avoid damage, do not use the camera or remove the card. Turn the camera off and wait until the moisture has fully evaporated before resuming use. Even after the camera is completely dry, if it is still internally cold, do not remove the card until the camera has adjusted to the ambient temperature.
- If the camera will not be used for an extended period, store it in a cool, dry, well-ventilated location. Even while the camera is in storage, press the shutter button a few times once in a while to check that the camera is still working.
- Avoid storing the camera where there are chemicals that result in rust and corrosion such as in a chemical lab.
- If the camera has not been used for an extended period, test all its functions before using it. If you have not used the camera for some time or if there is an important shoot such as a foreign trip coming up, have the camera checked by your nearest Canon Service Center or check the camera yourself and make sure it is working properly.
- The camera may become hot after repeated continuous shooting or still photo/movie shooting over an extended period. This is not a malfunction.
- If there is a bright light source inside or outside the image area, ghosting may occur.

Viewfinder

- Although the viewfinder is produced under extremely high-precision manufacturing conditions and more than 99.99% of the pixels meet design specifications, 0.01% or fewer pixels may be defective or appear as red or black dots. This does not indicate damage. They do not affect the images recorded.

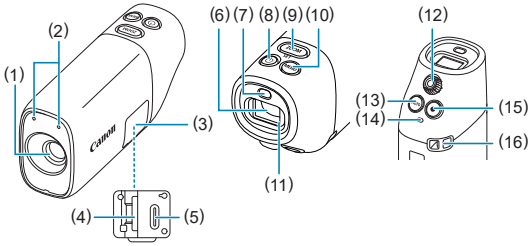
Cards

To protect the card and its recorded data, note the following:

- Do not drop, bend, or wet the card. Do not subject it to excessive force, physical shock, or vibration.
- Do not touch the card's electronic contacts with your fingers or anything metallic.
- Do not affix any stickers, etc. on the card.
- Do not store or use the card near anything that has a strong magnetic field, such as a television, speakers, or magnets. Also avoid places prone to having static electricity.
- Do not leave the card in direct sunlight or near a heat source.
- Store the card in a case.
- Do not store the card in hot, dusty, or humid locations.

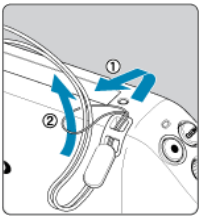
Part Names

Attaching the Strap



(1)	Lens
(2)	Microphone
(3)	Card/terminal cover
(4)	< > Card slot
(5)	< USB > Digital terminal
(6)	Electronic viewfinder
(7)	Viewfinder sensor
(8)	< > Power button
(9)	< ZOOM / SET > Focal length switching/Set button
(10)	< MENU > Menu button
(11)	Viewfinder eyepiece
(12)	Dioptric adjustment dial
(13)	< PHOTO > Shutter/Up/Left button
(14)	Indicator lamp
(15)	< ● > Movie shooting/Down/Right button
(16)	Strap mount

Attaching the Strap



Attach the included wrist strap to the camera strap mount.

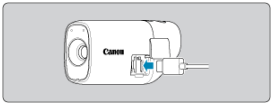
Preparation and Basic Operations

This chapter describes preparatory steps before you start shooting and the basic camera operations.

- Charging the Camera
- Inserting/Removing Cards
- Turning on the Power
- Basic Operations
- Menu Operations and Settings

Charging the Camera

1. **Charge the camera.**



- Charge the camera by connecting the camera's Digital terminal to a power adapter (sold separately).
- After charging begins, the indicator lamp turns orange.
- The indicator lamp goes off after charging is finished.

- **Charging the camera when it is fully depleted takes approx. 1 hr. and 50 min. at room temperature (23°C/73°F).** The time required to charge the battery will vary greatly depending on the ambient temperature and the battery's remaining capacity.
- For safety, charging in low temperatures (5–10°C/41–50°F) takes longer.
- The camera can also be used while plugged in for charging.

Caution

- Charging and powering may stop if the camera becomes hot.

Note

- For charging and powering the camera, an optional USB Power Adapter PD-E1 is recommended. Some commercially available power adapters (USB Type-C Power Delivery, with an output voltage/current of at least 9V DC/2A) have also been confirmed to work with the camera. For details, check the Canon website.

- **The camera is not fully charged when you receive it.**
  Charge the battery before use.

- **Charge the camera on the day you will use it or the day before.**
  The built-in battery will gradually lose its charge, even if it is not used.

- **Use the camera where the temperature is 0–35°C (32–95°F).**
  For optimal camera performance, use where the ambient temperature is 0–35°C (32–95°F). Lower temperatures may temporarily reduce the performance and life of the built-in battery. Higher temperatures may prevent continuous shooting if the camera becomes hot.

Inserting/Removing Cards

Insertion

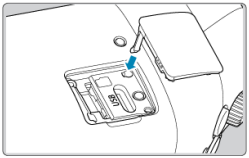
Removal

Caution

- Use of memory cards other than microSD / microSDHC / microSDXC cards is not supported.

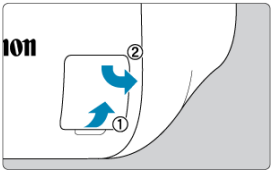
Note

- The number of shots available varies depending on the card's free space.
- Reattach the card/terminal cover as shown below if it comes off.



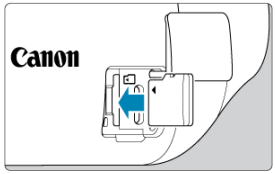
Insertion

1. **Open the cover.**



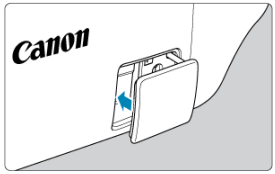
- After opening the card/terminal cover, flip it over to the right.

2. **Insert the card.**



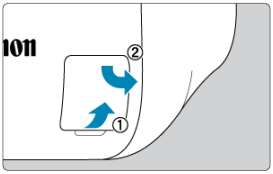
- Insert the card with the label facing you. **Inserting cards the wrong way may damage the camera.**

3. **Close the cover.**



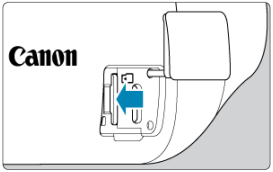
Removal

1. **Open the cover.**



- Turn the camera off ( ).
- **After making sure the indicator lamp is off, open the cover and flip it over to the right.**

2. **Remove the card.**



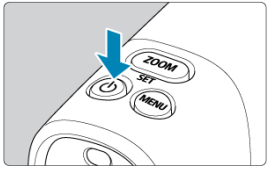
- Press the card in to eject it.
- Pull the card straight out, then close the cover.

Caution

- **A lit indicator lamp indicates that the camera is writing to, reading from, erasing from, or transferring data to the card. Do not open the card/terminal cover at this time. To avoid image data corruption and damage to cards or the camera, never do any of the following while the indicator lamp is lit.**
  - **Removing the card**
  - **Shaking or striking the camera**
- If a card-related error message appears in the viewfinder, remove and reinsert the card. If the error persists, use a different card.
  If you can transfer images on the card to a computer, transfer all the images and then format the card with the camera (). The card may then return to normal.

Turning on the Power

- Setting the Date, Time, and Time Zone
- Changing the Interface Language



- To turn the camera on, press the < ⏻ > button. Press it again to turn the camera off.

Setting the Date, Time, and Time Zone

If the date/time/zone screen appears when you turn the camera on, see Date/Time/Zone.

Changing the Interface Language

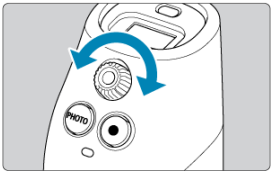
To change the interface language, see Language.

Basic Operations

- Adjusting the Viewfinder
- Holding the Camera
- Zoom Button
- Shutter Button

Adjusting the Viewfinder

1. **Adjust the dioptric adjustment dial.**

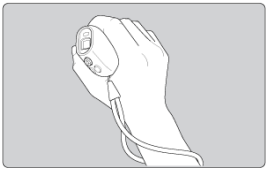


- Look through the viewfinder and turn the dioptric adjustment dial until the image appears sharp.

Holding the Camera

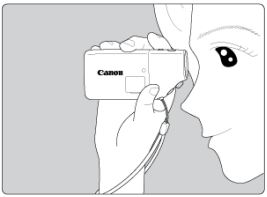
The camera can be held in a variety of ways to suit how you will use it.

