Canon

PowerShot V1

Advanced User Guide

These operating instructions are for the PowerShot V1 with firmware ver. 1.1.0 or later installed.

EN

CT2-D293-B

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Introduction

Before starting to shoot, be sure to read the following

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 images cannot be recorded or transferred to a computer, Canon cannot be held liable for any loss or inconvenience caused.

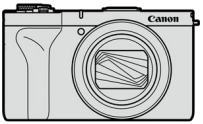
Copyrights

Copyright laws in some countries prohibit the unauthorized use of images recorded with the camera (or music/images with music transferred to the memory card) for purposes other than personal enjoyment. Also be aware that certain public performances, exhibitions, etc. may prohibit photography even for private enjoyment.

- Package Contents
- Supplemental Information
- Compatible Accessories
- Instruction Manuals
- Quick Start Guide
- About This Guide
- Compatible Cards
- Safety Instructions
- Handling Precautions
- Part Names
- Software/Apps

Package Contents

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



Camera
(with shoe cover)

Battery Pack LP-E17
(with protective cover)

Wrist strap

Windscreen

- The camera does not come with a memory card ( ), HDMI cable, interface cable, or battery charger.
- Be careful not to lose any of these items.
- No software CD-ROM is included. Software ( ) can be downloaded from the Canon website.

Supplemental Information

Check the following website for supplemental information about the camera.

- **https://cam.start.canon/H001/**

Compatible Accessories

Check the following website for details on compatible accessories.

- https://cam.start.canon/H002/

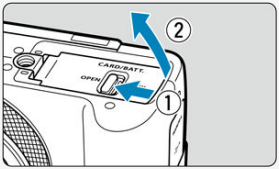
Instruction Manuals

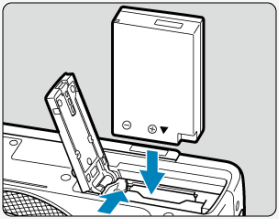
- **Instruction Manual (included with the camera)**
  Be sure to read before use.

- **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/C016/

For software instruction manuals, see Software Instruction Manuals.

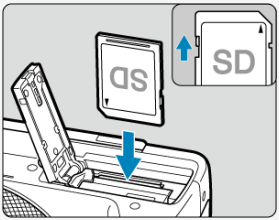
1. Insert the battery ( ).





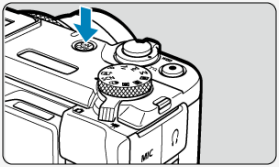
- Upon purchase, charge the battery to start using ( ).

2. Insert the card ( ).



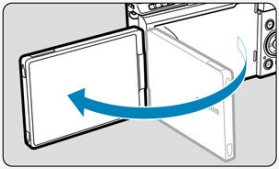
- Insert the card with the label facing the front of the camera until it clicks into place.

3. Turn the camera on ( ).



- All the necessary camera settings are set automatically.

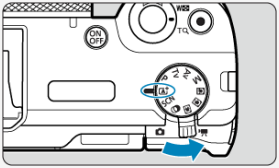
4. Flip out the screen ( ).



- When the date/time/zone setting screen is displayed, see Date/Time/Zone.
- When the password setting screen is displayed, see Setting a Password.
- After [**Welcome**] appears on the screen, follow the on-screen instructions to connect the camera to your smartphone ( ).

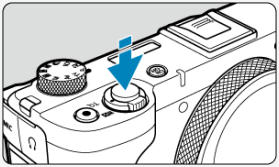
Recording movies

1. **Set the still photo shooting/movie recording switch to < > and set the Mode dial to < > (,).**



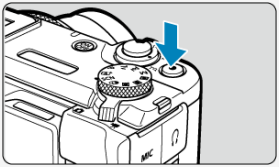
- All the necessary camera settings are set automatically.

2. **Focus on the subject.**



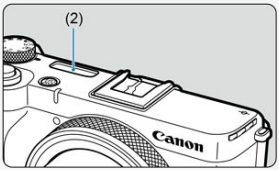
- By default, [AF: **Movie Servo AF**] is set to [**Enable**] so that the camera always keeps focusing ( ).

3. Record the movie.



- Press the movie shooting button to start recording a movie. You can also start recording a movie by tapping [●] on the screen.

- [●**REC**] (1) is displayed in the upper right while movie recording is in progress, and a red frame appears around the screen.



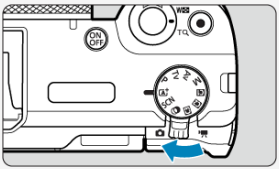
  - Sound is recorded with the movie microphone (2).
  - To stop recording the movie, press the movie shooting button again. You can also stop recording a movie by tapping [■] on the screen.

4. Review the recorded movie ( ).

- Press the < ▶ > button.
- Press < SET > twice.

Shooting still photos

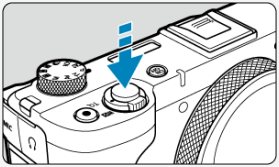
1. Set the still photo shooting/movie recording switch to < > ( ).



2. Focus on the subject ( ).

- A tracking frame [ ] for AF appears over any face detected.
- Press the shutter button halfway, and the camera will focus on the subject.

3. Take the picture ( ).



- Press the shutter button completely to take the picture.

4. Review the picture.

- The image just captured will be displayed for approx. 2 sec. on the screen.
- To display the image again, press the < ▶ > button ( ).

About This Guide

Icons in This Guide

Basic Assumptions for Operational Instructions and Sample Photos

Icons in This Guide

< ◎ >	Indicates the Control dial.
< ▲ > < ▼ > < ◀ > < ▶ >	Indicates the direction to press the cross keys < ✥ >.
<) >	Indicates the Control ring.
< SET >	Indicates the Quick Control/Set button.
⏱*	Indicates the duration (in * seconds) of the operation for the button you pressed, as timed after you release the button.

- In addition to the above, the icons and symbols used on the camera's buttons and displayed on the screen are also used in this guide when discussing relevant operations and functionality.

📷 🎥	The 📷 to the right of the titles indicates features for still photo shooting.
📷 🎥	The 🎥 to the right of the titles indicates features for movie recording.
☆	☆ to the right of titles indicates functions only available in Creative Zone modes (**<P>**, **<Tv>**, **<Av>**, or **<M>**).
	Links to pages with related topics.
	Warning to prevent shooting problems.
	Supplemental information.
	Tips or advice for better shooting.
?	Troubleshooting advice.

Basic Assumptions for Operational Instructions and Sample Photos

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

Compatible Cards

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** ( ).

- **SD/SDHC/SDXC memory cards**
  UHS-II and UHS-I cards 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 size ( ).

In this guide, “card” refers to SD memory cards, SDHC memory cards, and SDXC memory cards.
***A card is not included.** Please purchase it separately.

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.
- Keep batteries out of the reach of 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.
The battery is dangerous if swallowed. If swallowed, seek immediate medical assistance.

- PRODUCT CONTAINS BUTTON/COIN CELL BATTERY

Button/coin cell batteries are hazardous and must be kept out of reach of children at all times, whether new or used.
These batteries can cause severe or fatal injuries in 2 hours or less if swallowed or placed inside any part of the body.
If it is suspected a button/coin cell battery has been swallowed or placed inside any part of the body, seek medical attention immediately.

- Use only power sources specified in this instruction manual 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 commercially available batteries or provided battery packs.
  - Use batteries/battery packs only with their specified product.
  - Do not heat batteries/battery packs or expose them to fire.
  - Do not charge batteries/battery packs using non-authorized battery chargers.
  - Do not expose the terminals to dirt or let them come into contact with metallic pins or other metal objects.
  - Do not use leaking batteries/battery packs.
  - When disposing of batteries/battery packs, insulate the terminals with tape or other means.

This may cause electric shock, explosion or fire.
If a battery/battery pack leaks and the material contacts your skin or clothing, flush the exposed area thoroughly with running water. In case of eye contact, flush thoroughly with copious amounts of clean running water and seek immediate medical assistance.

- 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 place heavy objects on the power cord. Do not damage, break or modify the power cord.
- 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 unplug the product by pulling the power cord.
- 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. The use of a tripod or similar equipment is recommended when using the product in hot places and for people with circulation problems or less sensitive skin.

- 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.

- Do not leave batteries near pets.

Pets biting a battery could cause leakage, overheating, or explosion, resulting in product damage or fire.

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

- Do not fire the flash near the eyes.

It may hurt the eyes.

- Do not look at the screen for prolonged 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.

- Flash emits high temperatures when fired. Keep fingers, any other part of your body, and objects away from the flash unit while taking pictures.

This may cause burns or malfunction of the flash.

- 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.

- Only mount the product on a tripod that is sufficiently sturdy.
- Do not carry the product when it is mounted on a tripod.

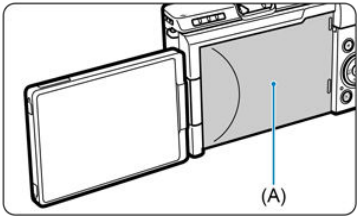
This may cause injury or may result in an accident.

- Do not touch any parts inside the product.

This may cause injury.

- 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 screen storage compartment (A), because its temperature can increase** by repeated continuous shooting for extended time or movie recording. This may cause burns.



- The camera and memory cards may become hotter when [📷: **Auto pwr off temp.**] is set to [**High**].
  - We recommend using a tripod or the like to avoid handheld shooting, which may cause problems such as low-temperature contact burns.
  - Do not touch cards immediately after shooting. Cards may be hot, which may cause burns. Wait until the card has cooled down before removing it.

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.
- 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.
- Only use a commercially available blower to blow away dust on the lens. Do not use cleaners that contain organic solvents to clean the camera body or lens. For stubborn dirt, take the camera to the nearest Canon Service Center.
- Do not touch the camera's electrical contacts with your fingers. This is to prevent the contacts from corroding. Corroded contacts can cause camera malfunction.
- 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 or battery. 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 or battery until the camera has adjusted to the ambient temperature.
- If the camera will not be used for an extended period, remove the battery and store the camera in a cool, dry, well-ventilated location. Record occasionally during storage to make sure the camera is still working correctly.
- 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.
- When shooting with backlighting, keep the sun sufficiently away from the angle of view. Always keep intense light sources such as the sun, lasers, and other intense artificial light sources out of the image area and not near it. Concentrated intense light may cause smoke or damage the image sensor or other internal components.

Screen

The following does not affect images captured by the camera.

- Although the screen 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 is not a malfunction.
- If the screen is left on for a prolonged period, screen burn-in may occur where you see remnants of what was displayed. However, this is only temporary and will disappear when the camera is left unused for a few days.
- The screen display may seem slightly slow in low temperatures or may look black in high temperatures. It will return to normal at room temperature.

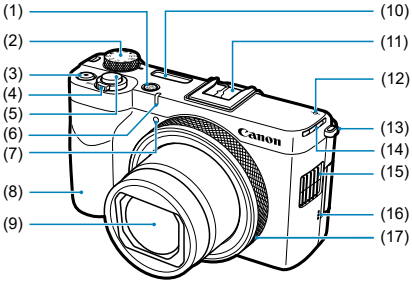
Cards

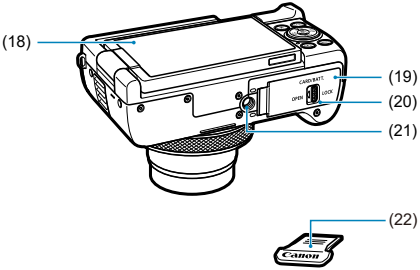
To protect the card and its recorded data, note the following:

- Do not drop, bend, or wet the card. Do not subject it to excessive force, physical shock, or vibration.
- Keep card contacts free of dust and foreign material. Do not touch card contacts with your fingers or metal objects.
- 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.
- Cards may become hot after long sessions of repeated continuous shooting or still photo shooting/movie recording. This is not a malfunction.

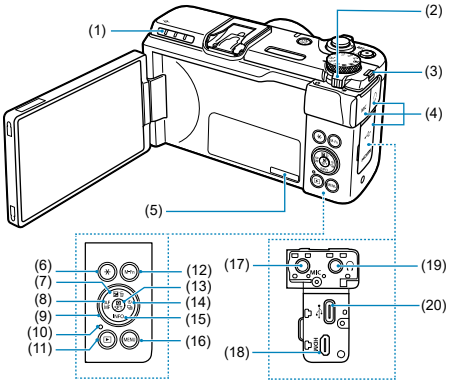
Part Names

- Attaching the Strap
- Attaching a Windscreen



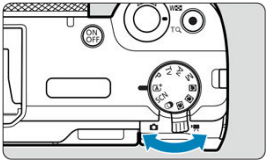


(1)	Power button
(2)	Mode dial
(3)	Movie shooting button
(4)	Zoom lever During shooting: <**W**> Wide-angle/<**T**> Telephoto During playback: < ⊞ > Index/< 🔍 > Magnify
(5)	Shutter button
(6)	Tally lamp
(7)	AF-assist beam/red-eye reduction/self-timer/remote control lamp
(8)	Grip
(9)	Lens
(10)	Microphone (stereo)
(11)	Multi-function shoe
(12)	< ⊖ > Focal plane mark
(13)	Strap mount
(14)	Exhaust vent
(15)	Intake vent
(16)	Speaker
(17)	< ◐ > Control ring
(18)	Screen
(19)	Card/battery compartment cover
(20)	Card/battery compartment cover lock
(21)	Tripod socket
(22)	Shoe cover


(1)
(2)
(3)
(4)
(5)
(6)
(7)
(8)
(9)
(10)
(11)
(12)
(13)
(14)
(15)
(16)
(17)
(18)
(19)
(20)
MIC
MIC

(1)	Exhaust vent
(2)	Still photo shooting/movie recording switch
(3)	Strap mount
(4)	Terminal cover
(5)	Serial number (body number)
(6)	< ✳ > AE lock button
(7)	< ▲ / ☒ / 🗑 > Up/exposure compensation/erase button
(8)	< ◀ / AF MF > Left/autofocus/manual focus button
(9)	< ◎ / ✥ > Control dial/cross keys
(10)	Access lamp
(11)	< ▶ > Playback button
(12)	< M-Fn > Multi-function button
(13)	< Ⓢ > Quick Control/Set button
(14)	< ▶ / ⏱ / ⧉ > Right/self-timer/drive mode selection button
(15)	< ▼ / INFO > Down/Info button
(16)	< MENU > Menu button
(17)	< MIC > External microphone IN terminal
(18)	< HDMI > HDMI micro terminal
(19)	< ∩ > Headphone terminal
(20)	< •⭠ > Digital terminal

Still photo shooting/movie recording switch



For still photo shooting, set the still photo shooting/movie recording switch to <📷> and for movie recording, set it to <🎥>.

Caution

- When the still photo shooting/movie recording switch has been flipped, check the camera settings once again before shooting.

Note

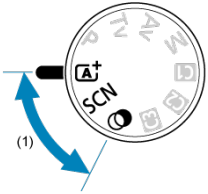
- You can record movies by pressing the movie shooting button during still photo shooting.

Mode dial

The Mode dial is divided into Basic Zone and Creative Zone modes.

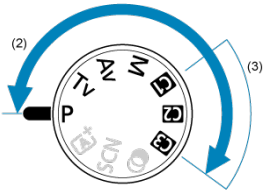
(1) Basic Zone

The camera sets everything to suit the subject or scene for shooting ( ).



(2) Creative Zone

You can set the shutter speed or aperture value and change the camera settings to shoot ( ).

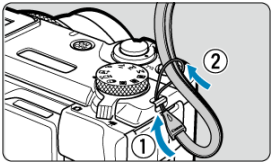


(3) Custom shooting modes

You can assign <**P**>, <**Tv**>, <**Av**>, <**M**>, AF operation, menu functions, and more to < C1 >, < C2 >, or < C3 > ( ).

Attaching the Strap

1. **Attach the included wrist strap to the strap mount.**



- The wrist strap can also be attached on the left side.

Attaching a Windscreen

1. **Turn the camera off.**

2. **Remove the shoe cover from the camera's multi-function shoe.**

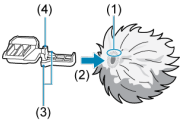
3. **Attach the windscreen to the camera's multi-function shoe.**

Caution

- When attaching the windscreen, make sure that the fur does not get caught in the hot shoe.

Note

- If the windscreen fur falls off, attach it as follows.



Orient the windscreen as shown so that the white thread (1) is on top.
Insert the attachment into the fur with the orientation shown in (2).
Cover the protrusions (3) with the fur so that they fit inside.
Leave the protrusion (4) outside of the fur.

Software/Apps

- Software/App Overview
- Installing Computer Software
- Installing Smartphone Apps
- Software Instruction Manuals

Software/App Overview

Computer software

- **Digital Photo Professional**
  Software recommended for users who shoot RAW images. Enables image viewing, editing, printing, and more.

Smartphone apps

- **Camera Connect**
  Enables you to transfer captured images from the camera to a smartphone over a wired or wireless connection, set various camera settings from the smartphone, and shoot remotely from the smartphone.
- **Digital Photo Professional Express**
  App for RAW image processing and image editing on a smartphone or tablet. Requires a paid subscription.

Installing Computer Software

Always install the latest version of the software. In this case, previous versions are overwritten.

Caution

- Do not install software while the camera is connected to the computer. The software will not be installed correctly.
- Installation is not possible without an internet connection.
- Older versions of the software do not support RAW image processing or correct display for images from this camera.

1. **Download the software.**

   - Connect to the internet from a computer and access the following Canon website.
     https://cam.start.canon/

   Depending on the software, you may need to enter the camera's serial number. The serial number is written on the camera body.

2. **Extract the installer on the computer.**

   For Windows

   - Click the displayed installer file to start the installer.

   For macOS

   - Double-click the dmg file to open the installation window.
   - Double-click the icon in this window to start the installer.

3. **Follow the on-screen instructions to install the software.**

Installing Smartphone Apps

- Always install the latest version.
- Apps can be installed from Google Play or App Store.
- You can also access Google Play and App Store from the following Canon website.
  https://cam.start.canon/

Software Instruction Manuals

Check the following website for software instruction manuals.

- https://cam.start.canon/

Preparation and Basic Operations

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

- Charging the Battery
- Inserting/Removing the Battery and Card
- Using the Screen
- Turning on the Power
- Multi-Function Shoe
- Basic Operations
- Menu Operations and Settings
- Quick Control
- Touch-Screen Operation
- Switching the Screen Display

Charging the Battery

Using the Charger (Sold Separately) for Charging/Power

Using the Battery Charger (Sold Separately) to Charge the Battery

- **Upon purchase, the battery is not fully charged.**
  Charge the battery before use.
- **Charge the battery on the day before or on the day it is to be used.**
  Charged batteries gradually lose their charge, even when they are 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 lower battery performance and reduce battery life. Higher temperatures may cause the camera body to become hot and prevent continuous use.
- **When not using the camera, remove the battery.**
  If the battery is left in the camera for a prolonged period, a small amount of power current will keep being released, resulting in excess discharge and shorter battery life. Store the battery with the protective cover attached. Storing the battery when it is fully charged may lower the battery performance.

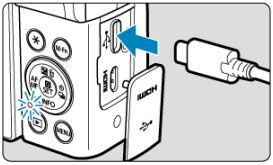
Using the Charger (Sold Separately) for Charging/Power

You can use the Charger (sold separately) to Charging.

Charging

1. **Insert the battery ( ).**

2. Charge the battery.



- Connect the charger. The access lamp turns orange.
- The access lamp turns off after the camera is fully charged.

Supplying power

Although power is supplied to the camera when it is turned on, the battery is not charged. However, batteries are charged during auto power off.
The battery level indicator is gray when power is supplied.
To change from powering the camera to charging, turn the camera power off.

Caution

- Charging may stop if the camera becomes hot.
- Turn off the camera before removing the battery.
- Do not power the camera unless it has a Battery Pack LP-E17.
- To protect the battery pack and keep it in optimal condition, do not charge it continuously for more than 24 hours.
- If the charging lamp fails to light up or a problem occurs during charging (shown by the access lamp blinking in orange), unplug the power cord, reinsert the battery, and wait a few minutes before plugging it in again. If the problem persists, take the camera to the nearest Canon Service Center.

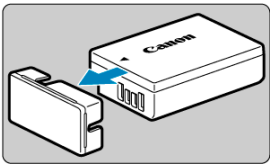
Note

- It is recommended that you use the USB Power Adapter PD-E2 or PD-E1 (sold separately) as a charger for this product.
- The PD-E2 and PD-E1 can also be used for powering.
- Some commercially available chargers have been confirmed to work with the camera. For details, check the Canon website ( ).
- Charging the camera when it is fully depleted takes approx. 2 hr. 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.

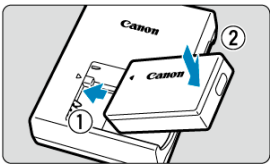
Using the Battery Charger (Sold Separately) to Charge the Battery

You can use the LC-E17 Series (LC-E17/LC-E17E/LC-E17C) battery chargers (sold separately) to charge the battery.

1. **Detach the protective cover provided with the battery.**

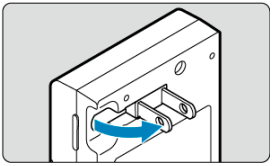


2. **Fully insert the battery into the battery charger.**

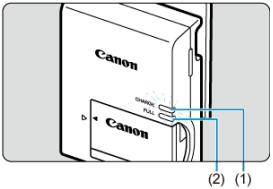


- Do the opposite to remove the battery.

3. Charge the battery.



- Flip out the battery charger prongs in the direction shown and plug the charger into a power outlet.



- Charging starts automatically and the charge lamp (1) lights up in orange.
- When the battery is fully charged, the full-charge lamp (2) will light up in green.

Caution

- After charging the battery, remove it and disconnect the charger from the power outlet.
- The battery charger can also be used in foreign countries. If necessary, attach a commercially available plug adapter for the respective country or region.
- To avoid damage to the battery charger, do not connect it to portable voltage transformers for overseas travel.
- After disconnecting the battery charger from the outlet, do not touch the prongs for approximately 5 seconds.

Note

- The battery charger is compatible with a 100 V AC to 240 V AC 50/60 Hz power source.
- It takes approx. 2 hr. to fully charge a completely exhausted battery 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 reasons, charging in low temperatures (5–10°C / 41–50°F) will take longer (up to approx. 4 hr.).
- If the battery becomes exhausted quickly even after having been fully charged, the battery has reached the end of its service life. Check the battery's recharge performance ( ) and purchase a new battery.

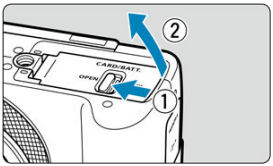
Inserting/Removing the Battery and Card

- Insertion
- Formatting Cards
- Removal

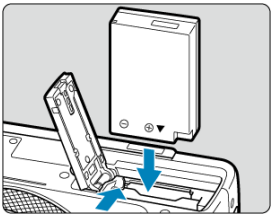
Insert a fully charged Battery Pack LP-E17 and card in the camera. The captured images are recorded onto the card.

Insertion

1. **Slide the card/battery compartment cover lock and open the cover.**

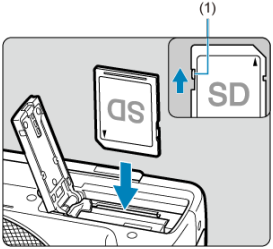


2. **Insert the battery.**



- Insert the end with the electrical contacts.
- Insert the battery until it locks in place.

3. Insert the card.

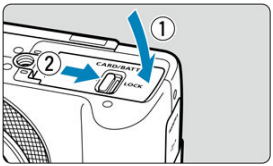


- Insert the card with the label facing the front of the camera until it clicks into place.

Caution

- **Make sure the card's write-protect switch (1) is set upward to enable writing and erasing.**

4. Close the cover.



- Press the cover closed, then slide the card/battery compartment cover lock to lock it.

Caution

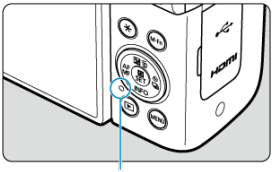
- You cannot use batteries other than Battery Pack LP-E17.

Formatting Cards

If a card is new or was previously formatted (initialized) by another camera or computer, format the card with this camera ( ).

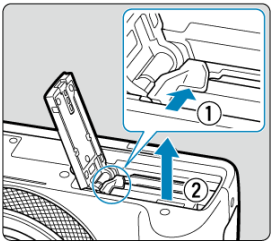
Removal

1. **Slide the card/battery compartment cover lock and open the cover.**



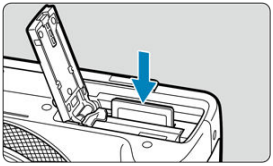
- Turn the camera off.
- **Make sure the access lamp (1) is off before opening the card/battery compartment cover.**

2. **Remove the battery.**

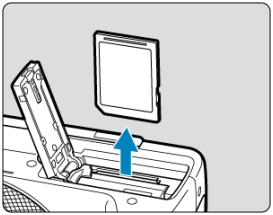


- Press the battery lock lever as shown by the arrow and remove the battery.
- To prevent short-circuits, always attach the included protective cover ( ) to the battery.

3. Remove the card.



- Gently push in the card, then let it go to eject.



- Pull the card straight out, then close the cover.

Caution

Do not remove cards immediately after a red [ ] icon is displayed as you are shooting. Cards may be hot, due to high internal camera temperature. Turn off the power and stop shooting for a while before removing cards. Removing hot cards immediately after shooting may cause you to drop and damage them. Be careful when removing cards.

Note

- The number of shots available varies depending on remaining card capacity and settings such as image quality and ISO speed.

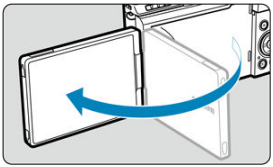
Caution

- **When the access lamp (green) is lit or blinking, it indicates that images are being written to, read from, or erased from the card, or data is being transferred. Do not open the card/battery compartment cover. To avoid corrupting image data or damaging cards or the camera, never do any of the following while the access lamp is lit or blinking.**
  - **Removing the card.**
  - **Removing the battery.**
  - **Shaking or striking the camera.**
  - **Unplugging or plugging in a power cord.**
- If the card already contains recorded images, the image number may not start from 0001 ( ).
- If a card-related error message is displayed on the screen, 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.
- Do not touch the card's contacts with your fingers or metal objects. Do not expose the contacts to dust or water. If smudges adhere to the contacts, contact failure may result.
- Multimedia cards (MMC) cannot be used. (Card error will be displayed.)

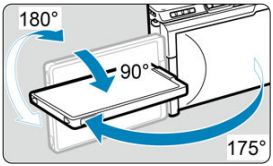
Using the Screen

You can change the direction and angle of the screen.

1. **Flip out the screen.**

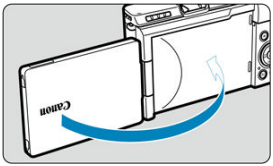


2. **Rotate the screen.**



- When the screen is out, you can tilt it up or down or rotate it to face the subject.
- Indicated angles are only approximate.

3. **Face it toward you.**



- Normally, use the camera with the screen facing you.

Caution

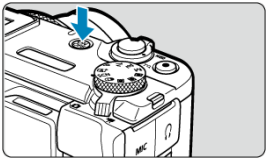
- Avoid forcing the screen into position as you rotate it, which puts undue pressure on the hinge.

Note

- Keep the screen closed and facing the camera body when the camera is not in use. You can protect the screen.
- A mirror image (right/left reversed) of subjects is displayed when the screen faces subjects in front of the camera.

Turning on the Power

- Setting the Display Language
- Setting the Date, Time, and Time Zone
- Setting a Password
- Connecting the Camera to a Smartphone
- Battery Level Indicator



- Press the power button to turn the power on. Press it again to turn the camera off.

Note

- If you turn off the power while an image is being recorded to the card, [**Saving...**] will be displayed and the power will turn off after the recording finishes.

Setting the Display Language

Set the Language if the [**Language**] setting screen appears after you turn on the camera.

Setting the Date, Time, and Time Zone

Set the Date/Time/Zone if the [**Date/Time/Zone**] setting screen appears.

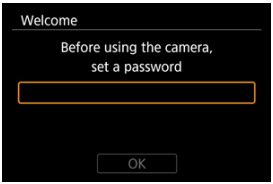
Setting a Password

To prevent unauthorized access to information on the camera, set a camera password.

Caution

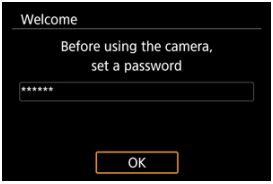
- Setting a password does not protect images or other data on cards.
- Canon cannot be held liable for theft involving the camera or cards.
- If you select [**Do not ask again**], be careful not to allow third-party access to data or information on the camera, such as in the settings.

1. **Set the password.**

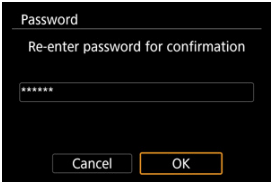


- Enter a six-digit number, then select [**OK**].

2. Select [OK].



3. Reenter the password.



- Select [**OK**] to set the password.

The [**Password**] screen is displayed when the power switch is set to < ON > or the camera resumes operation from auto power off. Enter the password you set.

- [**Do not ask again**]: Select if you prefer not to have the screen displayed again.
- [**Reset**]: Select to reset the camera to defaults and remove the password.

Caution

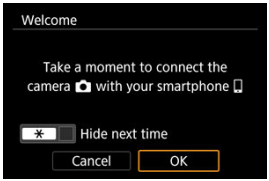
- Until you enter the password, these connections are not available while the password screen is displayed.
  - USB connection
  - Wi-Fi connection
  - Bluetooth connection
- Select [**Do not ask again**] on the password screen in these situations.
  - When using Bluetooth connections with the power switch set to < OFF > or during auto power off
  - When automatically uploading images to image.canon

Note

- For details on operations such as changing the password, see Password Management.

Connecting the Camera to a Smartphone

Instructions for connecting to a smartphone are displayed if you select [**OK**] when the setup screen appears ( ).



Battery Level Indicator

The battery level indicator appears when the camera is turned on.

	Battery level is sufficient.
	Battery level is low, but the camera can still be used.
	Battery will be depleted soon (blinks).
	Charge the battery.

Note

- Doing any of the following will exhaust the battery faster:
  - Pressing the shutter button halfway for a prolonged period.
  - Activating the AF frequently without taking a picture.
  - Using Image Stabilizer.
  - Using the Wi-Fi function or Bluetooth® function.
  - Using the screen frequently.
  - Using accessories compatible with the multi-function shoe.
- The number of available shots may decrease depending on the actual shooting conditions.
- See [: **Battery info.**] to check the battery status ( ).
- In low ambient temperatures, shooting may not be possible even with a sufficient battery level.
- The battery level indicator is gray when power is supplied.

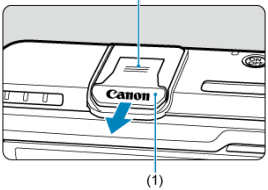
Multi-Function Shoe

Using the Multi-Function Shoe

The multi-function shoe is a hot shoe that supplies power to accessories and offers advanced communication functionality.

Using the Multi-Function Shoe

Removing the shoe cover

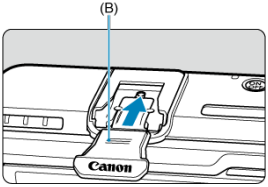


- Remove the shoe cover (1) by pressing the part labeled (A) in the figure as shown with your finger. After removal, keep the shoe cover in a convenient place to avoid losing it.

Attaching accessories

- When attaching accessories that communicate through contacts of the multi-function shoe, insert the accessory's mounting foot until it clicks into place, then slide the mounting foot locking lever to secure it. For details, refer to the accessory's Instruction Manual.
- Use of accessories not designed for a multi-function shoe requires Multi-Function Shoe Adapter AD-E1, sold separately. For details, refer to the Canon website ( ).

Attaching the shoe cover



- After removing accessories from the multi-function shoe, reattach the shoe cover to protect the contacts from dust and water.
- Slide the shoe cover all the way in by pressing the part labeled (B) in the figure, as shown.

Caution

- Attach accessories correctly as described in Attaching accessories. Incorrect attachment may cause the camera or accessories to malfunction, and accessories may fall off.
- Blow off any foreign material on the multi-function shoe with a commercially available blower or similar tool.
- If the multi-function shoe becomes wet, turn off the camera and allow it to dry before use.
- Use the shoe cover included with the camera.

Basic Operations

- Holding the Camera
- Zoom Lever
- Movie Shooting Button
- Shutter Button
- < >Control Dial
- < >Control Ring

Holding the Camera

- As you shoot, you can tilt the screen to adjust it. For details, see Using the Screen.

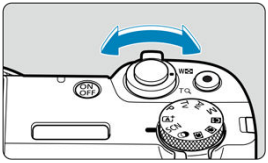
(1) Normal angle
(2) Low angle
(3) High angle

Caution

- Be careful not to cover the intake vent or the exhaust vent with your hands or fingers.

Zoom Lever

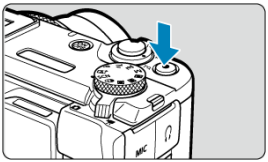
Operate the zoom lever while viewing the screen to determine the size of what you wish to shoot.



During shooting: <**W**> (wide-angle) / <**T**> (telephoto)
During playback: < ▦ > (index) /< 🔍 > (magnify)

Movie Shooting Button

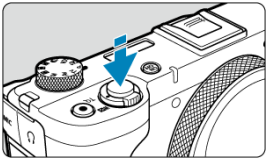
Press the movie shooting button to start recording a movie. Press it again to stop recording.



Shutter Button

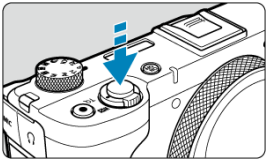
The shutter button has two steps. You can press the shutter button halfway. Then you can further press the shutter button completely.

Pressing halfway



This activates autofocusing and the automatic exposure system that sets the shutter speed and aperture value.
The exposure value (shutter speed and aperture value) is displayed on the screen for 8 sec. (metering timer/⏱8).

Pressing completely



This releases the shutter and takes the picture.

Preventing camera shake

Hand-held camera movement during the moment of exposure is called camera shake. It can cause blurred pictures. To prevent camera shake, note the following:

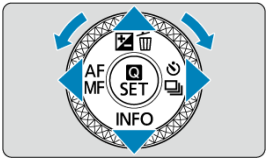
- Hold the camera still, as shown in Holding the Camera.
- Press the shutter button halfway to autofocus, then slowly press the shutter button completely.

Note

- The camera will still pause before taking a picture if you press the shutter button completely without pressing it halfway first, or if you press the shutter button halfway and immediately press it completely.
- Even during menu display or image playback, you can return to shooting standby by pressing the shutter button halfway.

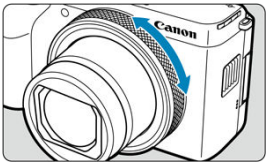
< ◌ >Control Dial

Turn the control dial to select an item or switch the image. With the exception of some operations, you can perform the same operations as < ▲ >< ▼ >< ◀ >< ▶ >.



<⚙>Control Ring

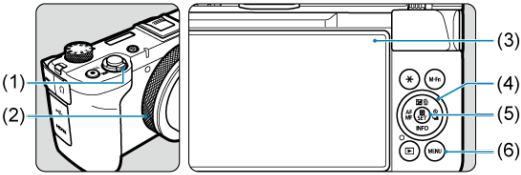
In <**P**>, <**Tv**>, <**Av**>, and <**M**> mode, you can set the shutter speed and aperture value.



On the Quick Control screen, you can change the AF area, AF operation, and other settings. In addition, you can switch the settings with the [⚙: **Customize control dial/ring**] (⚙).

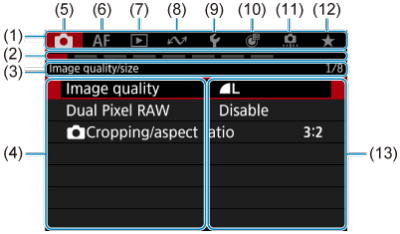
Menu Operations and Settings

- Creative Zone Menu Screen
- Basic Zone Menu Screen
- Menu Setting Procedure
- Dimmed Menu Items



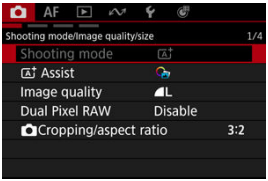
(1)	Zoom lever
(2)	< > Control ring
(3)	Screen
(4)	< / > Control dial/cross keys
(5)	< > button
(6)	< MENU > button

Creative Zone Menu Screen



(1)	Main tabs
(2)	Secondary tabs
(3)	Secondary tab name
(4)	Menu items
(5)	: Shooting
(6)	AF: Autofocus
(7)	: Playback
(8)	: Communication functions
(9)	: Set-up
(10)	: Control customization
(11)	: Custom Functions
(12)	★: My Menu
(13)	Menu settings

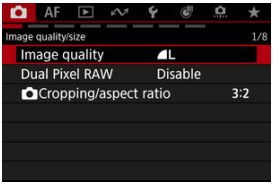
Basic Zone Menu Screen



* In Basic Zone modes, some tabs and menu items are not displayed.

Menu Setting Procedure

1. **Display the menu screen.**

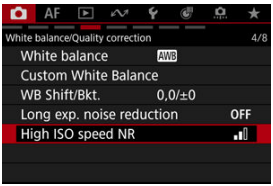


- Press the < MENU > button to display the menu screen.