Wearing the Strap



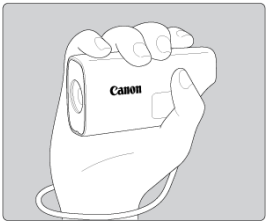
- Place the strap around your wrist before you hold the camera.
- After the strap is around your wrist, keep it between your thumb and index finger in use.

Holding the camera for viewing



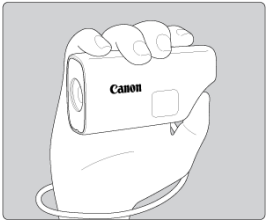
- Gently hold the front of the camera.

Holding the camera securely for viewing



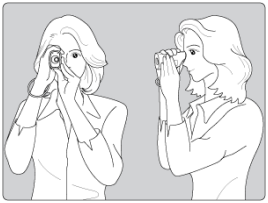
- Securely hold the camera with your fingers around it.
- Rest your index finger lightly on the < ZOOM > button.

Holding the camera for shooting



- Securely hold the camera with your fingers around it.
- Rest your index finger lightly on the < ZOOM > button.
- Use your thumb to control the < PHOTO >/< ● > button.

Holding the camera securely for shooting

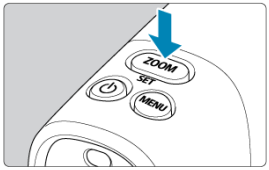


- Securely hold the camera with your fingers around it.
- With your other hand, support the camera from below.
- Rest your index finger lightly on the < ZOOM > button.
- Use your thumb to control the < PHOTO >/< ● > button.
- Rest your arms and elbows lightly against the front of your body.
- Hold the camera near your face and look through the viewfinder.

Note

- You can hold the camera in either hand and look through the viewfinder with either eye.

Zoom Button

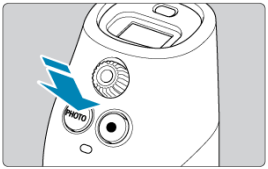


- Each press of the < ZOOM > button switches between three zoom levels.

Shutter Button

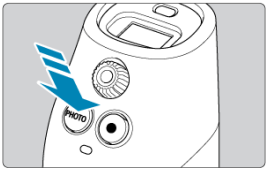
The shutter button has two steps. You can press the shutter button halfway. Then you can further press the shutter button completely.

Pressing halfway



Activates autofocusing.

Pressing completely (only for still photo shooting)



This action shoots.

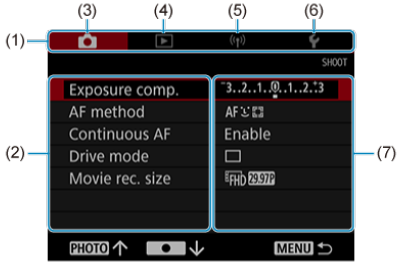
Preventing camera shake

- Hold the camera still, as shown in Holding the Camera.
- In still photo shooting, press the shutter button halfway to focus, then slowly press the shutter button completely.

Menu Operations and Settings

- Menu Screen
- Menu Setting Procedure

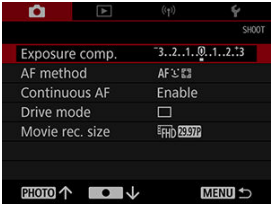
Menu Screen



(1)	Main tabs
(2)	Menu items
(3)	: Shooting
(4)	: Playback
(5)	: Wireless communication
(6)	: Set-up
(7)	Menu settings

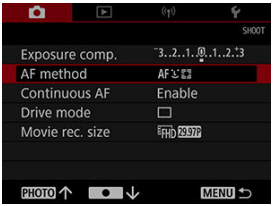
Menu Setting Procedure

1. **Display the menu screen.**



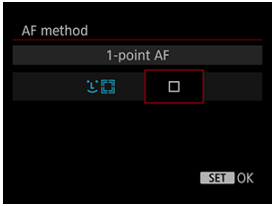
- Press the < MENU > button to display the menu screen.

2. **Select an item.**



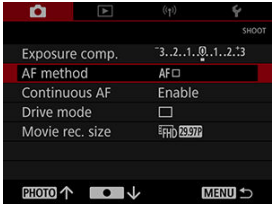
- Press the < PHOTO > or < ● > button to select an item, then press < SET >.

3. **Select an option.**



- Press the < PHOTO > or < ● > button to select an option.
- The current setting is indicated in blue.

4. **Set the option.**



- Press < SET > to set it.

5. **Exit the setting.**

- Press the < MENU > button.

Note

- The description of menu functions hereafter assumes that you have pressed the < MENU > button to display the menu screen.
- To cancel the operation, press the < MENU > button.

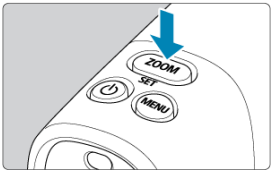
Shooting and Recording

This chapter describes shooting and introduces menu settings on the shooting ([📷]) tab.

- Using the Camera as a Monocular
- Still Photo Shooting
- Movie Recording
- Exposure Compensation
- Selecting the AF Method
- Continuous AF
- Drive Mode
- Movie Recording Size

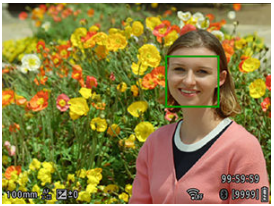
Using the Camera as a Monocular

1. **Zoom in.**



- Each press of the < ZOOM > button switches between three zoom levels.

2. **Focus on the subject.**

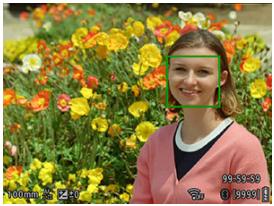


- Press the shutter button halfway to focus.

Note

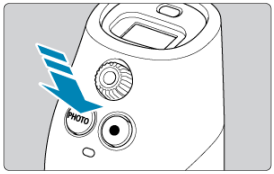
- The camera turns off automatically if left idle for the time set in [: **Viewfinder off**] ( ).

1. **Focus on the subject.**



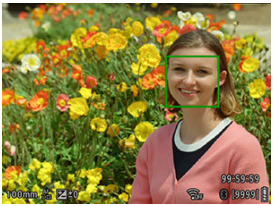
- Press the shutter button halfway to focus.
- A green frame appears once the subject is in focus.
- A yellow frame is displayed when the camera cannot focus on subjects.

2. **Take the picture.**



- Press the shutter button completely.
- To review your shots, use the [▶: **Play**] menu ( ).

1. **Focus on the subject.**

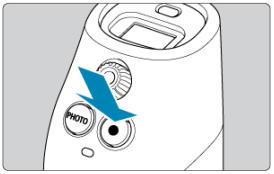


- Press the shutter button halfway to focus.
- A green frame appears once the subject is in focus.
- A yellow frame is displayed when the camera cannot focus on subjects.

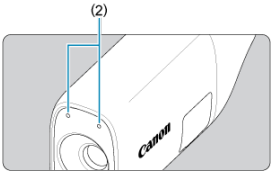
Caution

- If you perform camera operations during movie recording, the camera's built-in microphone may also record sounds of the camera operations.

2. Record the movie.



- Press the < ● > button to start movie recording.
- While the movie is being recorded, the [●**REC**] icon (1) will be displayed in the upper right of the screen.



- Sound is recorded by the microphones (2).
- To stop recording the movie, press the < ● > button again.
- To review your movies, use the [▶: **Play**] menu ( ).

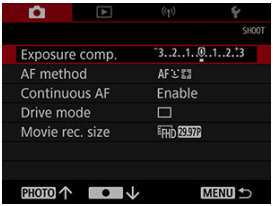
Note

- Audio is recorded in stereo.

Exposure Compensation

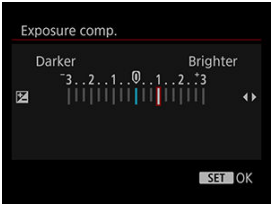
By setting exposure compensation toward the positive or negative side, you can brighten or darken images relative to the standard exposure determined by the camera.
You can set exposure compensation up to ±3 stops, in 1/3-stop increments.

1. **Select [: Exposure comp.].**

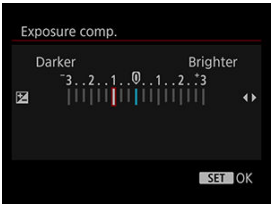


2. Set the amount of compensation.

Increased exposure, to brighten images



Decreased exposure, to darken images



- Press the < PHOTO > or < ● > button to select the compensation amount, then press < SET >.