2. **Select a tab.**

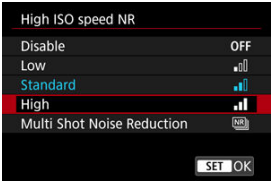
- Switch the main tab (group of functions) with the zoom lever.
- Press the < ◀ >< ▶ > keys or turn the < ◎ > dial to select a secondary tab.

3. **Select an item.**



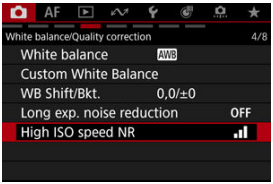
- Press the < ▲ >< ▼ > keys to select an item, then press < SET >.

4. Select an option.



- Press the < ▲ >< ▼ > keys to select an option (or in some cases, use the < ◐ > dial or < ◀ >< ▶ > keys).
- The current setting is indicated in blue.

5. Set an option.



- Press < SET > to set it.

6. Exit the setting.

- Press the < MENU > button to return to shooting standby.

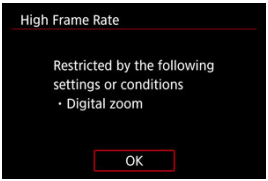
Note

- The description of menu functions hereafter assumes that you have pressed the < MENU > button to display the menu screen.
- Menu operations are also possible by tapping the menu screen.
- To cancel the operation, press the < MENU > button.

Dimmed Menu Items

Ex: When [**Digital zoom**: **On**] is set

Dimmed menu items cannot be set. This is because another function that is already set takes precedence.



To investigate the limiting function, select a dimmed item and press < SET >.
Canceling the limiting function will enable you to configure the dimmed menu item.

Caution

- It may not be possible to check the limiting function for some setting items.

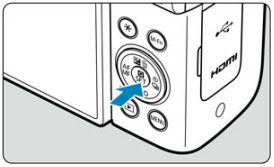
Note

- You can reset menu functions to the default settings by selecting [**Basic settings**] in [: **Reset camera**] ( ).

Quick Control

You can directly and intuitively select and set the settings displayed.

1. **Press the < > key (10).**



2. **Select a setting item and set your preferred option.**

- Press the < ▲ > < ▼ > keys to select an item.
- Turn the < > dial to adjust the setting. Some items are set by pressing a button after this.

Touch-Screen Operation

- Tapping
- Dragging
- Shooting with the Touch Shutter

Tapping

Sample screen (Quick Control)

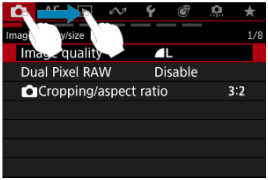
- Use your finger to tap (touch briefly and then remove your finger from) the screen.
- For example, when you tap [Q], the Quick Control screen appears. By tapping [↩], you can return to the preceding screen.

Note

- To have the camera beep for touch operations, set [: **Beep**] to [**Enable**] ( ).
- Responsiveness to touch operations can be adjusted in [: **Touch control**] ( ).

Dragging

Sample screen (Menu screen)



- Slide your finger while touching the screen.

Shooting with the Touch Shutter

Just by tapping the screen, you can focus and take the picture automatically.

1. Enable the Touch Shutter.

- Tap [OFF] on the screen.
- Each time you tap the icon, it will toggle between [OFF] and [ ].
- [ ] (Touch Shutter: Enable)
  The camera will focus on the spot you tap, then the picture will be taken.
- [OFF] (Touch Shutter: Disable)
  You can tap a spot to perform focusing on the spot. Press the shutter button completely to take the picture.

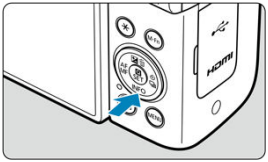
2. Tap the screen to shoot.

- Tap the face or subject on the screen.
- On the point you tap, the camera focuses (Touch AF) using your specified AF Area.
- The camera shoots automatically when set to [ ].

Caution

- The camera shoots in single shooting mode regardless of the drive mode setting ([□H], [□H], or [□]).
- Tapping the screen focuses with [**One-Shot AF**], even if [AF: **AF operation**] is set to [**Servo AF**].
- Tapping the screen in magnified view will not focus or take the picture.
- When shooting by tapping with [**Review duration**] in [📷: **Review duration**] set to [**Hold**], you can take the next shot by pressing the shutter button halfway or tapping [↩].

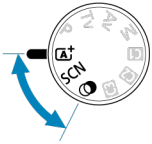
Switching the Screen Display



Each press of the < INFO > button changes the information shown.

Basic Zone

This chapter describes how to use the Basic Zone modes on the Mode dial for best results. With Basic Zone modes, various features are set automatically to enable fully automatic shooting.

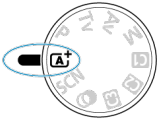


- A+: Fully Automatic Shooting (Scene Intelligent Auto)
  - Movie Recording
  - Still Photo Shooting
- Special Scene Mode
  - Movie Recording
  - Still Photo Shooting
- Creative Filters Mode
  - Movie Recording
  - Still Photo Shooting

A+: Fully Automatic Shooting (Scene Intelligent Auto)

- Movie Recording
- Still Photo Shooting

Set the Mode dial to < A+ > for fully automatic movie recording/still photo shooting.



Movie Recording

Scene Icons

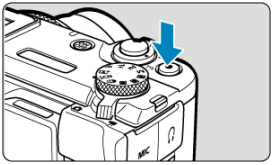
The camera detects the type of scene and sets all settings accordingly. The detected scene type is indicated in the upper left of the screen. For icon details, see Scene Icons.

1. **Set the still photo shooting/movie recording switch to <🎥>.**

2. **Focus on the subject.**

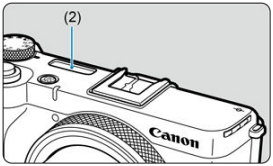
- By default, [AF: **Movie Servo AF**] is set to [**Enable**] so that the camera always keeps focusing ( ).
- When you press the shutter button halfway, the camera focuses using your specified AF area.

3. Record the movie.



- Press the movie shooting button to start recording a movie. You can also start recording a movie by tapping [●] on the screen.

- [●**REC**] (1) is displayed in the upper right while movie recording is in progress, and a red frame appears around the screen.



- Sound is recorded with the movie microphone (2).
- To stop recording the movie, press the movie shooting button again. You can also stop recording a movie by tapping [■] on the screen.
- ISO speed is set automatically ( ).

Scene Icons

In [▶A+] recording mode, the camera detects the type of scene and sets all settings accordingly. The detected scene type is indicated in the upper left of the screen. For icon details, see Scene Icons.

Still Photo Shooting

- Shooting Moving Subjects
- Scene Icons
- Adjusting Settings
- A+: Assist Features

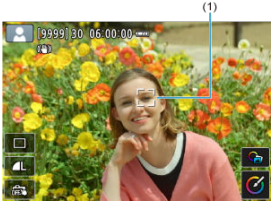
The camera analyzes the scene and sets the optimum settings automatically. It can also adjust focus automatically on either the still or moving subject by detecting the motion of the subject ( ).

1. **Set the still photo shooting/movie recording switch to < >.**

2. **Select an Assist feature.**

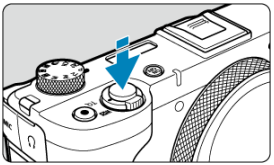
- Tap [ ] to access the selection screen ( ).

3. Aim the camera at what you will shoot (the subject).



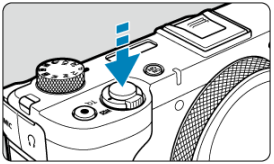
- An AF point (1) may be displayed on the subject, under some shooting conditions.
- When an AF point is displayed on the screen, aim it over the subject.

4. Focus on the subject.



- Press the shutter button halfway to focus.
- Under low light, the AF-assist beam ( ) is automatically activated if needed.
- Once the subject is in focus, that AF point turns green and the camera beeps (One-Shot AF).
- An AF point in focus on a moving subject turns blue and tracks subject movement (Servo AF).

5. Take the picture.



- Press the shutter button completely to take the picture.
- The image just captured will be displayed for approx. 2 sec. on the screen.

Caution

- Subject movement (whether subjects are still or moving) may not be detected correctly for some subject or shooting conditions.

Note

- AF operation (One-Shot AF or Servo AF) is set automatically when you press the shutter button halfway. Even when automatically set to One-Shot AF, the camera will switch to Servo AF if subject motion is detected while you are pressing the shutter button halfway.
- The < A+ > mode makes the colors look more impressive in nature, outdoor, and sunset scenes. If you do not obtain the desired color tones, change the mode to a Creative Zone mode ( ) and select a Picture Style other than [ ], then shoot again ( ).

Minimizing blurred photos

- Be careful about camera shake in handheld shots. To avoid camera shake, consider using a tripod. Use a sturdy tripod that can bear the weight of the shooting equipment. Attach the camera securely to the tripod.
- Using a wireless remote control (sold separately,) is recommended.

? FAQ

- **Focusing is not possible (indicated by a yellow AF point).**
  Aim the AF point over an area with good contrast, then press the shutter button halfway (). If you are too close to the subject, move away and shoot again.

- **Multiple AF points are displayed simultaneously.**
  Focus has been achieved at all those points.

- **The shutter speed display is blinking.**
  Since it is too dark, taking the picture may result in a blurred subject due to camera shake. Using a tripod or an external flash () is recommended.

- **Pictures taken with flash are too bright.**
  Pictures may be bright (overexposed) if you shoot subjects at close range in flash photography. Move away from the subject and shoot again.

- **The bottom part of pictures taken with flash is unnaturally dark.**
  Shooting subjects that are too close may make the shadow of the lens visible in your shots. Move away from the subject and shoot again.

Note

- Note the following if you are not using flash.
  - Under low light, when camera shake tends to occur, hold the camera steady or use a tripod. You can reduce the blur caused by camera shake by setting the lens to the wide-angle end.
  - When shooting portraits under low light, tell subjects to stay still until you have finished shooting. Any movement as you shoot will make the person look blurry in the picture.

Shooting Moving Subjects

Pressing the shutter button halfway tracks moving subjects to keep them in focus.
Keep the subject on the screen as you hold down the shutter button halfway, and at the decisive moment, press the shutter button completely.

Scene Icons

The camera detects the scene type and sets everything automatically to suit the scene. An icon representing the detected scene appears in the upper left of the screen ( ) in still photo shooting, or when you press the movie shooting button to record a movie with the Mode dial set to < >.

Adjusting Settings

By tapping icons on the screen, you can adjust settings for drive mode, image quality, Touch Shutter, Assist, and Creative Assist.

A+: Assist Features

Selecting Assist Features

1. **Select [: Assist].**

2. **Select an option.**

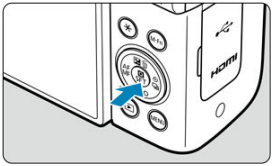
Note

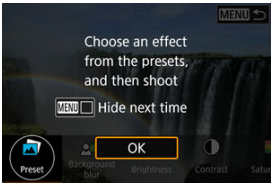
- From the shooting screen, you can access the selection screen directly by tapping [] ( ).

Creative Assist

You can shoot with your preferred effects applied.

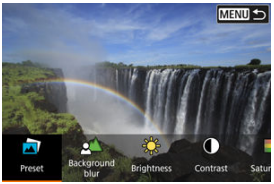
1. Press < SET >.





- Read the message and select [**OK**].

2. Select an effect.



- Select an effect with the < ◎ > dial and press < SET >.

3. Select the effect level and other details.

- Set with the < ◌ > dial and press < SET >.
- To reset the setting, press the < ✳ > button, then select [**OK**].

Creative Assist effects

- **[ ] Preset**
  Select one of the preset effects.
  Note that [**Saturation**], [**Color tone 1**], and [**Color tone 2**] are not available with [**B&W**].

- **[ ] Background blur**
  Adjust background blur. Choose higher values to make backgrounds sharper. To blur the background, choose lower values. [**Auto**] adjusts background blurring to match the brightness. Depending on the zoom position, some positions may not be available.

- **[ ] Brightness**
  Adjust image brightness.

- **[ ] Contrast**
  Adjust contrast.

- **[ ] Saturation**
  Adjust the vividness of colors.

- **[ ] Color tone 1**
  Adjust amber/blue color tone.

- **[ ] Color tone 2**
  Adjust green/magenta color tone.

- **[ ] Monochrome**
  Set the toning effect for monochrome shooting.

Note

- [**Background blur**] is not available in flash photography.
- These settings are reset when you switch shooting modes or turn the power off. To save the settings, set [: **Retain Creative Assist data**] to [**Enable**].

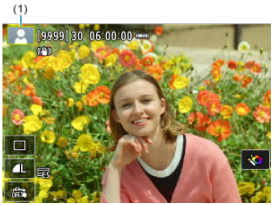
Advanced

Compositing and other advanced processing is applied to your shots based on scene detection by the camera.

1. **Select [: Assist] ( ).**

2. **Select [Advanced].**

3. **Check the icon.**



- Blinking scene icon (1): Multiple images are captured per shot and merged into a single image. In this case, only the composite image is saved.
- Normal scene icon display: Shooting with < > settings ( ).

Caution

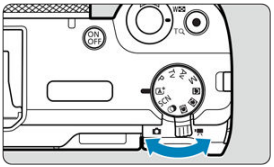
- Continuous shooting is not available.
- The camera shoots in [**Electronic** ES] shutter mode.
- The image area is smaller than in other shooting modes.
- RAW image quality cannot be selected.
- Flash photography is not available.
- Images that are greatly out of alignment due to camera shake or other issues may not be aligned correctly.
- To prevent camera shake, a high ISO speed may be set.
- Note that the image may not be rendered with a smooth gradation and may look uneven or noisy.
- The image processing may not be sufficient in scenes with strong backlighting or high contrast.
- Shooting moving subjects may result in afterimages from the movement, or darkness around the subject.
- The image alignment may not function properly with repetitive patterns (lattice, stripes, etc.), flat or single-tone images, or images significantly misaligned due to camera shake.
- Be careful about camera shake in handheld shots.
- Shooting under fluorescent or LED lighting may cause issues such as irregular exposure or colors in the resulting images, due to the flickering light source.
- [**BUSY**] appears on the screen as images are processed, and shooting is not possible until processing is finished.
- Shots will look slightly different from the preview image shown on the screen.

Special Scene Mode

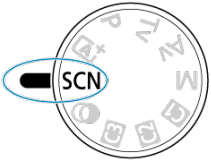
- Movie Recording
- Still Photo Shooting

Selecting a shooting mode according to the subject and scene automatically sets the features that are suitable for shooting.
* < SCN > stands for Special Scene.

1. **Select movie < > or still photo < > with the still photo shooting/ movie recording switch.**

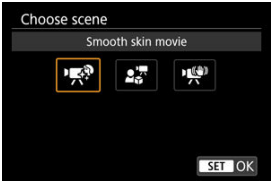


2. **Set the Mode dial to < SCN >.**



3. **Tap the Special scene icon.**

4. Select a Special scene.



Movie Recording

Smooth Skin Movie

Movie for Close-Up Demos

Movie IS Mode

You can change the recording mode to suit the scene.

Smooth Skin Movie

Select [ ].
Image processing makes skin look smoother.
On the Quick Control screen, you can set the level of the [**Smooth skin effect**] and [**AF for close-up demos**], etc.

Shooting tips

- **Focus on the face.**
  Adjust the distance between the face and the camera and set the focus so that the tracking frame [ ] is displayed on the face. If [**AF for close-up demos**] is set to [**On**], it focuses on the subject that is close to the camera. So if there is a face in front of the camera, you can shoot with the face in focus. In this case, the tracking frame is not displayed.

Caution

- Areas other than people's skin may be modified, depending on the shooting conditions.
- If the smooth skin effect is too strong, images may not look as expected. Take some test shots in advance and check the results.

Note

- The [**Smooth skin effect**] setting is retained even if you change shooting modes or turn the camera off.

Movie for Close-Up Demos

Select [ ].
Subjects near the camera can be given priority for focusing. This is useful for demonstrations, product reviews, or similar situations.
Adjust the brightness, etc. in Quick Control.

Caution

- No AF points are displayed.
- Subjects cannot be selected manually.

Movie IS Mode

Select [ ].
Enables movie recording with reduced camera shake.
Adjust the brightness, etc. in Quick Control.

Press the < > button to change the image stabilization settings.

Still Photo Shooting

- Self Portrait Mode
- Portrait Mode
- Smooth Skin Mode
- Panoramic Shot Mode
- Food Mode
- Handheld Night Scene Mode
- HDR Backlight Control Mode
- Fireworks

You can change the shooting mode to suit the scene.

Self Portrait Mode

To take shots that include yourself, use [ ] (Self Portrait) mode. Rotate the screen around toward the lens. Customizable image processing includes skin smoothing as well as brightness and background adjustment to make yourself stand out.

Shooting tips

- **Set the brightness and smooth skin effect.**
  [**Brightness**] and [**Smooth skin effect**] can be set in a range of five levels. In [**Background**], you can adjust the level of background blurring.

- **Tap the screen to shoot.**
  Besides pressing the shutter button completely to shoot, you can also shoot by tapping the screen, once you enable Touch Shutter by tapping [ ] to change it to [ ] ( ).

Caution

- After the camera achieves focus, do not change the distance between you and the camera until the picture is taken.
- Be careful not to drop the camera.

Note

- The self-timer lamp ( ) does not blink when the screen is facing toward the front of the camera in [**Self Portrait**] mode.
- You can also take shots of yourself in shooting modes other than [**Self Portrait**] by rotating the screen toward the front and tapping [ ] in the lower left.

Portrait Mode

Use [] (Portrait) mode to blur the background and make the person you shoot stand out. It also makes skin tones and hair look softer.

Shooting tips

- **Select the location where the distance between the subject and the background is the farthest.**

  The further the distance between the subject and background, the more blurred the background will look. The subject will also stand out better against an uncluttered dark background.

- **Use the telephoto.**

  Press the zoom lever to the < > side and approach the subject so that the subject fills the frame from the waist up.

- **Focus on the face.**

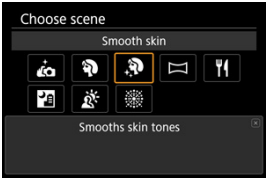
  As you focus before shooting, make sure the AF point on the subject's face is green. When shooting close-ups of faces, you can set [AF: **Eye detection**] to [**Enable**] to shoot with the subject's eyes in focus.

- **Shoot continuously.**

  The default setting is [] (Low speed continuous). If you keep holding down the shutter button, you can shoot continuously to capture changes in the subject's facial expression and pose.

Smooth Skin Mode

Use [ ] (Smooth skin) mode to make skin look more attractive. Image processing makes skin look smoother.



Shooting tips

- **Enable the camera to detect faces.**
  When the camera detects the main subject to which the smooth skin effect will be applied, the frame is displayed on the subject's face. For more effective skin smoothing, you can move closer to or farther from the subject so that the frame is displayed on the subject's face.

- **Focus on the face.**
  As you focus before shooting, make sure the AF point on the subject's face is green. When shooting close-ups of faces, you can set [AF: **Eye detection**] to [**Enable**] to shoot with the subject's eyes in focus.

Caution

- Areas other than people's skin may be modified, depending on the shooting conditions.
- If the smooth skin effect is too strong, images may not look as expected. Take some test shots in advance and check the results.

Panoramic Shot Mode

Use [⊏⊐] (Panoramic shot) mode to shoot panoramas. The panorama is created by combining shots captured in continuous shooting as you move the camera in one direction while pressing the shutter button completely.

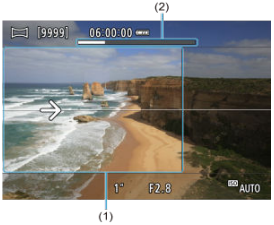
1. **Choose a shooting direction.**

- Tap [📷✥] in the lower right to choose the shooting direction.
- An arrow is displayed showing the direction to move the camera.

2. **Press the shutter button halfway.**

- Keeping the shutter button pressed halfway, focus on the subject.

3. Take the picture.



- With the shutter button fully-pressed, move the camera straight ahead at a constant speed in the direction shown by the arrow.
- The area displayed clearly (1) is captured.
- A shooting progress indicator (2) is displayed.
- Shooting stops when you release the shutter button, or when all of the progress indicator is white.

Caution

- In some scenes, images you intended to capture may not be saved as expected, and the panorama may not look as expected.
- Shooting may stop midway if you move the camera too slowly or quickly. However, the panorama created up to that point will still be saved.
- In consideration of the large sizes of < ▭ > mode images, use a computer or other device to resize panorama images if you will print them from a memory card inserted in a Canon printer.
  If panoramas cannot be managed correctly by software or Web services, try resizing them on a computer.
- Shots of the following subjects and scenes may not be combined correctly.
  - Subjects in motion
  - Subjects at close range
  - Scenes where the contrast varies greatly
  - Scenes with long stretches of the same color or pattern, such as the sea or sky
- Shooting is not affected by any correction applied to counteract blur from swinging the camera.
- Move the camera slowly when the zoom is set to the telephoto end or when shooting night scenes or under low light.

Food Mode

Use [🍴] (Food) mode for culinary photography. The photo will look bright and appetizing. Also, the reddish tinge due to the light source will be suppressed in the pictures taken under tungsten lights, etc.

Shooting tips

- **Change the color tone.**

  [**Color tone**] can be adjusted. To increase the reddish tinge of food, set toward [**Warm tone**] (red), or set toward [**Cool tone**] (blue) if it looks too red.

Caution

- The warm color cast of subjects may fade.
- When multiple light sources are included in the scene, the warm color cast of the picture may not be reduced.
- In flash photography, [**Color tone**] switches to the standard setting.
- If there are people in the picture, the skin tone may not be reproduced properly.

Handheld Night Scene Mode

[ ] (Handheld Night Scene) mode enables handheld shooting for night scenes. In this shooting mode, four shots are taken consecutively for each picture, and the resulting image with reduced camera shake is recorded.

Shooting tips

- **Hold the camera steady.**
  Keep your elbows close to your body to hold the camera steady ( ). In this mode, four shots are aligned and merged into a single image, but if there is significant misalignment in any of the four shots due to camera shake, they may not align properly in the final image.

Caution

- The image area is smaller than in other shooting modes.
- RAW image quality cannot be selected.
- Autofocusing at night or in dark scenes may be difficult when points of light lie within the AF point. In this case, set the focus mode to MF ( ) and focus manually.
- Shooting moving subjects may result in afterimages from the movement, or darkness around the subject.
- The image alignment may not function properly with repetitive patterns (lattice, stripes, etc.), flat or single-tone images, or images significantly misaligned due to camera shake.
- It takes some time to record images to the card since they are merged after shooting. [**BUSY**] appears on the screen as images are processed, and shooting is not possible until processing is finished.
- Shots will look slightly different from the preview image shown on the screen.

HDR Backlight Control Mode

Use [ ] (HDR Backlight Control) mode for backlit scenes with both bright and dark areas. Shooting once in this mode captures three consecutive images at different exposures, which are combined to create a single HDR image that retains detail in shadows that might otherwise be lost from backlighting.
* HDR stands for High Dynamic Range.

Shooting tips

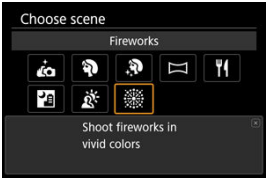
- **Hold the camera steady.**
  Keep your elbows close to your body to hold the camera steady ( ). In this mode, three shots are aligned and merged into a single image. However, if there is significant misalignment in any of the three shots due to camera shake, they may not align properly in the final image.

Caution

- The image area is smaller than in other shooting modes.
- RAW image quality cannot be selected.
- Flash photography is not available.
- Note that the image may not be rendered with a smooth gradation and may look uneven or noisy.
- HDR Backlight Control may not be effective for excessively backlit scenes or extremely high-contrast scenes.
- When shooting subjects that are sufficiently bright as they are, for example for normally lit scenes, the image may look unnatural due to the HDR effect.
- Shooting moving subjects may result in afterimages from the movement, or darkness around the subject.
- The image alignment may not function properly with repetitive patterns (lattice, stripes, etc.), flat or single-tone images, or images significantly misaligned due to camera shake.
- It takes some time to record images to the card since they are merged after shooting. [**BUSY**] appears on the screen as images are processed, and shooting is not possible until processing is finished.

Fireworks

Use [ ] (Fireworks) mode to shoot fireworks in vivid colors.



Shooting tips

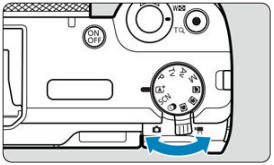
- **Hold the camera steady.**
  Mount the camera on a tripod or take other measures to keep it still and prevent camera shake. In addition, it is recommended that you set [: **IS (Image Stabilizer) mode**] to [**Off**] to shoot when securing the camera with a tripod, etc.
  Although no frames are displayed when you press the shutter button halfway, optimal focus is still determined.

Creative Filters Mode

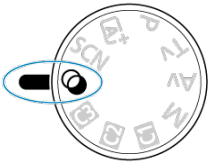
- Movie Recording
- Still Photo Shooting

You can shoot with filter effects applied. Filter effects can be previewed before you shoot.

1. **Select movie < > or still photo < > with the still photo shooting/ movie recording switch.**

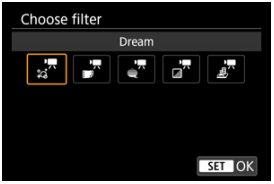


2. **Set the Mode dial to < >.**



3. **Tap the Creative filters icon.**

4. Select a filter effect.



Note

- Select [ ] in the Quick Control to adjust the filter effect.

Movie Recording

Creative Filter Characteristics

Adjusting the Miniature Effect

Creative Filter Characteristics

- **Dream**
  Applies a soft, dreamy, otherworldly appearance. Gives the movie a soft look overall, blurring the periphery of the screen. You can adjust the blurry areas along the screen edges.

- **Old movies**
  Creates an atmosphere like an old film by adding wavering, scratches, and flickering effects to the image. The top and bottom of the screen are masked in black. You can modify the wavering and scratch effects by adjusting the filter effect.

- **Memory**
  Creates the atmosphere of a distant memory. Gives the movie a soft look overall, reducing brightness of the periphery of the screen. You can modify the overall saturation and the dark areas along the screen edges by adjusting the filter effect.

- **Dramatic B&W**
  Creates an atmosphere of dramatic realism with high-contrast black and white. You can adjust the graininess and black-and-white effect.

- **Miniature effect movies**
  You can record movies with a miniature (diorama) effect. Select the playback speed and record.
  Shooting under the default setting will keep the center looking sharp.
  To move the area that looks sharp (the scene frame), see Adjusting the Miniature Effect.
  1-point AF is used as the AF area. Shooting with the AF point and scene frame aligned is recommended. The AF point and scene frame are hidden during recording.
  Set the playback speed to [**5x**], [**10x**], or [**20x**] before recording.

Speed and playback time (for a 1-minute movie)

Speed	Playback Time
5x	Approx. 12 sec.
10x	Approx. 6 sec.
20x	Approx. 3 sec.

Caution

[🖶] (Miniature effect movie)

- Sound is not recorded.
- Movie Servo AF will not function.
- Editing is not available for miniature effect movies with a playback time less than 1 sec. (✎).

Adjusting the Miniature Effect

1. **Move the scene frame.**

- Use the scene frame to set an area that will look sharp.
- To make the scene frame movable (displayed in orange), press the < INFO > button or tap [ ] in the lower right of the screen. By tapping [ ], you can also switch between vertical and horizontal scene frame orientation. Scene frame orientation can also be switched from horizontal orientation by pressing the < ◀ >< ▶ > keys and from vertical orientation with the < ▲ >< ▼ > keys.
- < ◌ >To move the scene frame, use the < ◌ > dial or < ✥ > keys. To center the scene frame again, press the < MENU > button.
- Press < SET > to confirm the scene frame position and enable movement of the AF point, which turns orange.

2. Move the AF point as needed and record the movie.

- Use the < ◎ > dial or < ✥ > keys to move the AF point to the position to focus on.
- Aligning the AF point and scene frame is recommended.
- To return the AF point to the center of the screen, press the < MENU > button.
- To confirm the position of the AF point, press < SET >.

Note

- To switch from moving the AF point to moving the scene frame, press the < INFO > button after < SET >.

Creative Filter Characteristics

Caution

- RAW and RAW+JPEG are not available. When RAW image quality is set, images are captured with L image quality. When RAW+JPEG image quality is set, images are captured with the specified JPEG image quality.

Note

- No histogram is displayed.
- A magnified view is not available.

Creative Filter Characteristics

- **Grainy B/W**
  Makes the image grainy and black and white. By adjusting the contrast, you can change the black-and-white effect.

- **Soft focus**
  Gives the image a soft look. By adjusting the blur, you can change the degree of softness.

- **Fish-eye effect**
  Gives the effect of a fish-eye lens. The image will have barrel distortion.
  Depending on the level of this filter effect, the area trimmed along the periphery of the image changes. Also, because this filter effect magnifies the center of the image, the apparent resolution at the center may degrade depending on the number of recorded pixels, so set the filter effect while checking the resulting image. One AF point is used, fixed at the center.

- **Water painting effect**
  Makes the photo look like a watercolor painting with soft colors. By adjusting the effect, you can change the color density. Note that night scenes or dark scenes may not be rendered with a smooth gradation and may look uneven or noisy.

- **Toy camera effect**
  Shifts colors to those typical of toy cameras and darkens the four corners of the image. Color tone options can be used to change the color cast.

- **Miniature effect**
  Creates a diorama effect.
  Shooting under the default setting will keep the center looking sharp.
  To move the area that looks sharp (the scene frame), see “Adjusting the Miniature Effect” ( ).
  [**AF area**] is set to [**1-point AF**]. Shooting with the AF point and scene frame aligned is recommended.

- **HDR art standard**
  Photos retain more detail in highlights and shadows. With reduced contrast and flatter gradation, the finish resembles a painting. The subject outlines will have bright (or dark) edges.

- **HDR art vivid**
  Colors are more saturated than with [**HDR art standard**], and the low contrast and flat gradation resemble graphic art.

- **HDR art bold**
  The colors are the most saturated, making the subject pop out, and the picture looks like an oil painting.

- **HDR art embossed**

  The color saturation, brightness, contrast and gradation are decreased to make the picture look flat, so that the picture looks faded and old. The subject outlines will have intensely bright (or dark) edges.

Caution

Precautions for [HDR], [HDR], [HDR], and [HDR]

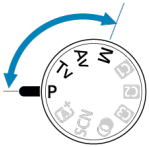
- The image area is smaller than in other shooting modes.
- Shots will look slightly different from the filter effect previews shown on the screen.
- Shooting moving subjects may result in afterimages from the movement, or darkness around the subject.
- The image alignment may not function properly with repetitive patterns (lattice, stripes, etc.), flat or single-tone images, or images significantly misaligned due to camera shake.
- Be careful about camera shake in handheld shots.
- Subjects such as the sky or white walls may not be rendered with smooth gradation and may have noise or irregular exposure or colors.
- Shooting under fluorescent or LED lighting may result in unnatural color reproduction of the illuminated areas.
- It takes some time to record images to the card since they are merged after shooting. [**BUSY**] appears on the screen as images are processed, and shooting is not possible until processing is finished.
- Flash photography is not available.

Note

- With [HDR], [HDR], [HDR], and [HDR], you can shoot high dynamic range photos that retain detail in highlights and shadows of high-contrast scenes. Three consecutive images are captured at different brightnesses each time you shoot and used to create a single image. See the precautions for [HDR], [HDR], [HDR], and [HDR].

Creative Zone

In the Creative Zone, you can set the shutter speed or aperture value and change the camera settings to shoot.



- Movie Recording
- Still Photo Shooting

Movie Recording

Autoexposure Recording

Shutter-Priority AE

Aperture-Priority AE

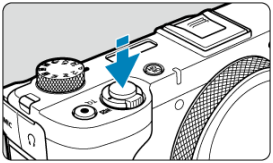
Manual Exposure Recording

Autoexposure Recording

Exposure is controlled automatically to suit the brightness.

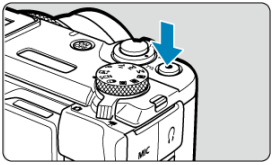
1. **Select <P> with the Mode dial.**

2. **Focus on the subject.**



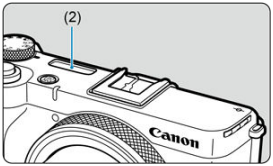
- By default, [AF: **Movie Servo AF**] is set to [**Enable**] so that the camera always keeps focusing ( ).
- When you press the shutter button halfway, the camera focuses using your specified AF area.

3. Record the movie.



- Press the movie shooting button to start recording a movie. You can also start recording a movie by tapping [●] on the screen.

- [●**REC**] (1) is displayed in the upper right while movie recording is in progress, and a red frame is displayed around the screen.



- Sound is recorded by the microphone (2).
- To stop recording the movie, press the movie shooting button again. You can also stop recording a movie by tapping [■] on the screen.
- ISO speed is set automatically ( ).

Shutter-Priority AE

[Tv] recording mode enables you to set your preferred shutter speed for movies. ISO speed and aperture values are set automatically to suit the brightness and obtain standard exposure.

1. **Select <Tv> with the Mode dial.**

2. **Set the shutter speed (1).**

(1)

- Set it by looking at the screen as you turn the < > dial.
- The available shutter speeds vary depending on the frame rate.

3. **Focus and record the movie.**

- Same as steps 2 and 3 for Autoexposure Recording.
- ISO speed is set automatically ( ).

Caution

- Avoid adjusting shutter speed while recording movies, which will record changes in exposure.
- When recording a movie of a moving subject, a shutter speed of approx. 1/25 sec. to 1/125 sec. is recommended. The faster the shutter speed, the less smooth the subject's movement will look.
- If you change the shutter speed while recording under fluorescent or LED lighting, image flicker may be recorded.
- Available shutter speeds vary depending on the frame rate you have set for your specified movie recording size.

Aperture-Priority AE

[Av] recording mode enables you to set your preferred aperture value for movies. ISO speed and shutter speed are set automatically to suit the brightness and obtain standard exposure.

1. **Select <Av> with the Mode dial.**

2. **Set the aperture value (1).**

(1)

- Set it by looking at the screen as you turn the < > dial.

3. **Focus and record the movie.**

- Same as steps 2 and 3 for Autoexposure Recording.
- ISO speed is set automatically ( ).

Caution

- Avoid adjusting the aperture value while recording movies, which will record changes in exposure caused by aperture adjustment.

Note

Notes for [ ], [Tv], and [Av] modes

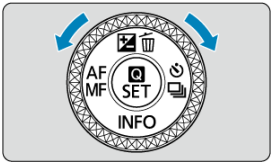
- You can lock the exposure (AE lock) by pressing the < * > button. After locking, AE lock can be canceled by pressing the < * > button again.
- Exposure compensation can be set in a range of up to ±3 stops by pressing the < ± > button.
- In [ ] mode, the ISO speed, shutter speed, and aperture value are not recorded in movie Exif information.
- The camera is compatible with Speedlite functionality to activate the LED light automatically under low light when recording movies in [ ], [Tv], and [Av] modes. For details, refer to the Instruction Manual of the EX series Speedlite equipped with an LED light.

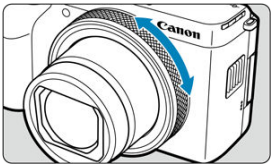
Manual Exposure Recording

You can manually set the shutter speed, aperture value, and ISO speed for movie recording.

1. **Select <M> with the Mode dial.**

2. **Set the shutter speed, aperture value, and ISO speed.**





- Press the shutter button halfway and check the exposure level indicator.
- Turn the < ◌ > dial to set the shutter speed (1), the < ▮ > dial to set the aperture value (2), and tap the ISO speed to set the ISO speed (3) (☑).
- Available shutter speeds vary by frame rate (☑).

3. Focus and record the movie.

- Same as steps 2 and 3 for Autoexposure Recording.

Caution

- During movie recording, avoid changing the shutter speed, aperture value, or ISO speed, which may record changes in the exposure or create more noise at high ISO speeds.
- When recording a movie of a moving subject, a shutter speed of approx. 1/25 sec. to 1/125 sec. is recommended. The faster the shutter speed, the less smooth the subject's movement will look.
- If you change the shutter speed while recording under fluorescent or LED lighting, image flicker may be recorded.
- Available shutter speeds vary depending on the frame rate you have set for your specified movie recording size.

Note

- Exposure compensation with ISO Auto can be set in a range of ±3 stops as follows.
  - Tap the exposure level indicator
  - Set [: **Exposure comp.**]
- When ISO Auto is set, you can press the < ✳ > button to lock the ISO speed. After locking during movie recording, ISO speed lock can be canceled by pressing the < ✳ > button again.
- If you press the < ✳ > button and recompose the shot, you can see the exposure level difference on the exposure level indicator ( ) compared to when the < ✳ > button was pressed.
- You can set the ISO speed manually or select [AUTO] to set it automatically ( ).

Still Photo Shooting

- P: Program AE
- Tv: Shutter-Priority AE Shooting
- Av: Aperture-Priority AE Shooting
- M: Manual Exposure Shooting
- Long (Bulb) Exposures

P: Program AE

The camera automatically sets the shutter speed and aperture value to suit the subject's brightness.
* <**P**> stands for Program.
* AE stands for Auto Exposure.

1. **Set the Mode dial to <P> ( ).**

2. **Focus on the subject.**

- Aim the AF point over the subject and press the shutter button halfway.
- Once the subject is in focus, the AF point turns green (with One-Shot AF).
- The shutter speed and aperture value are set automatically.

3. Check the display.

- As long as the exposure value is not blinking, standard exposure will be obtained.

4. Take the picture.

- Compose the shot and press the shutter button completely.

Caution

- If a slow shutter speed and low aperture value blink, the subject is too dark. Increase the ISO speed or use flash.
- If a fast shutter speed and high aperture value blink, the subject is too bright. Lower the ISO speed or set the [: **ND filter**] ( ).

Note

Differences between <P> and < > modes

- < > mode limits available functions and sets the AF area, metering mode, and many other functions automatically to prevent bad shots. In contrast, <**P**> mode only sets the shutter speed and aperture value automatically, and you can freely set the AF area, metering mode, and other functions.

Program shift

- In <**P**> mode, you can freely change the combination (program) of shutter speed and aperture value set automatically by the camera while maintaining the same exposure. This is called Program shift.
- With Program shift, you can press the shutter button halfway, then turn the < > dial until the desired shutter speed or aperture value is displayed.
- Program shift will be canceled automatically when the metering timer ends (exposure setting display turns off).
- Program shift cannot be used with flash.

Tv: Shutter-Priority AE Shooting

In this mode, you set the shutter speed and the camera automatically sets the aperture value to obtain the standard exposure matching the brightness of the subject. A faster shutter speed can freeze the action of a moving subject. A slower shutter speed can create a blurred effect, giving the impression of motion.
* **<Tv>** stands for Time value.

Blurred motion
(Slow speed image)

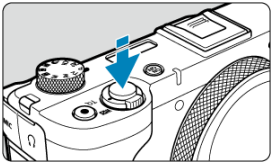
Frozen motion
(High speed image)

1. **Set the Mode dial to <Tv> ( ).**

2. **Set the desired shutter speed.**

   - Turn the < > dial to set it.

3. Focus on the subject.



- Press the shutter button halfway.
- The aperture value is set automatically.

4. Check the display and shoot.

- As long as the aperture value is not blinking, the standard exposure will be obtained.

Caution

- If the lowest aperture value blinks, it indicates underexposure.
  Turn the < ◯ > dial to set a slower shutter speed until the aperture value stops blinking or set a higher ISO speed.
- If the highest aperture value blinks, it indicates overexposure.
  Turn the < ◯ > dial to set a faster shutter speed until the aperture value stops blinking, or set a lower ISO speed.

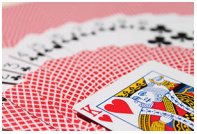
Note

Shutter speed display

- For example, **0"5** indicates 0.5 sec. and **15"**, 15 sec.

Av: Aperture-Priority AE Shooting

In this mode, you set the desired aperture value and the camera sets the shutter speed automatically to obtain the standard exposure matching the subject brightness. A higher f/number (smaller aperture hole) will make more of the foreground and background fall within acceptable focus. On the other hand, a lower f/number (larger aperture hole) will make less of the foreground and background fall within acceptable focus.
* **<Av>** stands for Aperture value (aperture opening).



Blurred background
(Low aperture value image)

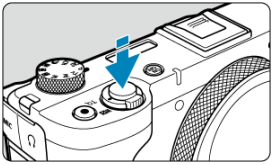
Sharp foreground and background
(High aperture value image)

1. **Set the Mode dial to <Av> ( ).**

2. **Set the desired aperture value.**

- Turn the < > dial to set it.

3. Focus on the subject.



- Press the shutter button halfway.
- The shutter speed is set automatically.

4. Check the display and shoot.

- As long as the shutter speed is not blinking, the standard exposure will be obtained.

Caution

- If a slow shutter speed blinks, it indicates underexposure.
  Turn the < ◐ > dial to decrease the aperture value (open the aperture) until the shutter speed blinking stops or set a higher ISO speed.
- If a fast shutter speed blinks, it indicates overexposure.
  Turn the < ◐ > dial to increase aperture value (close the aperture) until the shutter speed blinking stops or set a lower ISO speed.

Note

Aperture value display

- The higher the value, the smaller the aperture opening will be. The aperture value displayed varies depending on the zoom position.

M: Manual Exposure Shooting

In this mode, you set both the shutter speed and aperture value as desired. To determine the exposure, refer to the exposure level indicator or use a commercially available exposure meter.
* <**M**> stands for Manual.

1. **Set the Mode dial to <M> ( ).**

2. **Set the ISO speed ( ).**

   - With ISO Auto, you can set exposure compensation ( ).

3. **Set the desired shutter speed.**

   - Turn the < > dial to set it.

4. **Set the desired aperture value.**

   - Turn the < > dial to set it.

5. **Focus on the subject.**

   - Press the shutter button halfway.
   - Check the exposure level mark [ ] to see how far the current exposure level is from the standard exposure level.

6. **Take the picture.**

Exposure Compensation with ISO Auto

If the ISO speed is set to [**AUTO**] for manual exposure shooting, you can set exposure compensation ( ) as follows:

- Tap the exposure level indicator
- [: **Expo.comp./AEB**]

Caution

- Exposure may not be as expected when ISO Auto is set, because the ISO speed is adjusted to ensure standard exposure for your specified shutter speed and aperture value. In this case, set the exposure compensation.
- Exposure compensation is not applied in flash photography with ISO Auto, even if you have set an exposure compensation amount.

Note

- When ISO Auto is set, you can press the < ✳ > button to lock the ISO speed.
- If you press the < ✳ > button and recompose the shot, you can see the exposure level difference on the exposure level indicator compared to when the < ✳ > button was pressed.
- Any existing exposure compensation amount is maintained if you switch to <**M**> mode with ISO Auto after using exposure compensation in <**P**>, <**Tv**>, or <**Av**> ( ).

Long (Bulb) Exposures

In this mode, the shutter stays open as long as you hold down the shutter button completely, and closes when you let go of the shutter button. Use bulb exposures for night scenes, fireworks, astrophotography, and other subjects requiring long exposures.

1. **Set the Mode dial to <M> ( ).**

2. **Set the shutter speed to [BULB].**

   - Turn the < > dial to the left to set [**BULB**].

3. **Set the desired aperture value.**

   - Turn the < > dial to set it.

4. **Take the picture.**

   - The exposure will continue for as long as you keep the shutter button pressed completely.
   - Elapsed exposure time is shown on the screen.

Caution

- Do not point the camera toward an intense light source, such as the sun or an intense artificial light source. Doing so may damage the image sensor or the camera's internal components.
- Long bulb exposures produce more noise in the image than usual.
- ISO 400 is used when the camera is set to ISO Auto.

Note

- You can reduce the noise generated during long exposures by using [: **Long exp. noise reduction**] ( ).
- Using a tripod is recommended for bulb exposures.
- You can also shoot bulb exposures by using Wireless Remote Control BR-E1 (sold separately,). When you press the remote controller's release (transmit) button, the bulb exposure will start immediately or 2 sec. later. Press the button again to stop the bulb exposure.

Shooting and Recording

This chapter describes shooting and recording and introduces menu settings on the shooting [📷] tab.
☆ to the right of titles indicates functions only available in Creative Zone modes (<**P**>, <**Tv**>, <**Av**>, or <**M**>).
Switch between movie recording and still photo shooting with the Still photo shooting/movie recording switch.

Caution

- After switching between movie recording and still photo shooting, check the camera settings again before shooting.
- Still photo shooting is not supported in movie recording mode. You can record movies by pressing the movie shooting button during still photo shooting.

- Tab Menus: Movie Recording
- Tab Menus: Still Photo Shooting

Movie Recording

- Movie Recording Size
- High Frame Rate
- Digital Zoom
- Sound Recording
- Audio Format
- Audio Settings ☆
- Exposure Compensation ☆
- Movie ISO Speed Settings ☆
- Movie Auto Slow Shutter ☆
- ND Filter ☆
- Picture Style ☆
- Canon Log Settings ☆
- Clarity ☆
- Color Filter
- HDR Shooting (PQ) ☆
- Auto Lighting Optimizer ☆
- Highlight Tone Priority ☆
- White Balance ☆
- White Balance Correction ☆
- High ISO Speed Noise Reduction ☆
- Time-Lapse Movies

- Tally Lamp ☆
- Movie Self-Timer
- Image Stabilizer (IS Mode)
- Customizing Quick Controls ☆
- Movie Auto Level
- Metering Timer ☆
- Time Code
- Zebra Settings ☆
- Shooting Information Display
- Reverse Display
- Auto Power Off Temperature
- Standby: Low Resolution
- Shutdown Warning Guidance
- Display During HDMI Connection
- General Shooting

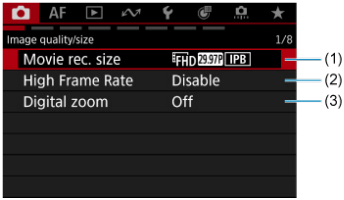
Still Photo Shooting

- Still Photo Image Quality
- Dual Pixel RAW
- Still Photo Cropping/Aspect Ratio
- Exposure Compensation ☆
- ND Filter ☆
- AEB Shooting ☆
- Exposure Lock (AE Lock) ☆
- Still Photo ISO Speed Settings ☆
- Shooting with Speedlites ☆
- Flash Function Settings ☆
- Metering Mode ☆
- Picture Style ☆
- Clarity ☆
- HDR Shooting (PQ) ☆
- Auto Lighting Optimizer ☆
- Highlight Tone Priority ☆
- Color Space ☆
- HDR Mode ☆
- White Balance ☆
- White Balance Correction ☆
- Long Exposure Noise Reduction ☆
- High ISO Speed Noise Reduction ☆

- Focus Bracketing ☆
- Shutter Mode ☆
- Image Stabilizer (IS Mode)
- Customizing Quick Controls ☆
- Metering Timer ☆
- Shooting Information Display
- Display Frame Rate
- Reverse Display
- Auto Power Off Temperature
- Review Duration
- Exposure Simulation ☆
- General Shooting

Tab Menus: Movie Recording

Image quality/size

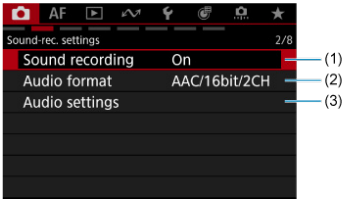


(1) Movie rec. size

(2) High Frame Rate

(3) Digital zoom

Sound-rec. settings

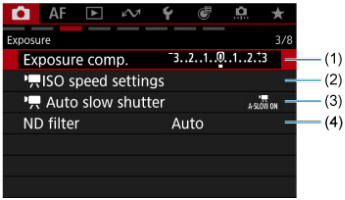


(1) Sound recording

(2) Audio format

(3) Audio settings ☆

Exposure



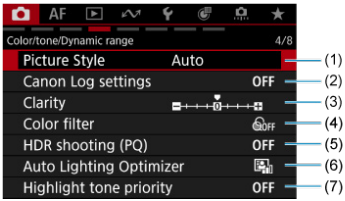
(1) Exposure comp. ☆

(2) ISO speed settings ☆

(3) Auto slow shutter ☆

(4) ND filter ☆

Color/tone/Dynamic range



(1) Picture Style ☆

(2) Canon Log settings ☆

(3) Clarity ☆

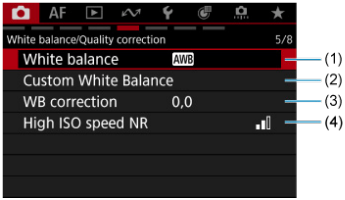
(4) Color filter

(5) HDR shooting (PQ) ☆

(6) Auto Lighting Optimizer ☆

(7) Highlight tone priority ☆

White balance/Quality correction



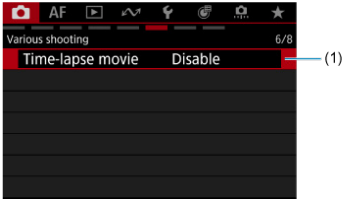
(1) White balance ☆

(2) Custom White Balance ☆

(3) WB correction ☆

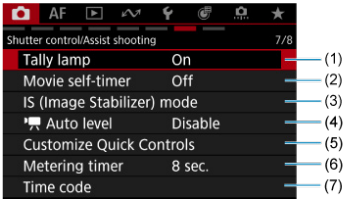
(4) High ISO speed NR ☆

Various shooting



(1) Time-lapse movie

Shutter control/Assist shooting



(1) Tally lamp ☆

(2) Movie self-timer

(3) IS (Image Stabilizer) mode

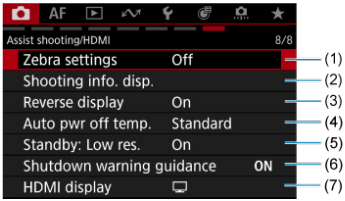
(4) Auto level

(5) Customize Quick Controls ☆

(6) Metering timer ☆

(7) Time code

Assist shooting/HDMI



(1) Zebra settings ☆

(2) Shooting info. disp.

(3) Reverse display

(4) Auto pwr off temp.

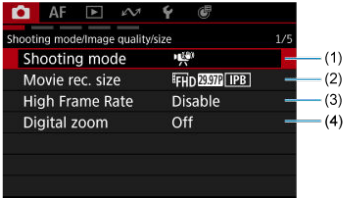
(5) Standby: Low res.

(6) Shutdown warning guidance

(7) HDMI display

In Basic Zone modes (< >< SCN >< > modes), the following screens are displayed.

Shooting mode/Image quality/size



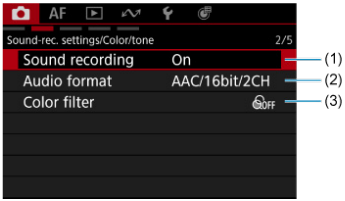
(1) Shooting mode

(2) Movie rec. size

(3) High Frame Rate

(4) Digital zoom

Sound-rec. settings/Color/tone

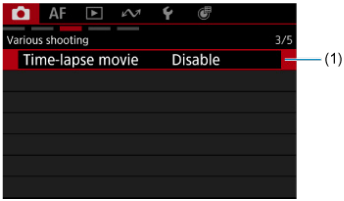


(1) Sound recording

(2) Audio format

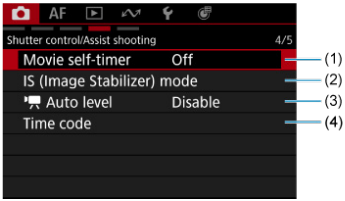
(3) Color filter

Various shooting



(1) Time-lapse movie

Shutter control/Assist shooting



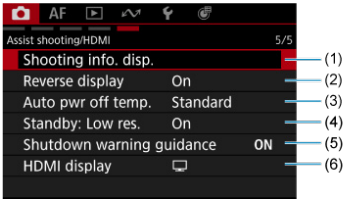
(1) Movie self-timer

(2) IS (Image Stabilizer) mode

(3) Auto level

(4) Time code

Assist shooting/HDMI



(1) Shooting info. disp.

(2) Reverse display

(3) Auto pwr off temp.

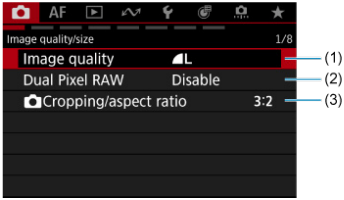
(4) Standby: Low res.

(5) Shutdown warning guidance

(6) HDMI display

Tab Menus: Still Photo Shooting

Image quality/size

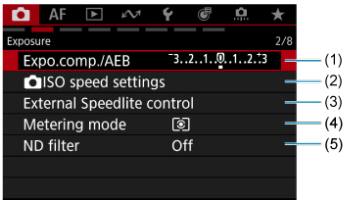


(1) Image quality

(2) Dual Pixel RAW

(3) Cropping/aspect ratio

Exposure



(1) Expo.comp./AEB ☆

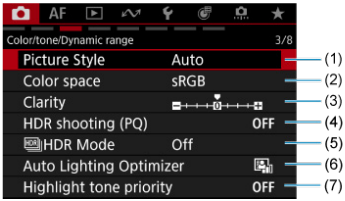
(2) ISO speed settings ☆

(3) External Speedlite control ☆

(4) Metering mode ☆

(5) ND filter ☆

Color/tone/Dynamic range



(1) Picture Style ☆

(2) Color space ☆

(3) Clarity ☆

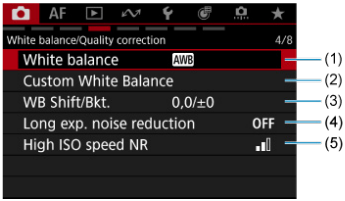
(4) HDR shooting (PQ) ☆

(5) HDR Mode ☆

(6) Auto Lighting Optimizer ☆

(7) Highlight tone priority ☆

White balance/Quality correction



(1) White balance ☆

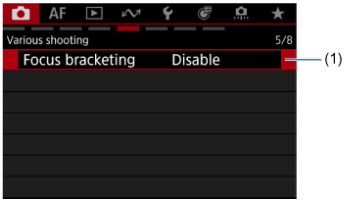
(2) Custom White Balance ☆

(3) WB Shift/Bkt. ☆

(4) Long exp. noise reduction ☆

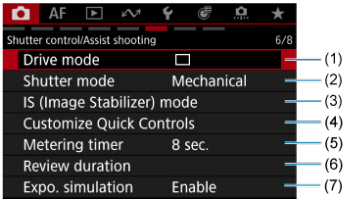
(5) High ISO speed NR ☆

Various shooting



(1) Focus bracketing ☆

Shutter control/Assist shooting



(1) Drive mode

(2) Shutter mode ☆

(3) IS (Image Stabilizer) mode

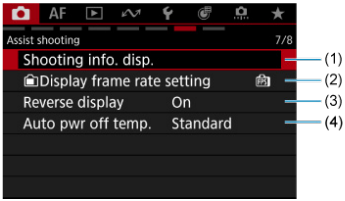
(4) Customize Quick Controls ☆

(5) Metering timer ☆

(6) Review duration

(7) Expo. simulation ☆

Assist shooting



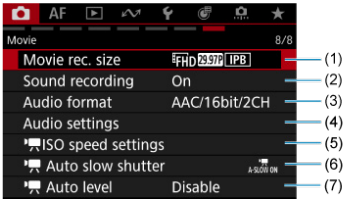
(1) Shooting info. disp.

(2) Display frame rate setting

(3) Reverse display

(4) Auto pwr off temp.

Movie



(1) Movie rec. size

(2) Sound recording

(3) Audio format

(4) Audio settings ☆

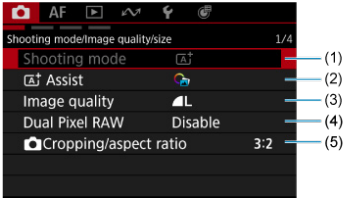
(5) ISO speed settings ☆

(6) Auto slow shutter ☆

(7) Auto level

In Basic Zone modes (< A+ >< SCN >< ◎ > modes), the following screens are displayed.

Shooting mode/Image quality/size



(1) Shooting mode

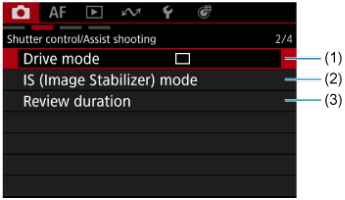
(2) A+ Assist

(3) Image quality

(4) Dual Pixel RAW

(5) Cropping/aspect ratio

Shutter control/Assist shooting

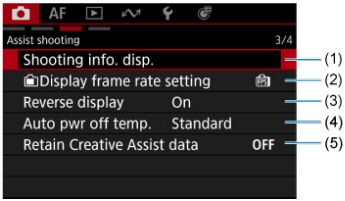


(1) Drive mode

(2) IS (Image Stabilizer) mode

(3) Review duration

Assist shooting



(1) Shooting info. disp.

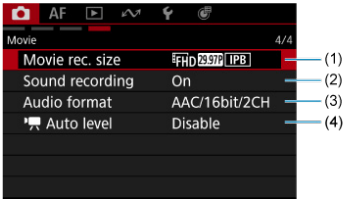
(2) Display frame rate setting

(3) Reverse display

(4) Auto pwr off temp.

(5) Retain Creative Assist data

Movie



(1) Movie rec. size

(2) Sound recording

(3) Audio format

(4) Auto level

Movie Recording Size

- Image Area
- 4K Movie Recording
- Cards That Can Record Movies
- Movie Files Exceeding 4 GB
- Total Movie Recording Time and File Size Per Minute
- Movie Recording Time Limit

You can set the resolution, frame rate, and compression method in [: **Movie rec. size**]. Note that the frame rate is updated automatically to match the [: **Video system**] setting ( ).

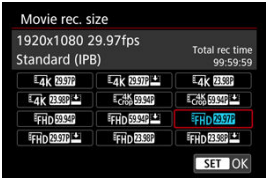


Image Size		Aspect Ratio
4K	3840×2160	16:9
4K Crop	3840×2160	16:9
FHD	1920×1080	16:9

Frame rate (fps: frames per second)

- **[119.9P] 119.9 fps ( )/[59.94P] 59.94 fps/[29.97P] 29.97 fps**
  For areas where the TV system is NTSC (North America, Japan, South Korea, Mexico, etc.).

- **[100.0P] 100.00 fps ( )/[50.00P] 50.00 fps/[25.00P] 25.00 fps**
  For areas where the TV system is PAL (Europe, Russia, China, Australia, etc.).

- **[23.98P] 23.98 fps**
  Mainly for cinematic purposes. Available when [: **Video system**] is set to [**For NTSC**].

Compression method

- [IPB] **IPB** (Standard)
  Compresses multiple frames at a time efficiently for recording.

- [IPB] **IPB** (Light)
  Since the movie is recorded at a bit rate lower than with IPB (Standard), the file size will be smaller than with IPB (Standard) and the playback compatibility will be higher. This will make the available recording time longer than with IPB (Standard) (with a card of the same capacity).

Movie recording format

- [MP4] **MP4**
  All movies you record with the camera are recorded as movie files in MP4 format (file extension ".MP4").

Caution

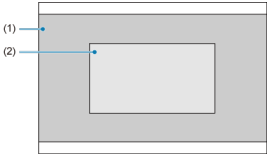
- If you change the [: **Video system**] setting, also set [: **Movie rec. size**] again.
- Other devices may not properly play movies such as 4K, FHD 59.94P/50.00P, and High Frame Rate movies.
- Apparent resolution and noise vary slightly depending on the movie recording size setting.

Note

- To obtain better performance with the card, formatting the card with the camera before recording movies is recommended ( ).
- Movies cannot be recorded in HD or VGA quality.

Image Area

The movie image area varies depending on the movie recording size setting.



(1) 4K (3840×2160) / FHD (1920×1080)
(2) 4K Crop (3840×2160)

Caution

- Recording with Movie digital IS ( ) further crops the image around the center of the screen.

4K Movie Recording

- Recording 4K movies requires a stable card with a fast writing speed. For details, see Cards That Can Record Movies.
- 4K movie recording greatly increases the processing load, which may increase the internal camera temperature faster or higher than for regular movies. **If a white [ ] or red [ ] icon appears during movie recording, the card may be hot, so stop recording the movie and let the camera cool down before removing the card. (Do not remove the card immediately.)**
- From a 4K movie, you can select any frame to save to the card as a JPEG still image ( ).

Cards That Can Record Movies

See Card performance requirements (movie recording) [write/read speed] for details on cards that can record at each movie recording size.
Test cards by recording a few movies to make sure that they can record correctly at the specified size.

Caution

- Before recording 4K movies, format cards by selecting [**Low level format**] in [: **Format card**] ( ).
- 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 properly, format the card and try again. If formatting the card does not resolve the problem, refer to the card manufacturer's website, etc.

Note

- To obtain better performance with the card, formatting the card with the camera before recording movies is recommended ( ).
- To check the card's writing/reading speed, refer to the card manufacturer's website, etc.

Movie Files Exceeding 4 GB

- **Using SDHC cards formatted with the camera**

  If you use the camera to format an SDHC card, the camera will format it in FAT32. With a FAT32-formatted card, if you record a movie and the file size exceeds 4 GB, a new movie file will be created automatically.
  When you play back the movie, you will have to play back each movie file individually. Movie files cannot be played back automatically in consecutive order. After the movie playback ends, select the next movie and play it back.

- **Using SDXC cards formatted with the camera**

  exFAT formatting is applied when the camera is used to format SDXC cards. Individual movies recorded to exFAT-formatted cards are recorded as a single file (without splitting them into multiple files) even if they exceed 4 GB, so the resulting movie file will exceed 4 GB.

Caution

- When importing movie files exceeding 4 GB to a computer, use a card reader ( ). It may not be possible to save movie files exceeding 4 GB if you attempt this using standard features of the computer's operating system.

Total Movie Recording Time and File Size Per Minute

See Estimated recording time, movie bit rate, and file size.

Movie Recording Time Limit

When recording non-High Frame Rate movies

The maximum recording time per movie is 6 hr. Once 6 hr. is reached, recording stops automatically. You can start recording a movie again by pressing the movie shooting button (which records the movie as a new file).

When recording High Frame Rate movies

The maximum recording time per movie is 1 hr. 30 min. Once 1 hr. 30 min. is reached, recording automatically stops. You can start recording a High Frame Rate movie again by pressing the movie shooting button (which records the movie as a new file).

Caution

- The camera's internal temperature may rise and less recording time may be available after extended movie playback/Live View display.

Still Photo Image Quality

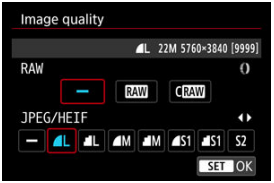
RAW Images

Guide to Image Quality Settings

Maximum Burst for Continuous Shooting

You can select the pixel count and the image quality. JPEG/HEIF image quality options are as follows: ◢L / ◢L / ◢M / ◢M / ◢S1 / ◢S1 / S2. For RAW images, you can specify RAW or CRAW as the image quality.

1. **Select [: Image quality] ( ).**
2. **Set the image quality.**



- For RAW images, use the < > dial to select the size, and for JPEG/HEIF images, use the < ◀ >< ▶ > keys.
- Press < SET > to set it.

Note

- HEIF can be specified when [: **HDR shooting (PQ)**] is set to [**Enable**]. You can convert these images to JPEG images after shooting ( ).
- ◢L is set if you set both RAW and JPEG/HEIF to [—].
- Two versions of each shot are recorded at your specified image quality when you have selected both RAW and JPEG/HEIF. Both images have the same file number but each has a different file extension, with .JPG for JPEG, .HIF for HEIF and .CR3 for RAW.
- S2 is in ◢ (Fine) quality.
- Meaning of image quality icons: RAW RAW, CRAW Compact RAW, JPEG, HEIF, L Large, M Medium, S Small.

RAW Images

RAW images are raw data from the image sensor that are recorded to the card digitally as RAW or CRAW, based on your selection. CRAW produces RAW images with smaller file sizes than RAW.
You can use Digital Photo Professional (EOS software) to process RAW images. You can make various adjustments to images depending upon how they will be used and can generate JPEG, HEIF, or other types of images reflecting the effects of those adjustments.

Note

- To view RAW images on a computer, consider using Digital Photo Professional (DPP).
- Older versions of DPP Ver. 4.x do not support display, processing, editing, or other operations with RAW images captured by this camera. If a previous version of DPP Ver. 4.x is installed on your computer, obtain and install the latest version of DPP from the Canon website to update it ( ), which will overwrite the previous version. Similarly, DPP Ver. 3.x or earlier does not support display, processing, editing, or other operations with RAW images captured by this camera.
- Commercially available software may not be able to display RAW images captured by this camera. For compatibility information, contact the software manufacturer.

Guide to Image Quality Settings

See Still photo file size/Number of shots available/Maximum burst for continuous shooting for details on file size, number of shots available, maximum burst, and other estimated values.

Maximum Burst for Continuous Shooting

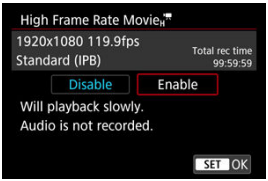
The estimated maximum burst is shown on the upper left of the shooting screen.

Note

- If the maximum burst is displayed as "**99**", it indicates that you can shoot 99 or more shots continuously. Fewer shots are available for a value of 98 or lower, and when [**BUSY**] is displayed on the screen, internal memory is full and shooting will stop temporarily. If you stop continuous shooting, the maximum burst will increase. After all captured images have been written to a card, you can once again shoot at the maximum burst listed in Still photo file size/Number of shots available/Maximum burst for continuous shooting.
- You may be able to increase the continuous shooting time by adjusting the [: **Image quality**] and [: **Drive mode**] settings.
  - In [: **Image quality**], select an option other than [RAW] or [C RAW].
  - Set [: **Drive mode**] to an option other than [] or [].

High Frame Rate

When High Frame Rate is set to [**On**], the camera can capture 119.88/100.00 fps to record movie files with a frame rate of 29.97/25.00 fps.



- Sound is not recorded.
- Time code display during movie recording advances 4 sec. per second.
- Because High Frame Rate movies are recorded as 29.97/25.00 fps movie files, they are played in slow motion at 1/4 speed.

Caution

Precautions when set to [High Frame Rate: On]

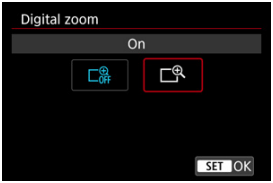
- Time codes are not recorded when [**Count up**] is set to [**Free run**] in [: **Time code**] ( ).
- Check the [: **Movie rec. size**] setting if you return this setting to [**Disable**].
- The screen may flicker if you record High Frame Rate movies under fluorescent or LED lighting.
- For a moment when you start or stop recording High Frame Rate movies, the movie is not updated, and the frame stops momentarily. Be aware of this when recording movies to external devices via HDMI.
- Movie frame rates shown on the screen as you record High Frame Rate movies do not correspond to the frame rate of the movie recorded.
- The frame rate of HDMI video output is 59.94 fps or 50.00 fps.
- The camera's internal temperature may rise and less recording time may be available after extended movie playback or image display.

Digital Zoom

With the recording size set to [FHD 29.97P]/[FHD 23.98P] (NTSC) or [FHD 25.00P] (PAL), you can shoot with approx. 1–10× digital zoom.

1. **Select [: Digital zoom] ( ).**

2. **Select an option.**



- Select [**On**], then press < >.
- Press the < MENU > button to close the menu.

3. **Use digital zoom.**

- Tap [W/T] in the lower right.
- The digital zoom bar will appear.
- Tap [▲] or press the < ▲ > key to zoom in, and tap [▼] or press the < ▼ > key to zoom out.
- Pressing the shutter button halfway focuses with [**1-point AF**] (fixed at center).
- To cancel digital zoom, select [**Off**] in step 2.

Caution

- Using a tripod is recommended.
- The maximum ISO speed is ISO12800.
- A magnified view is not available.
- Images will look grainier at higher magnifications with the digital zoom. Noise, dots of light, etc. may also become noticeable.
- Also see Shooting Conditions That Make Focusing Difficult.
- The camera's internal temperature may rise and reduce the available recording time.
- [: **Standby: Low res.**] is set to [**Off**] and cannot be changed ( ).

Sound Recording

You can record movies while recording sound with the built-in stereo microphone or an external microphone. You can also freely adjust the sound-recording level.
Use [: **Sound recording**] to set sound recording functions.

1. **Select [: Sound recording] ( ).**

2. **Select an option.**

- Set the recording level and other settings as needed in [: **Audio settings**] ( ).
- [: **Audio settings**] is not available in [] mode. Here, the sound-recording level is adjusted automatically.

Caution

- Sounds from Wi-Fi operations may be captured with built-in or external microphones. During sound recording, using the wireless communication function is not recommended.
- When connecting an external microphone or headphones to the camera, be sure to insert the plug all the way in.
- If you perform camera operations during movie recording, the camera's built-in microphone may also record sounds of the operations. If so, it may help reduce these sounds if you use an external microphone equipped with an output plug and position it away from the camera.
- Do not connect anything other than an external microphone to the camera's external microphone IN terminal.
- Do not change the [: **Sound recording**] settings when listening with headphones. This may cause sudden loud output that may hurt your ears.

Note

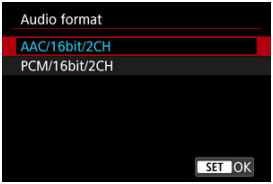
- Use of a windscreen is recommended when recording with the built-in stereo microphone. For instructions on attaching a windscreen, see Attaching a Windscreen.
- Audio is also output when the camera is connected to televisions via HDMI, unless [**Sound recording**] is set to [**Off**]. In case of feedback from television audio output, move the camera away from the television or turn down the volume.
- The volume balance between L/R (left/right) cannot be adjusted.
- Sound is recorded at a 48 kHz/16-bit sampling rate.

Audio Format

You can choose the audio format used for sound in movie recording.

1. **Select [: Audio format] ( ).**

2. **Select an option.**



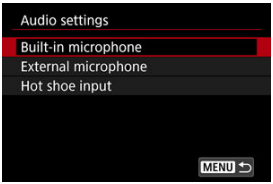
Audio Settings

- Audio Noise Reduction
- Recording Mode
- Recording Level
- Wind Filter
- Attenuator
- Microphone Directionality

Configure the microphones used in movie recording. When using external microphones, be sure to also refer to the external microphone instruction manual.

1. **Select [: Audio settings] ( ).**

2. **Select the device to use.**



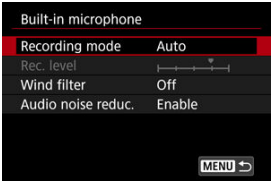
- **Built-in microphone**
  For configuring settings for the built-in microphone.

- **External microphone**
  For configuring settings for external microphones that use the external microphone IN terminal.

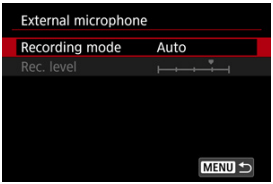
- **Hot shoe input**
  For configuring settings for external microphones designed for a multi-function shoe.

3. Set the item.

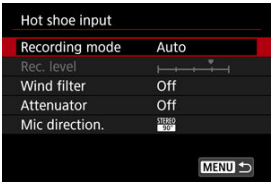
When set to [Built-in microphone]



When set to [External microphone]



When set to [Hot shoe input]



- Available setting items vary depending on the microphone used.

Audio Noise Reduction

When recording with the built-in microphone, this feature reduces steady white noise.

Disable

Disables audio noise reduction.

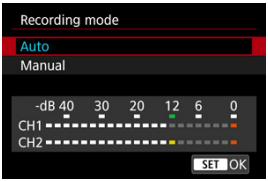
Enable

Enables audio noise reduction.

Caution

- Audio quality may be different when set to [**Enable**] than when set to [**Disable**].
- Reducing white noise may make some noise more noticeable.
- Test recording in advance, because audio noise reduction effectiveness and resulting changes in audio quality vary by shooting conditions.
- To reduce audio noise in headphone output, configure [**Audio monitoring**] ( ).

Recording Mode



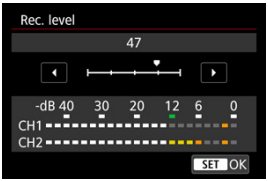
- **Auto**
  The sound-recording level is adjusted automatically. Auto level control will take effect automatically in response to the sound level.

- **Manual**
  You can adjust the sound-recording level as needed. Adjust the level in [**Rec. level**].

Note

- Recording levels are shown in the level meter at the bottom of the screen.

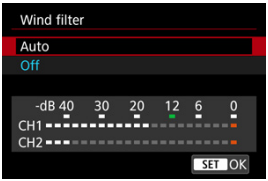
Recording Level



Available when [**Recording mode**] is set to [**Manual**].

To adjust the sound-recording level, turn the < ◌ > dial while watching the level meter. Look at the peak hold indicator, and adjust so that the level meter sometimes lights up on the right of the “12” (–12 dB) mark for the loudest sounds. If it exceeds “0”, the sound will be distorted.

Wind Filter



Available when using the built-in microphone or multi-function shoe external microphones that are compatible with wind filters.
Set to [**Auto**] to reduce audio distortion in windy outdoor scenes. When the wind filter function takes effect, part of the low bass sounds will also be reduced.

Attenuator

This feature suppresses sound distortion during recording. It can be set with an external microphone designed for a multi-function shoe. For details, refer to the instruction manual for the multi-function shoe external microphone.

Note

- The attenuator functions automatically when using a built-in microphone or external microphone. The settings can be changed when using an external microphone compatible with a multi-function shoe.

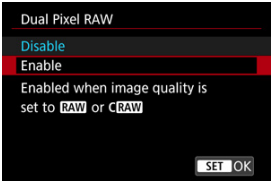
Microphone Directionality

Available when using an external microphone compatible with a multi-function shoe for which directivity can be switched. For details, refer to the instruction manual for the external microphone compatible with a multi-function shoe for which directivity can be switched.

Dual Pixel RAW

Shooting RAW or CRAW images with this feature enabled produces special Dual Pixel RAW images containing dual pixel information from the image sensor. This is called Dual Pixel RAW shooting.
When processing these images in Digital Photo Professional software for EOS cameras, you can take advantage of the dual pixel data to fine-tune apparent resolution (using depth information), shift the camera viewpoint slightly, and reduce ghosting.
Results will vary depending on shooting conditions, so before using this feature, refer to the Digital Photo Professional instruction manual for details on Dual Pixel RAW characteristics and image processing.

1. **Select [: Dual Pixel RAW] ( ).**
2. **Select [Enable].**



3. **Set the image quality to RAW or CRAW.**
   - Set the image quality to RAW, RAW+JPEG, RAW+HEIF, CRAW, CRAW+JPEG, or CRAW+HEIF.
4. **Take the picture.**
   - A RAW image containing dual pixel data (Dual Pixel RAW image) is captured.