3. Take the picture.

- To cancel exposure compensation, return the exposure level to ±0.

Note

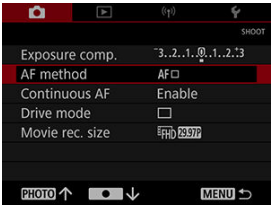
- The exposure compensation amount will remain in effect even after you turn off the camera.

Selecting the AF Method

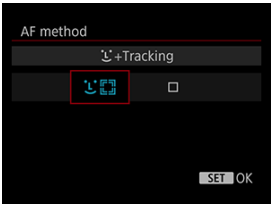
- (Face)+Tracking:
- 1-point AF:
- AF Shooting Tips
- Shooting Conditions That Make Focusing Difficult

You can change the method of autofocusing to suit the subject and scene you are shooting.

1. **Select [: AF method].**

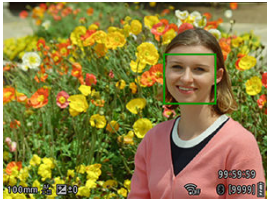


2. **Select the AF method.**



(Face)+Tracking:

The camera detects and focuses on people's faces.
When no face is detected, focusing areas are determined from a variety of conditions.



Caution

- An object other than a human face may be detected as a face.
- Face detection will not work if the face is very small or large in the picture, too bright or too dark, or partially hidden.
- AF may not detect subjects or people's faces at the edges of the screen. Recompose the shot to center the subject or bring the subject closer to the center.

1-point AF: □

The camera focuses in a single AF point in the center.

AF Shooting Tips

- Even when focus is achieved, pressing the shutter button halfway will focus again.
- Image brightness may change during autofocusing.
- It may take some time to focus, depending on the subject and shooting conditions.
- If the light source changes as you shoot, the screen may flicker, and focusing may be difficult. In this case, restart the camera and resume shooting with AF under the light source you will use.
- For peripheral subjects that are slightly out of focus, try to focus again with the subject centered, then recompose the shot and shoot.

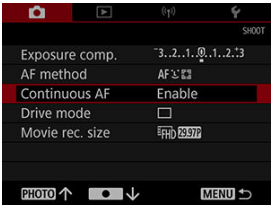
Shooting Conditions That Make Focusing Difficult

- Subjects with low contrast, such as a blue sky or flat surfaces in solid colors, or other cases when highlight or shadow details are clipped.
- Subjects in low light.
- Stripes and other patterns where there is contrast only in the horizontal direction.
- Subjects with repetitive patterns (Example: Skyscraper windows, computer keyboards, etc.).
- Fine lines and subject outlines.
- Under light sources with constantly changing brightness, colors, or patterns.
- Night scenes or points of light.
- The image flickers under fluorescent or LED lighting.
- Extremely small subjects.
- Subjects at the edge of the screen.
- Strongly backlit or reflective subjects (Example: Car with a highly reflective surfaces, etc.).
- Near and distant subjects covered by an AF point (Example: Animal in a cage, etc.).
- Subjects that keep moving within the AF point and will not stay still due to camera shake or subject blur.
- Performing AF when the subject is very far out of focus.
- Noise (dots of light, banding, etc.) appears on the screen during AF.

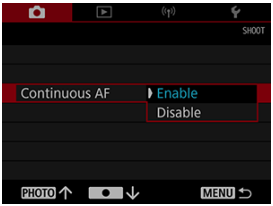
Continuous AF

This function keeps subjects generally in focus.

1. **Select [: Continuous AF].**



2. **Select [Enable].**



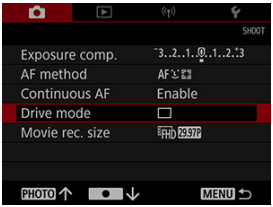
Caution

- More battery power is consumed when set to [**Enable**], because the lens is driven continuously.

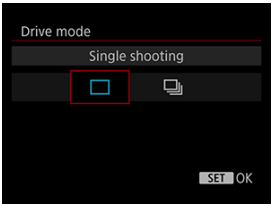
Drive Mode

You can select the drive mode suiting the scene or subject.

1. **Select [: Drive mode].**



2. **Set the drive mode.**



- **[] Single shooting**
  When you hold down the shutter button completely, only one shot will be taken.

- **[] Continuous shooting**
  When you hold down the shutter button completely, you can shoot continuously at **max. approx. 10 shots/sec.** while you keep holding it down.

Caution

- The continuous shooting speed may decrease depending on factors such as shutter speed, subject conditions, and brightness.
- When internal memory becomes full during continuous shooting, the continuous shooting speed may drop off because shooting will be temporarily disabled.

Movie Recording Size

Movie Recording Size

Cards That Can Record Movies

Movie Recording Time Limit

The frame rate can be set in [: **Movie rec. size**].

Movie Recording Size

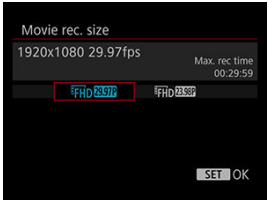


Image size

Image Size		Aspect Ratio
FHD	1920×1080	16:9

Frame rate (fps: frames per second)

- [29.97P] **29.97fps**
  For areas using the NTSC TV system, such as North America, Japan, South Korea, and Mexico.
- [25.00P] **25.00fps**
  For areas using the PAL TV system, such as Europe, Russia, China, and Australia.
- [23.98P] **23.98fps**
  Mainly for motion pictures. Available when [: **Video system**] is set to [**For NTSC**].

Cards That Can Record Movies

See Card performance requirements (movie recording) for details on cards that can record at each level of movie recording quality.
Test cards by recording a few movies to make sure they can record correctly.

Caution

- If you use a slow-writing card when recording movies, the movie may not be recorded properly. Also, if you play back a movie on a card with a slow reading speed, the movie may not be played back properly.
- When recording movies, use high-performance cards with a writing speed sufficiently higher than the bit rate.
- When movies cannot be recorded correctly, format the card and try again. If formatting the card does not resolve the problem, refer to the card manufacturer's website, etc.

Movie Recording Time Limit

The maximum recording time per movie is 9 min. 59 sec. Once 9 min. 59 sec. is reached, recording automatically stops. You can start recording a movie again by pressing the < ● > button (which records the movie as a new file).

Playback

This chapter covers topics related to playback—playing back captured still photos and movies—and introduces menu settings on the Playback ([▶]) tab.

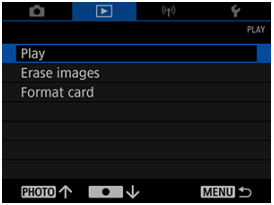
Caution

- Normal display or selection on this camera may not be possible for images captured on other cameras, or images from this camera that have been edited or renamed on a computer.

- Image Playback
- Movie Playback
- Erasing Images
- Formatting

Image Playback

1. **Switch to playback.**



- Select [▶]: **Play**].
- The last image captured or played back is displayed.

2. **Browse images.**

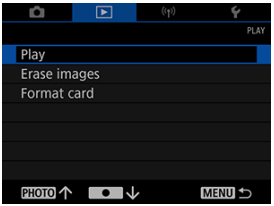
- To play back images starting with your most recent shot, press the < PHOTO > button.
- To play back images starting with the first captured image, press the < ● > button.

3. **Exit image playback.**

- Press the < MENU > button to exit image playback.

Movie Playback

1. **Switch to playback.**



- Select [▶: **Play**].

2. **Select a movie.**

- Press the < PHOTO > or < ● > button to select a movie to play.
- Images with < SET > displayed in the upper left are movies.

3. **Press < SET >.**

4. **Press < SET > to play the movie.**

- The movie will start playing back.
- You can pause playback and display the movie playback panel by pressing < SET >. Press it again to resume playback.

Movie playback panel

Item	Playback Operations
▶ **Playback**	Each press of < SET > switches between playback and pausing playback.
Skip backward	Skips backward approx. 4 sec. each time you press < SET >.
Previous frame	Displays the previous frame each time you press < SET >. Holding < SET > down rewinds the movie.
Next frame	Plays the movie frame-by-frame each time you press < SET >. Holding < SET > down fast-forwards the movie.
Skip forward	Skips forward approx. 4 sec. each time you press < SET >.
	Playback position
mm' ss"	Playback time, with minutes (labeled ') followed by seconds (")
MENU	Press the < MENU > button to return to image playback.