Caution

- Startup takes longer when the power is turned on or the camera resumes operation from auto power off.
- Continuous shooting speed is slower when you shoot with Dual Pixel RAW ( ). Maximum burst is also lower.
- [ ] and [ ] drive modes are not available. Setting the mode to [ ] or [ ] has the effect of setting it to [ ].
- Noise may be slightly more noticeable in RAW, RAW+JPEG, or RAW+HEIF images.
- These features are not available: HDR shooting, focus bracketing, electronic shutter, and one-touch image quality setting.

Note

Amount and effect of Dual Pixel RAW correction

- Larger apertures increase the amount and effect of correction.
- The amount and effect of correction may not be sufficient under some shooting scenes, etc.
- The amount and effect of correction varies depending on the camera orientation (vertical or horizontal).
- The amount and effect of correction may not be sufficient under some shooting conditions.

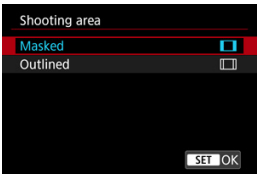
Still Photo Cropping/Aspect Ratio

You can change the aspect ratio before shooting. You can use [1.4x (crop)] to shoot as if using a telephoto lens, because this option magnifies the center of the image.

1. **Select [: Cropping/aspect ratio] ( ).**

2. **Select an option.**

- Tap [**Shooting area**] to select how to display the shooting area when the cropping/aspect ratio is set to [1:1], [4:3], or [16:19].



Note

- RAW images when the cropping/aspect ratio is set to [1:1], [4:3], or [16:19] are recorded in the [3:2] aspect ratio with added cropping information for the configured aspect ratio. This information enables Digital Photo Professional (EOS software) to generate an image with the configured aspect ratio.

Exposure Compensation

Exposure compensation can brighten (increase exposure) or darken (decrease exposure) the standard exposure set by the camera.
Exposure compensation is available in <**P**>, <**Tv**>, <**Av**>, and <**M**> modes. For details on exposure compensation when <**M**> mode and ISO Auto are both set, see M: Manual Exposure Shooting.

1. **Press the < ☒ > button.**

2. **Set with the < ◀ >< ▶ > keys.**

- You can also set exposure compensation on the [📷: **Exposure comp.**] or [📷: **Expo.comp./AEB**] screens in the menu.

Caution

- If [📷: **Auto Lighting Optimizer**] (⚙) is set to any setting other than [**Disable**], the image may still look bright even if decreased exposure compensation is set to darken images.

Note

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

Movie ISO Speed Settings

ISO speed range

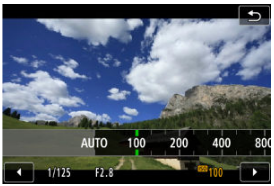
Max for Auto

Max for Auto

In [M] mode, you can set the ISO speed manually. You can also select ISO Auto.

1. **Tap the ISO speed display.**

2. **Set the ISO speed.**



- Turn the < > dial to set it.
- With [**AUTO**] selected, ISO speed is set automatically.
- When [**AUTO**] is selected, pressing the shutter button halfway will display the ISO speed actually set.

ISO speed guide

- Low ISO speeds reduce image noise but may increase the risk of camera/subject shake or reduce the area in focus (shallower depth of field), in some shooting conditions.
- High ISO speeds enable low-light shooting and larger area in focus (deeper depth of field), but may increase image noise.

Caution

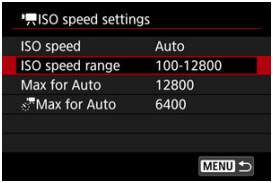
- Image noise (such as graininess, dots of light, or banding), irregular colors, or color shift may be noticeable at high ISO speeds, in high temperatures, or with long exposures.
- When shooting in conditions that produce an extreme amount of noise, such as a combination of high ISO speed, high temperature, and long exposure, images may not be recorded properly.

ISO speed range

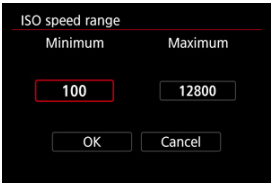
You can set the manual ISO speed setting range (Minimum/Maximum).

1. **Select [: ISO speed settings] ( ).**

2. **Select [ISO speed range].**



3. **Select Minimum or Maximum.**



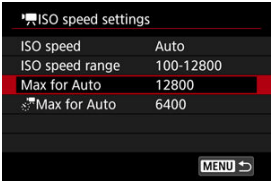
- Select Minimum or Maximum, then press < >.

Max for Auto

You can set the maximum limit for ISO Auto in movie recording in [], [], or [] mode or in [] mode with ISO Auto.

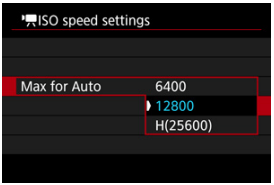
1. **Select [: ISO speed settings] ( ).**

2. **Select [Max for Auto].**



- Select [**Max for Auto**], then press < SET >.

3. **Select the ISO speed.**



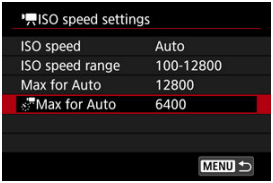
- Select the ISO speed, then press < SET >.

Max for Auto

You can set the maximum limit for ISO Auto in 4K time-lapse/Full HD time-lapse movie recording in [], [], or [] mode or in [] mode with ISO Auto. By default, the maximum limit is set to ISO6400. The maximum limit can be set in a range of ISO 400–12800.

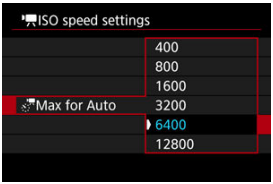
1. **Select [: ISO speed settings] ( ).**

2. Select [Max for Auto].



- Select [**Max for Auto**], then press <SET>.

3. Select the ISO speed.



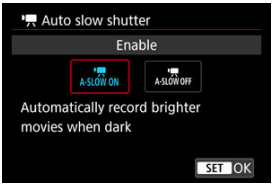
- Select the ISO speed, then press <SET>.

Movie Auto Slow Shutter

You can choose whether to record movies that are brighter and less affected by image noise than when set to [**Disable**] by automatically slowing the shutter speed under low light. Available in [ ] or [ ] recording mode. With [**Movie IS mode**], this feature is fixed to [**Enable**], and with [**Smooth skin movie**], to [**Disable**]. Applies when the frame rate of the movie recording size is 59.94P or 50.00P.

1. **Select [: Auto slow shutter] ( ).**

2. **Select an option.**



- **Disable**
  Enables you to record movies with smoother, more natural movement, less affected by subject shake than when set to [**Enable**]. Note that under low light, movies may be darker than when set to [**Enable**].

- **Enable**
  Enables you to record brighter movies than when set to [**Disable**] by automatically reducing the shutter speed to 1/30 sec. (NTSC) or 1/25 sec. (PAL) under low light.

Note

- Setting to [**Disable**] is recommended when recording moving subjects under low light, or when afterimages such as trails may occur.

ND Filter

For optimal brightness in the scenes you shoot, Auto ND filter reduces light intensity to 1/8 the actual level, by an amount equivalent to three stops. Besides [**Auto**] (only in movie recording), you can also select [**Off**] or [**On**].

1. **Select [: ND filter] (,).**

2. **Select an option.**

Caution

- Selecting [**On**] or [**Auto**] makes it more likely that image noise will occur, even in bright scenes, because it is easier for the ISO speed to increase.
- ND stands for Neutral Density.

Precautions on using Auto ND filter

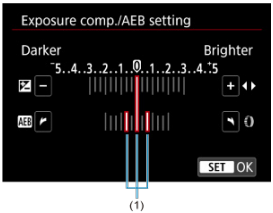
- ND filter status does not change once recording begins for movie recording or streaming, even when [**Auto**] is set.
- For best results, set to [**Off**] if you will go from a bright to a dark environment while recording movies.
- [: **ND filter**] is set to [**Off**] when the camera is used as webcam.

AEB Shooting

In exposure bracketing, three consecutive images are captured at different exposures by automatically adjusting the shutter speed, aperture value, and ISO speed.
* AEB stands for Auto Exposure Bracketing.

1. Select [: Expo.comp./AEB] ( ).

2. Set the AEB range.



- Turn the < > dial to set the AEB range (1).
- By using the < ◀ >< ▶ > keys, you can set the amount of exposure compensation.
- Press < SET > to set it.
- The AEB range index is shown on the exposure level indicator.

3. Take the picture.

- Three bracketed shots are taken, according to the specified drive mode, in this sequence: Standard exposure, decreased exposure, and increased exposure.
- AEB will not be automatically canceled. To cancel AEB, follow step 2 to turn off the AEB range display.

Caution

- Exposure compensation in AEB may be less effective with [: **Auto Lighting Optimizer**] ( ) set to an option other than [**Disable**].

Note

- If the drive mode is set to [], press the shutter button three times for each shot. In [], [], or [] mode, holding down the shutter button completely captures three images, one after another, before the camera automatically stops shooting. When [10] or [2] is set, three consecutive shots are captured after a delay of 10 or 2 sec. When set to [C], three times the specified number of shots are taken in continuous shooting.
- AEB is not available during flash photography, Multi Shot Noise Reduction, HDR mode, focus bracketing, or creative filter shooting.
- AEB is canceled when the power is turned off.

Exposure Lock (AE Lock)

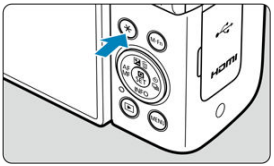
Effect of AE Lock

You can lock the exposure when you want to set the focus and exposure separately or when you will take multiple shots at the same exposure setting. Press the < ✳ > button to lock the exposure, then recompose and take the picture. This is called AE lock. It is effective for shooting backlit subjects, etc.

1. **Focus on the subject.**

- Press the shutter button halfway.
- The exposure value will be displayed.

2. **Press the < ✳ > button.**



- A [✳] icon is displayed in the lower left of the screen to indicate that exposure is locked (AE lock).

3. **Recompose and take the picture.**

- To cancel AE lock, press the < ✱ > button.

Effect of AE Lock

Metering Mode Selection	AF Point Selection	
	Automatic Selection	Manual Selection
[◉]	Exposure centered on the AF point in focus is locked.	Exposure centered on the selected AF point is locked.
[•][ ]	Center-weighted exposure is locked.	

* Center-weighted exposure is locked when [◉] is set with the camera configured for manual focusing ( ).

Still Photo ISO Speed Settings

Maximum [**AUTO**] ISO Speed

Set the ISO speed to suit the ambient light level. In Basic Zone modes, ISO speed is set automatically.

1. **Tap the ISO speed display.**

2. **Set the ISO speed.**

- Turn the < ◐ > dial to set it.
- With [**AUTO**] selected, ISO speed is set automatically.
- When [**AUTO**] is selected, pressing the shutter button halfway will display the ISO speed actually set.
- You can also press the < ✳ > button to set the speed to [**AUTO**].

ISO speed guide

- Low ISO speeds reduce image noise but may increase the risk of camera/subject shake or reduce the area in focus (shallower depth of field), in some shooting conditions.
- High ISO speeds enable low-light shooting, a larger area in focus (deeper depth of field), and longer flash range but may increase image noise.

Note

- Can also be set on the [**ISO speed**] screen in [📷: 📷**ISO speed settings**].

Caution

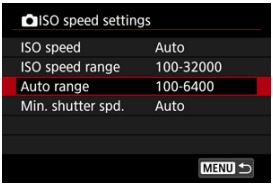
- Image noise (such as graininess, dots of light, or banding), irregular colors, or color shift may be noticeable at high ISO speeds, in high temperatures, or with long exposures.
- When shooting in conditions that produce an extreme amount of noise, such as a combination of high ISO speed, high temperature, and long exposure, images may not be recorded properly.
- If you use a high ISO speed and flash to shoot a close subject, overexposure may result.

Maximum [AUTO] ISO Speed

For ISO [**AUTO**], you can set the maximum ISO speed limit.

1. **Select [: ISO speed settings] ( ).**

2. **Select [Auto range].**



- Press < >.

3. **Select the range.**

- Set the maximum and minimum.
- Select [**OK**], then press < >.

Shooting with Speedlites

- EL/EX Series Speedlites for EOS Cameras
- Canon Speedlites Other Than the EL/EX Series
- Non-Canon Flash Units
- Quick Flash Group Control

EL/EX Series Speedlites for EOS Cameras

Features of EL/EX series Speedlites (sold separately) can be used in flash photography with the camera.
For instructions, refer to the EL/EX series Speedlite's Instruction Manual.

Flash exposure compensation

You can adjust flash output (flash exposure compensation). With an image displayed on the screen, press the < M-Fn > button repeatedly to select the flash exposure compensation item, then turn the < ◎ > dial to set the flash exposure compensation amount.

FE Lock

This enables you to obtain appropriate flash exposure for a specific part of the subject. Aim the screen center over the subject, press the camera's < ✱ > button, and then compose the shot and take the picture.

Caution

- Some Speedlites cannot be attached directly to this camera. For details, see Multi-Function Shoe.
- Setting [📷: **Auto Lighting Optimizer**] (⧉) to an option other than [**Disable**] may still cause images to look bright even if you set lower flash exposure compensation for darker images.
- In flash photography, set [📷: **Shutter mode**] to [**Mechanical**] (⧉).

Note

- The Speedlite will fire an intermittent AF-assist beam as needed, if autofocusing is difficult under low light.
- You can also set flash exposure compensation in [**Flash function settings**] in [: **External Speedlite control**] ( ).
- The camera can turn on certain Speedlites automatically when the camera is turned on. For details, refer to the instruction manual of Speedlites that support this feature.

Canon Speedlites Other Than the EL/EX Series

- With an EZ/E/EG/ML/TL series Speedlite set to A-TTL or TTL autoflash mode, the flash can be fired at full output only.
  Set the camera's shooting mode to <**Av**> or <**M**> and adjust the aperture value before shooting.
- When using a Speedlite that has manual flash mode, shoot in the manual flash mode.

Non-Canon Flash Units

Sync speed

The camera can synchronize with non-Canon compact flash units at up to 1/250 sec. With large studio flash units, the flash duration is longer than that of a compact flash unit and varies depending on the model. Before shooting, confirm that flash sync is performed correctly by taking some test shots at a sync speed of approx. 1/60 sec. to 1/30 sec.

Caution

- Using the camera with a dedicated flash unit or flash accessory for cameras of other manufacturers poses a risk of malfunction and even damage.
- Do not attach a high-voltage flash unit to the camera's multi-function shoe. It may not fire.

Quick Flash Group Control

As you view the shooting screen in wireless multi-flash photography, you can configure the settings for each flash group by pressing the button assigned to [**Quick flash group control**] in [: **Customize buttons**]. This example is based on assigning the < M-Fn > button ( ).

1. **Set the flash firing mode to < Gr > (individual group control) to prepare for wireless multi-flash photography.**

   - For details, refer to the instruction manuals of flash units supporting wireless multi-flash photography.

2. **During standby, press the < M-Fn > button.**

   - A setting screen for each flash group is displayed.
   - Press the < ▲ >< ▼ > keys to select a flash group (A–E) to configure.
   - Press the < ✳ > button to set the flash mode.
   - Press the < ◀ >< ▶ > keys to set the flash output or flash exposure compensation.

Note

- You can access the [**Quick flash group control**] setting screen in <**P**>, <**Tv**>, <**Av**>, or <**M**> mode.
- When Speedlites are set to a flash mode other than < Gr > (individual group control), pressing the < M-Fn > button displays the [**Flash function settings**] screen.

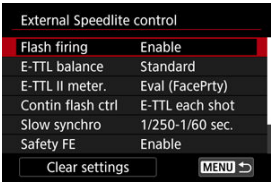
Flash Function Settings

- Flash Firing
- E-TTL Balance
- E-TTL II Flash Metering
- Continuous Flash Control
- Slow Synchro
- Safety FE
- Flash Function Settings
- Flash Custom Function Settings
- Clearing Flash Function Settings/Clearing All Speedlite Custom Functions

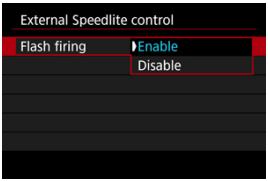
Functions of EL/EX Series Speedlites compatible with flash function settings can be set via a camera menu screen. Attach the Speedlite to the camera and turn on the Speedlite before setting the flash functions.
For details on the Speedlite's functions, refer to the Speedlite's Instruction Manual.

1. **Select [: External Speedlite control] ( ).**

2. **Select an option.**

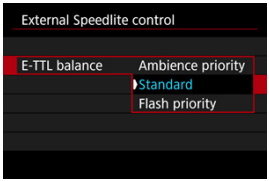


Flash Firing



To enable flash photography, set to [**Enable**]. To enable only the AF-assist beam of the Speedlite, set to [**Disable**].

E-TTL Balance



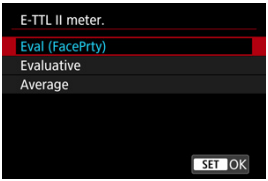
You can set your preferred appearance (balance) for flash shots. This setting enables you to adjust the ratio of ambient light to Speedlite light output.

- Set the balance to [**Ambience priority**] to lower the proportion of flash output and uses ambient light to produce lifelike shots with a natural mood. Especially useful when shooting dark scenes (indoors, for example). After switching to <**P**> or <**Av**> mode, consider setting [**Slow synchro**] in [📷: **External Speedlite control**] to [**1/250-30sec. auto**] and using slow-sync shooting.
- Set the balance to [**Flash priority**] to make the flash the main source of light. Useful for reducing shadows on subjects and in the background from ambient light.

Caution

- For some scenes, [**Ambience priority**] may yield the same results as [**Standard**].

E-TTL II Flash Metering



- Set to [**Eval (FacePrty)**] for flash metering suitable for shots of people.
- Set to [**Evaluative**] for flash metering that emphasizes firing in continuous shooting.
- If [**Average**] is set, the flash exposure will be averaged for the entire metered scene.

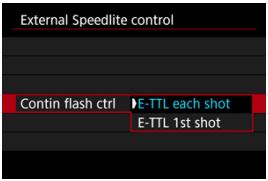
Note

- Depending on the scene, flash exposure compensation may be necessary.

Caution

- Even when [**Eval (FacePrty)**] is set, some subjects and shooting conditions may prevent you from obtaining the expected result.

Continuous Flash Control



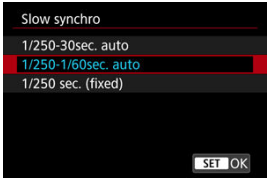
- Set to [**E-TTL each shot**] to perform flash metering for each shot.
- Set to [**E-TTL 1st shot**] to perform flash metering for only the first shot before continuous shooting. The flash output level for the first shot is applied to all subsequent shots. Useful when prioritizing continuous shooting speed without recomposing shots.

Caution

- Any subject movement in continuous shooting may cause exposure problems.

Slow Synchro

You can set the flash-sync speed for flash photography in <**P**> or <**Av**> mode. Note that the maximum flash synchronization speed is 1/250 seconds.



1/250-30sec. auto

The flash sync speed is set automatically within a range of 1/250 sec. to 30 sec. to suit the scene's brightness. High-speed sync is also possible.

1/250-1/60sec. auto

Since the flash sync speed is set automatically within a range of 1/250 sec. to 1/60 sec. to suit the scene's brightness, it prevents a slow shutter speed from being set automatically in low-light conditions.
Effective for preventing subject blur and camera shake. Light from the flash provides standard exposure for subjects, but note that backgrounds may be dark.

1/250 sec. (fixed)

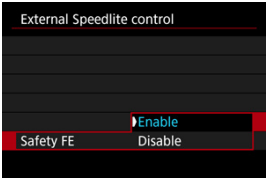
The shutter speed is fixed at 1/250 sec., which is more effective in preventing subject blur and camera shake than with [**1/250-1/60sec. auto**].
However, in low light, the subject's background will come out darker than with [**1/250-1/60sec. auto**].

Caution

- High-speed sync is not available in <**P**> or <**Av**> mode when set to [**1/250 sec. (fixed)**].

Safety FE

To ensure suitable exposure in flash photography under unfavorable exposure conditions, the camera can automatically adjust the shutter speed, aperture value, and ISO speed.



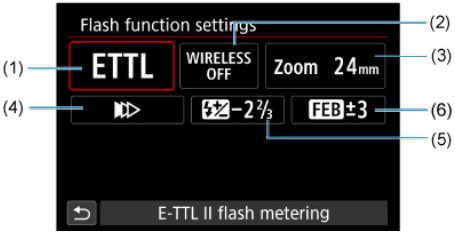
Caution

- The shutter speed values displayed when you press the shutter button halfway may not match the actual settings used.

Flash Function Settings

The information displayed on the screen, position of display, and available options vary depending on the Speedlite model, its Custom Function settings, the flash mode, and other factors. For details on the Speedlite's functions, refer to the Speedlite's Instruction Manual.

Sample display



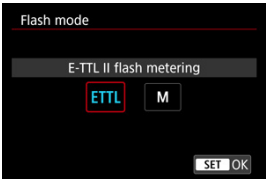
(1)	Flash mode
(2)	Wireless functions/ Firing ratio control (RATIO)
(3)	Flash zoom (flash coverage)
(4)	Shutter synchronization
(5)	Flash exposure compensation
(6)	Flash exposure bracketing

Caution

- Functions are limited when using EX series Speedlites that are not compatible with flash function settings.

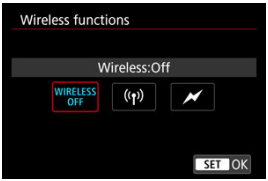
Flash mode

You can select the flash mode to suit your desired flash photography.



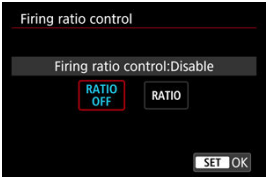
- [**E-TTL II flash metering**] is the standard mode of EL/EX series Speedlites for automatic flash photography.
- [**Manual flash**] is for setting the Speedlite's [**Flash output level**] yourself.
- Regarding other flash modes, refer to the Instruction Manual of a Speedlite compatible with the respective flash mode.

Wireless functions



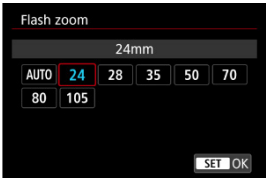
You can use radio or optical wireless transmission to shoot with wireless multiple-flash lighting.
For details on wireless flash, refer to the Instruction Manual of a Speedlite compatible with wireless flash photography.

Firing ratio control (RATIO)



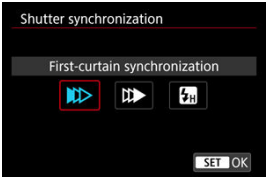
With a macro flash, you can set the firing ratio control.
For details on firing ratio control, refer to the Instruction Manual of the macro flash.

Flash zoom (flash coverage)



With Speedlites having a zooming flash head, you can set the flash coverage.

Shutter synchronization

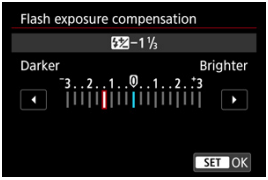


Normally, set this to [**First-curtain synchronization**] so that the flash fires immediately after the shooting starts.
Set to [**Second-curtain synchronization**] and use low shutter speeds for natural-looking shots of subject motion trails, such as car headlights.
Set to [**High-speed synchronization**] for flash photography at higher shutter speeds than the maximum flash sync shutter speed. This is effective when shooting with an open aperture in <**Av**> mode to blur the background behind subjects outdoors in daylight, for example.

Caution

- When using second-curtain synchronization, set the shutter speed to 1/30 sec. or slower. If the shutter speed is 1/40 sec. or faster, first-curtain synchronization will be applied automatically even if [**Second-curtain synchronization**] is set.

Flash exposure compensation

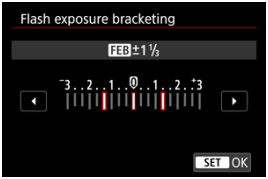


Just as exposure compensation is adjustable, you can also adjust flash output.

Note

- If flash exposure compensation is set with the Speedlite, you cannot set the flash exposure compensation with the camera. If it is set with both the camera and Speedlite, the Speedlite's setting overrides the camera's.

Flash exposure bracketing

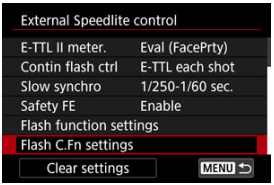


Speedlites equipped with flash exposure bracketing (FEB) can change the external flash output automatically as three shots are taken at once.

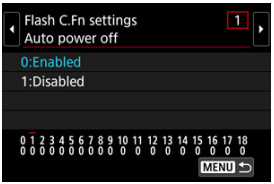
Flash Custom Function Settings

For details on the Speedlite's Custom Functions, refer to the Instruction Manual of the Speedlite.

1. **Select [Flash C.Fn settings].**



2. **Set the desired functions.**



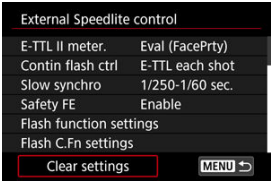
- Select the number.
- Select an option.

Caution

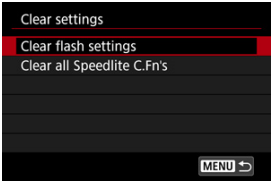
- With an EL/EX series Speedlite, the Speedlite will always fire at full output if the [**Flash metering mode**] Custom Function is set to [**1:TTL**] (autoflash).
- The Speedlite's Personal Function (P.Fn) cannot be set or canceled from the camera's [📷: **External Speedlite control**] screen. Set it directly on the Speedlite.

Clearing Flash Function Settings/Clearing All Speedlite Custom Functions

1. **Select [Clear settings].**



2. **Select the settings to be cleared.**



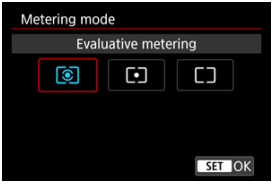
- Select [**Clear flash settings**] or [**Clear all Speedlite C.Fn's**].
- Select [**OK**] on the confirmation screen to clear all flash settings or Flash Custom Function settings.

Metering Mode

Methods for measuring the subject's brightness (metering modes) are provided. Normally, evaluative metering is recommended. Evaluative metering is set automatically in Basic Zone modes (except in < : > mode, which uses center-weighted average metering).

1. **Select [: Metering mode] ( ).**

2. **Select an option.**



- **: Evaluative metering**
  General-purpose metering mode suited even for backlit subjects. The camera adjusts the exposure automatically to suit the scene.

- **: Spot metering**
  Effective when metering a specific part of the subject. The spot metering area is indicated on the screen.

- **: Center-weighted average**
  The metering across the screen is averaged, with the center of the screen weighted more heavily.

Note

- Holding down the shutter button halfway when shooting with [**One-Shot AF**] locks the exposure value (AE lock).

Picture Style

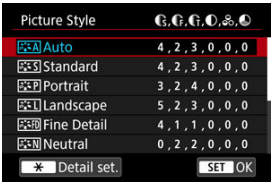
- Picture Style Selection
- Picture Style Customization
- Picture Style Registration

By selecting a preset Picture Style, you can obtain effective image characteristics.

Picture Style Selection

1. **Select [: Picture Style] ( ).**

2. **Select a Picture Style.**



Picture Style Characteristics

- **Auto**
  The color tone will be adjusted automatically to suit the scene. The colors will look vivid for blue skies, greenery and sunsets, particularly in nature, outdoor, and sunset scenes.

  Note

  - If the desired color tone is not obtained with [**Auto**], use another Picture Style.

- **Standard**
  The image looks vivid, sharp, and crisp. Suitable for most scenes.

- **Portrait**
  For smooth skin tones, with slightly less sharpness. Suited for close-up portraits. Skin tone can be adjusted by changing [**Color tone**] as described in Settings and Effects.

- **Landscape**
  For vivid blues and greens, and very sharp and crisp images. Effective for impressive landscapes.

- **Fine Detail**
  For detailed rendering of fine subject contours and subtle textures. The colors will be slightly vivid.

- **Neutral**
  For retouching later on a computer. Makes images subdued, with lower contrast and natural color tones.

- **Faithful**
  For retouching later on a computer. Faithfully reproduces the actual colors of subjects as measured in daylight with a color temperature of 5200K. Makes images subdued, with lower contrast.

- **Monochrome**
  Creates black-and-white images.

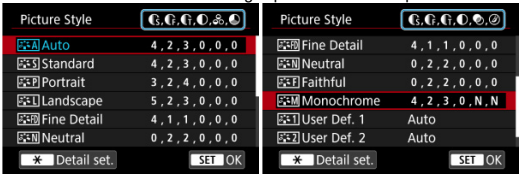
  Caution

  - Color images cannot be recovered from JPEG/HEIF images shot with the [**Monochrome**] Picture Style.

- **User Def. 1–3**
  You can add a new style based on presets such as [**Portrait**] or [**Landscape**] or a Picture Style file, then adjust it as needed ( ). Shots taken with a style you have not customized yet will have the same characteristics as the default [**Auto**] setting.

Symbols

Icons on the Picture Style selection screen represent [**Strength**], [**Fineness**], and [**Threshold**] for [**Sharpness**] as well as [**Contrast**] and other parameters. The numbers indicate the values for these settings specified for the respective Picture Style.



	Sharpness	
		Strength
		Fineness
		Threshold
	Contrast	
	Saturation	
	Color tone	
	Filter effect (Monochrome)	
	Toning effect (Monochrome)	

Caution

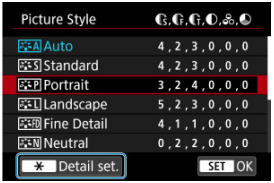
- For movie recording, "*, *" is indicated for the [**Fineness**] and [**Threshold**] parameters of [**Sharpness**]. [**Fineness**] and [**Threshold**] cannot be set for movie recording.

Picture Style Customization

You can customize any Picture Style by changing it from the default settings. For details on customizing [**Monochrome**], see Monochrome Adjustment.

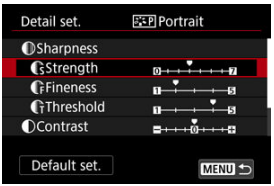
1. **Select [: Picture Style] ( ).**

2. **Select a Picture Style.**



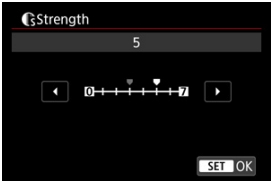
- Select the Picture Style to adjust, then press the < > button.

3. **Select an option.**

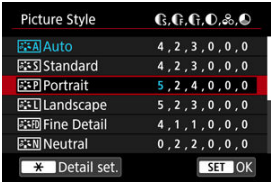


- Select an option, then press < >.
- For details on settings and effects, see Settings and Effects.

4. Set the effect level.



- Adjust the effect level, then press < SET >.



- Press the < MENU > button to save the adjusted setting and return to the Picture Style selection screen.
- Any settings you change from default values are displayed in blue.

Note

- For movie recording, [**Fineness**] and [**Threshold**] for [**Sharpness**] cannot be set (not displayed).
- By selecting [**Default set.**] in step 3, you can restore the parameter settings of the respective Picture Style to the defaults.
- To shoot with the Picture Style you adjusted, first select the adjusted Picture Style, then shoot.

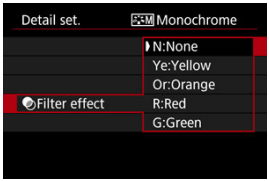
Settings and Effects

	Sharpness			
		Strength	0: Weak outline emphasis	7: Strong outline emphasis
		Fineness[*1]	1: Fine	5: Grainy
		Threshold[*2]	1: Low	5: High
	Contrast		–4: Low contrast	+4: High contrast
	Saturation		–4: Low saturation	+4: High saturation
	Color tone		–4: Reddish skin tone	+4: Yellowish skin tone

* 1: Indicates the edge thinness that enhancement applies to. The smaller the number, the finer the outlines that can be emphasized.
* 2: Contrast threshold between edges and surrounding image areas, which determines edge enhancement. The smaller the number, the more the outline will be emphasized when the contrast difference is low. However, noise tends to be more noticeable when the number is smaller.

Monochrome Adjustment

Filter effect



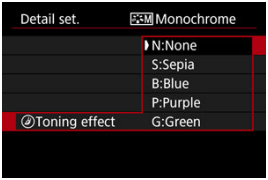
With a filter effect applied to a monochrome image, you can make white clouds or green trees stand out more.

Filter	Sample Effects
N:None	Normal black-and-white image with no filter effects.
Ye:Yellow	Blue sky will look more natural, and white clouds will look crisper.
Or:Orange	The blue sky will look slightly darker. The sunset will look more brilliant.
R:Red	The blue sky will look quite dark. Fall leaves will look crisper and brighter.
G:Green	Skin tones and lips will appear muted. Green tree leaves will look crisper and brighter.

Note

- Increasing [**Contrast**] will make the filter effect more pronounced.

Toning effect



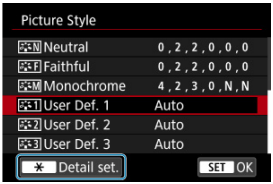
By applying a toning effect, you can create a monochrome image in the selected color. Effective when you want to create memorable images.

Picture Style Registration

You can select a base Picture Style such as [**Portrait**] or [**Landscape**], adjust it as desired, and register it under [**User Def. 1**] – [**User Def. 3**]. Useful when creating several Picture Styles with different settings.

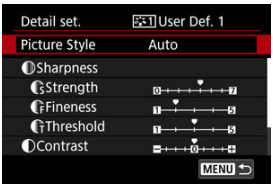
1. **Select [: Picture Style] ( ).**

2. **Select [User Defined].**



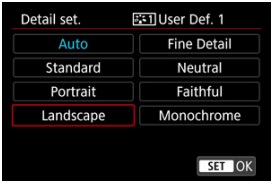
- Select [**User Def. ***], then press the < ✱ > button.

3. **Press < >.**



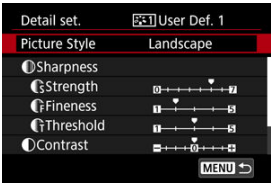
- With [**Picture Style**] selected, press < >.

4. Select a base Picture Style.



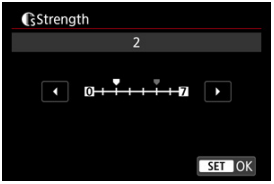
- Select the base Picture Style, then press <(SET)>.

5. Select an option.

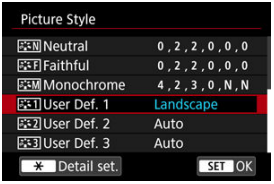


- Select an option, then press <(SET)>.

6. Set the effect level.



- Adjust the effect level, then press < SET >.
- For details, see Picture Style Customization.



- Press the < MENU > button to save the adjusted setting and return to the Picture Style selection screen.
- The base Picture Style will be indicated on the right of [**User Def. ***].
- Blue style names in [**User Def. ***] have been changed from default values.

Caution

- If a Picture Style is already registered under [**User Def. ***], changing the base Picture Style will clear the parameter settings of the previously registered User Defined Picture Style.
- You can restore the default [**User Def. ***] style and settings by selecting [**Basic settings**] in [: **Reset camera**].

Note

- To shoot with a registered Picture Style, select the registered [**User Def. ***], then shoot.

Canon Log Settings

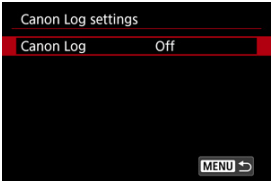
Shooting Settings

Canon Log Image Quality

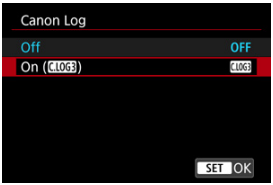
Canon Log gamma curve takes full advantage of image sensor characteristics to ensure wide dynamic range for movies that will be processed in postproduction. With minimal loss of detail in shadows and highlights, movies retain more visual information across the dynamic range.
To work with Canon Log movies in postproduction, you can apply look-up tables (LUTs). LUT data can be downloaded from the Canon website.

1. **Select [: Canon Log settings] ( ).**

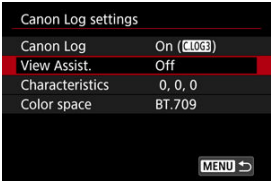
2. **Select [Canon Log].**



3. **Select [On (C.LOG3)] ( ).**

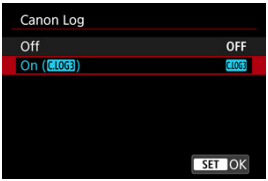


4. Set the options as desired.



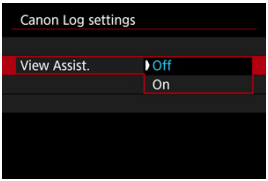
- **View Assist.** ( )
- **Characteristics** ( )
- **Color space** ( )

Canon Log



- **On (C.LOG3)**
  Enables 10-bit recording of Canon Log movies to the card. Movies can also be recorded to an external device that supports 10-bit recording.

View Assist.



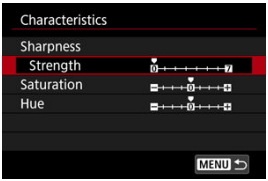
When played on the camera, these movies may look darker and have lower contrast than movies recorded with a Picture Style applied, due to Canon Log image characteristics, which are intended to ensure a wide dynamic range. For clearer display that makes it easier to check details, set [**View Assist.**] to [**On**].