Caution

- Movie playback may stop if the card's read speed is too slow or movie files have corrupted frames.
- High internal camera temperature may prevent movie playback. Movie playback may also stop if the camera becomes hot during playback.
- Sound is not audible when movies are played on this camera. To watch movies with audio playback, use a movie playback device.

Erasing Images

Selecting ([√]) Multiple Images to Erase Together

Erasing All Images on a Card

Unneeded images to erase can be selected individually or all at once.

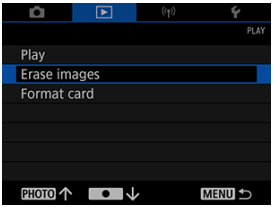
Caution

- **Once an image is erased, it cannot be recovered. Make sure you no longer need the image before erasing it.**

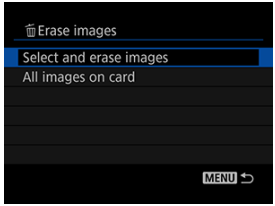
Selecting ([√]) Multiple Images to Erase Together

By adding checkmarks to the images to erase, you can erase all those images at once.

1. **Select [▶: Erase images].**



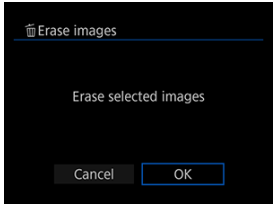
2. **Select [Select and erase images].**



3. **Select an image.**

- Press the < PHOTO > or < ● > button to select an image to erase, then press < SET >.
- To select another image to erase, repeat step 3.

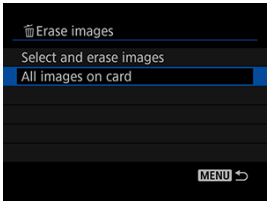
4. **Erase the images.**



- Press the < MENU > button, then press [**OK**].

Erasing All Images on a Card

You can erase all the images on a card at once.



Formatting

Use this camera to format (initialize) the card in the following cases.

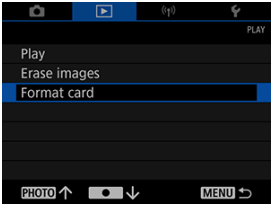
- The card is new.
- The card was formatted by a different camera or a computer.
- The card is full of images or data.
- A card-related error is displayed ( ).

Caution

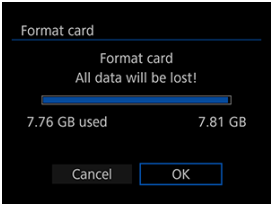
- **Formatting a card will erase all data on it. Before formatting, check what is on the card. If necessary, transfer the images and data to a computer, etc. before formatting the card.**

---

1. **Select [▶: Format card].**



2. **Format the card.**



- Select [**OK**].

Card file formats

microSD cards will be formatted in FAT12/16, microSDHC cards in FAT32, and microSDXC in exFAT.

Caution

- It may not be possible to use microSDXC cards formatted with this camera in other cameras. Also note that exFAT-formatted cards may not be recognized by some computer operating systems or card readers.
- Formatting or erasing data on a card does not completely erase the data. Be aware of this when selling or discarding the card. When disposing of cards, take steps to protect personal information if necessary, as by physically destroying cards.

Note

- The card capacity displayed on the card format screen may be smaller than the capacity indicated on the card.
- This device incorporates exFAT technology licensed from Microsoft.

Wireless Features

This chapter describes how communication functions are used to connect the camera to a smartphone or tablet (hereafter, collectively referred to as “smartphones”) over Wi-Fi and send images, control the camera remotely, or perform other operations.

Caution

- Over Wi-Fi, this camera can only connect to smartphones.

Caution

Important

- Note that Canon cannot be held liable for any loss or damage caused by erroneous network settings when using the camera. In addition, Canon cannot be held liable for any other loss or damage caused by use of the camera.
  Take security measures that you deem necessary when using a network, at your discretion. Canon cannot be held liable for any loss or damage caused by unauthorized access or other security breaches.

- What You Can Do Wirelessly
- Camera Connect Communication from Smartphones
- Ending Connections or Reconnecting
- Wi-Fi Settings
- Bluetooth Settings
- GPS Features
- Troubleshooting
- Clearing Wireless Settings

What You Can Do Wirelessly

- You can use a smartphone to browse images on the camera and save them to the smartphone.
- You can control the camera remotely from a smartphone.
- You can use smartphone GPS features to geotag images.

Camera Connect Communication from Smartphones

- Installing Camera Connect on Smartphones
- Connecting to a Bluetooth-compatible Smartphone via Wi-Fi
- Camera Connect Functions
- Canceling the Pairing
- Wi-Fi Connection Without Using Bluetooth
- General Precautions on Camera Connect Communication from Smartphones

Installing Camera Connect on Smartphones

The dedicated app Camera Connect (free of charge) must be installed on the smartphone on which Android or iOS is installed.

- Camera Connect can be installed from Google Play or App Store. You can also access Google Play or the App Store from a QR code in the Instruction Manual included with the camera.

Note

- For the operating system versions supported by Camera Connect, refer to the download site of Camera Connect.
- Sample screens and other details in this guide may not match the actual user interface elements after camera firmware updates or updates to Camera Connect, Android, or iOS.

Connecting to a Bluetooth-compatible Smartphone via Wi-Fi

Follow these steps to establish a Wi-Fi connection between the camera and a smartphone supporting Bluetooth low energy technology (hereafter, “Bluetooth”) and then save camera images to the smartphone with Camera Connect.

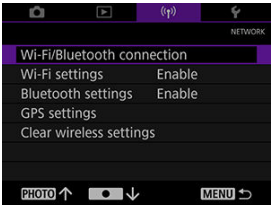
Steps on the smartphone (1)

Turn on Bluetooth and Wi-Fi from the smartphone settings screen. Note that pairing with the camera is not possible from the smartphone’s Bluetooth settings screen.

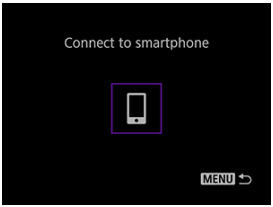
Steps on the camera (1)

To reconnect to a smartphone you have connected to before, you can simply turn on the camera and start Camera Connect.

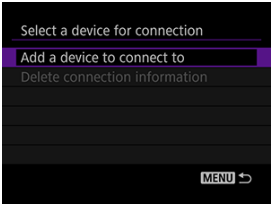
1. **Select [: Wi-Fi/Bluetooth connection].**



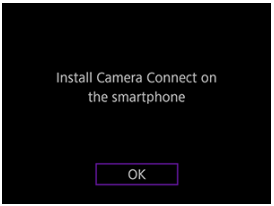
2. **Select [Connect to smartphone].**



3. **Select [Add a device to connect to].**

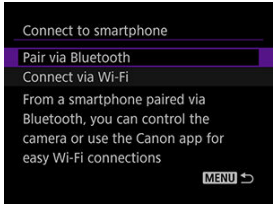


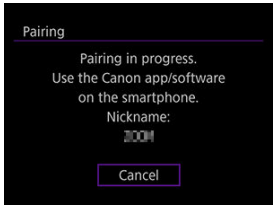
4. **Press < SET >.**



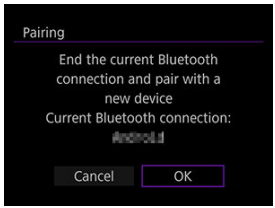
- Install Camera Connect on the smartphone and select [**OK**].

5. **Select [Pair via Bluetooth].**





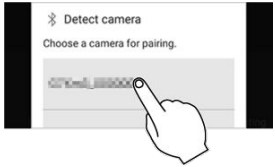
- To pair with a different smartphone, select [**OK**] on the following screen.



Steps on the smartphone (2)

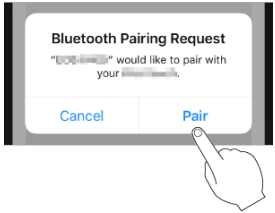
6. **Start Camera Connect.**

7. **Tap the camera for pairing.**



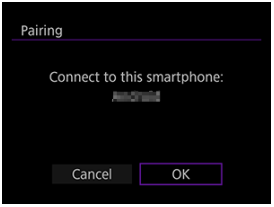
- In Android, go to Steps on the camera (2).