- Setting this feature to [**On**] does not affect movies recorded to the card, which are recorded using Canon Log characteristics. Similarly, HDMI video output has Canon Log characteristics, and View Assist is not used for it.

Note

- [V.Assist] is shown on the information display screen during movie recording with View Assist.
- When set to [**On**], View Assist is also used with magnified display.

Characteristics

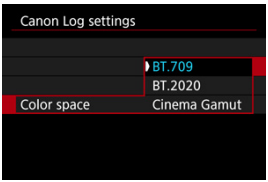


Adjust as needed. Select an option ([**Sharpness**: **Strength**], [**Saturation**], or [**Hue**]), adjust the effect level, then press < SET >.

Sharpness: Strength		0: Weak outline emphasis	7: Strong outline emphasis
Saturation		−4: Low	+4: High
Hue*	**Reds**	−4: Toward magenta	+4: Toward yellow
	Greens	−4: Toward yellow	+4: Toward cyan
	Blues	−4: Toward cyan	+4: Toward magenta

* Reds, greens, and blues cannot be adjusted separately.

Color space



Choose [**BT.709**], [**BT.2020**], or [**Cinema Gamut**] as the color space when recording to cards.

- Before HDMI output, the color space is converted to suit the device as follows.

Camera Color Space Setting	**HDMI Device Color Space Support**	
	BT.2020 Supported	**BT.2020 Not Supported**
BT.709	BT.709	BT.709
BT.2020	BT.2020	BT.709
Cinema Gamut	BT.2020	BT.709

- Manually setting the ISO speed to 100–640 will make the dynamic range narrower.
- Canon Log offers a dynamic range of approx. 1600% at ISO 800 or higher.
- The following are expanded ISO speeds: ISO 100, 125, 160, 200, 250, 320, 400, 500 and 640. [L] is displayed when an ISO speed is set.

Canon Log Image Quality

- With Canon Log, movies may be affected by horizontal banding, depending on the subject or shooting conditions. Record a few test movies and check the results in advance. In particular, noise may become more noticeable if you enhance the contrast when color-grading your movies.
- With Canon Log, skies, white walls, and similar subjects may be affected by noise or uneven gradation, exposure, or colors.
- If you continue to shoot under high temperature and high ISO conditions when Canon Log is set, the color may change.
- Horizontal banding is more likely to occur when recording somewhat dark, flat subjects. This image noise may even occur at relatively low ISO speeds around ISO 800.
- If noise is noticeable, try recording under brighter conditions and adjusting brightness in color grading. Although dynamic range is narrower at ISO speeds lower than ISO 800, noise can also be reduced by recording this way.

Caution

General Canon Log shooting precautions

- Canon Log and Canon Log 2 are not supported.
- With Canon Log, autofocusing may be more difficult for subjects under low light, or for low-contrast subjects. Difficulty in autofocusing can be reduced by shooting near maximum aperture.
- Histograms with [**Canon Log**] in [: **Canon Log settings**] set to [**On (C.LOG3)**] are not based on conversion for View Assist display. Image areas shown in gray in the histogram roughly indicate signal values that are not used.

Note

Playing back movies recorded with Canon Log

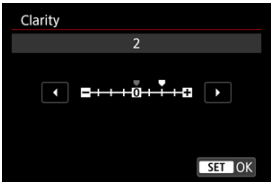
- View Assist is not used during movie playback.

Clarity

You can adjust image clarity, as determined by the contrast of image edges.
Set toward the negative end to make images look softer or toward the positive end for a sharper appearance.

1. **Select [: Clarity] (,).**

2. **Set the effect level.**



Caution

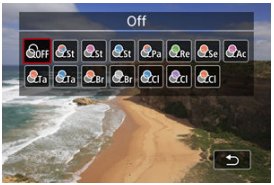
- Setting clarity may darken or lighten the areas around boundaries in high-contrast images.
- The effect of this setting is not shown in images on the screen in still photo shooting.

Color Filter

You can adjust colors as you watch the screen.

1. **Select [: Color filter] ( ).**

2. **Select a color filter.**



Filter	Effect	Recommended Scenes
StoryTeal&Orange	Matte with teal shadows and amber highlights	High-contrast daytime scenes and other scenes with contrast, such as well-lit rooms
StoryMagenta	Matte with a magenta filter effect overall	
StoryBlue	Matte with a blue filter effect overall	
PaleTeal&Orange	Teal shadows and amber highlights	Scenes with contrast that include some amber or yellowish colors
RetroGreen	Faded with a green filter effect overall	Old buildings, cityscapes
Sepiatone	Faded with a sepia filter effect overall	
AccentRed	All colors except reds are faded	Scenes that include some reddish colors
TastyWarm	High saturation and bright midtones, with warm colors overall	Scenes that include food or beverages in warm tones
TastyCool	High saturation and bright midtones, with cool colors overall	Scenes that include food or beverages in cool tones
BrightAmber	Low contrast, light shadows while keeping the ambiance dark, and warm colors	Dimly lit scenes with warm-toned light sources
BrightWhite	Low contrast, light shadows while keeping the ambiance dark, and cool colors	
ClearLightBlue	Low contrast, bright shadows, with light blue overall	Bright evening cityscapes, indoor scenes
ClearPurple	Low contrast, bright shadows, with light purple overall	
ClearAmber	Low contrast, bright shadows, with light amber overall	

Caution

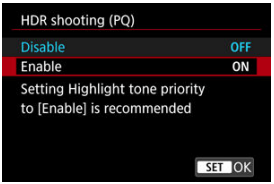
- Color filters may prevent images from being rendered with smooth gradation and may result in image noise.
- Some camera settings or subjects may prevent you from obtaining your expected colors.

HDR Shooting (PQ)

HDR Shooting (PQ) settings enable the camera to produce HDR images conforming to the PQ specification defined in ITU-R BT.2100 and SMPTE ST.2084. (Actual display depends on monitor performance.)
Shots are captured as HEIF or RAW images.
* HDR stands for High Dynamic Range.
* PQ stands for Perceptual Quantization. The “PQ” in HDR PQ refers to the gamma curve of the input signal for displaying HDR images.

1. **Select [: HDR shooting (PQ)] ( ).**

2. **Select [Enable].**



- On the screen during shooting and playback, converted images are displayed that resemble how the images would look on an HDR display device.

Caution

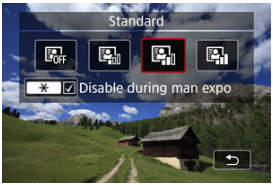
- Some scenes may look different from how they appear on an HDR display device.
- Unused signal values are roughly indicated by image areas in gray in the histogram when [: **HDR shooting (PQ)**] is set to [**Enable**].
- [: **Display frame rate setting**] is not available when [: **HDR shooting (PQ)**] is set to [**Enable**]. It is set to [**Smooth**].
- For images captured with [: **HDR shooting (PQ)**] set to [**Enable**], before playback on an HDR display device, set [▶: **HDMI HDR output**] to [**On**] ( ).
  Note that regardless of the [▶: **HDMI HDR output**] setting, HDR images are used for display on HDR display devices during shooting.

Auto Lighting Optimizer

Brightness and contrast can be corrected automatically if shots look dark or contrast is too low or high.

1. **Select [: Auto Lighting Optimizer] (,).**

2. **Set a correction option.**



Caution

- Noise may increase and apparent resolution may change, under some shooting conditions.
- If the effect of Auto Lighting Optimizer is too strong and results are not at your preferred brightness, set to [**Low**] or [**Disable**].
- If a setting other than [**Disable**] is set and you use exposure compensation or flash exposure compensation to darken the exposure, the image may still come out bright. If you want a darker exposure, set this function to [**Disable**].

Note

- To enable [: **Auto Lighting Optimizer**] to be set even in <**M**> mode, press the < ✳ > button in step 2 to clear the checkmark [✓] for [**Disable during man expo**].

Highlight Tone Priority

You can reduce overexposed, clipped highlights.

1. **Select [: Highlight tone priority] (,).**

2. **Set an option.**

- [**Enable**]: Improves gradation in highlights. The gradation between the grays and highlights becomes smoother.
- [**Enhanced**]: Reduces overexposed highlights even more than [**Enable**], under some shooting conditions.

Caution

- Noise may increase slightly.
- The available ISO range starts at ISO 200. Expanded ISO speeds cannot be set.
- With [**Enhanced**], results in some scenes may not look as expected.

Note

- [: **Highlight tone priority**] is set to [**Enable**] and cannot be changed after you set [: **HDR shooting (PQ)**] to [**Enable**] by pressing the < ✳ > button to add a checkmark to this setting.
- [: **Highlight tone priority**] is set to [**Disable**] when [: **HDR Mode**] is set to [**On**], even if you set [: **HDR shooting (PQ)**] to [**Enable**].

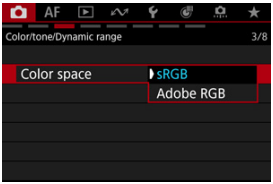
Color Space

Adobe RGB

The range of reproducible colors is called the “color space.” For normal shooting, sRGB is recommended.
In Basic Zone, [**sRGB**] is set automatically.

1. **Select [: Color space] ( ).**

2. **Set a color space option.**



- Select [**sRGB**] or [**Adobe RGB**], then press < >.

Adobe RGB

This color space is mainly used for commercial printing and other professional applications. Recommended when using equipment such as Adobe RGB-compatible monitors or DCF 2.0 (Exif 2.21 or later) compatible printers.

Note

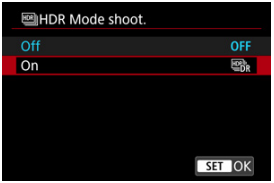
- File names of still photos shot in the Adobe RGB color space begin with “_”.
- The ICC profile is not appended. For the descriptions about the ICC profile, refer to the Digital Photo Professional Instruction Manual (EOS software).

HDR Mode

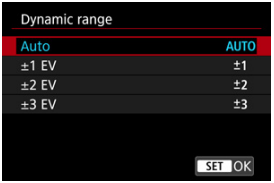
You can shoot high dynamic range photos that retain detail in highlights and shadows of high-contrast scenes. HDR shooting is effective for landscape and still-life shots.
HDR shooting enhances gradation in dark image areas by merging three images deliberately captured at different exposures (standard, underexposed, and overexposed) to produce an HDR image that compensates for loss of detail in dark image areas. HDR images are captured as HEIFs or JPEGs.
* HDR stands for High Dynamic Range.

1. **Select [: HDR Mode] ( ).**

2. **Set [HDR Mode shoot.] to [On].**

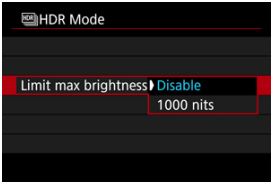


3. **Set [Dynamic range].**



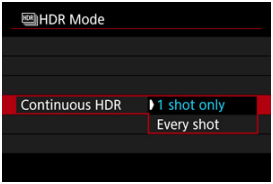
- Selecting [**Auto**] will have the dynamic range set automatically depending on the image's overall tonal range.
- The higher the number, the wider the dynamic range will be.

4. Set [Limit max brightness] (only with [📷: HDR shooting (PQ)] set to [Enable]).



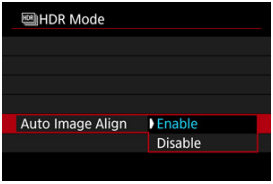
- With [**Disable**], maximum brightness is not limited. Recommended when you will review images on a monitor supporting display at brightnesses exceeding 1000 nits.
- With [**1000 nits**], maximum brightness is limited to approx. 1000 nits.

5. Set [Continuous HDR].



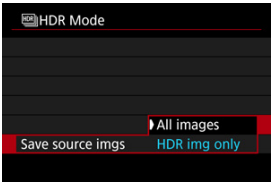
- With [**1 shot only**], HDR shooting is canceled automatically after you finish shooting.
- With [**Every shot**], HDR shooting continues until the setting in step 2 is set to [**Off**].

6. Set [Auto Image Align].



- For handheld shooting, select [**Enable**]. When using a tripod, select [**Disable**].

7. Specify the images to save.



- To save the three images captured and the resulting HDR image, select [**All images**].
- To save only the HDR image, select [**HDR img only**].

8. Take the picture.

- When you press the shutter button completely, three consecutive images will be captured, and the HDR image will be recorded to the card.

Caution

- Expanded ISO speeds (H) are not available in HDR shooting.
- The flash will not fire during HDR shooting.
- AEB is not available.
- In HDR shooting, three images are captured with settings such as shutter speed automatically adjusted. For this reason, even in < Tv > and < M > modes, the shutter speed and ISO speed will change, relative to your specified speed.
- To prevent camera shake, a high ISO speed may be set.
- If you perform handheld HDR shooting with [**Auto Image Align**] set to [**Enable**], image periphery will be slightly trimmed and resolution will be slightly lowered. Also, if the images cannot be aligned properly due to camera shake, etc., auto image alignment may not take effect. Note that when shooting with excessively bright (or dark) exposure settings, auto image alignment may not work properly.
- If you perform handheld HDR shooting with [**Auto Image Align**] set to [**Disable**], the three images may not be properly aligned and the HDR effect may be reduced. Using a tripod is recommended.
- Auto image alignment may not function properly with repetitive patterns (lattice, stripes, etc.) or flat, single-tone images.
- Subjects such as the sky or white walls may not be rendered with smooth gradation and may have noise or irregular exposure or colors.
- HDR shooting under fluorescent or LED lighting may cause issues such as irregular exposure or colors in HDR images, due to the flickering light source.
- With HDR shooting, the images will be merged, then saved to the card, so it may take some time. [**BUSY**] appears on the screen as images are processed, and shooting is not possible until processing is finished.
- Maximum shutter speed in HDR shooting with an electronic shutter is 1/8000 sec.

Note

- Image quality of RAW HDR images is as follows.
  - [📷: **HDR shooting (PQ)**] set to [**Disable**]: JPEG quality
  - [📷: **HDR shooting (PQ)**] set to [**Enable**]: HEIF quality

  HDR image quality in RAW+JPEG or RAW+HEIF shooting corresponds to your specified JPEG or HEIF image quality.

White Balance

- White Balance
- [AWB] Auto White Balance
- [ ] Custom White Balance
- [K] Color Temperature

White balance (WB) is for making the white areas look white. Normally, the Auto [AWB] (Ambience priority) or [AWBW] (White priority) setting will obtain the correct white balance. If natural-looking colors cannot be obtained with Auto, you can select the white balance to match the light source or set it manually by shooting a white object.

In Basic Zone modes, [AWB] (Ambience priority) is set automatically. ([AWBW] (White priority) is set in < > mode.)

1. **Select [: White balance] (,).**

2. **Select an option.**

- Turn the < > dial to select a white balance option.

Note

- For [AWB] and [AWBW] setting instructions, see [AWB] Auto White Balance.

(Approx.)

Display	Mode	Color Temperature (K: Kelvin)
AWB	Auto (Ambience priority)	3000–7000
AWBW	Auto (White priority)	
☀	Daylight	5200
	Shade	7000
	Cloudy, twilight, sunset	6000
	Tungsten light	3200
	White fluorescent light	4000
ϟ	When using Flash	Automatically set*
	Custom	2000–10000
K	Color temperature	2500–10000

* Applicable with Speedlites having a color temperature transmission function. Otherwise, it will be fixed to approx. 6000K.

White Balance

The human eye adapts to changes in lighting so that white objects look white under all kinds of lighting. Cameras determine white from the color temperature of lighting and, based on this, apply image processing to make color tones look natural in your shots.

[AWB] Auto White Balance

With [AWB] (Ambience priority), you can slightly increase the intensity of the image's warm color cast when shooting a tungsten-light scene.

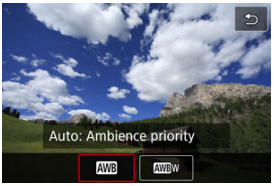
If you select [AWBW] (White priority), you can reduce the intensity of the image's warm color cast.

1. **Select [: White balance] (,).**

2. **Select [AWB].**

- With [AWB] selected, press the < > button.

3. **Select an option.**



Caution

Precautions when set to [AWBW] (White priority)

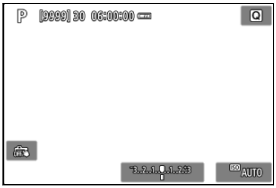
- The warm color cast of subjects may fade.
- When multiple light sources are included in the scene, the warm color cast of the picture may not be reduced.
- When using flash, the color tone will be the same as with [AWB] (Ambience priority).

[ ] Custom White Balance

With custom white balance, you can manually set the white balance for the specific light source of the shooting location. Make sure to perform this procedure under the light source at the actual location of the shoot.

Registration from an image on a card

1. **Shoot a white object.**



- Aim the camera at a plain white object, so that white fills the screen.
- Set the camera to manual focus ( ) and shoot so that the white object has standard exposure.
- You can use any of the white balance settings.

Caution

- Correct white balance may not be obtained if the exposure of your image differs greatly from standard exposure.
- These images cannot be selected: images captured with the Picture Style set to [**Monochrome**], images that are cropped or have a Creative filter applied, or images from other cameras.

2. **Select [: Custom White Balance] (,).**

3. Import the white balance data.

- Use the < ◀ >< ▶ > keys to select the image captured in step 1, then press < SET >.
- Select [**OK**] to import the data.

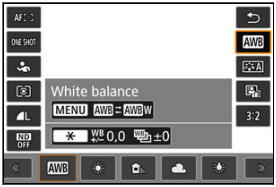
4. Select [: White balance] (,).

5. Select [].

Shooting and registering white balances

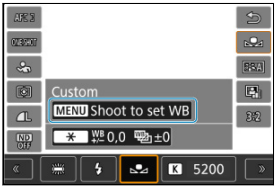
1. **Press < SET >.**

2. **Select a white balance setting.**



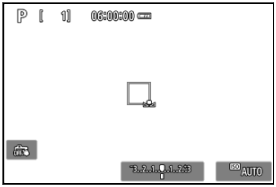
- Press the < ▲ >< ▼ > keys for selection.

3. **Select [Shoot to set WB].**

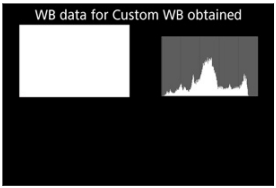


- Turn the < ◎ > dial to select [ ], then press the < MENU > button.

4. Shoot a white object.



- Aim the camera at a plain white object, so that white fills the screen.
- Set the camera to manual focus ( ) and shoot so that the white object has standard exposure.
- The custom white balance is registered to the camera.



Caution

- Correct white balance may not be obtained if the exposure of your image differs greatly from standard exposure.

Note

- Instead of shooting a white object, you can also shoot a gray card or standard 18% gray reflector (commercially available).

[K] Color Temperature

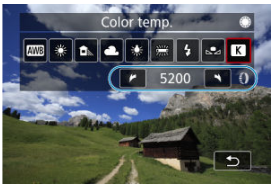
A value can be set representing the white balance color temperature.

1. **Select [: White balance] (,).**

2. **Select a color temperature.**

- Select [K].

3. **Set the color temperature.**



- Turn the < > dial to set a color temperature, then press < >.

Note

- When setting the color temperature for an artificial light source, set the white balance correction (magenta or green bias) as necessary.
- When setting [K] to a value measured with a commercially available color temperature meter, take some test shots in advance and adjust the setting as needed to compensate for any difference between the color temperature meter and the camera.

White Balance Correction

White Balance Correction

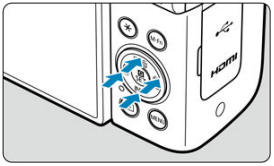
White Balance Auto Bracketing

You can correct the white balance that is set. This adjustment will have the same effect as using a commercially available color temperature conversion filter or color compensating filter.

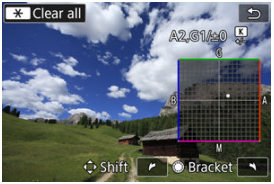
White Balance Correction

1. **Select [: WB Shift/Bkt.] (,).**

2. Set the white balance correction.



Sample setting: A2, G1



- Press the < ✥ > keys to move the [■] mark on the screen.
- B is for blue, A for amber, M for magenta, and G for green. White balance is corrected in the direction you move the mark.
- The direction and amount of correction are indicated in the upper right of the screen.
- Pressing the < ✳ > button will cancel all the [📷: **WB Shift/Bkt.**] settings.
- Press < SET > to exit the setting.

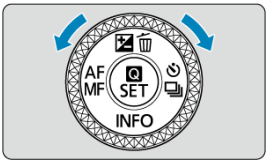
Note

- One level of the blue/amber correction is equivalent to approx. 5 mireds of a color temperature conversion filter. (Mired: Unit of measure for color temperature used to indicate values such as the density of a color temperature conversion filter.)

White Balance Auto Bracketing

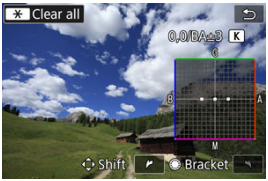
White balance bracketing enables you to capture three images at once with different color tones.

Set the white balance bracketing amount.



- In step 2 for White Balance Correction, when you turn the < ◌ > dial, the "■" mark on the screen will change to "■ ■ ■" (3 points).
  Turning the dial clockwise sets the B/A bracketing, and turning it counterclockwise sets the M/G bracketing.

B/A bias ±3 levels



- The direction and amount of bracketing are indicated in the upper right of the screen.
- Pressing the < ✳ > button will cancel all of the [📷: **WB Shift/Bkt.**] settings.
- Press < SET > to exit the setting.

Caution

- During white balance bracketing, the maximum burst for continuous shooting will be lower.
- Since three images are recorded for one shot, it takes longer to record the image to the card.

Note

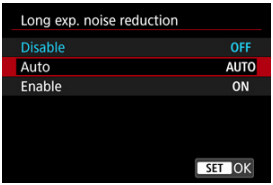
- The images will be bracketed in the following sequence: 1. Standard white balance, 2. Blue (B) bias, and 3. Amber (A) bias, or 1. Standard white balance, 2. Magenta (M) bias, and 3. Green (G) bias.
- You can also set white balance correction and AEB together with white balance bracketing. If you set AEB in combination with white balance bracketing, a total of nine images will be recorded for a single shot.
- The white balance icon blinks to indicate that white balance bracketing has been set.
- **Bracket** stands for bracketing.

Long Exposure Noise Reduction

Noise such as dots of light or banding that tends to occur in long exposures at shutter speeds of one sec. or slower can be reduced.

1. **Select [: Long exp. noise reduction] ( ).**

2. **Set a reduction option.**



- **Auto**
  For images exposed for 1 sec. or longer, noise reduction is performed automatically if noise typical of long exposures is detected. This setting is effective enough in most cases.

- **Enable**
  Noise reduction is performed for all images exposed for 1 sec. or longer. The [**Enable**] setting may reduce noise that cannot be detected with the [**Auto**] setting.

Caution

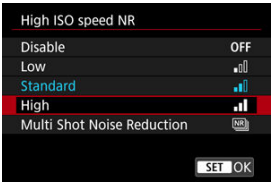
- With [**Auto**] or [**Enable**] set, noise reduction after you shoot may take as long as exposure for the shot.
- Images may look grainier with the [**Enable**] setting than with the [**Disable**] or [**Auto**] setting.
- [**BUSY**] is displayed as noise is reduced, and the shooting screen is not displayed until processing is finished, when you can shoot again.

High ISO Speed Noise Reduction

You can reduce the image noise generated. This function is especially effective when shooting at high ISO speeds. When shooting at low ISO speeds, the noise in the darker parts of the image (shadow areas) can further be reduced.

1. **Select [: High ISO speed NR] (,).**

2. **Set the level.**



- **Low, Standard, High**
  The camera applies an amount of noise reduction corresponding to your specified level.

- **Multi Shot Noise Reduction**
  Applies noise reduction with higher image quality than [**High**]. For a single photo, four shots are taken continuously and aligned and merged automatically into a single JPEG image.
  Note that [**Multi Shot Noise Reduction**] is not available with image quality set to RAW or RAW+JPEG.

Caution

Precautions on Multi Shot Noise Reduction

- If there is significant misalignment in the image due to camera shake, the noise reduction effect may become smaller.
- Be careful about camera shake in handheld shots. Using a tripod is recommended.
- If you shoot a moving subject, the moving subject may leave afterimages.
- Auto image alignment may not function properly with repetitive patterns (lattice, stripes, etc.) or flat, single-tone images.
- If the subject's brightness changes as the four consecutive shots are taken, irregular exposure in the image may result.
- After shooting, it may take some time to record an image to the card after performing noise reduction and merging the images. "**BUSY**" is displayed as images are processed, and shooting is not possible until processing is finished.
- [**Multi Shot Noise Reduction**] is not available with any of these features: AEB, WB bracketing, RAW/RAW+JPEG, long exposure noise reduction, HDR mode/HDR PQ settings, focus bracketing or Creative filter shooting.
- Flash photography is not available. Note that the AF-assist beam of Speedlites may be fired, depending on the [**AF**: **AF-assist beam firing**] setting.
- The camera automatically switches to [**Standard**] when RAW or RAW+JPEG image quality is set.
- Automatically switches to [**Standard**] if you turn the power off, replace the battery or card, change to Basic Zone modes, or switch to movie recording.

Time-Lapse Movies

Approx. Time Available for Recording Time-Lapse Movies

Still photos shot at a set interval can be stitched together automatically to create a 4K or Full HD time-lapse movie. A time-lapse movie shows how a subject changes in a much shorter period of time than the actual time it took. It is effective for a fixed-point observation of changing scenery, growing plants, celestial motion, etc.

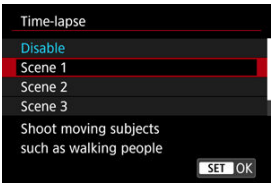
Time-lapse movies are recorded in MP4 format at the following quality: 4K 29.97P ALL-I (NTSC)/4K 25.00P ALL-I (PAL) in 4K recording, and FHD 29.97P ALL-I (NTSC)/FHD 25.00P ALL-I (PAL) in Full HD recording.

Note that the frame rate is updated automatically to match the [: **Video system**] setting ( ).

1. **Select [: Time-lapse movie] ( ).**

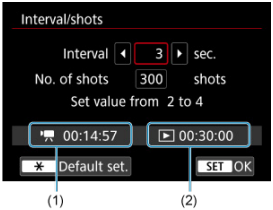
2. **Select [Time-lapse].**

3. **Select a scene.**



- Select a scene to suit the shooting situation.
- For greater freedom when setting the shooting interval and number of shots manually, select [**Custom**].

4. Set the shooting interval.

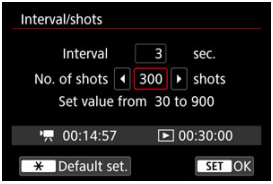


- Select [**Interval/shots**].
- Select [**Interval**] (sec.). Use the < ◀ >< ▶ > keys to set a value, then press < (SET) >.
- As you set the number, refer to the time required (1) and playback time (2).

When [Custom] is set

- Select [**Interval**] (min.:sec.).
- Press < (SET) > to set < ⇕ >.
- Use the < ▲ >< ▼ > keys to set a value, then press < (SET) >. (Returns to < ▭ >.)
- Select [**OK**] to register the setting.

5. Set the number of shots.



- Select [**No. of shots**]. Use the < ◀ >< ▶ > keys to set a value, then press < (SET) >.
- As you set the number, refer to the time required and playback time.

When [Custom] is set

- Select the digit.
- Press < (SET) > to set < ⇕ >.
- Use the < ▲ >< ▼ > keys to set a value, then press < (SET) >. (Returns to < ▭ >.)
- Make sure that the playback time is not displayed in red.
- Select [**OK**] to register the setting.

Caution

- The playback time is displayed in red if the card does not have enough free space to record the specified number of shots. Although the camera can continue recording, the recording will stop when the card becomes full.
- With an SDHC card, the playback time is displayed in red if the [**No. of shots**] setting results in a file size exceeding 4 GB. If you keep recording in this condition and the movie file size reaches 4 GB, the time-lapse movie recording will stop.

Note

- With [**Scene ***], available intervals and numbers of shots are restricted, to suit the type of scene.
- For details on cards that can record time-lapse movies, see Card performance requirements (movie recording) [write/read speed].
- If the number of shots is set to 3600, the time-lapse movie will be approx. 2 min. in NTSC and approx. 2 min. 24 sec. in PAL.

6. Select the desired movie recording size.

- **4K (3840 × 2160)**
  The movie is recorded in 4K quality. The aspect ratio is **16:9**.
  The frame rate is 29.97 fps (29.97P) for NTSC and 25.00 fps (25.00P) for PAL, and movies are recorded in MP4 (MP4) format with ALL-I (ALL-I) compression.

- **FHD (1920 × 1080)**
  The movie will be recorded in Full High-Definition (Full HD) quality. The aspect ratio is **16:9**.
  The frame rate is 29.97 fps (29.97P) for NTSC and 25.00 fps (25.00P) for PAL, and movies are recorded in MP4 (MP4) format with ALL-I (ALL-I) compression.

7. Set [Auto exposure].

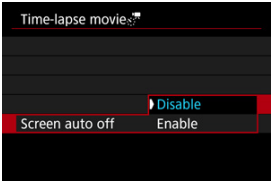
- **Fixed 1st frame**
  When taking the first shot, metering is performed to set the exposure automatically to match the brightness. The exposure setting for the first shot will be applied to subsequent shots. Other shooting-related settings for the first shot will also be applied for subsequent shots.

- **Each frame**
  Metering is also performed for each subsequent shot to set the exposure automatically to match the brightness. Note that any functions such as Picture Style and white balance that are set to [**Auto**] will be set automatically for each subsequent shot.

Caution

- Significant changes in brightness between shots may prevent the camera from shooting at the specified interval when [**Interval**] is set to less than 3 sec. and [**Auto exposure**] is set to [**Each frame**].
- With [**Auto exposure**] set to [**Each frame**], the ISO speed, shutter speed, and aperture value may not be recorded in the time-lapse movie Exif information in some shooting modes.

8. Set [Screen auto off].



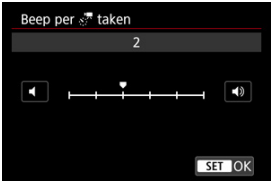
- **Disable**
  Even during time-lapse movie recording, the image will be displayed. (The screen turns off only at the time of shooting.) Note that the screen will turn off when approx. 30 min. elapse after the shooting started.

- **Enable**
  The screen will turn off when approx. 10 sec. elapse after the shooting started.

Note

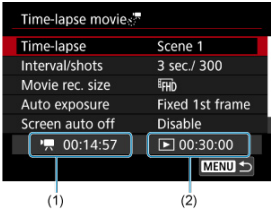
- During time-lapse movie recording, you can press the < INFO > button to turn on/off the screen.

9. Set the beeper.



- Select [**Beep per taken**].
- Set to [0] to prevent the camera from beeping for each shot.

10. Check the settings.



(1) Time required

Indicates the time required to shoot the set number of shots with the set interval. If it exceeds 24 hours, "*** days" will be displayed.

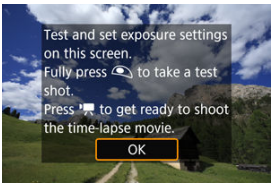
(2) Playback time

Indicates the movie recording time (time required to play back the movie) when creating the time-lapse movie in 4K movie or Full HD movie from the still photos taken with the set intervals.

11. Close the menu.

- Press the < MENU > button to turn off the menu screen.

12. Read the message.

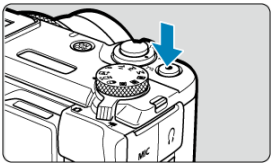


- Read the message and select [**OK**].

13. Take a test shot.

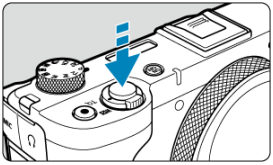
- Press the < INFO > button and double-check the time required (1) and interval (2) shown on the screen.
- Set the exposure and shooting functions, then focus.
- Press the shutter button completely to take a test shot, which is recorded to the card as a still photo.
- If there are no problems with the test shot, go to the next step.
- To take more test shots, repeat this step.

14. Press the movie shooting button.



- The camera is now ready to start recording a time-lapse movie.
- To return to step 13, press the movie shooting button again.

15. Record the time-lapse movie.



- Press the shutter button completely to start recording the time-lapse movie.
- AF will not work during time-lapse movie recording.
- "●**REC**" is displayed in the upper right of the screen as the time-lapse movie is recorded.
- When the set number of shots are taken, the time-lapse movie recording ends.
- To cancel recording time-lapse movies, set [**Time-lapse**] to [**Disable**].

Caution

- Do not point the camera toward an intense light source, such as the sun or an intense artificial light source. Doing so may damage the image sensor or the camera's internal components.
- [📷: **Time-lapse movie**] cannot be set to an option other than [**Disable**] when the camera is connected to a computer with the interface cable, or when an HDMI cable is connected.
- Movie Servo AF will not function.
- If the shutter speed is 1/30 sec. or slower, the exposure of the movie may not be displayed properly (may differ from that of the resulting movie).
- Do not zoom during time-lapse movie recording. Zooming may cause the image to be out of focus or the exposure to change.
- Recording time-lapse movies under flickering light may cause noticeable screen flickering, and images may be captured with horizontal stripes (noise) or irregular exposure.
- Images displayed as time-lapse movies are recorded may look different from the resulting movie (in details such as inconsistent brightness from flickering light sources, or noise from a high ISO speed).
- When recording a time-lapse movie under low light, the image displayed during shooting may look different from what is actually recorded in the movie.
- If you move the camera from left to right (panning) or shoot a moving subject during time-lapse movie recording, the image may look extremely distorted.
- During time-lapse movie recording, auto power off will not take effect. Also, you cannot adjust the shooting function and menu function settings, play back images, etc.
- Sound is not recorded for time-lapse movies.
- The camera may not shoot if the shutter speed nearly coincides with the shooting interval.
- If the next scheduled shot is not possible, it will be skipped. This may shorten the recording time of the created time-lapse movie.
- If the time it takes to record to the card exceeds the shooting interval due to the shooting functions set or card performance, some of the shots may not be taken with the set intervals.
- The captured images are not recorded as still photos. Even if you cancel the time-lapse movie recording after only one shot is taken, it will be recorded as a movie file.
- Set [📷: **Time-lapse movie**] to [**Disable**] if you will connect the camera to a computer with the interface cable. Options other than [**Disable**] will prevent the camera from communicating with the computer.
- During time-lapse movie recording, the lens's image stabilizer will not operate.
- Time-lapse movie recording ends if the power is turned off and the setting changes to [**Disable**].
- Even if a flash is used, it will not fire.
- The following operations cancel standby for time-lapse movie recording and switch the setting to [**Disable**].
  - Selecting [**Basic settings**] in [🔧: **Reset camera**]
  - Using the Mode dial

- If you start time-lapse movie recording while the white [ ] ( ) icon is displayed, the image quality of the time-lapse movie may deteriorate. It is recommended that you start time-lapse movie recording after the white [ ] icon disappears (camera's internal temperature decreases).

Note

- Using a tripod is recommended.
- Taking test shots in advance is recommended.
- The movie's field of view coverage for both the 4K and Full HD time-lapse movie recording is approx. 100%.
- To cancel time-lapse movie recording in progress, press the movie shooting button. The time-lapse movie shot so far will be recorded on the card.
- If the time required for recording is more than 24 hours but not more than 48 hours, “2 days” will be indicated. If three or more days are required, the number of days will be indicated in 24-hour increments.
- Even if the time-lapse movie's playback time is less than 1 sec., a movie file will still be created. In this case, [00'00"] is indicated as the playback time.

Note

You can use Wireless Remote Control BR-E1 (sold separately) to start and stop time-lapse movie recording.

- **With Wireless Remote Control BR-E1**
  - First, pair the BR-E1 with the camera ( ).

Camera Status/ Remote Control Setting	< ● > (Immediate Release) <2> (2-sec. Delay)	< > (Movie Recording)
Recording standby	As set in the Shutter Button Function for Movies setting	Starts recording
During time-lapse movie recording		Ends recording

Approx. Time Available for Recording Time-Lapse Movies

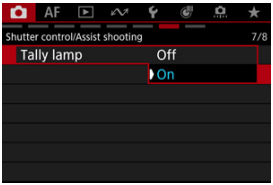
For guidelines on how long you can record time-lapse movies (until the battery runs out), see Estimated recording time, movie bit rate, and file size.

Tally Lamp

The tally lamp lights up or blinks to indicate camera status.

1. **Select [: Tally lamp] ( ).**

2. **Select an option.**



- When set to [**On**], the tally lamp lights up or blinks as follows.

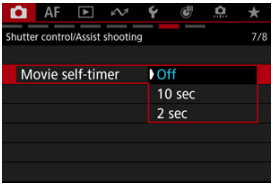
Lit	Movie recording in progress
Blinking rapidly	• The battery level indicator has started blinking • Cannot record movies, due to insufficient card free space or other reasons • High internal camera temperature, due to hot shooting conditions or extended movie recording
Blinking slowly	Movie recording is now possible for up to 6 min.

Movie Self-Timer

Movie recording can be started by the self-timer.

1. **Select [: Movie self-timer] ( ).**

2. **Select an option.**



3. **Record the movie.**

- After you press the movie shooting button or tap [●], the camera beeps and displays the number of seconds left before recording.

Note

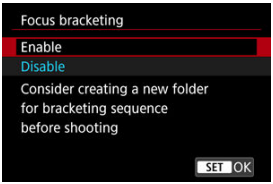
- To cancel the self-timer, either tap the screen or press < >.

Focus Bracketing

Focus bracketing enables continuous shooting with the focal distance changed automatically after each shot. These images enable you to create a single image in focus over a deep depth of field. Compositing is also possible using an application that supports depth compositing, such as Digital Photo Professional (EOS software).

1. **Select [: Focus bracketing] ( ).**

2. **Set [Focus bracketing].**

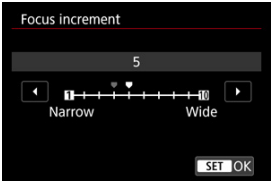


- Select [**Enable**].

3. **Set [Number of shots].**

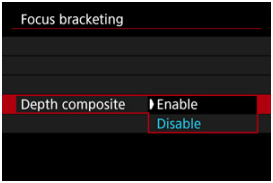
- Specify the number of images captured per shot.
- Can be set in a range of [**2**]–[**500**].

4. Set [Focus increment].



- Specify how much to shift the focus. This amount is automatically adjusted to suit the aperture value at the time of shooting.
  Larger aperture values increase the focus shift and make focus bracketing cover a wider range under the same focus increment and number of shots.
- After completing the settings, press < (SET) >.

5. Set [Depth composite].

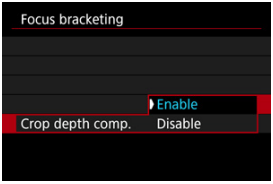


- Select [**Enable**] for in-camera depth compositing. The depth-composited image is saved.
- Select [**Disable**] if you prefer not to perform in-camera depth compositing. Only captured images are saved.

Caution

- Depth-composited images are saved as JPEGs.
- ◢M/◢M/◢S1/◢S1/S2 image quality is not available. Settings are adjusted so that the resulting image is ◢L for ◢M/◢S1/S2 or ◢L for ◢M/◢S1.

6. Set [Crop depth comp.].



- Select [**Enable**] for cropping before compositing, to prepare any images without a sufficient angle of view for compositing alignment by cropping them to correct the angle of view.
- Select [**Disable**] if you prefer not to crop these images. In this case, areas without a sufficient angle of view are covered by a black border in the saved images. You can crop the images manually or edit them as needed.

7. Take the picture.

- To save your shots in a new folder, tap [ ] and select [**OK**].
- Focus at the nearer end of your preferred focal range, then press the shutter button completely.
- Once shooting begins, release the shutter button.
- The camera shoots continuously, shifting the focal position toward infinity.
- Shooting ends after your specified number of images, or at the far end of the focal range.
- To cancel shooting, press the shutter button completely again.

Caution

- Focus bracketing is intended for still photo shooting on a tripod.
- Shooting with a wider angle of view is recommended. After depth compositing, you can crop the image if necessary.
- Suitable [**Focus increment**] settings vary by subject. An unsuitable [**Focus increment**] setting may cause unevenness in composite images, or shooting may take more time because more shots are taken. Take some test shots to decide a suitable [**Focus increment**] setting.
- Flash photography is not available.
- Shooting under flickering light may cause uneven images. In this case, lowering the shutter speed may give better results.
- Focus bracketing is not available when the camera is set to manual focus ( ).
- Canceling shooting in progress may cause exposure problems in the last image. Avoid using the last image when combining the images in Digital Photo Professional.
- Depth compositing is canceled if you open the card/battery compartment cover, or if the remaining battery capacity becomes too low. After cancellation, composited images are not saved.
- Depth compositing may fail for patterned images (with a lattice or stripes, for example) or images that are generally flat and uniform.
- When taking several shots, start by focusing closer, then gradually focus farther away.
- Too great a distance when moving the focal position between multiple shots may cause unevenness in depth-composited images, or it may cause compositing to fail.
- Depth compositing is intended for subjects that are not moving. For this reason, shooting subjects in motion may prevent effective compositing.
- Depth compositing of images with multiple subjects may fail if your shots are composed with the subjects far apart from each other, for example.
- In depth compositing, optimal images from the shots are selected and combined by the camera. Not all of the shots are combined to create the composite image.

Note

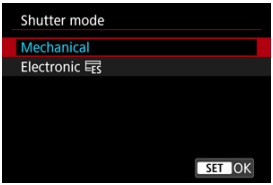
- Consider using a tripod, wireless remote control (sold separately,), or other means of securing the camera.
- For best results, set the aperture value in a range of f/5.6–11 before shooting.
- Details such as shutter speed, aperture value, and ISO speed are determined by conditions for the first shot.
- [: **Focus bracketing**] reverts to [**Disable**] when the power is turned off.

Shutter Mode

You can choose the method of shutter release.

1. **Select [: Shutter mode] ( ).**

2. **Select an option.**



- **Mechanical**
  Shooting activates the mechanical shutter.
  Select when shooting with Speedlites.

- **Electronic**
  The maximum shutter speed can be set higher than for a mechanical shutter.
  - A white frame is displayed around the screen at the time of shooting when [: **Drive mode**] is set to [] or [].
  - Shutter operations are accompanied by beeps. Beeping can be disabled in [: **Beep**] or [: **Volume**].

Caution

- Zooming during continuous shooting may cause changes in exposure.

Precautions when set to [Electronic ES]

- The continuous shooting speed may become slower depending on the shooting conditions.
- Images of fast-moving subjects may look distorted.
- Images may not be shot in standard exposure if the aperture value changes in <**P**> (Program AE) or <**Tv**> (Shutter-priority AE) mode.
- Under some shooting conditions, focusing and aperture adjustment may be audible.
- Bands of light may be displayed and captured images may be affected by light and dark banding if you shoot with electronic shutter during flash firing by other cameras or under fluorescent lighting or other flickering light sources.
- Banding may appear on the screen if you shoot under flickering light sources.
- The camera shoots in [□H] mode, even when [: **Drive mode**] is set to [□].

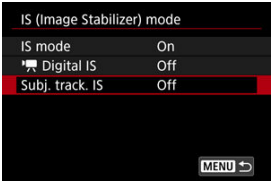
Image Stabilizer (IS Mode)

Image stabilization reduces camera shake during movie recording and still photo shooting. The available features differ during movie recording and still photo shooting.

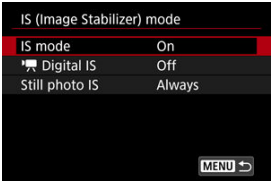
1. **Select [: IS (Image Stabilizer) mode] (,).**

2. Select and set the item.

Movie recording



Still photo shooting



- IS mode (movies/still photos)
  Activates image stabilization using the camera's IS mode feature.
- Movie Digital IS (movies)
  Activates image stabilization using the electronic IS mode feature.
  The image will be slightly magnified during IS mode when turned [**On**] ( ).
  When [**Enhanced**] ( ) is set, it can compensate for stronger camera shaking than the [**On**] setting. The image will be more magnified.
  Set to [**Off**] ( ) to disable image stabilization with Movie digital IS.
- Subject tracking IS (movies)
  Set to [**On**] ( ) to activate image stabilization that keeps subjects relatively fixed on the screen.
  Tap the subject to be tracked to display a tracking frame (locked) [ ] and start the Subject tracking IS.
  [**Screen center**] activates image stabilization that keeps subjects being tracked near the center of the screen.
  [**Sel. position**] activates image stabilization so as to keep the subject at the position when tapped.
- Still photo IS (still photos)
  Select [**Always on**] to provide constant image stabilization. [**Only for shot**]: Image stabilization is active only at the moment of shooting.

Caution

Movie Digital IS

- Stabilization by Movie digital IS may be less effective at some movie recording sizes.
- The wider the angle of view (wide angle), the more effective the image stabilization will be. The narrower the angle of view (telephoto), the less effective the image stabilization will be.
- When using a tripod, setting Movie digital IS to [**Off**] is recommended.
- Depending on the subject and shooting conditions, the subject may blur noticeably (the subject momentarily looks out of focus) due to the effects of the Movie digital IS.
- Since the images is magnified, the image appears more grainy. Noise, dots of light, etc. may also become noticeable.
- When the frame rate is set to 119.88 fps/100.00 fps, Movie Digital IS may not provide sufficient stabilization when shooting near the closest focusing distance.

Subject tracking IS

- For details about how to select the subject to be tracked, see “Tracking with a Button” ( ) and “Subject to Detect” ( ).
- When the tracking target lock is canceled, lock the subject once again as the tracking target.
- The following types of subjects or shooting conditions may prevent proper subject tracking.
  - Subjects with very low contrast.
  - Subjects in low light.
  - Strongly backlit or reflective subjects.
  - There are two or more possible subjects to be tracked on screen.
  - The subject to be tracked is hidden or partially hidden.
  - When there are fluctuations in the subject's dimensions.
  - When there are changes in the subject's color or brightness.
  - When the subject frequently changes its posture.
  - When the camera moves too quickly or slowly.
  - When the camera movement does not match the subject's movement.
  - With long lens focal lengths.
- The effect of stabilizing the subject position increases as the angle of view widens (wide - angle side) and decreases as the angle of view narrows (telephoto side).
- Since Subject tracking IS magnifies the image, the image appears more grainy. Noise, dots of light, etc. may also become noticeable.

Note

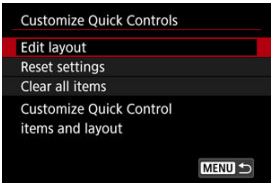
- When using the Subject tracking IS feature, it is recommended that you shoot while moving the camera in a smooth manner to keep the subject being tracked in the following locations.
  When set to [**Screen center**]: near the center of the screen
  When set to [**Sel. position**]: position when tapped

Customizing Quick Controls

Quick Control items and the layout are customizable.

1. **Select [: Customize Quick Controls] (,).**

2. **Select [Edit layout].**



3. **Select items to remove.**

- Items shown on the Quick Control screen are labeled with a checkmark.
- Use the < > dial or < > keys to select an item to remove, then press < >.

4. Select items to add.

- Use the < ◎ > dial or < ✥ > keys to select an item to add, then press < SET >.
- To change the layout, press the < ✱ > button.

5. Change the layout.

- Press the < ▲ >< ▼ > keys to select an item to move, then press < SET >.

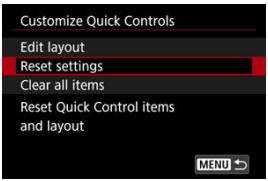
- Press the < ▲ >< ▼ > keys to move the item, then press < SET >.
- Press the < MENU > button to exit setup.

6. **Select [Save and exit].**

7. **Review the screen.**

- Press < SET > to check the screen with your settings applied.

Resetting the Quick Control screen or clearing all items



- Select [**Reset settings**] to restore the default Quick Control screen items and layout.
- Select [**Clear all items**] to remove all items from the layout, so that the Quick Control screen is not displayed even when < SET > is pressed.

Movie Auto Level

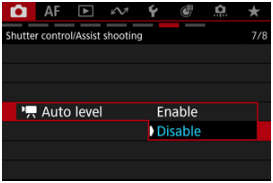
Auto leveling helps keep movies straight during recording. With this feature set, the display area may narrow, and subjects may be enlarged.

Caution

- Set [: **IS (Image Stabilizer) mode**] to [**Off**].

1. **Select [: Auto level] ( ).**

2. **Select an option.**

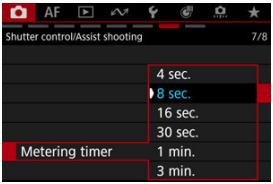


Metering Timer

You can set how long the metering timer runs (which determines the duration of exposure value display) after it is triggered automatically by an action such as pressing the shutter button halfway.

1. **Select [: Metering timer] (,).**

2. **Set a time option.**

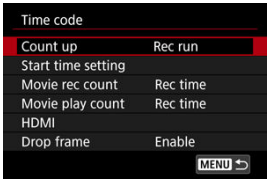


Time Code

- Count Up
- Start Time Setting
- Movie Recording Count
- Movie Play Count
- HDMI
- Drop Frame

Time codes record the time automatically as movies are recorded. Time codes always record elapsed hours, minutes, seconds, and frames. They are mainly used when movies are edited.

To set up the time code, use [: **Time code**].



Caution

- Time codes may not be displayed correctly if your movies are played back on devices other than the camera.

Count Up

- **Rec run**
  The time code advances only during movie recording. Time codes in each movie file recorded continue from the last time code in the previous file.

- **Free run**
  The time code keeps advancing, even when you are not recording.

Caution

- When set to [**Free run**], time codes are not added to High Frame Rate movies.
- When set to [**Free run**], time codes will be affected by any changes to settings for time, zone, or daylight saving time ( ).

Start Time Setting

You can set the initial time of the time code.

- **Manual input setting**
  Enables you to set any starting hour, minute, second, and frame.

- **Reset**
  Resets the time set with [**Manual input setting**] or [**Set to camera time**] to “00:00:00.” or “00:00:00:”.

- **Set to camera time**
  Matches the hour, minute, and second set as the time on the camera. Sets the frame value to “00.”

Movie Recording Count

You can select how time is displayed on the movie recording screen.

- **Rec time**
  During recording standby, displays the available recording time. During recording, displays the time that has elapsed since movie recording began (1).

- **Time code**
  Displays the time code during movie recording (2).

Movie Play Count

You can select how time is displayed on the movie playback screen.

- **Rec time**
  Displays the recording or playback time during movie playback.

- **Time code**
  Displays the time code during movie playback.

Note

- Time codes are always recorded to movie files (except when High Frame Rate movies are set to [**Free run**]), regardless of the [**Movie rec count**] setting.
- The [**Movie play count**] setting in [📷: **Time code**] is linked to the [▶: **Movie play count**], so that these settings always match.
- The “frame” count is not displayed during movie recording or playback.

HDMI

- **Time code**
  Time codes can be added to movies as you record them to an external device via HDMI.

  - **Off**
    No time code is added to HDMI video output.

  - **On**
    Time codes are added to HDMI video output. When [**On**] is set, [**Rec Command**] is displayed.

- **Rec Command**
  For HDMI video output recorded by an external device, you can synchronize recording to when you start and stop recording movies on the camera.

  - **Off**
    Recording is started and stopped by the external device.

  - **On**
    Recording by an external device is synchronized to starting/stopping recording on the camera.

Caution

- Time codes are not added to HDMI video output when you record High Frame Rate movies with [**Count up**] in [📷: **Time code**] set to [**Free run**].
- To determine compatibility of external recording devices with [**Time code**] and [**Rec Command**] functions, check with the device manufacturer.
- Even with [**Time code**] set to [**Off**], external recording devices may add time codes to movies, depending on their specifications. For details on device specifications relevant to adding time code to HDMI input, check with the device manufacturer.

Drop Frame

The time code's frame count will cause a discrepancy between the actual time and the time code if the frame rate is set to 119.9P (119.9 fps), 59.94P (59.94 fps), or 29.97P (29.97 fps). The discrepancy is corrected automatically when [**Enable**] is set.

- **Enable (DF)**
  Corrects the discrepancy automatically by skipping time code numbers (DF: drop frame).
  Time codes are displayed as follows.
  00:00:00. (Playback: 00:00:00.00)

- **Disable (NDF)**
  The discrepancy is not corrected (NDF: non-drop frame).
  Time codes are displayed as follows.
  00:00:00: (Playback: 00:00:00:00)

Note

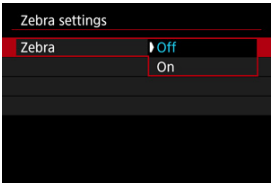
- The [**Drop frame**] setting item is not displayed when the frame rate is set to 23.98P (23.98 fps), or when [🔧: **Video system**] is set to [**For PAL**].

Zebra Settings

To simplify exposure adjustment before or during movie recording, you can display a striped pattern over or around image areas of a specified brightness.

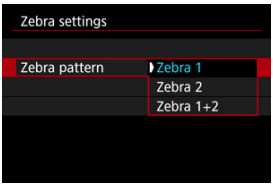
1. **Select [: Zebra settings] ( ).**

2. **Select [Zebra].**



- Select [**On**].

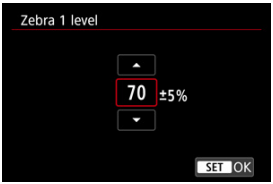
3. **Select [Zebra pattern].**



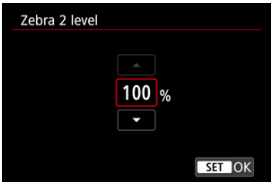
- [**Zebra 1**]: Displays left-slanting stripes around areas of the specified brightness.
- [**Zebra 2**]: Displays right-slanting stripes over areas that exceed the specified brightness.
- [**Zebra 1+2**]: Displays both [**Zebra 1**] and [**Zebra 2**].
  [**Zebra 1**] display takes precedence where [**Zebra 1**] and [**Zebra 2**] display areas overlap.

4. Set the level.

Zebra 1 level



Zebra 2 level



- Set with the < ▲ >< ▼ > keys.

Note

- The maximum brightness value does not reach 100% when HDR-PQ is set. Note that the maximum brightness value varies depending on [📷: **Highlight tone priority**] and [📷: **Picture Style**] settings.
- Checking the zebra display level in advance is recommended when you will set [**Zebra pattern**].

Shooting Information Display

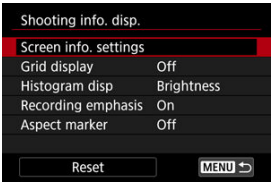
- Customizing Information on the Screen
- Grid
- Histogram
- Card Free Space (%) Display
- Recording Emphasis
- Aspect Marker
- Clearing Settings

You can customize the details and screens of information shown on the camera when you shoot.

Customizing Information on the Screen

1. **Select [: Shooting info. disp.] (,).**

2. **Select [Screen info. settings].**



3. Select screens.

- Press the < ▲ >< ▼ > keys to select screens of information to show on the camera.
- For information you prefer not to display, press < (SET) > to clear the checkmark [✓].
- To edit the screen, press the < ✱ > button.

4. Edit the screen.

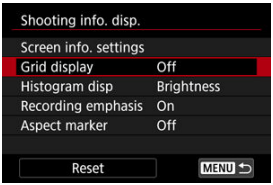
- Press the < ▲ >< ▼ > keys to select options to show on the information screen.
- For items you prefer not to display, press < (SET) > to clear the checkmark [✓].
- Select [**OK**] to register the setting.

Grid

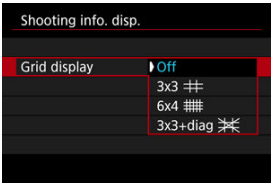
A grid can be displayed on the screen.

1. **Select [: Shooting info. disp.] (,).**

2. **Select [Grid display].**



3. **Select an option.**

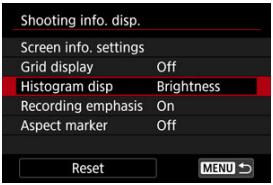


Histogram

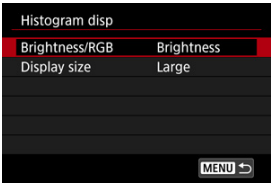
You can select the content and display size of the histogram.

1. **Select [: Shooting info. disp.] (,).**

2. **Select [Histogram disp].**



3. **Select an option.**



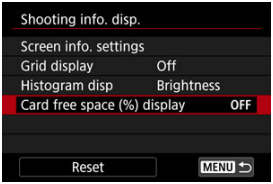
- Select the content ([**Brightness**] or [**RGB**]) and display size ([**Large**] or [**Small**]).

Card Free Space (%) Display

You can display card free space on the screen.

1. **Select [: Shooting info. disp.] ( ).**

2. **Select [Card free space (%) display].**



3. **Select [On].**

Note

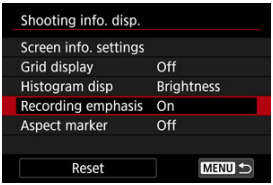
- During still photo shooting or when writing to cards, the number of available shots is shown instead of the free space.

Recording Emphasis

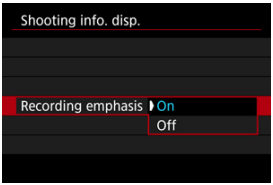
This can display a frame which calls attention to the movie recording in progress.

1. **Select [: Shooting info. disp.] (,).**

2. **Select [Recording emphasis].**



3. **Select an option.**



- **On**
  A red frame around the screen lights up while movie recording is in progress.

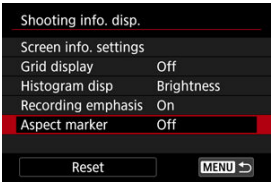
- **Off**
  No frame is displayed to call attention to recording in progress.

Aspect Marker

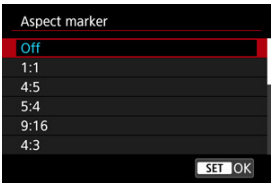
If you will change the image aspect ratio when editing the recorded movie, you can display aspect markers on the movie recording screen (during standby and recording) to be aware of the final angle of view after editing.

1. **Select [: Shooting info. disp.] (,).**

2. **Select [Aspect marker].**



3. **Select an option.**



- Select a display option.

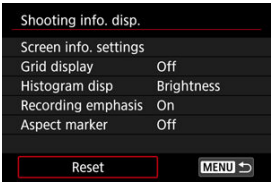
Note

- Markers are not shown during movie playback (recorded movies are not tagged with aspect marker information).

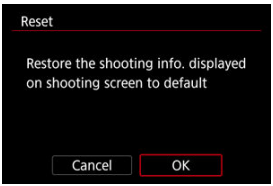
Clearing Settings

1. **Select [: Shooting info. disp.] (,).**

2. **Select [Reset].**



3. **Select [OK].**

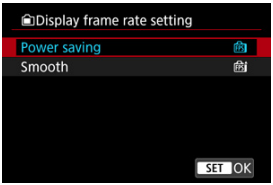


Display Frame Rate

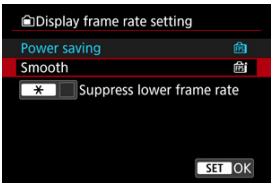
You can set the display frame rate for the shooting screen in still photo shooting. Choose whether to conserve battery power or use a high frame rate for display.

1. **Select [: Display frame rate setting] ( ).**

2. **Select an option.**



When set to [Smooth]



- By pressing the < ✳ > button to add a checkmark, you can include low-light locations in the scenarios for suppressing lower display frame rates.

Caution

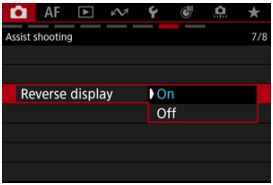
- Shooting under low light with [**Suppress lower frame rate**] set for shooting screen display may affect performance as follows.
  - Faster battery consumption
  - Fewer shots available
  - Lower image display brightness
  - Difficulty in autofocusing
  - Lower metering precision
  - Lower subject detection precision

Reverse Display

A mirror image can be displayed when you shoot with the screen rotated toward the subject (toward the front of the camera).

1. **Select [: Reverse display] (,).**

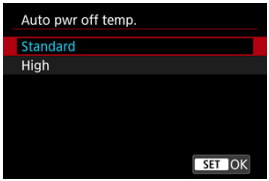
2. **Select [On].**



- Select [**Off**] if you prefer not to reverse display when the screen is facing the subject.

Auto Power Off Temperature

You can set the maximum camera body temperature at which the camera automatically turns off. Setting this level higher than the standard temperature can extend the available shooting time by removing some operating restrictions.

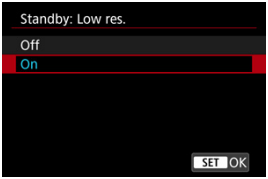


[**High**] sets the maximum temperature higher than the standard setting.

Caution

- The camera and memory cards may become hotter when [: **Auto pwr off temp.**] is set to [**High**].
  - Once the camera body becomes hot, [] appears on the screen as a warning.
  - We recommend using a tripod or the like to avoid handheld shooting, which may cause problems such as low-temperature contact burns.
  - Do not touch cards immediately after shooting. Cards may be hot, which may cause burns. Wait until the card has cooled down before removing it.

Standby: Low Resolution

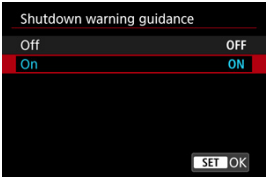


Set to [**On**] to conserve battery power and control the rise of internal camera temperature during standby.
As a result, it may enable you to record movies over a longer period.

Caution

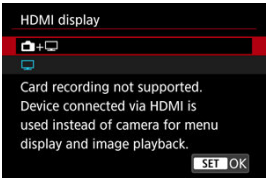
- Image quality on the standby screen may differ from image quality on the screen during movie recording.
- Briefly when you start recording movies, image display may remain on the current frame instead of being updated.
- When [: **Digital zoom**] is set to a value other than [**Off**], [: **Standby: Low res.**] is set to [**Off**] and cannot be changed ( ).

Shutdown Warning Guidance



Set [: **Shutdown warning guidance**] to [**Off**] to hide the guidance that is displayed when the camera starts up or changing the settings, etc. ( )

Display During HDMI Connection



You can specify how movies are displayed as they are recorded via HDMI to an external device. Movie output itself corresponds to the [: **Movie rec. size**] setting.
The default setting is [].

- +
  Enables movie display both on the camera screen and on the other device, via HDMI output.
  Camera operations such as image playback or menu display are shown on the other device via HDMI, not on the camera screen.
-
  Deactivates the camera screen during output via HDMI, so that the screen is blank. Shooting information, AF points, and other information is included in HDMI output and shown on any monitors connected to the external recording device, but you can stop output of this information by pressing the < INFO > button.
  Before recording movies externally, confirm that no information is being sent by the camera by making sure no shooting information, AF points, and so on is displayed on external monitors or other devices.

Caution

- Card recording is not performed with [: **HDMI display**] set to [+]. Camera menus and image playback are only displayed on the screen connected via HDMI.
- The HDMI output resolution and frame rate are automatically adjusted to suit the movie recording size.

? For longer HDMI output

To continue HDMI output for longer than 30 min., select [+], then set [**Auto power off**] in [: **Power saving**] to [**Disable**] ( ). HDMI output will continue after the camera screen turns off when the time set in [**Screen off**] elapses.

Caution

- HDMI output without information prevents display of warnings about the card space, battery level, or high internal temperature ( ) via HDMI.
- During HDMI output, display of the next image may take some time if you switch between movies of different recording sizes or frame rates.
- Avoid operating the camera when recording movies to external devices, which may cause information to be displayed in the HDMI video output.
- Brightness and color of movies recorded with the camera may look different from that of HDMI video output recorded by external devices, depending on the viewing environment.

Note

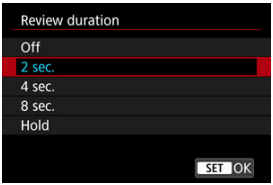
- By pressing the < INFO > button, you can change the information displayed.
- Time codes can be added to HDMI video output ( ).
- Audio is also output via HDMI, except when [**Sound recording**] is set to [**Disable**].

Review Duration

To keep the image displayed immediately after you shoot, set to [**Hold**], and if you prefer not to have the image displayed, set to [**Off**].

1. **Select [: Review duration] ( ).**

2. **Select an option.**



Note

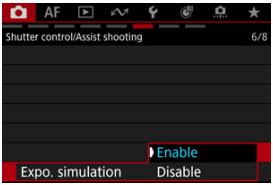
- When [**Hold**] is set, images are displayed as long as the time set in the [**Screen off**] option of [: **Power saving**].

Exposure Simulation

With exposure simulation, display of image brightness and depth of field more closely matches the actual brightness (exposure) of your shots.

1. **Select [: Expo. simulation] ( ).**

2. **Select an option.**



- **Enable**
  Image brightness as displayed closely matches the actual brightness (exposure) of your shots. If you set exposure compensation, the image brightness will change accordingly.

- **Disable**
  The image is displayed at standard brightness, so it is easy to see. Even if you set exposure compensation, the image is displayed at the standard brightness.

General Shooting

Information Display

General Movie Recording Precautions

General Still Photo Shooting Precautions

Information Display

For details about the icons displayed on the shooting screen, see Information Display.

Caution

- The remaining time displayed for movie recording is only a guideline.
- Movie recording may stop before the initially displayed recording time elapses if the red [ ] icon appears due to high internal camera temperature during recording ( ).

General Movie Recording Precautions

Guidance Display Before Recording

Guidance may be displayed when the camera starts up, after settings are adjusted, or in other situations.

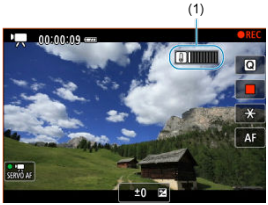
The guidance warns that the camera may become hot internally if movies are recorded under the current settings, and that if you continue recording, the camera may turn off automatically.
If you will record over an extended period, consider changing the settings listed in the guidance (such as movie recording size or use of digital zoom), so that you can record without the camera displaying guidance.
If you prefer to record without changing the settings, note any warning indicators displayed as you record.

Note

- If you prefer not to display this guidance, set [: **Shutdown warning guidance**] to [**Off**] ( ).

Warning Indicator Display During Shooting or Recording

A 10-level indicator (1) is displayed during still photo shooting or movie recording in case of excessive internal camera temperature.



As the internal temperature rises, the level on the indicator extends to the right. How fast the level increases will depend on shooting conditions. Levels 1–7 are marked in white, but once the temperature reaches level 8, the color changes.

[ ] flashes in red if you continue recording after the indicator reaches level 9, marked in orange. A flashing icon indicates that the camera will soon turn off automatically.

A message is displayed if you continue to record while the icon is flashing, and the camera automatically turns off.

Subsequent recording

To keep recording under the same settings, leave the camera off and let it cool down for a while. Note that the camera may overheat again after you resume recording.

Caution

Precautions for movie recording

- Do not point the camera toward an intense light source, such as the sun or an intense artificial light source. Doing so may damage the image sensor or the camera's internal components.
- Condensation may form inside the camera lens if you record movies in humid environments.
  To prevent condensation, set the [**Fan rotation speed**] to medium or greater speed ( ) and reduce the video resolution and frame rate. If condensation forms, turn the camera off and wait until the moisture has evaporated before resuming use.
- If you record something that has fine detail, moire or false colors may result.
- If [AWB] or [AWBW] is set and the ISO speed or aperture value changes during movie recording, the white balance may also change.
- If you record a movie under fluorescent or LED lighting, the movie image may flicker.
- Recording a few test movies is recommended if you intend to perform zooming during movie recording. Zooming as you record movies may cause exposure changes or lens sounds to be recorded, an uneven audio level, or loss of focus.
- Large aperture values may delay or prevent accurate focusing.
- Performing AF during movie recording may cause the following kinds of issues: significant temporary loss of focus, recording of changes in movie brightness, temporary stopping of movie recording, or recording of mechanical lens sounds.
- Avoid covering the built-in microphones with your fingers or other objects.
- Connecting or disconnecting an HDMI cable during movie recording will end recording.
- If necessary, also see General Still Photo Shooting Precautions.
- The camera may become hot in movie recording while connected via Wi-Fi. Use a tripod or take other measures to avoid handheld recording.

Recording and image quality

- If there is a very bright light source in the image, the bright area may appear black on the screen. Movies are recorded almost exactly as they appear on the screen.
- Image noise or irregular colors may occur when recording at high ISO speeds, high temperatures, slow shutter speeds, or under low light. Movies are recorded almost exactly as they appear on the screen.
- Video and audio quality of recorded movies may be worse on other devices, and playback may not be possible, even if the devices support MP4 formats.
- If you use a card with a slow writing speed, an indicator may appear on the right of the screen during movie recording. The indicator shows how much data has not yet been written to the card (remaining capacity of the internal buffer memory), and it increases more quickly the slower the card is. If the indicator (1) becomes full, movie recording will stop automatically.

- If the card has a fast writing speed, the indicator will not appear or the level (if displayed) will not increase much. First, record a few test movies to see if the card can write fast enough.
- If the indicator shows that the card is full, and movie recording stops automatically, the sound near the end of the movie may not be recorded properly.
- If the card's writing speed is slow (due to fragmentation) and the indicator appears, formatting the card may make the writing speed faster.

Note

Notes for movie recording

- Each time you record a movie, a new movie file is created on the card.
- Most external microphones compatible with 3.5 mm mini-jacks can be used.
- Any connected external microphone is used instead of the built-in microphone.

General Still Photo Shooting Precautions

Caution

- Do not point the camera toward an intense light source, such as the sun or an intense artificial light source. Doing so may damage the image sensor or the camera's internal components.

Image quality

- When you shoot at high ISO speeds, noise (such as dots of light and banding) may become noticeable.
- Shooting in high temperatures may cause noise and irregular colors in the image.
- Frequent shooting over an extended period may cause high internal temperatures and affect image quality. When you are not shooting, always turn off the camera.
- If you shoot a long exposure while the camera's internal temperature is high, image quality may decline. Stop shooting and wait a few minutes before shooting again.

White [] internal temperature warning icon

- A white [] icon indicates high internal camera temperature, caused by factors such as extended shooting or use in hot environments.
- The white [] icon indicates that the image quality of still photos will decline. Stop shooting for a while and allow the camera to cool down.
- Shooting at low ISO speeds instead of high speeds is recommended when the white [] icon is displayed.
- Shooting in hot environments over extended periods will cause the white [] or red [] icon to appear sooner. When you are not shooting, always turn off the camera.
- If the camera's internal temperature is high, the quality of images shot with a high ISO speed or long exposure may decline even before the white [] icon is displayed.

Camera overheating indicator

- A temperature indicator [] is displayed when the camera begins to become hot.
  For details on how indicator display corresponds to camera operation, see Warning Indicator Display During Shooting or Recording.

Images and display

- Under low- or bright-light conditions, the displayed image may not reflect the brightness of the captured image.
- Although noise may be noticeable in images under low light (even at low ISO speeds), there will be less noise in your shots, due to differences in image quality between displayed and captured images.
- The screen may flicker if the light source (lighting) changes. In this case, stop shooting temporarily and resume under the light source you will use.
- Pointing the camera at different direction may momentarily prevent correct display of brightness. Wait until the brightness level stabilizes before shooting.
- If there is a very bright light source in the image, the bright area may appear black on the screen. However, the actual captured image will correctly show the bright area.
- Under low light, bright [: **Screen brightness**] settings may cause noise or irregular colors in images. However, the noise or irregular colors will not be recorded in the captured image.
- When you magnify the image, the image sharpness may look more pronounced than in the actual setting.

Note

- The field of view is approx. 100% (with image quality set to JPEG).
- If the camera is idle over an extended period, the screen turns off automatically after the time set in [**Screen off**] under [: **Power saving**], and the camera itself turns off automatically after the time set in [**Auto power off**] ( ).
- Using a commercially available HDMI cable, you can display images on a television ( ). Note that no sound will be output.

AF/Drive

This chapter describes autofocus operation and drive modes and introduces menu settings on the AF [AF] tab.
☆ to the right of titles indicates functions only available in Creative Zone modes (<**P**>, <**Tv**>, <**Av**>, or <**M**>).

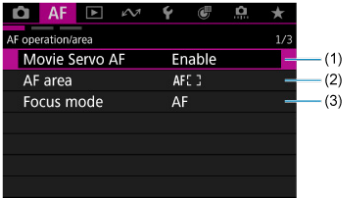
Note

- < AF > stands for autofocus. < MF > stands for manual focus.

- Tab Menus: AF (Movie Recording)
- Tab Menus: AF (Still Photos)
- AF Operation ☆
- Movie Servo AF
- Selecting the AF Area ☆
- Preview AF
- AF-Assist Beam Firing
- Limiting the AF Area ☆
- Manual Focus
- Selecting the Drive Mode
- Using the Self-Timer
- Remote Control Shooting
- Adjusting the Zone AF Frame Size

Tab Menus: AF (Movie Recording)

AF operation/area

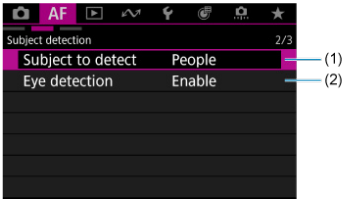


(1) Movie Servo AF

(2) AF area

(3) Focus mode

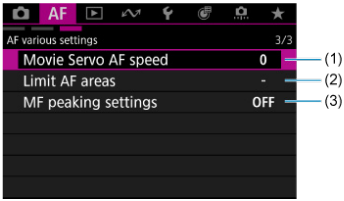
Subject detection



(1) Subject to detect

(2) Eye detection

AF various settings



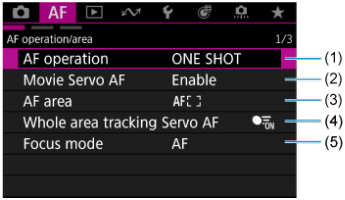
(1) Movie Servo AF speed ☆

(2) Limit AF areas ☆

(3) MF peaking settings

Tab Menus: AF (Still Photos)

AF operation/area



(1) AF operation ☆

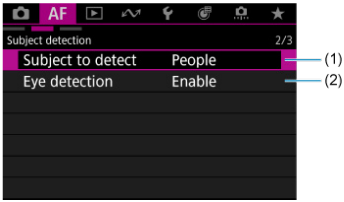
(2) Movie Servo AF

(3) AF area

(4) Whole area tracking Servo AF ☆

(5) Focus mode

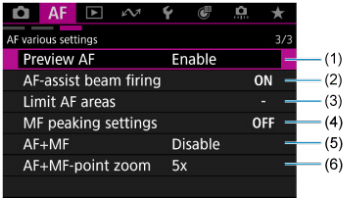
Subject detection



(1) Subject to detect

(2) Eye detection

AF various settings



(1) Preview AF

(2) AF-assist beam firing

(3) Limit AF areas ☆

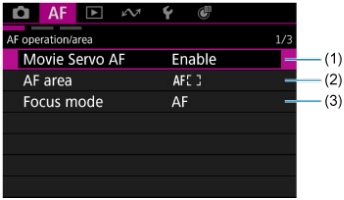
(4) MF peaking settings

(5) AF+MF

(6) AF+MF-point zoom

In Basic Zone modes (< A+ >< SCN >< ◉ > modes), the following screens are displayed. Note that available menus vary by shooting mode.