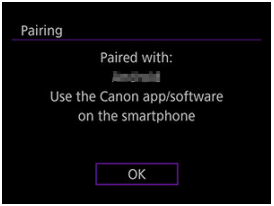
8. **Tap [Pair] (iOS only).**



Steps on the camera (2)

9. **Select [OK].**

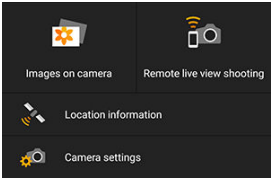




Steps on the smartphone (3)

10. **After [Pairing complete] is displayed, tap [OK].**

11. **In Camera Connect, tap [Images on camera].**



- Tap [**Join**] when a message is displayed to confirm camera connection.
- Images on the camera are listed on the smartphone when the Wi-Fi connection is established. On the camera, [**Wi-Fi on**] is displayed.

12. **Choose images and save them to the smartphone.**

Caution

- Bluetooth connections consume camera battery power.

Camera Connect Functions

Images on camera

- Images can be browsed or deleted.
- Images can be saved on a smartphone.

Remote live view shooting

- Enables remote shooting as you view a live image on the smartphone.

Location information

- Not supported on this camera. For details on geotagging images, see GPS Settings.

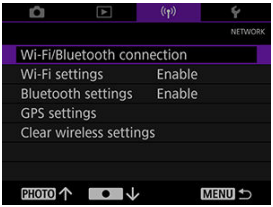
Camera settings

- Camera settings can be changed.

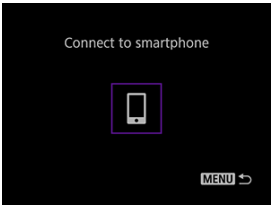
Canceling the Pairing

Cancel pairing with a smartphone as follows.

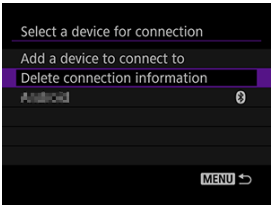
1. **Select [: Wi-Fi/Bluetooth connection].**



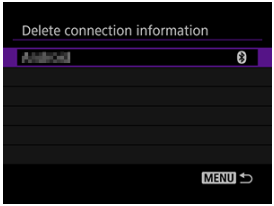
2. **Select [Connect to smartphone].**



3. **Select [Delete connection information].**

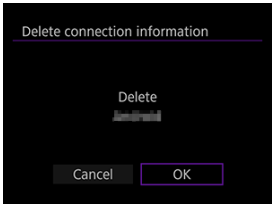


4. **Select the smartphone to cancel paring with.**



- Smartphones currently paired with the camera are labeled [ ].

5. **Select [OK].**



6. **Clear the camera information on the smartphone.**

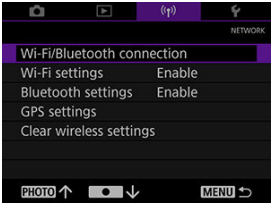
- In the smartphone's Bluetooth setting menu, clear the camera information registered on the smartphone.

Wi-Fi Connection Without Using Bluetooth

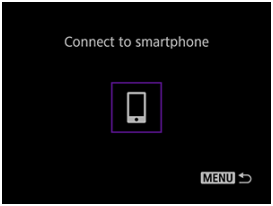
Connect via Wi-Fi to smartphones without Bluetooth support as follows.

Steps on the camera (1)

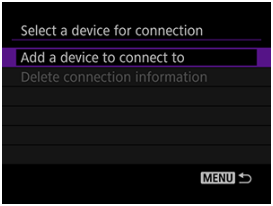
1. **Select [: Wi-Fi/Bluetooth connection].**



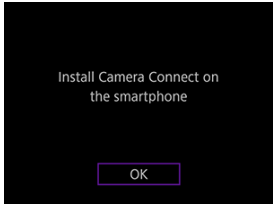
2. **Select [Connect to smartphone].**



3. **Select [Add a device to connect to].**



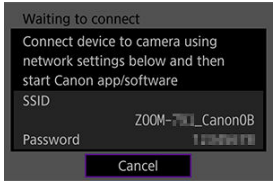
4. **Press < SET >.**



- Install Camera Connect on the smartphone and select [**OK**].

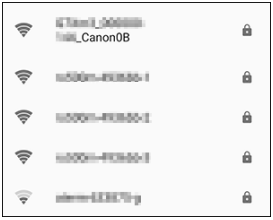
5. **Select [Connect via Wi-Fi].**

6. **Check the SSID and password.**



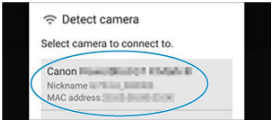
Steps on the smartphone

7. **Operate the smartphone to establish a Wi-Fi connection.**



- Activate the smartphone's Wi-Fi function, then tap the SSID (network name) you checked in step 6.
- For the password, enter the password checked in step 6.

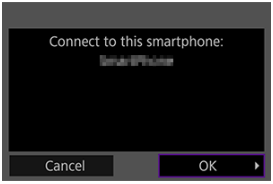
8. **Start Camera Connect and tap the camera to connect to via Wi-Fi.**



- On the screen displayed, tap the camera to connect to via Wi-Fi.

Steps on the camera (2)

10. **Select [OK].**



- [**Wi-Fi on**] is displayed on the camera.
- The main Camera Connect screen is displayed on the smartphone.

General Precautions on Camera Connect Communication from Smartphones

Caution

- Some functions are not available while connected via Wi-Fi.
- In remote shooting, the AF speed may become slower.
- Depending on the communication status, image display or shutter release timing may be delayed.

Note

- With a Wi-Fi connection established, disabling the smartphone's power saving function is recommended.

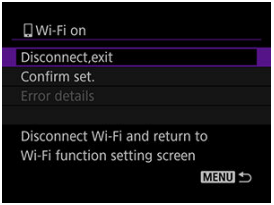
Ending Connections or Reconnecting

Ending Connections

Reconnecting

Ending Connections

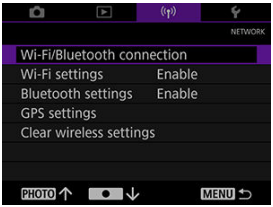
1. **Select [Disconnect,exit].**



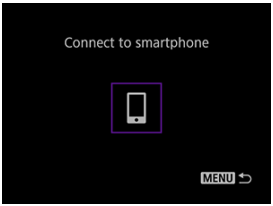
2. **Select [OK].**

Reconnecting

1. **Select [((ᵖ)): Wi-Fi/Bluetooth connection].**



2. **Select [Connect to smartphone].**

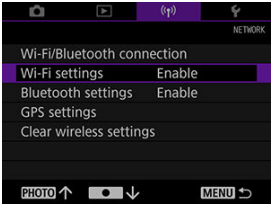


3. **Prepare the smartphone.**

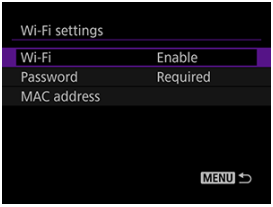
- Prepare the smartphone by following the instructions displayed.
- If settings were changed on the smartphone, restore the previous settings to enable connections by the camera.

Wi-Fi Settings

1. **Select [(ᯤ): Wi-Fi settings].**



2. **Select an item.**



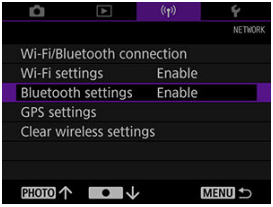
- **Wi-Fi**
  Set to [**Disable**] where use of electronic devices or wireless devices is prohibited, such as on airplanes or in hospitals.

- **Password**
  To allow Wi-Fi connections without a password, set to [**None**].

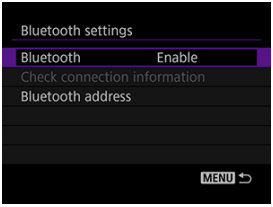
- **MAC address**
  You can check the MAC address of the camera.

Bluetooth Settings

1. **Select [((ᛉ)): Bluetooth settings].**



2. **Select an item.**



- **Bluetooth**
  If you will not use Bluetooth functionality, select [**Disable**].
- **Check connection information**
  Enables you to check the name and connection status of paired smartphones.
- **Bluetooth address**
  You can check the camera's Bluetooth address.

GPS Features

GPS Settings

Your shots can be geotagged using GPS information (such as latitude, longitude, and elevation) from a smartphone paired via Bluetooth.
On the smartphone, activate location services.

Caution

- Elevation is not as accurate as latitude or longitude, due to the nature of GPS.
- Shots may not be geotagged immediately after the camera is turned on.