AF operation/area

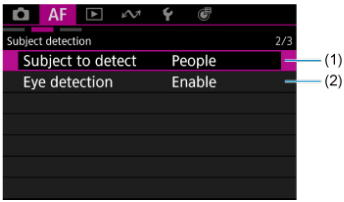


(1) Movie Servo AF

(2) AF area

(3) Focus mode

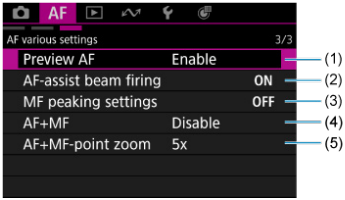
Subject detection



(1) Subject to detect

(2) Eye detection

AF various settings



(1) Preview AF

(2) AF-assist beam firing

(3) MF peaking settings

(4) AF+MF

(5) AF+MF-point zoom

AF Operation

One-Shot AF for Still Subjects

Servo AF for Moving Subjects

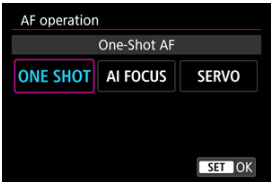
AI Focus AF for Automatic AF Mode Switching

You can select the AF operation characteristics to suit the shooting conditions or subject.

1. **Set [AF: Focus mode] to [AF] ( ).**

2. **Select [AF: AF operation] ( ).**

3. **Select an option.**



Note

- If focus is not achieved, the AF point will turn yellow. When using One-Shot AF, either recompose the shot and try to focus again or see Shooting Conditions That Make Focusing Difficult.

One-Shot AF for Still Subjects

This AF operation is suited for still subjects. When you press the shutter button halfway, the camera will focus only once.

- When focus is achieved, the AF point will turn green and the beeper will sound.
- The focus remains locked while you hold down the shutter button halfway, allowing you to recompose the image before taking the picture.

Note

- If [: **Beep**] is set to [**Disable**], the beeper will not sound when focus is achieved.
- Tap the screen to move the AF point into position for focusing.

Shooting with the focus locked

In focus lock shooting, you will use One-Shot AF with a fixed AF point, then recompose the shot before shooting. The steps are as follows when you will press the shutter button halfway to focus.

1. **Aim the fixed AF point over the subject to focus on, then press the shutter button halfway.**

2. **After the AF point in focus turns green, keep the shutter button pressed halfway and recompose the shot.**

3. **Press the shutter button completely to take the picture.**

Servo AF for Moving Subjects

This AF operation is suited for moving subjects. While you hold down the shutter button halfway, the camera will keep focusing on the subject continuously.

- When focus is achieved, the AF point will turn blue. The camera beeps after focusing.
- The exposure is set at the moment the picture is taken.

Caution

- Accurate focusing may not be possible at high aperture values or depending on the distance to the subject and how fast the subject is moving.
- Consider shooting with One-Shot AF if Servo AF operation is unsteady for still subjects.

AI Focus AF for Automatic AF Mode Switching

The AF mode is automatically switched from [**One-Shot AF**] to [**Servo AF**] based on subject status while you are pressing the shutter button halfway or shooting continuously.

Movie Servo AF

Movie Servo AF Speed

With this function enabled, the camera focuses on the subject continuously during shooting.

1. **Set the still photo shooting/movie recording switch to < >.**

2. **Select [AF: Movie Servo AF] ( ).**

3. Select [Enable].

- **Enable**

  - The camera focuses on the subject continuously even when you are not pressing the shutter button halfway.

  - To keep the focus at a specific position, you can temporarily stop Movie Servo AF by tapping [SERVO AF] in the lower left of the screen.

  - Movie Servo AF will resume if you return to movie recording after operations such as pressing the < MENU > or < ▶ > button or changing the AF area.

- **Disable**
  Press the shutter button halfway to focus.

Caution

Precautions when set to [Movie Servo AF: Enable]

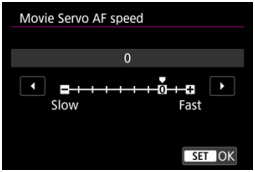
- **Shooting conditions that make focusing difficult**
  - A fast-moving subject approaching or moving away from the camera.
  - A subject moving at a close distance to the camera.
  - When shooting with a higher aperture value.
  - Also see Shooting Conditions That Make Focusing Difficult.
- Since the AF is driven continuously and the battery power is consumed, the possible movie recording time ( ) will be shortened.
- Movie Servo AF will pause during zooming.
- During movie recording, if a subject approaches or moves away or if the camera is moved vertically or horizontally (panning), the recorded image may momentarily expand or contract (change in image magnification).

Movie Servo AF Speed

You can set the AF speed for Movie Servo AF.

1. **Select [AF: Movie Servo AF speed] ( ).**

2. **Set the option.**



- You can adjust the AF speed (focus transition speed) from the standard speed (0) to slow (one of seven levels) or fast (one of two levels) to obtain the desired effect for the movie creation.

Caution

- This function is available when [**Movie Servo AF**] in [AF: **Movie Servo AF**] is set to [**Enable**].

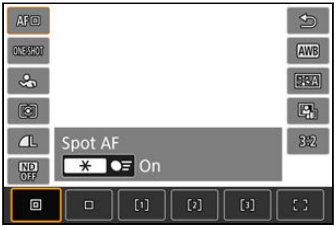
Selecting the AF Area

- AF Area
- Selecting the AF Area
- Tracking (Whole Area)
- Tracking with a Button
- Focus Mode
- Subject to Detect
- Eye Detection
- Manually Setting the AF Frames
- AF Shooting Tips
- Shooting Conditions That Make Focusing Difficult
- AF Range

AF Area

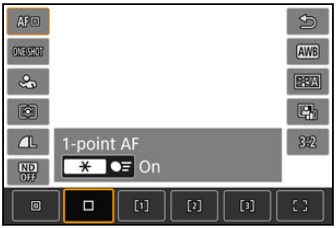
Camera operation in the AF area is as follows.

⊡: Spot AF



The camera focuses in a narrower area than 1-point AF.

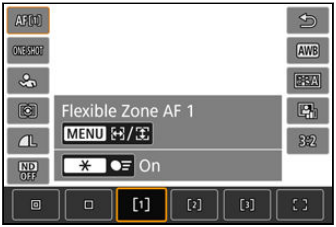
□: 1-point AF



The camera focuses using a single AF point [□].

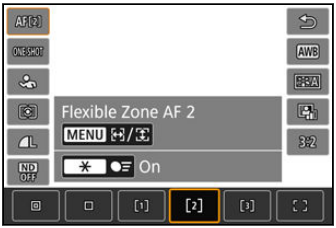
[1]: Flexible Zone AF 1

By default, a square Zone AF frame is set.



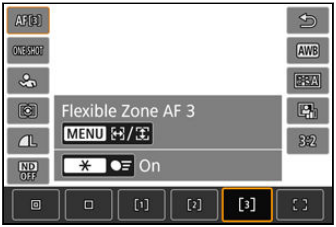
[2]: Flexible Zone AF 2

By default, a vertical rectangular Zone AF frame is set.



[3]: Flexible Zone AF 3

By default, a horizontal rectangular Zone AF frame is set.



With Flexible Zone AF 1–3, you can freely set the size of the Zone AF frame ( ).
Uses auto selection AF in Zone AF frames to cover a larger area, which makes focusing easier than with 1-point AF and effective for moving subjects.
Focusing areas are determined not only based on the nearest subject but also based on a variety of other conditions such as faces (of people or animals), subject motion, and subject distance.

Pressing the shutter button halfway displays [□] over AF points in focus.

[ ]: Whole area AF

Uses auto selection AF in a whole-area AF frame to cover a larger area than Flexible Zone AF, which makes focusing easier than with 1-point AF/Flexible Zone AF and effective for moving subjects.
Focusing areas are determined not only based on the nearest subject but also based on a variety of other conditions such as faces (of people or animals), subject motion, and subject distance.

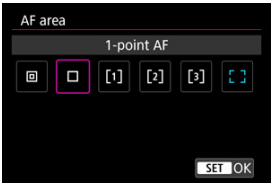
Pressing the shutter button halfway displays [□] over AF points in focus.

Selecting the AF Area

You can select the AF area to suit the shooting conditions or subject.

1. **Select [AF: AF area] (,).**

2. **Select the AF area.**

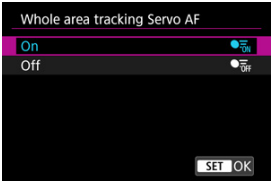


Tracking (Whole Area)

You can set whether to switch to whole-area subject tracking during Servo AF (while the shutter button is pressed halfway with [AF: **AF operation**] set to [**Servo AF**]).

1. **Select [AF: Whole area tracking Servo AF] ( ).**

2. **Select an option.**



- **On**
  The AF area switches to whole-area AF to track subjects across the entire screen area while the shutter button is pressed halfway.

- **Off**
  Subjects are tracked only within AF points when the shutter button is pressed halfway or completely.

Tracking with a Button

You can press a button assigned to [**Start/stop whole area AF tracking**] and [**AF point selection**] in [: **Customize buttons**] to track subjects with a tracking frame [ ]. This example is based on assigning [**Start/stop whole area AF tracking**] to the < > button and [**AF point selection**] to the < M-Fn > button ( ).

1. **Check the tracking frame.**

- A tracking frame appears after you aim the camera at a subject. Aim the AF point over the subject if you have selected an option other than [**Whole area AF**] in [AF: **AF area**].
- With Flexible Zone AF, the specified Zone AF frame is displayed.

2. **Press the < > button.**

- The tracking frame changes to [ ], which locks on to that subject for tracking and follows the subject within the screen if it moves. To cancel tracking, press the < > button again.
- To choose a subject to focus on when multiple subjects can be detected, press the < M-Fn > button to change the tracking frame to [ ], then use the < ◀ >< ▶ > keys.
- Once tracking begins, the subject is tracked across the entire screen, regardless of the specified AF area.

3. Take the picture.

Note

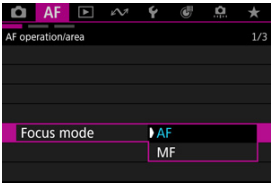
- The position of AF areas and points when tracking stops during shooting standby corresponds to the position before tracking.
- When tracking stops while the shutter button is pressed halfway or completely, the AF area reverts to the state before tracking, but the AF point is centered in the tracking frame when tracking stops (during [**Servo AF**]).

Focus Mode

You can set how the camera focuses.

1. **Select [AF: Focus mode] (,).**

2. **Select an option.**



- **AF**
  The camera operates in autofocus mode.

- **MF**
  The camera operates in manual focus mode.

Note

- You can also switch between [**AF**] and [**MF**] when the shooting screen is displayed by pressing the <**AF MF**> key.

Fine-tuning the focus

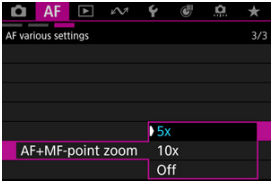
You can adjust the focus after focusing with the One-Shot AF.

1. **Select [On] in [AF: AF+MF] ( ).**

2. **Focus on the subject.**

- Press the shutter halfway to focus on the subject and keep holding down the shutter button halfway.

3. **Adjust the focus.**



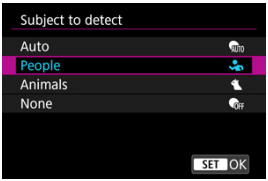
- Operate the < ◐ >.
- Selecting [**5x**] or [**10x**] in [AF: **AF+MF-point zoom**] magnifies the screen by 5x or 10x when fine-tuning the focus.

Note

- To focus more accurately, try attaching the camera to a tripod to stabilize it.
- Press the shutter button halfway to fine-tune the focus to the optimal position.

Subject to Detect

You can specify conditions for automatic selection of the main subject to track.



- **Auto**
  Automatically selects the main subject to track in the scene.

- **People**
  Prioritizes the faces or heads of people as the main subjects to track.
  When a person's face or head cannot be detected, the camera attempts to detect and track their torso. If their torso cannot be detected, the camera may track other parts of their body.

- **Animals**
  Detects animals (dogs and cats) and people and prioritizes detection results for animals as the main subjects to track.
  For animals, the camera attempts to detect faces or bodies, and a tracking frame is shown over any face detected.
  When an animal's face or entire body cannot be detected, the camera may track part of their body.

- **None**
  The camera determines the main subject automatically from how you compose shots, without detecting subjects.
  Tracking frames are not displayed.

Caution

- The following kinds of subjects may not be detected. Also, the subject's left or right eye may not be prioritized correctly.
  - Extremely small or large
  - Too bright or dark
  - Partially hidden
  - Difficult to distinguish from the background
  - Obscured by rain, snow, or dust clouds
- People's posture or the color or shape of what they are wearing may prevent detection. Frames may also appear for subjects other than people.
- The camera may not detect dogs or cats depending on the breed, color, shape, or posture. Frames may also appear for similar-looking animals or non-animal subjects.
- To avoid having a tracking frame displayed next to unintended subjects when you are shooting people or animals with the camera set to [**Auto**], change the setting to track your intended subjects.

Note

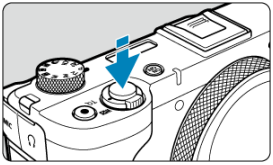
- When pressing the shutter button halfway for subject selection, you can choose the following subjects. In scenes without relevant subjects, the camera tracks other objects regardless of the [AF: **Subject to detect**] setting.
  - **Auto**, **People**
    People, animals
    (When the subject for detection is set to [**People**], animals can only be selected during Servo AF.)
  - **Animals**
    Animals, people
- To restrict AF to your specified AF area, set [AF: **Whole area tracking Servo AF**] to [**Off**] and [AF: **Subject to detect**] to [**None**].

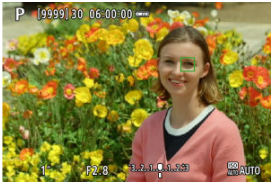
Manually selecting a subject for focus

1. **Check the tracking frame.**

- Aim the camera at the subject. An AF point (or Zone AF frame) appears on the screen if you have set [AF: **AF area**] to an option other than [**Whole area AF**]. In this case, aim the AF point over the subject.
- A tracking frame [ ] appears over any subjects detected.
- Tracking frames [ ] away from AF points are displayed in gray, except in some cases.
- Once the tracked subject is near an AF point, even if it is outside the AF point, the tracking frame turns white (distinguishing it as an active frame), which enables selection as the main subject.

2. Focus and take the picture.





- A tracking frame is displayed (in green for One-Shot AF or blue for Servo AF) when you press the shutter button halfway, and the camera beeps.
  A yellow tracking frame indicates that the camera could not focus on the subjects.

Note

- Selecting a subject by touch with [AF: **AF area**] set to [**Whole area AF**] changes the tracking frame to [ ] and locks on to that subject for tracking across the entire screen.
- To release locked tracking, tap [OFF].
- Pressing the shutter button halfway when the AF point does not overlap the tracking frame [ ] will focus using the active, white AF frame.
- For human subjects, the active [ ] may cover only a part of the face, not the whole face.
- The size of tracking frames varies depending on the subject.

Caution

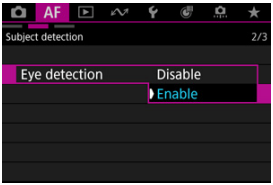
- If the subject's face is significantly out of focus, face detection will not be possible. Adjust the focus manually ( ) so that the face can be detected, then perform AF.
- AF may not detect subjects or people's faces at the edges of the screen. Recompose the shot to center the subject or bring the subject closer to the center.

Eye Detection

You can shoot with the eyes of people or animals in focus.

1. **Select [AF: Eye detection] (,).**

2. **Select an option.**



3. **Aim the camera at the subject.**

- An AF point is displayed around their eye.
- To choose an eye when [AF: **AF area**] is set to [**Whole area AF**], tap the screen.
- If your selected eye is not detected, an eye to focus on is selected automatically.
- To choose an eye to focus on when [ ] is displayed and [AF: **AF area**] is set to [**Whole area AF**], you can use the < ◀ >< ▶ > keys depending on the [AF: **Eye detection**] setting.

4. **Take the picture.**

Caution

- Subject eyes may not be detected correctly, depending on the subject and shooting conditions.
- Eyes are not detected when [AF: **Subject to detect**] is set to [**None**].

Manually Setting the AF Frames

You can manually set the AF point or Zone AF frame. Screens such as these are shown when set to Flexible Zone AF 1.

1. **Check the AF point.**

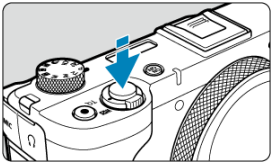
(1)

- The AF point (1) will appear.

2. **Move the AF point.**

- Focus by tapping a position on the screen to move the AF point there.
- To center the AF point, tap [ ].

3. Focus and take the picture.



- Aim the AF point over the subject and press the shutter button halfway.

- Once the subject is in focus, the AF point changes color (to green for One-Shot AF or blue for Servo AF) and the camera beeps.
- If focus is not achieved, the AF point will turn yellow.

Caution

- The camera will keep moving the AF point [□] to track subjects when set to Flexible Zone AF and Servo AF, but under some shooting conditions (such as when subjects are small), it may not be possible to track the subject.
- Focusing may be difficult when using a peripheral AF point. In this case, select an 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 before and after autofocusing.
- Depending on the subject and shooting conditions, it may take longer to focus, or the continuous shooting speed may decrease.
- 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.
- If focusing is not possible with AF, focus manually ( ).
- For subjects at the edge of the screen that are slightly out of focus, try centering the subject (or AF point, or Zone AF frame) to bring them into focus, then recompose the shot before shooting.

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.
- A special effect filter is used.
- Noise (dots of light, banding, etc.) appears on the screen during AF.

AF Range

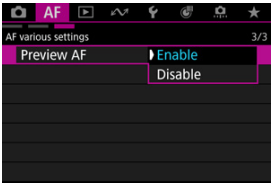
The available autofocus range varies depending on the settings such as aspect ratio, movie recording size, and Movie digital IS.

Preview AF

Keeps subjects generally in focus before you start shooting. The camera is ready to focus immediately when you press the shutter button halfway.

1. **Select [AF: Preview AF] ( ).**

2. **Select [Enable].**



Caution

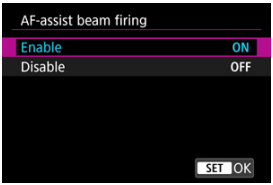
- Fewer shots are available when set to [**Enable**], because AF is driven continuously and battery power is consumed.

AF-Assist Beam Firing

You can enable or disable AF-assist beam firing from the camera or a Speedlite.

1. **Select [AF: AF-assist beam firing] ( ).**

2. **Select an option.**



- **[ON] Enable**
  Enables firing of the AF-assist beam, when needed.

- **[OFF] Disable**
  Disables firing of the AF-assist beam. Set if you prefer not to fire the AF-assist beam.

Caution

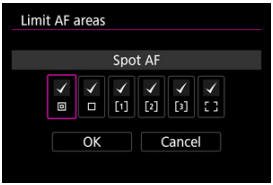
- Speedlite AF-assist beam firing is disabled when the Speedlite's [AF: **AF-assist beam firing**] Custom Function is set to [**Disable**].

Limiting the AF Area

You can now limit the selectable AF areas. For details on the AF areas, see AF Area.

1. **Select [AF: Limit AF areas] (,).**

2. **Select the AF area to limit and press <SET>.**



- Items with a [✓] are selectable AF areas.
- After confirming the settings, select [**OK**].

Caution

- The [✓] mark cannot be cleared from all items at the same time.

Note

- An asterisk to the right of [AF: **Limit AF areas**] indicates that the default setting has been modified.

Manual Focus

Setting MF Peaking (Outline Emphasis)

If focusing is not possible with autofocus, you can magnify the image and focus manually.

1. **Press the <AF MF> button to set [MF].**

2. **Magnify the image.**

   - Each time you press the <**M-Fn**> button the magnification ratio changes as follows.

   → x5 → x10 → x1

3. **Move the magnified area.**

   - Tap the screen to move the magnified area into position for focusing.

4. **Focus manually.**

   - Press the < ▲ >< ▼ > keys while viewing the video to adjust the focus.

Note

- In magnified view, the exposure is locked.
- Even when focusing manually, you can use Touch Shutter to shoot.

Setting MF Peaking (Outline Emphasis)

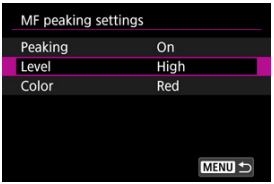
Edges of subjects in focus can be displayed in color to make focusing easier. You can set the outline color and adjust the sensitivity (level) of edge detection.

1. **Select [AF: MF peaking settings] (,).**

2. **Select [Peaking].**

- Select [**On**].

3. **Set [Level] and [Color].**



- Set as necessary.

Caution

- In magnified view, peaking display is not shown.
- During HDMI output, peaking display is not shown on equipment connected via HDMI. Note that peaking display is shown on the camera screen when [: **HDMI display**] is set to [+].
- MF peaking may be hard to discern at high ISO speeds, especially when ISO expansion is set. If necessary, lower the ISO speed or set [**Peaking**] to [**Off**].

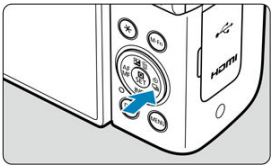
Note

- Peaking display shown on the screen is not recorded in images.

Selecting the Drive Mode

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

1. **Press the < ⧉ > button (⏱6).**



- With an image displayed on the screen, press the < ⧉ > button.

2. **Select the drive mode item.**

- Turn the < ◎ > dial to select the drive mode item.

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

- **[⧉] High-speed continuous shooting +**
  When you hold down the shutter button completely, you can shoot continuously as described below while you keep holding it down, based on the [📷: **Shutter mode**] setting.
  - [**Mechanical**]: max. approx. 15 shots/sec.
  - [**Electronic** ES]: max. approx. 30 shots/sec.

- **[High-speed continuous shooting]**
  When you hold down the shutter button completely, you can shoot continuously as described below while you keep holding it down, based on the [: **Shutter mode**] setting.
  - [**Mechanical**]: max. approx. 8.2 shots/sec.
  - [**Electronic ES**]: max. approx. 16 shots/sec.

- **[Low-speed continuous shooting]**
  When you hold down the shutter button completely, you can shoot continuously as described below while you keep holding it down, based on the [: **Shutter mode**] setting.
  - [**Mechanical**]: max. approx. 3.0 shots/sec.
  - [**Electronic ES**]: max. approx. 5.0 shots/sec.

- **[10] Self-timer: 10 sec. ( )**

- **[2] Self-timer: 2 sec. ( )**

- **[C] Self-timer: Continuous shooting ( )**

Caution

- [] enables approx. 15 shots/sec. continuous shooting speed when set to [**Mechanical**] under these conditions.
  - Room temperature (23°C / 73°F)
  - Using any of the following power sources
    - Fully charged LP-E17
    - USB power adapters (sold separately)
  - Shutter speed: 1/1000 sec. or faster
  - Use of flash: None
- [] enables approx. 30 shots/sec. continuous shooting speed when set to [**Electronic ES**] under these conditions.
  - Shutter speed: 1/30 sec. or faster

  Note that the continuous shooting speed may be less than approx. 30 shots/sec. if any of the following occurs during continuous shooting.
  - Settings are applied in <**P**> or <**Tv**> shooting mode that cause the aperture value to change
  - Servo AF changes the position in focus
- The continuous shooting speed with Servo AF may be slower depending on the subject conditions.
- The continuous shooting speed will be slower when shooting under flickering light.
- When internal memory becomes full during continuous shooting, the continuous shooting speed may drop off because shooting will be temporarily disabled ( ).

Using the Self-Timer

Use the self-timer when you want to be in the picture such as a commemorative photograph.

1. **Press the < ⏱ > button (⏱6).**

- With an image displayed on the screen, press the < ⏱ > button.

2. **Select the drive mode item.**

- Turn the < ◎ > dial to select the self-timer.

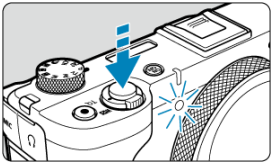
  ⏱10: Shoot in 10 sec.

  ⏱2: Shoot in 2 sec.

  ⏱C: Shoot continuously in 10 sec. for the specified number of shots*

  * Press < ✱ > and set the number of shots to take (2–10) with < ◀ >< ▶ >.

3. Take the picture.



- Focus on the subject, then press the shutter button completely.
- To check operation, look at the self-timer lamp, listen for beeps, or watch the countdown in seconds on the screen.
- Self-timer lamp blinking accelerates and the camera beeps quickly approx. 2 sec. before the picture is taken.

Caution

- With [⏲C], some conditions in continuous shooting may lengthen the shooting interval, such as image quality and use of flash.

Note

- [⏲2] is used to start shooting without touching the camera (to avoid camera shake) when it is mounted on a tripod for shots such as still lifes or long exposures, for example.
- After taking self-timer shots, playing back the image (⧉) to check focus and exposure is recommended.
- When using the self-timer to shoot yourself, use focus lock (⧉) on an object at the same distance as where you will stand.
- To cancel the self-timer after it starts, either tap the screen or press < SET >.
- Auto power off time may be extended when the camera is set for remote control shooting.

Remote Control Shooting

Wireless Remote Control BR-E1

You can shoot remotely by using an optional Wireless Remote Control BR-E1, which pairs via Bluetooth.

Wireless Remote Control BR-E1

You can shoot remotely up to approx. 5 meters/16.4 feet from the camera.
First, pair the camera and BR-E1 ( ).
For operating instructions, refer to the BR-E1 instruction manual.

Note

- Auto power off time may be extended when the camera is set for remote control shooting.
- BR-E1 can also be used for movie recording. Even in still photo shooting, you can record movies by setting the remote control switch to movie mode.

Adjusting the Zone AF Frame Size

You can resize the Zone AF frame displayed for Flexible Zone AF 1–3.

1. **Tap [Q] on the shooting screen.**

2. **Select a flexible zone to change the size and tap [MENU].**

3. **Adjust the size with < ✥ >.**

- Tap [SET] to set the size.
- By tapping [M-Fn], you can return to the default setting.

Playback

This chapter covers topics related to playback—playing back captured still photos and movies—and introduces menu settings on the playback [▶] tab.
☆ to the right of titles indicates functions only available in Creative Zone modes (<**P**>, <**Tv**>, <**Av**>, or <**M**>).

Caution

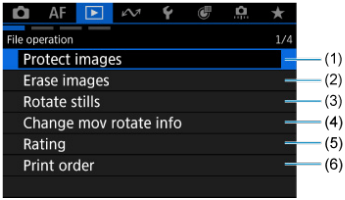
- Normal display or configuration on this camera may not be possible for images captured on other cameras, or images from this camera that have been edited or renamed on a computer.
- Images that cannot be used with playback functions may be displayed.

- Tab Menus: Playback
- Image Playback
- Magnified Image Display
- Index Display (Multiple-Image Display)
- Movie Playback
- Editing a Movie's First and Last Scenes
- 4K Movie Frame Grab
- Playback on a TV Set
- Protecting Images
- Erasing Images
- Rotating Still Photos
- Changing Movie Orientation Information
- Rating Images
- Print Ordering (DPOF)
- RAW Image Processing ☆
- Creative Assist
- Quick Control RAW Processing ☆
- Playback Creative Filters
- Resizing JPEG/HEIF Images
- Cropping JPEG/HEIF Images
- Converting HEIF to JPEG ☆
- Slide Show
- Setting Image Search Conditions
- Resuming from Previous Playback
- Customizing Playback Information Display
- Displaying the Highlight Alert

- Playback Grid
- Movie Play Count
- HDMI HDR Output

Tab Menus: Playback

File operation



(1) Protect images

(2) Erase images

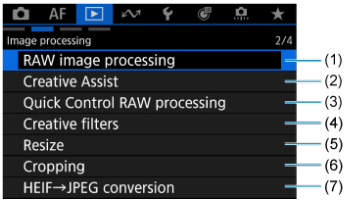
(3) Rotate stills

(4) Change mov rotate info

(5) Rating

(6) Print order

Image processing



(1) RAW image processing ☆

(2) Creative Assist

(3) Quick Control RAW processing ☆

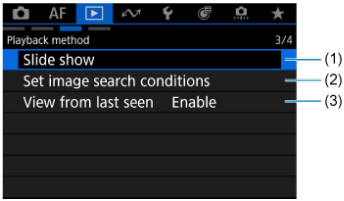
(4) Creative filters

(5) Resize

(6) Cropping

(7) HEIF→JPEG conversion ☆

Playback method

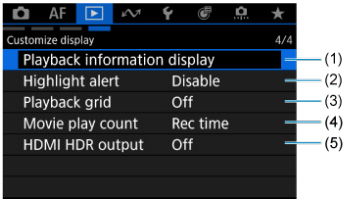


(1) Slide show

(2) Set image search conditions

(3) View from last seen

Customize display



(1) Playback information display

(2) Highlight alert

(3) Playback grid

(4) Movie play count

(5) HDMI HDR output

Image Playback

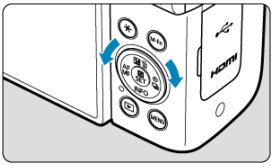
- Single-Image Display
- Shooting Information Display
- Touch Playback

Single-Image Display

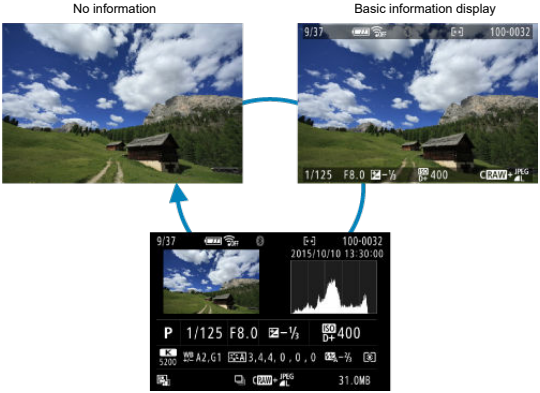
1. **Switch to playback.**

- Press the < ▶ > button.
- The last image captured or played back is displayed.

2. **Browse images.**



- To play back images starting with your most recent shot, turn the < ◌ > dial counterclockwise. To play back images starting with the first captured image, turn the dial clockwise.
- Each time you press the < INFO > button, the display will change.



Shooting information display

3. Exit image playback.

- Press the < ▶ > button to exit image playback and return to shooting standby.

Note

- Lines indicating the image area are shown on RAW images captured with [📷: 📷 **Cropping/aspect ratio**] set to [**1:1**], [**4:3**], or [**16:9**] (🔍).
- If the search conditions are set with [▶: **Set image search conditions**] (🔍), only the filtered images will be displayed.

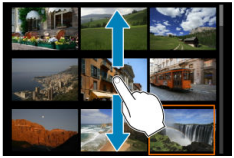
Shooting Information Display

With the shooting information screen displayed (), you can press the < INFO > button to switch to other information. You can also customize the information displayed, in [▶: **Playback information display**] ().

Touch Playback

The camera features a touch-screen panel that you can touch to control playback. Supported touch operations are like those used with smartphones and similar devices. First, press the < ▶ > button to prepare for touch playback.

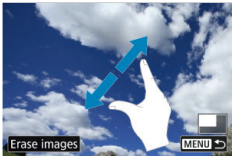
Browse images



Jump display

Index display

Magnified view

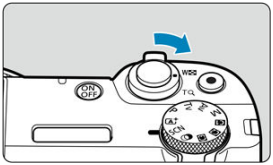


Note

- You can also magnify display by double-tapping with one finger.

Magnified Image Display

1. **Magnify the image.**

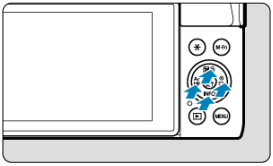


- During image playback, press the zoom lever on the < 🔍 > side.

(1)

- The magnified view will appear. The magnified area position (1) will be displayed in the lower right of the screen.
- Each press of the zoom lever on the < 🔍 > side magnifies the display.
- Each press of the zoom lever on the < ▦ > side reduces the display. If the zoom lever is pressed further on the < ▦ > side, it switches to the index display ( ).
- To erase the current image, select [**Erase images**] ( ).

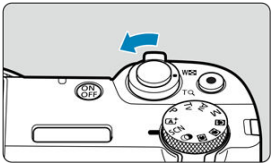
2. Scroll the image.



- Use the < ✥ > keys to scroll around the magnified image.
- To cancel the magnified view, press the < ▶ > button or tap [MENU ↩].

Index Display (Multiple-Image Display)

1. **Switch to the index display.**



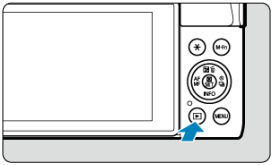
- Operate the zoom lever during image playback.
- The selected image is highlighted with an orange frame. Press the zoom lever on the < ▦ > side to switch the display between a 1→, 4→, 9→, 36→, and 100 image display. Press the zoom lever on the < 🔍 > side to switch the display between a 100→, 36→, 9→, 4→, and 1 image display.

2. Browse images.

- Press the < ✥ > keys to move the orange frame for image selection.
- Press < SET > in the index display to display the selected image in the single-image display.

Movie Playback

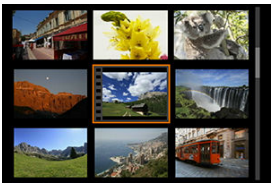
1. **Switch to playback.**



- Press the < ▶ > button.

2. **Select a movie.**

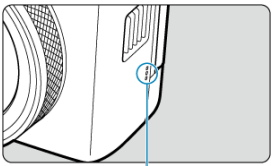
- Turn the < ◎ > dial to select a movie to play.
- In single-image display, the [SET] icon displayed in the upper left of the screen indicates a movie.



- In index display, perforations at the left edge of a thumbnail indicate a movie. Movies cannot be played back from index display, so press < SET > to switch to single-image display.

3. In the single-image display, press < SET >.

4. Select [▶].



- The movie will start playing back. Sound is played through the speaker (1).
- You can pause playback and display the movie playback panel by pressing < SET >. Press it again to resume playback.
- Press the < ▲ >< ▼ > keys to adjust the volume (even during playback).

Movie playback panel

Item	Playback Operations
Skip backward	Skips backward approx. 1 sec. each time you press the < ◀ > key. Holding down the < ◀ > key will rewind the movie.
Previous frame	Displays the previous frame each time you turn the < ◎ > dial left.
Playback	Pressing < SET > toggles between playback and stop.
Next frame	Displays the next frame each time you turn the < ◎ > dial right.
Skip forward	Skips forward approx. 1 sec. each time you press the < ▶ > key. Holding down the < ▶ > key will fast forward the movie.
	Playback position
hh:mm:ss	Playback time (hours:minutes:seconds, when [**Movie play count**] is set to [**Rec time**])
hh:mm:ss:ff (DF) **hh:mm:ss:ff** (NDF)	Time code (hours:minutes:seconds:frames, when [**Movie play count**] is set to [**Time code**])
Volume	Press the < ▲ >< ▼ > keys to adjust the speaker volume ().
	Press the < ✳ > button to go to the next screen ().
MENU	Press the < MENU > button to return to single-image display.

Controls not on the previous screen are as follows.

Item	Playback Operations
Edit	Displays the editing screen ( ).
Slow motion	Adjust the slow motion speed by turning the < > dial. The slow motion speed is indicated in the upper right of the screen.
Frame Grab	Available when you play 4K movies. Enables you to extract the current frame and save it as a JPEG or HEIF still image ( ).
MENU	Press the < MENU > button to return to the previous screen.

Caution

- Adjust the volume using television controls when the camera is connected to a television for movie playback ( ), because volume cannot be adjusted by pressing the < ▲ >< ▼ > keys.
- Movie playback may stop if the card's read speed is too slow or movie files have corrupted frames.

Editing a Movie's First and Last Scenes

You can edit out the first and last scenes of a movie in approx. 1-sec. increments.

1. **Pause movie playback.**

- The movie playback panel will appear.

2. **Press the < ✳ > button, then select [✂].**

3. Specify the part to be edited out.

- Select either [✂] (Cut beginning) or [✂] (Cut end).

- Press the < ◀ >< ▶ > keys to go back or forward one frame. Each turn of the < ◎ > dial goes back or forward one frame.
- After deciding which part to edit out, press < SET >. The portion indicated by a line at the bottom of the screen will remain.

4. Check the edited movie.

- Select [▶] to play back the edited movie.
- To change the edited part, go back to step 3.
- To cancel the editing, press the < MENU > button.

5. Save.

- Select [[ ] (1).
- The save screen will appear.
- To save it as a new file, select [**New file**], or to save it and overwrite the original movie file, select [**Overwrite**].
  Select [ ] (2) to save a compressed version of the file. 4K movies are converted to Full HD movies before compression.
- On the confirmation screen, select [**OK**] to save the edited movie and return to the movie playback screen.