Countries/regions permitting use of GPS functions

- Use of GPS features is restricted in some countries and regions, and illegal use may be punishable under national or local regulations. To avoid violating GPS regulations, visit the Canon website to check where use is allowed. Note that Canon cannot be held liable for any problems arising from use of GPS functions in other countries and regions.
  - Because the use of GPS may be restricted in some countries and regions, follow local laws and regulations where you will use the camera. Be particularly careful about using GPS functions outside your home country.
  - Be careful about using GPS functions where the operation of electronic devices is restricted.
  - Others may be able to locate or identify you by using location data in your geotagged still images or movies. Be careful when sharing these geotagged still images, movies, or GPS log files with others, such as when posting them online where many people can view them.

GPS Settings

1. **Start Camera Connect.**

2. **Select [: GPS settings].**

3. **Select [GPS via mobile].**

   - Select [**Enable**].

4. **Shoot.**

   - Confirm that [] is shown on the camera.
   - Select [**GPS information display**], and before shooting, make sure GPS information is displayed.
   - Your shots are now geotagged.
   - From now on, shots you take with Camera Connect running will be geotagged.

Note

- The location information added to movies is acquired initially, when you start recording.
- In [**GPS information display**], you can review the location information added to shots. Latitude, longitude, elevation, and [**UTC**] (shooting date and time) are listed from top to bottom.
- [**UTC**]: Coordinated Universal Time, essentially the same as Greenwich Mean Time
- [---] is shown instead of numerical values for items not available on your smartphone or items not recorded correctly.
- GPS signal reception may take a longer time in some cases.

Troubleshooting

- Responding to Error Messages
- Communication Function Precautions
- Security

Responding to Error Messages

Resolve any errors displayed in the viewfinder by referring to these examples of corrective actions.

11	12

11: Connection target not found

- **Is Camera Connect running?**
  - Establish a connection using Camera Connect ( ).

12: Connection target not found

- **Is the smartphone on?**
  - Turn on the smartphone and wait a while. If a connection still cannot be established, perform the procedures to establish the connection again.

Communication Function Precautions

In case of slower transmission, lost connections, choppy image display, or other problems when using communication functions, try the following corrective actions.

If the wireless LAN transmission rate drops due to interference from the following electronic devices, stop using them or establish a connection away from them.

- In IEEE 802.11b/g/n wireless networks, the camera communicates on the 2.4 GHz band. For this reason, the wireless LAN transmission rate may drop if there are nearby Bluetooth devices, microwave ovens, cordless telephones, microphones, smartphones, or similar devices operating on the same frequency band.

Security

If security settings have not been properly set, the following problems may occur.

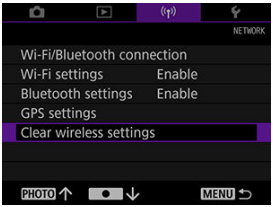
- Transmission monitoring
  Third parties with malicious intent may monitor wireless LAN transmissions and attempt to acquire the data you are sending.
- Unauthorized network access
  Third parties with malicious intent may gain unauthorized access to the network you are using to steal, modify, or destroy information. Additionally, you could fall victim to other types of unauthorized access such as impersonation (where someone assumes an identity to gain access to unauthorized information) or springboard attacks (where someone gains unauthorized access to your network as a springboard to cover their tracks when infiltrating other systems).

It is recommended to make use of the systems and functions to thoroughly secure your network, preventing these types of problems from occurring.

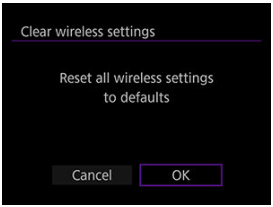
Clearing Wireless Settings

All settings of network features can be cleared. This can prevent the information from being leaked if you lend the camera or transfer ownership.

1. **Select [((ᵠ)): Clear wireless settings].**



2. **Select [OK].**



Caution

- If you have paired the camera with a smartphone, on the smartphone's Bluetooth settings screen, delete the connection information of the camera for which you restored default wireless communication settings.

Set-up

This chapter describes menu settings on the set-up ([: Set-up]) tab.

- Date/Time/Zone
- Power Saving
- Video System
- Language
- Resetting the Camera
- Other Information

Date/Time/Zone

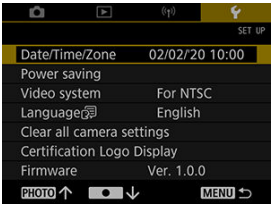
When you turn on the power for the first time or if the date/time/zone have been reset, follow these steps to set the time zone first.
By setting the time zone first, you can simply adjust this setting as needed in the future and the date/time will be updated to match it.
Since the captured images will be appended with the shooting date and time information, be sure to set your date/time.

Note

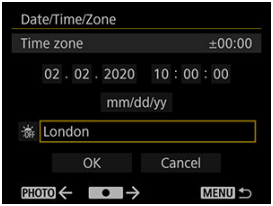
- Display is in English when you turn on the power for the first time.

---

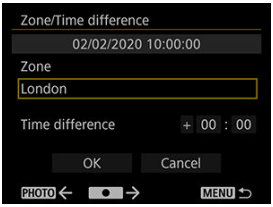
1. **Select [: Date/Time/Zone].**



2. Set the time zone.

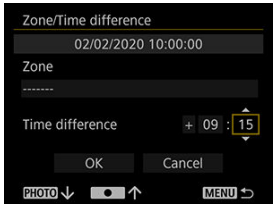


- Press the < PHOTO > or < ● > button to select [**Time zone**].



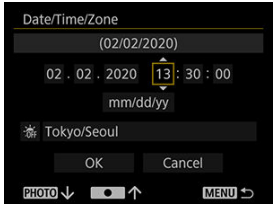
- Press < SET >.

- Press the < PHOTO > or < ● > button to select the time zone, then press < SET >.
- If your time zone is not listed, press the < MENU > button, then set the difference from UTC in [**Time difference**].



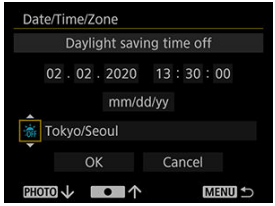
- Press the < PHOTO > or < ● > button to select a [**Time difference**] item (+ or –, hours, or minutes), then press < SET >.
- Press the < PHOTO > or < ● > button to set it, then press < SET >.
- After entering the time zone or time difference, press the < PHOTO > or < ● > button to select [**OK**], then press < SET >.

3. Set the date and time.



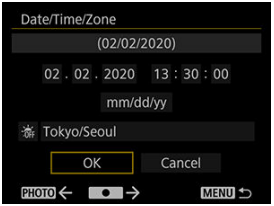
- Press the < PHOTO > or < ● > button to select an item, then press < SET >.
- Press the < PHOTO > or < ● > button to set it, then press < SET >.

4. Set daylight saving time.



- Set it as necessary.
- Press the < PHOTO > or < ● > button to select [☀OFF], then press < SET >.
- Press the < PHOTO > or < ● > button to select [☀], then press < SET >.
- When daylight saving time is set to [☀], the time set in step 3 is moved one hour ahead. If [☀OFF] is set, daylight saving time is canceled and the time is moved back one hour.

5. **Exit the setting.**



- Press the < PHOTO > or < ● > button to select [**OK**].

Caution

- Date, time, and time zone settings may be reset when the battery is depleted, or if the camera is exposed to freezing temperatures for an extended period. If this happens, set them once again.
- After changing [**Zone/Time difference**], check that the correct date/time are set.

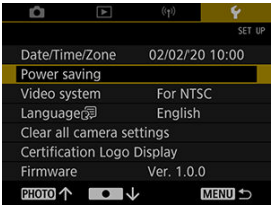
Note

- Auto power off time may be extended while the [: **Date/Time/Zone**] screen is displayed.

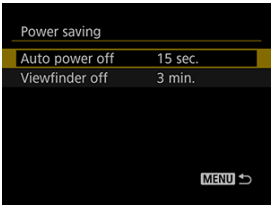
Power Saving

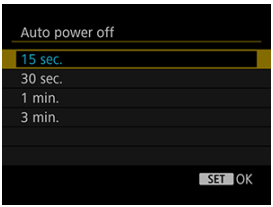
You can adjust the timing of when the camera and viewfinder turn off automatically ([Auto power off] and [Viewfinder off]).

1. **Select [: Power saving].**



2. **Select an item.**





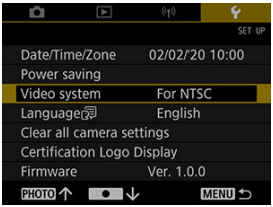
Note

- To conserve battery power, you should normally set [**Auto power off**] to 15 sec.
- Pressing any button before the [**Viewfinder off**] timer expires will reset the timer.
- Power saving settings do not apply during shooting, movie playback, or wireless connections.

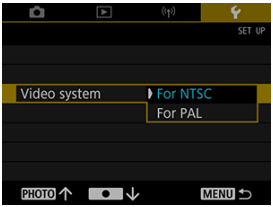
Video System

Set the video system of any television used for display. This setting determines the frame rates available when you record movies.

1. **Select [: Video system].**



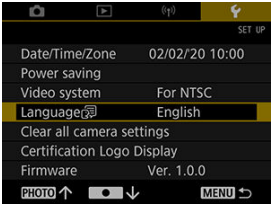
2. **Select an item.**



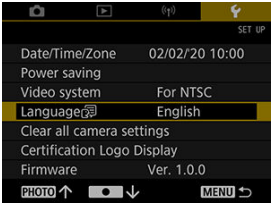
- **For NTSC**
  For areas using the NTSC TV system, such as North America, Japan, South Korea, and Mexico.
- **For PAL**
  For areas using the PAL TV system, such as Europe, Russia, China, and Australia.

Language

1. **Select [: Language].**



- To set it initially, select [: **Language**].



2. **Set the desired language.**

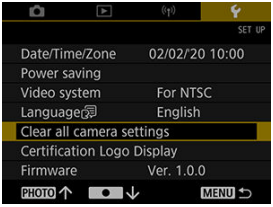
Note

- The language is set to English when you turn on the power for the first time.

Resetting the Camera

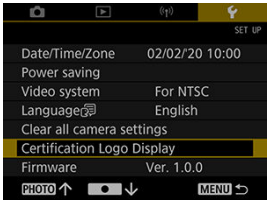
The camera's settings for shooting functions and menu functions can be restored to their defaults.

1. **Select [: Clear all camera settings].**



2. **Clear the settings.**

- Select [**OK**] on the confirmation screen.



Certification Logo Display

Select [: **Certification Logo Display**] to display some of the logos of the camera's certifications. Other certification logos can be found on the camera body and packaging.

Firmware

Select [: **Firmware**] to update the camera firmware.

Reference

This chapter provides reference information on camera features.

- Troubleshooting Guide
- Error Codes
- Information Display
- Specifications
- Before Disposal

Troubleshooting Guide

- Power-related problems
- Shooting-related problems
- Problems with wireless features
- Operation problems
- Display problems
- Playback problems

If a problem occurs with the camera, first refer to this Troubleshooting Guide. If this Troubleshooting Guide does not resolve the problem, contact your dealer or nearest Canon Service Center.

Power-related problems

Cannot charge the camera.

- In case of charging issues, see Charging the Camera.

The camera is not activated even when turned on.

- Charge the camera ( ).

The indicator lamp is still lit or blinking when the camera is off.

- The indicator lamp will remain on or continue to blink for a few seconds if the camera is turned off while an image is being recorded to the card. When the image recording is complete, the power will turn off automatically.

Battery life does not last long.

- Using the camera when it is fully charged is recommended ( ).
- The following operations reduce battery life and the number of shots available.
  - Recording movies over an extended period
  - Using the wireless communication functions

The camera turns off by itself.

- A power-saving feature is enabled ( ).

Shooting-related problems

No images can be shot or recorded.

- Make sure the card is properly inserted ( ).
- If the card is full, replace the card or delete unnecessary images to make space (,).

The card cannot be used.

- If a card error message is displayed, see Inserting/Removing Cards and Error Codes.

The image is out of focus or blurred.

- Press the shutter button gently to prevent camera shake (,).

[ ] is displayed.

- [ ] may be displayed after repeated movie recording, or if you keep the camera standing by for movie recording over extended periods. The camera turns off automatically in approx. 3 min. if you continue to record movies while [ ] is displayed. Turn off the camera when [ ] is displayed and wait until it cools down.

During movie recording, the red icon is displayed.

- It indicates that the camera's internal temperature is high. Display of the red [ ] icon indicates that movie recording will soon stop automatically.

Movie recording stops by itself.

- If the card's writing speed is slow, movie recording may stop automatically. For details on cards that can record movies, see Cards That Can Record Movies. To find out the card's writing speed, refer to the card manufacturer's website, etc.
- Format the card if the writing or reading speed seems slow ( ).
- Movie recording stops automatically at 9 min. and 59 sec.

The image flickers or horizontal stripes appear during movie recording.

- Flickering, horizontal stripes (noise), or irregular exposures can be caused by fluorescent lighting, LED lighting, or other light sources during movie recording. Also, changes in the exposure (brightness) or color tone may be recorded.

The subject looks distorted during movie recording.

- If you move the camera to the left or right (panning) or shoot a moving subject, the image may look distorted.

I cannot take still photos during movie recording.

- Still photos cannot be taken during movie recording. Stop movie recording before shooting still photos.

Problems with wireless features

Cannot pair with a smartphone.

- Use a smartphone compliant with Bluetooth Specification Version 4.2 or later.
- Turn on Bluetooth from the smartphone settings screen.
- Pairing with the camera is not possible from the smartphone's Bluetooth settings screen. Install the dedicated app Camera Connect (free of charge) on the smartphone ( ).
- Pairing with a previously paired smartphone is not possible if pairing information registered for another camera remains on the smartphone. If so, remove that camera's registered pairing information from the Bluetooth settings on the smartphone and try pairing again ( ).

Operations such as shooting and playback are not possible.

- With a Wi-Fi connection established, operations such as shooting and playback may not be possible. Terminate the Wi-Fi connection, then perform the operation.

Cannot reconnect to a smartphone.

- Reconnecting may not be possible, even with the same camera and smartphone, if you have changed the settings or selected other settings. In this case, delete the camera connection settings from the Wi-Fi settings on the smartphone and set up a connection again.
- A connection may not be established if Camera Connect is running when you reconfigure connection settings. In this case, quit Camera Connect for a moment and then restart it.

Operation problems

Camera operation is erratic. The buttons are unresponsive.

- An internal error may have occurred. Force the camera off by holding down the < MENU > and < ● > buttons together for 8 sec. Wait a while before restarting the camera by pressing the power button.

Display problems

The shooting date and time displayed are incorrect.

- Make sure the correct date and time are set ( ).
- Check the time zone and daylight saving time ( ).

Playback problems

Still photos and movies cannot be played back.

- The camera may not be able to play back images taken with another camera.
- Movies edited with a computer cannot be played back with the camera.

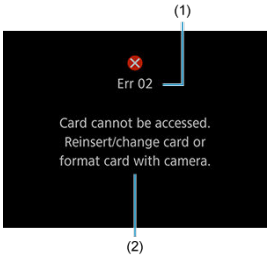
Mechanical sounds or sounds of camera operations can be heard during movie playback.

- If you perform camera operations during movie recording, the camera's built-in microphone may also record sounds of the camera operations.

The movie appears to freeze momentarily.

- Significant changes in exposure during movie recording may cause recording to stop momentarily until the brightness stabilizes.

Error Codes



(1) Error number
(2) Cause and countermeasures

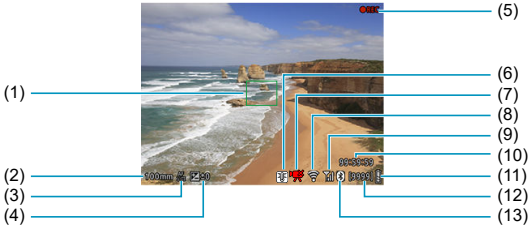
If there is a problem with the camera, an error message will appear. Follow the on-screen instructions.
If the problem persists, write down the error code (Errxx) and request service.

Information Display

Shooting Screen

Playback Screen

Shooting Screen



(1)	AF point
(2)	Zoom focal length
(3)	AF method
(4)	Exposure compensation amount
(5)	Movie recording in progress
(6)	Temperature warning
(7)	Movie recording restriction
(8)	Wi-Fi function
(9)	Wi-Fi signal strength
(10)	Movie recording time available/Elapsed recording time
(11)	Battery level
(12)	Available shots
(13)	Bluetooth function

Playback Screen

(1)	Movie playback
(2)	Playback number/Total images recorded
(3)	Battery level
(4)	Return icon
(5)	Movie recording time
(6)	Exposure compensation amount

Caution

- If the image was taken by another camera, certain shooting information may not be displayed.
- It may not be possible to play back images taken with this camera on other cameras.

Specifications

Effective pixels

Max. approx. 12.1 megapixels
* Total pixels: Approx. 21.1 megapixels

Effective sensor size

1/3-inch type
* The center portion of a 1/2.3-inch type CMOS sensor is used.

Focal length

Wide-angle side: 13.8 mm (35 mm equivalent: equivalent to approx. 100 mm)
Telephoto side: 55.5 mm (35 mm equivalent: equivalent to approx. 400 mm)

Step zoom

Equivalent to approx. 100 mm (optical) → equivalent to approx. 400 mm (optical) → equivalent to approx. 800 mm (digital)

Telephoto magnification

	Still photo shooting	Movie recording
Equivalent to approx. 100 mm	Approx. 1.2×	Approx. 1.2×
Equivalent to approx. 400 mm	Approx. 4.8×	Approx. 4.8×
Equivalent to approx. 800 mm	Approx. 9.6×	Approx. 9.6×

F/number

Wide-angle side: f/5.6
Telephoto side: f/6.3

Focusing range

Wide-angle: 1 m to ∞ / 3.28 ft. to ∞
Telephoto: 4.5 m to ∞ / 14.76 ft. to ∞

Image stabilization features

Lens shift system

Recording media

Recording media
microSD / microSDHC / microSDXC memory card
* SD speed class compatible.
* UHS speed class compatible.
* UHS-I compatible.

Recording system

Image recording format
Compliant to Design rule for Camera File system 2.0 and Exif 2.31

Image type
Still photos: JPEG
Movies: MP4

Still photo recording

Image quality / recorded pixels

Image quality	Recorded pixels
JPEG Large/Fine	12.0 megapixels (4000×3000)

* Image quality adjustment not available.
* Lower image quality when equivalent to approx. 800 mm, due to digital cropping.

Aspect ratio
Fixed at 4:3 and not adjustable

Image file size / number of possible shots / maximum burst

File size (approx. MB)	Possible shots (approx.)	Maximum burst (approx.)
4.6	11460	50

* Number of shots available and maximum burst in high-speed continuous shooting drive mode.
* Number of shots available and maximum burst apply to a 64 GB card conforming to Canon testing standards.
* File size, number of possible shots, and maximum burst vary depending on shooting conditions (including subject and memory card brand).

Movie recording

Movie recording format

Container format	MP4
Video	H.264 / MPEG-4 AVC * Variable (average) bit rate
Audio	MPEG-4 AAC-LC (stereo)

Movie recording quality

Movie recording size / compression method
Full HD: 1920×1080 / Standard (IPB)
* Movie recording size adjustment not available.

Frame rate
When set to NTSC: 29.97 / 23.98 fps
When set to PAL: 25.00 fps

Movie bit rate
Approx. 30 Mbps
* Video only, not including audio.

File size
Approx. 217 MB/min.

Maximum recording time
9 min. 59 sec.

Total recording time available

8 GB	Approx. 35 min.
32 GB	Approx. 140 min.
128 GB	Approx. 563 min.

Maximum file size

Card	Format	Maximum file size
microSD	FAT12/16	Max. 2 GB
microSDHC	FAT32	Max. 4 GB
microSDXC	exFAT	Unlimited

Card performance requirements (movie recording)
SD Speed Class 6 or higher

Video system
NTSC / PAL

Recording microphone
Built-in stereo microphone
* External microphone IN terminal not provided.

Type

OLED color electronic viewfinder

Screen size

0.39 inch-type

Dot count

Approx. 2,360,000 dots

Coverage

Approx. 100% (at approx. 22 mm eyepoint)

Eyepoint

Approx. 22 mm (at –1 m^{-1} from eyepiece lens end)

Dioptric adjustment

Approx. –3 to +1 m^{-1} (dpt)

Autofocus

Contrast detection

Focusing brightness range (in still photo shooting)
Wide: EV 7 to 17 / Tele: EV 7 to 17.3
(Center AF point, at 23°C / 73°F and ISO 100)

Focusing brightness range (in movie recording)
Wide: EV 7 to 17 / Tele: EV 8 to 17.3
(Center AF point, at 23°C / 73°F, ISO 100, and 29.97 fps)

Exposure control

Metering brightness range (in still photo shooting)
EV 5 to 18 (at 23°C / 73°F and ISO 100)

Metering brightness range (in movie recording)
EV 5 to 17 (at 23°C / 73°F and ISO 100)

ISO speed (in still photo shooting / movie recording)
ISO 100 to 3200 set automatically

Shutter speed

Still photo shooting
Controlled automatically (1/8000 to 1/30 sec.)

Movie recording
Controlled automatically (1/4000 to 1/30 sec.)

Continuous shooting speed

Max. approx. 10 shots/sec.

External interface

Terminal type
USB Type-C

Battery used

A rechargeable lithium-ion battery is built into the body.

Charging temperature

Approx. 5–40°C / Approx. 41–104°F

Number of shots available

Approx. 150 shots
* Based on CIPA standards, at 23°C / 73°F.

Time available for movie recording

Approx. 1 hr. 00 min.
* At 23°C / 73°F when fully charged and not connected to Wi-Fi.

Dimensions and weight

Dimensions
Approx. 33.4 (W) × 50.8 (H) × 103.2 (D) mm
Approx. 1.31 (W) × 2.00 (H) × 4.06 (D) in.
* Based on CIPA guidelines.

Weight
Approx. 145 g (including card) / approx. 144 g (body only)
Approx. 5.12 oz. (including card) / approx. 5.08 oz. (body only)

Operating environment

Operating temperature
0–40°C (32–104°F)

Operating humidity
10–90%

Wi-Fi (wireless LAN) communication

Standards compliance

Wi-Fi standards	Transmission method	Maximum link speed
IEEE 802.11b	DS-SS modulation	11 Mbps
IEEE 802.11g	OFDM modulation	54 Mbps
IEEE 802.11n		150 Mbps

Transmission frequency (center frequency)

Frequency	2412–2462 MHz
Channels	1–11 channels

Bluetooth

Standards compliance
Bluetooth Specification Version 4.2 compliant (Bluetooth low energy technology)

Transmission method
GFSK modulation

- All data above is based on Canon testing standards and CIPA (Camera & Imaging Products Association) testing standards and guidelines.
- Dimensions and weight listed above are based on CIPA guidelines.
- Product specifications and appearance are subject to change without notice.

Before Disposal

Caution

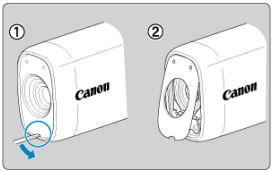
- DISPOSE OF USED BATTERIES ACCORDING TO LOCAL REGULATIONS.

Note

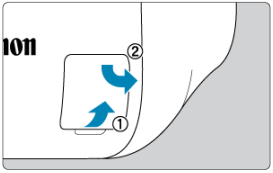
- A screwdriver for M1.4 Phillips head screws is recommended for screw removal.

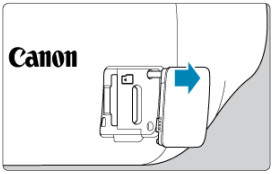
1. **Turn the camera off.**

2. **Insert the blade of a small regular screwdriver into the lens cover notch and pry upward to remove it.**

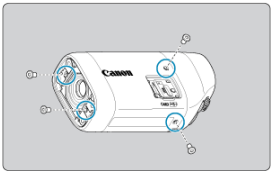


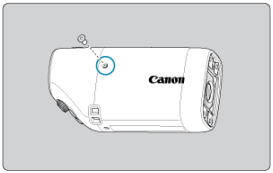
3. **Pry the card/terminal cover up, swing it open 90°, and remove it.**



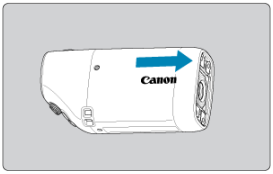


4. **Remove the five screws.**

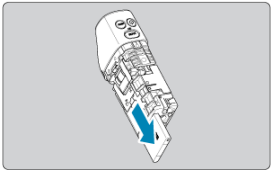




5. **Remove the camera body cover as shown.**



6. **Tilt the camera as shown and slide the battery out.**



Trademarks and Licensing

- Trademarks
- About MPEG-4 Licensing
- Accessories

Trademarks

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