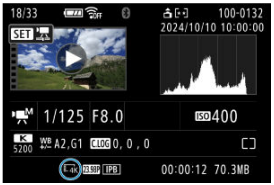
Caution

- Because editing is performed in approx. 1 sec. increments (at the position indicated by [ ] at the bottom of the screen), the actual position where movies are trimmed may differ from your specified position.
- Movies shot with another camera cannot be edited with this camera.
- You cannot edit a movie when the camera is connected to a computer.
- Compress and save is not available for the following movies.
  - Movies recorded with [: **HDR shooting (PQ)**] set to [**Enable**]
  - Movies recorded in FHD 29.97P (NTSC), FHD 25.00P (PAL), or FHD 23.98P (NTSC) sizes
- Movies may not be compressed when the remaining battery capacity is low. Charge the battery.

4K Movie Frame Grab

From 4K movies, you can select individual frames to save as JPEG or HEIF still images. This is referred to as “frame grabbing.”

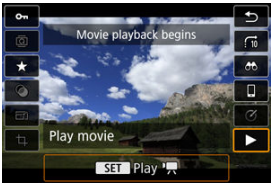
1. **Select a 4K movie.**



- Turn the < ◎ > dial to make a selection.
- On the shooting information screen (⧉), 4K movies are labeled with [4K] icons.
- In index display, press < SET > to switch to single-image display.

2. **In the single-image display, press < SET >.**

3. **Select [▶].**



- The movie will start playing back.

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

- The movie playback panel will appear.

5. Select a frame to grab.

- Use the movie playback panel to select the frame to grab as a still image.
- For movie playback panel instructions, see Movie playback panel.

6. Press the < ✳ > button, then select [ ].

7. Save.

- Select [**OK**] to save the current frame as a JPEG still image.
  HEIF images are saved if you grab frames from movies recorded with [: **HDR shooting (PQ)**] set to [**Enable**].
- Check the destination folder and image file number.

8. Select the image to display.

- Select [**View original movie**] or [**View extracted still image**].

Caution

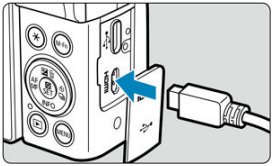
- Frame grabbing is not possible from the following 4K movies.
  - Movies recorded with other cameras
- Frame grabbing is not possible while the camera is connected to a computer.

Playback on a TV Set

By connecting the camera to a television with a commercially available HDMI cable, you can play back the captured still photos and movies on the television.

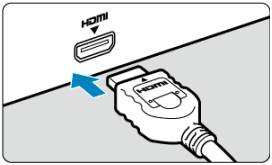
If the image does not appear on the TV screen, confirm that [: Video system] is correctly set to [For NTSC] or [For PAL] (depending on the video system of your television).

1. **Connect the HDMI cable to the camera.**



- Insert the HDMI cable in the camera's < HDMI > terminal.

2. **Connect the HDMI cable to the television.**

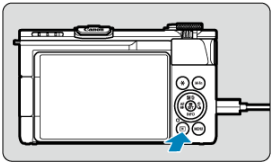


- Connect the HDMI cable to the television's HDMI IN port.

3. **Turn on the television and switch the television's video input to select the connected port.**

4. **Turn the camera on.**

5. Press the < ▶ > button.



- Images are now displayed on the television, with nothing displayed on the camera screen.
- The images will automatically be displayed at the optimum resolution matching the connected television.

Caution

- Adjust movie sound volume with the television. The sound volume cannot be adjusted with the camera.
- Before connecting or disconnecting the cable between the camera and television, turn off the camera and television.
- Depending on the television, part of the image displayed may be cut off.
- Do not connect any other device's output to the camera's < HDMI > terminal. Doing so may cause a malfunction.
- Certain televisions may not display the images due to incompatibility.
- It may take some time before images are displayed. To avoid delay, set [🔧: **HDMI resolution**] to [**1080p**] ( ).
- Touch-screen operations are not supported while the camera is connected to a television.

Protecting Images

- Protecting Individual Images
- Specifying the Range of Images to Protect
- Protecting All Images in a Folder or on a Card

You can protect important images from being accidentally erased.

Caution

- If you format the card ( ), the protected images will also be erased.

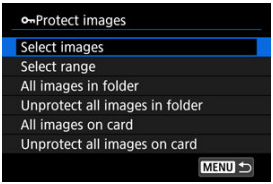
Note

- Once an image is protected, it cannot be erased by the camera's erase function. To erase a protected image, you must first cancel the protection.
- If you erase all the images ( ), only the protected images will remain. This is convenient when you want to erase all unneeded images at once.

Protecting Individual Images

1. **Select [▶: Protect images] ( ).**

2. **Select [Select images].**



3. Select the image to protect.

- Turn the < ◎ > dial to select an image to protect.

4. Protect the image.

- Press < SET > to protect the selected image, after which it will be labeled with a [O-] icon (1) at the top of the screen.
- To cancel protection and clear the [O-] icon, press < SET > again.
- To protect another image, repeat steps 3 and 4.

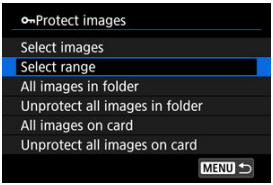
Note

- During playback, you can press < SET > to protect images from the Quick Control screen.

Specifying the Range of Images to Protect

While looking at the images in the index display, you can specify the first and last images for a range to protect all the specified images at once.

1. **Select [Select range].**



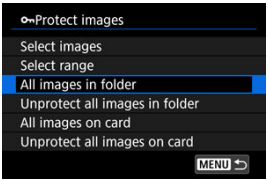
- Select [**Select range**] in [▶: **Protect images**].

2. **Specify the range of images.**

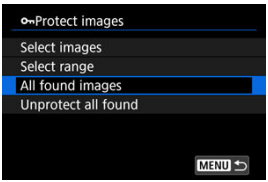
- Select the first image (start point).
- Next, select the last image (end point). The images in the specified range will be protected and the [O-] icon will appear.
- To select another image to protect, repeat step 2.

Protecting All Images in a Folder or on a Card

You can protect all the images in a folder or on a card at once.



- When you select [**All images in folder**] or [**All images on card**] in [▶: **Protect images**], all the images in the folder or on the card will be protected.
- To cancel protection, select [**Unprotect all images in folder**] or [**Unprotect all images on card**].
- If the search conditions are set with [▶: **Set image search conditions**] (), the display will change to [**All found images**] and [**Unprotect all found**].



- If you select [**All found images**], all the images filtered by the search conditions will be protected.
- If you select [**Unprotect all found**], the protection of all the filtered images will be canceled.

Erasing Images

- Erasing Images Individually
- Selecting ([✓]) Multiple Images to Erase Together
- Specifying the Range of Images to Erase
- Erasing All Images in a Folder or on a Card

You can either select and erase unnecessary images individually or erase them in one batch. Protected images ( ) will not be erased.

Caution

- **Once an image is erased, it cannot be recovered. Make sure you no longer need the image before erasing it. To prevent important images from being erased accidentally, protect them.**

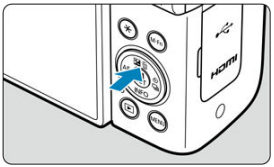
Erasing Images Individually

1. **Press the < ▶ > button.**

2. **Select the image to be erased.**

   - Turn the < ◎ > dial to select the image to erase.

3. **Press the < 🗑 > button.**



4. Erase the images.

JPEG/HEIF/RAW images or movies

- Select [**Erase**].

RAW+JPEG/RAW+HEIF images

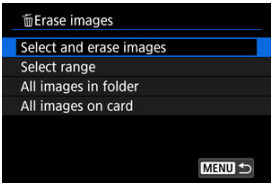
- Select an option.
- Series of images captured in [□], [□H], or [□] drive mode are erased when you select [**Erase scene including image**] during playback.

Selecting ([✓]) Multiple Images to Erase Together

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

1. **Select [▶: Erase images] ( ).**

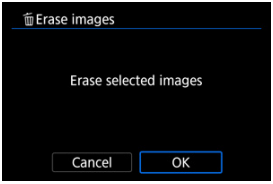
2. **Select [Select and erase images].**



3. **Select an image.**

- Turn the < > dial to select an image to erase, then press < >.
- To select another image to be erased, repeat step 3.
- Press the < MENU > button.

4. Erase the images.

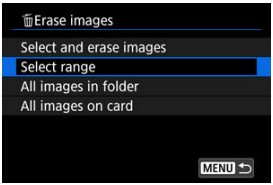


- Select [**OK**].

Specifying the Range of Images to Erase

While looking at the images in the index display, you can specify the first and last images for a range to erase all the specified images at once.

1. **Select [Select range].**



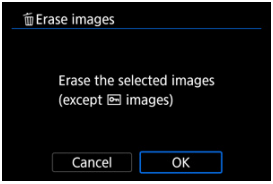
- Select [**Select range**] in [▶: **Erase images**].

2. **Specify the range of images.**

- Select the first image (start point).
- Next, select the last image (end point). A checkmark [✓] will be appended to all the images within the range between first and last images.
- To select another image to be erased, repeat step 2.

3. **Press the < MENU > button.**

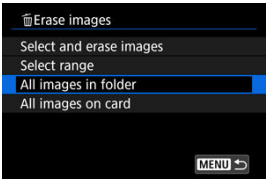
4. Erase the images.



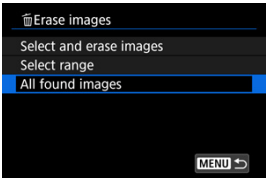
- Select [**OK**].

Erasing All Images in a Folder or on a Card

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



- When you select [**All images in folder**] or [**All images on card**] in [▶: **Erase images**], all the images in the folder or on the card will be erased.
- If the search conditions are set with [▶: **Set image search conditions**] (), the display will change to [**All found images**].



- If you select [**All found images**], all the images filtered by the search conditions will be erased.

Note

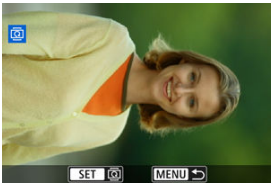
- To erase all the images including protected images, format the card ().

Rotating Still Photos

You can use this feature to rotate the displayed image to the desired orientation.

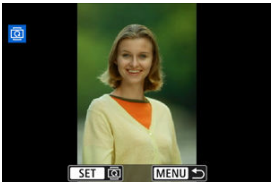
1. **Select [▶: Rotate stills] ( ).**

2. **Select an image to rotate.**



- Turn the < > dial to select the image.

3. **Rotate the image.**



- Each time you press < >, the image will rotate clockwise as follows: 90°→270°→0°.
- To rotate another image, repeat steps 2 and 3.

Note

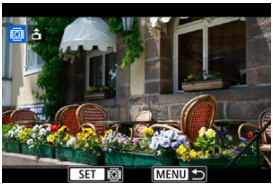
- If you set [: **Auto rotate**] to [**On**] ( ) before taking pictures, you need not rotate the image with this function.
- If the rotated image is not displayed in the rotated orientation during image playback, set [: **Auto rotate**] to [**On**].
- Movies cannot be rotated.

Changing Movie Orientation Information

You can manually edit movie playback orientation information (which determines which side is up).

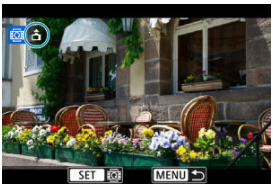
1. **Select [▶: Change mov rotate info] ( ).**

2. **Select a movie.**



- Turn the < ◎ > dial to select a movie with orientation information to change.

3. **Change the orientation information.**



- As you watch the camera and ▲ icon in the upper left of the screen, press < SET > to specify which side is up. Each press of < SET > edits the movie rotation information as follows: [ ] → [ ] → [ ].

Caution

- Movies are played horizontally on the camera and via HDMI video output, regardless of the [: **Add rotate info**] setting ( ).
- Movie orientation information of movies recorded with other cameras cannot be edited with this camera.

Rating Images

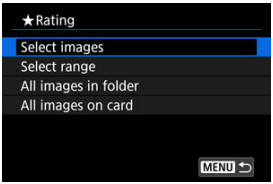
- Rating Individual Images
- Rating by Specifying the Range
- Rating All Images in a Folder or on a Card

You can rate images on a scale of 1–5 ([★]/[★★]/[★★★]/[★★★★]/[★★★★★]). This function is called rating.
* Rating images can help you organize them.

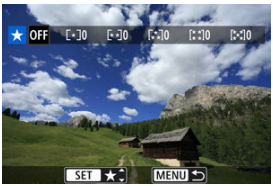
Rating Individual Images

1. **Select [▶: Rating] ( ).**

2. **Select [Select images].**



3. **Select the image to be rated.**



- Turn the < ◎ > dial to select the image to be rated.

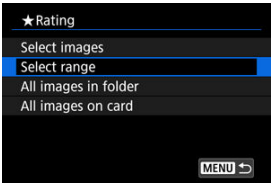
4. Rate the image.

- Press < SET >, and a blue highlight frame will appear as shown in the screen shown above.
- Use the < ▲ >< ▼ > keys to select a rating mark and press < SET >.
- When you append a rating mark to the image, the number beside the set rating will increase by one.
- To rate another image, repeat steps 3 and 4.

Rating by Specifying the Range

While looking at the images in the index display, you can specify the first and last images for a range to rate all the specified images at once.

1. **Select [Select range].**



- Select [**Select range**] in [▶: **Rating**].

2. **Specify the range of images.**

- Select the first image (start point).
- Next, select the last image (end point). A checkmark [✓] will be appended to all the images within the range between first and last images.
- To select other images, repeat step 2.

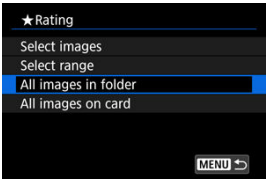
3. **Press the < MENU > button.**

4. Rate the image.

- Turn the < > dial to select a rating mark, then select [**OK**].
  All the images in the specified range will be rated (same rating) at once.

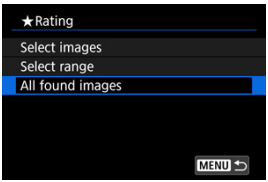
Rating All Images in a Folder or on a Card

You can rate all the images in a folder or on a card at once.



- Under [▶]: **Rating**], when you select [**All images in folder**] or [**All images on card**], all the images in the folder or on the card will be rated.

- Turn the < ◐ > dial to select a rating, then select [**OK**].
- When you are not rating images or canceling the rating, select [OFF].
- If the search conditions are set with [▶]: **Set image search conditions**] (), the display will change to [**All found images**].



- If you select [**All found images**], all the images filtered by the search conditions will be rated as specified.

Note

- Values next to ratings are displayed as [**###**] if more than 1,000 images have that rating.
- With [▶: **Set image search conditions**] and [: **Image jump w/**], you can display only the images given a specific rating.

Print Ordering (DPOF)

Setting Print Options

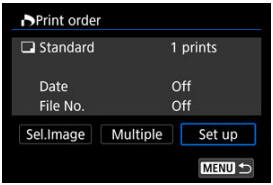
Selecting Images for Printing

DPOF (Digital Print Order Format) enables you to print images recorded on the card according to your printing instructions such as the image selection, quantity to print, etc. You can print multiple images in one batch or create a print order for a photofinisher.
You can set the print settings such as print type, date imprinting, file number imprinting, etc. The print settings will be applied to all the images specified for printing. (They cannot be set individually for each image.)

Setting Print Options

1. **Select [▶: Print order] ( ).**

2. **Select [Set up].**

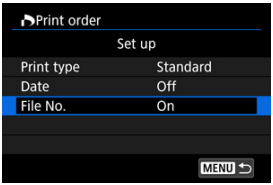


3. Set the options as desired.

- Set [**Print type**], [**Date**], and [**File No.**] options.

Print type		**Standard**	Prints one image on one sheet.
		Index	Multiple thumbnail images are printed on one sheet.
		Both	Prints both the standard and index prints.
Date	**On**	[**On**] imprints the recorded date of the captured image.	
	Off		
File No.	**On**	[**On**] imprints the file number.	
	Off		

4. Exit the setting.



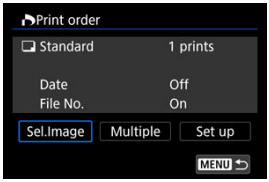
- Press the < MENU > button.
- Next, select [**Sel.Image**] or [**Multiple**] to specify the images to be printed.

Caution

- If you print an image with a large image size using the [**Index**] or [**Both**] setting ( ), the index print may not be printed with certain printers. In this case, resize the image ( ), then print the index print.
- Even if [**Date**] and [**File No.**] are set to [**On**], the date or file number may not be imprinted, depending on the print type setting and printer.
- With [**Index**] prints, the [**Date**] and [**File No.**] cannot both be set to [**On**] at the same time.
- When printing with DPOF, use the card for which print order specifications are set. You cannot print in the specified print order if you extract just the images from the card for printing.
- Certain DPOF-compliant printers and photofinishers may not be able to print the images as you specified. When using a printer, refer to the printer's instruction manual. When requesting service from a photofinisher, ask in advance.
- Do not use this camera to configure print settings for images with DPOF settings set up on another camera. All the print orders may be overwritten inadvertently. Also, the print order may not be possible, depending on the image type.

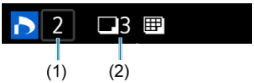
Selecting Images for Printing

Sel.Image



Select and specify the images individually.
Press the < MENU > button to save the print order to the card.

Standard/Both



(1) Quantity
(2) Total images selected

Press < SET > to print a copy of the displayed image. By pressing the < ▲ >< ▼ > keys, you can set a print quantity of up to 99 copies.

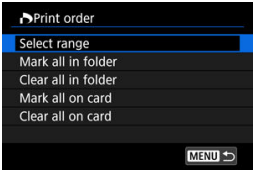
Index

(3) Checkmark
(4) Index icon

Press < SET > to add a checkmark [✓] to the box. The image will be included in the index print.

Multiple

Select range



Select [**Select range**] in [**Multiple**]. Selecting the first and last images of the range marks all the images in the range with a checkmark [✓], and one copy of each image will be specified for printing.

All images in a folder

Select [**Mark all in folder**] and select the folder. A print order for one copy of all the images in the folder will be specified.
If you select [**Clear all in folder**] and select the folder, the print order for all the images in the folder will be canceled.

All images on a card

If you select [**Mark all on card**], one copy of all the images on the card will be specified for printing.
If you select [**Clear all on card**], the print order will be cleared for all the images on the card.

If the search conditions are set with [▶: **Set image search conditions**] (🔍) and you select [**Multiple**], the display will change to [**Mark all found images**] and [**Clear all found images**].

All found images

If you select [**Mark all found images**], one copy of all the images filtered by the search conditions will be specified for printing.
If you select [**Clear all found images**], all the print order of the filtered images will be cleared.

Caution

- RAW/HEIF images and movies cannot be specified for printing. Note that RAW/HEIF images and movies will not be specified for printing even if you specify all images with [**Multiple**].

RAW Image Processing ☆

Magnified View

Processing Images with Specified Aspect Ratios

RAW Image Processing Options

You can process RAW or CRAW images with the camera to create JPEG or HEIF images. RAW images are not affected, so different conditions can be applied to create JPEG or HEIF images.
You can also use Digital Photo Professional (EOS software) to process RAW images.

Caution

- Processing into HEIF is not available for RAW or CRAW images captured at an expanded ISO speed (H).

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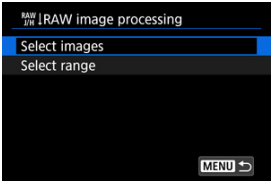
1. **Select [▶: RAW image processing] ( ).**

2. Select an option, then select images.

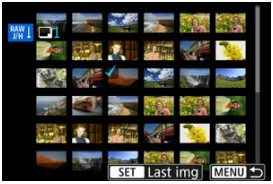


- You can select multiple images to process at once.

Select images

- Turn the < ◎ > dial to select images to process, then press < SET >.
- Press the < MENU > button.

Select range



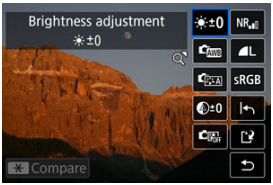
- Select the first image (start point).
- Next, select the last image (end point). A checkmark [✓] will be appended to all the images within the range between first and last images.
- To process other images, repeat this step.
- Press the < MENU > button.

3. Set the desired processing conditions.

Use shot settings

- Images are processed using image settings at the time of capture.
- Images captured with [: **HDR shooting (PQ)**] set to [**Enable**] are processed to create HEIFs, and images captured with this function set to [**Disable**] are processed to create JPEGs.

Set up processing→JPEG/Set up processing→HEIF

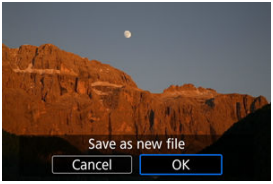


- Use < ✥ > to select an item.
- Turn the < ◐ > or < ◎ > dial to switch the setting.
- Press < SET > to access the function setting screen.
- To reset the settings, press the < 🗑 > button and select [**OK**] after a confirmation message is displayed.

Comparison screen

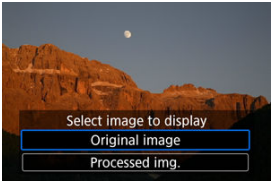
- You can switch between the [**After change**] and [**Shot settings**] screens by pressing the < ✳ > button and turning the < ◎ > dial.
- Items in orange on the [**After change**] screen have been modified since the time of capture.
- Press the < MENU > button to return to the processing conditions screen.

4. Save.



- When using [**Set up processing→JPEG**] or [**Set up processing→HEIF**], select [[⇲] (Save).
- Read the message and select [**OK**].
- If there are other images for processing, select [**Yes**].

5. Select the image to display.



- Select [**Original image**] or [**Processed img.**].
- Your selected image is displayed.

Magnified View

You can magnify images displayed for [**Set up processing→JPEG**] or [**Set up processing →HEIF**] by pressing the zoom lever on the < 🔍 > side on the displayed screen. With < ✥ >, you can scroll around the magnified image.

Press the zoom lever on the < ▦ > side to exit the magnified view.

Processing Images with Specified Aspect Ratios

JPEG or HEIF images at the specified aspect ratio are created when you process RAW images shot with [: **Cropping/aspect ratio**] ( ) set to [**1:1 (aspect ratio)**], [**4:3 (aspect ratio)**], or [**16:9 (aspect ratio)**].

RAW Image Processing Options

±0 Brightness adjustment

You can adjust the image brightness up to ±1 stop in 1/3-stop increments.

AWB White balance ( )

You can select the white balance. Selecting [AWB] enables you to select [**Auto: Ambience priority**] or [**Auto: White priority**]. If you select [K], you can set the color temperature.

Picture Style ( )

You can select the Picture Style. You can adjust the sharpness, contrast, and other parameters.

* [A], [1], [2], and [3] are not available when [**Set up processing→HEIF**] is set.

±0 Clarity ( )

You can adjust clarity in a range of –4 to +4.

* Not available when [**Set up processing→HEIF**] is set.

Auto Lighting Optimizer ( )

You can specify Auto Lighting Optimizer details.

NR High ISO speed NR ( )

You can set the noise reduction processing for high ISO speeds. If the effect is difficult to discern, magnify the image ( ).

JL Image quality ( )

You can set the image quality when creating a JPEG or HEIF image.

sRGB Color space ( )

You can select either sRGB or Adobe RGB. Since the camera screen is not compatible with Adobe RGB, the difference in the image will hardly be perceptible when either color space is set.

* [HDR PQ] is displayed when [**Set up processing→HEIF**] is set but is not an option for selection.

Caution

- Processing RAW images in the camera will not produce exactly the same results as processing RAW images with Digital Photo Professional (EOS software).
- If you perform [**Brightness adjustment**], noise, banding, etc. may be intensified with the effects of adjustment.

Creative Assist

You can process RAW images by applying your preferred effects and saving as JPEGs.

1. **Select [▶: Creative Assist] ( ).**

2. **Select an image.**

- Turn the < > dial to select images to process, then press < >.

3. Select an effect.

- Use the < ◎ > dial to select the effect.

- By selecting [**Preset**] and pressing < SET >, you can choose [**VIVID**], [**SOFT**], or other preset effects. [**AUTO1**], [**AUTO2**], and [**AUTO3**] are effects recommended by the camera based on image conditions.

- You can select effects such as [**Brightness**] or [**Contrast**] by pressing < SET > and then using the < ◎ > dial.
- Press < SET > when the adjustment is finished.

- To reset the settings, press [**Reset**] and select [**OK**] after a confirmation message is displayed.
- To confirm the effect, press the < ✳ > button.

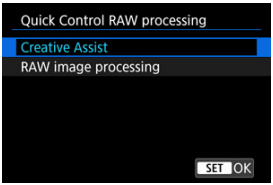
4. Select [OK] to save the image.

Quick Control RAW Processing ☆

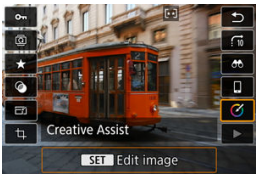
You can select the type of RAW image processing performed from the Quick Control screen.

1. **Select [▶: Quick Control RAW processing] ( ).**

2. **Select an option.**

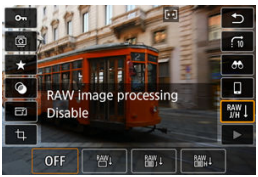


- **Creative Assist**



RAW processing that applies your preferred effect ( ).

- **RAW image processing**



RAW processing according to conditions you specify ( ).

Playback Creative Filters

Creative Filter Characteristics

You can apply the following filter processing to an image and save it as a separate image: Grainy B/W, Soft focus, Fish-eye effect, Art bold effect, Water painting effect, Toy camera effect, and Miniature effect.

1. **Select [▶: Creative filters] ( ).**

2. **Select an image.**

- Turn the < ◎ > dial to select an image and press < SET >.
- Images can be selected by touch from index display ( ).

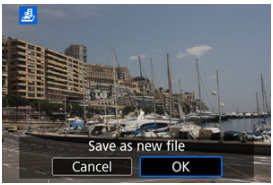
3. **Select a filter effect ( ).**

- Use the < ◎ > dial to select an effect and press < SET >.

4. Adjust the filter effect.

- Adjust the filter effect and press < SET >.
- For [**Miniature effect**], you can move the area that looks sharp (the white frame).
  - By tapping [ ], you can switch between vertical and horizontal scene frame orientation. Scene frame orientation can also be switched from horizontal orientation by pressing the < ◀ >< ▶ > keys and from vertical orientation with the < ▲ >< ▼ > keys.
  - To move the scene frame, use the < ◎ > dial or < ✥ > keys.
  - To confirm the position of the scene frame, press < SET >.

5. Save.



- Select [**OK**].
- Check the destination folder and image file number, then select [**OK**].
- To apply filter processing to other images, repeat steps 2 to 5.

Note

- RAW images cannot be selected. Note that for images captured in RAW+JPEG shooting, filter processing is applied to the JPEG image before saving the results.
- Playback creative filters cannot be applied to still photos from testing time-lapse movies.

Creative Filter Characteristics

Grainy B/W

Makes the image grainy and black and white. By adjusting the contrast, you can change the black-and-white effect.

Soft focus

Gives the image a soft look. By adjusting the blur, you can change the degree of softness.

Fish-eye effect

Gives the effect of a fish-eye lens. The image will have barrel distortion.
Depending on the level of this filter effect, the area trimmed along the periphery of the image changes. Also, because this filter effect magnifies the center of the image, the apparent resolution at the center may degrade depending on the number of recorded pixels, so set the filter effect in step 4 while checking the resulting image.

Art bold effect

Makes the photo look like an oil painting and the subject look more three-dimensional. By adjusting the effect, you can change the contrast and saturation. Note that subjects such as the sky or white walls may not be rendered with a smooth gradation and may look uneven or noisy.

Water painting effect

Makes the photo look like a watercolor painting with soft colors. By adjusting the effect, you can change the color density. Note that night scenes or dark scenes may not be rendered with a smooth gradation and may look uneven or noisy.

Toy camera effect

Shifts colors to those typical of toy cameras and darkens the four corners of the image. Color tone options can be used to change the color cast.

Miniature effect

Creates a diorama effect. To move the area that looks sharp (the scene frame), see step 4 ( ).

Resizing JPEG/HEIF Images

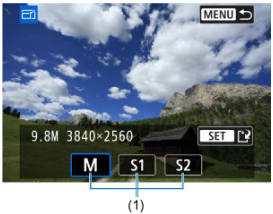
You can resize a JPEG or HEIF image to reduce the pixel count and save it as a new image. Resizing is available for L, M, or S1 JPEGs or HEIFs (in sizes except S2), including those captured in RAW+JPEG and RAW+HEIF shooting. S2 and RAW images and frame-grab images from 4K movies cannot be resized.

1. **Select [▶: Resize] ( ).**

2. **Select an image.**

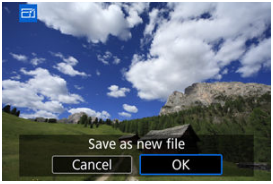
- Turn the < > dial to select the image to resize.

3. **Select the desired image size.**



- Press < > to display the image sizes.
- Select the desired image size (1).

4. Save.



- Select [**OK**] to save the resized image.
- Check the destination folder and image file number, then select [**OK**].
- To resize another image, repeat steps 2 to 4.

Cropping JPEG/HEIF Images

You can crop a captured JPEG or HEIF image and save it separately. RAW images and frame-grab images from 4K movies cannot be cropped.

1. **Select [▶: Cropping] ( ).**

2. **Select an image.**

- Turn the < ◎ > dial to select the image to crop.
- Press < SET > to display the cropping frame.

3. Set the cropping frame.

- The image area within the cropping frame will be cropped.

- **Resizing the cropping frame size**

  Press the zoom lever on the < Q > side to resize the cropping frame. The smaller the cropping frame, the more magnified the cropped image will look.

- **Correcting tilt**

  You can correct image tilt by ±10°. Turn the < ◎ > dial to select [ ], then press < SET >. While checking tilt relative to the grid, turn the < ◎ > dial (in 0.1° increments) or tap the left or right arrow (in 0.5° increments) in the upper left of the screen to correct tilt. After completing the tilt correction, press < SET >.

- **Changing the cropping frame aspect ratio and orientation**

  Turn the < ◎ > dial and select [ ]. Each press of < SET > changes the cropping frame aspect ratio.

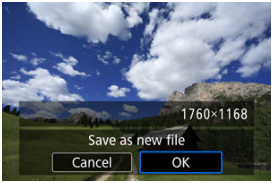
- **Moving the cropping frame**

  Press the < ▲ >< ▼ >< ◀ >< ▶ > keys to move the frame vertically or horizontally.

4. Check the image area to be cropped.

- Turn the < ◎ > dial to select [⊡↔], then press < SET >. The image area to crop is displayed.

5. Save.



- Turn the < ◎ > dial to select [⊡], then press < SET >.
- Select [**OK**] to save the cropped image.
- Check the destination folder and image file number, then select [**OK**].
- To crop another image, repeat steps 2 to 5.

Caution

- The position and size of the cropping frame may change depending on the angle set for tilt correction.
- Once a cropped image is saved, it cannot be cropped again or resized.

Converting HEIF to JPEG ☆

You can convert HEIF images captured in HDR shooting and save them as JPEG images.

Converting Individual Images

Specifying the Range of Images to Convert

Caution

- Some scenes may look different after conversion if the original and converted images are compared.
- Conversion is not available for cropped images, or for frame-grab images from 4K movies.

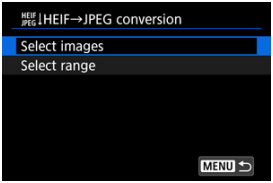
Note

- HEIF images that have been converted to JPEGs are labeled [JPEG].

Converting Individual Images

1. **Select [▶: HEIF→JPEG conversion] ( ).**

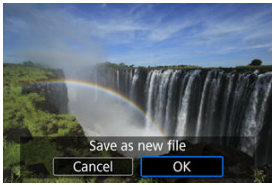
2. **Select [Select images].**



3. Select an image.

- Turn the < ◎ > dial to select an HEIF image to convert to JPEG, then press < SET >.
- To select other images, repeat step 3.
- Press the < MENU > button to convert to JPEG.

4. Save.



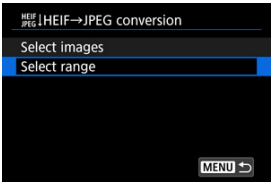
- Select [**OK**] to save the JPEG image.
- If there are other images for conversion, select [**Yes**].

5. Select the images to use for display.

- Select [**Original image**] or [**Processed img.**].
- Your selected image is displayed.

Specifying the Range of Images to Convert

1. **Select [Select range].**

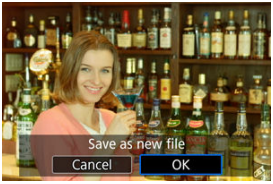


2. **Specify the range of images.**

- Select the first image (start point).
- Next, select the last image (end point). A checkmark [✓] will be appended to all the images within the range between first and last images.
- To select other images, repeat step 2.

3. **Press the < MENU > button.**

4. Save.



- Select [**OK**] to save the JPEG image.
- If there are other images for conversion, select [**Yes**].

5. Select the images to use for display.

- Select [**Original image**] or [**Processed img.**].
- Your selected image is displayed.

Slide Show

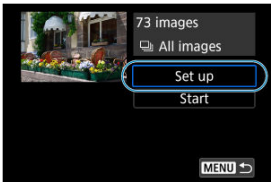
You can play back the images on the card as an automatic slide show.

1. **Specify the images to be played back.**

   - To play back all the images on the card, go to step 2.
   - To choose images for the slide show, filter the images with [▶]: **Set image search conditions]** (✎).

2. **Select [▶: Slide show] (✎).**

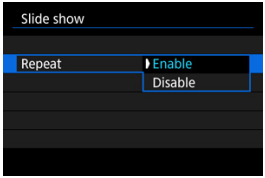
3. **Set the playback as desired.**



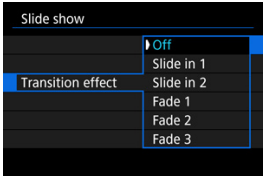
- Select [**Set up**].

Display time

Repeat



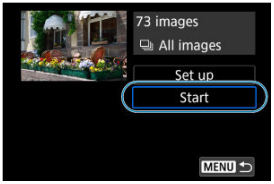
Transition effect



- Set the [**Display time**], [**Repeat**] (repeated playback), and [**Transition effect**] (effect when changing images) settings for the still photos.

- After completing the settings, press the < MENU > button.

4. Start the slide show.



- Select [**Start**].
- After [**Loading image...**] is displayed, the slide show will start.

5. Exit the slide show.

- To exit the slide show and return to the setting screen, press the < MENU > button.

Note

- To pause the slide show, press < SET >. During pause, [ ] will be displayed in the upper left of the screen. Press < SET > again to resume the slide show.
- During the automatic playback of still photos, you can press the < INFO > button to switch the display format ( ).
- Volume during movie playback can be adjusted by pressing the < ▲ >< ▼ > keys.
- During auto playback or when playback is paused, you can turn the < ◎ > dial to view another image.
- During auto playback, auto power off will not take effect.
- The display time may differ depending on the image.

Setting Image Search Conditions

Clearing the Search Conditions

You can filter image display according to your search conditions. After setting the image search conditions, you can play back and display only the found images. You can also protect, rate, play a slide show, erase, and apply other operations to filtered images.

1. **Select [▶: Set image search conditions] ( ).**

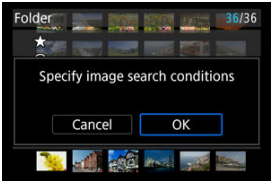
2. **Set the search conditions.**

(1)

- Turn the < ◎ > dial to select an option.
- Use the < ◀ >< ▶ > keys to set the option.
- A checkmark [✓] (1) is appended to the left of the option. (Specified as the search condition.)
- If you select the option and press < SET >, the checkmark [✓] will be removed (which cancels the search condition).
- After completing the settings, press the < MENU > button.

Option	Description
★ Rating	Displays images with the selected (rating) condition.
Date	Displays images taken on the selected shooting date.
Folder	Displays images in the selected folder.
Protect	Displays images with the selected (protect) condition.
Type of file (1)	Displays images of the selected file type.
Type of file (2)	

3. Apply the search conditions.



- Read the message displayed, then select [**OK**].
  The search condition is applied.

4. Display the found images.

(2)

- Press the < ▶ > button.
  Only the images that match the set conditions (filtered) will be played back.
  When the images are filtered for display, the screen will have an outer yellow frame (2).

Caution

- If no images match the search conditions, < SET > cannot be pressed in step 2.

Note

- Search conditions may be cleared after operations involving camera power or card changes and editing, adding, or erasing images.
- Auto power off time may be extended while the [▶: **Set image search conditions**] screen is displayed.

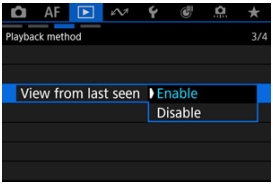
Clearing the Search Conditions

Access the screen in step 2, then press the < ✱ > button to clear all the search conditions.

Resuming from Previous Playback

1. **Select [▶: View from last seen] ( ).**

2. **Select an option.**



- [**Enable**]: Playback resumes from the last image displayed (unless you have just finished shooting).
- [**Disable**]: Playback resumes from your most recent shot whenever the camera is restarted.

Customizing Playback Information Display

Histogram

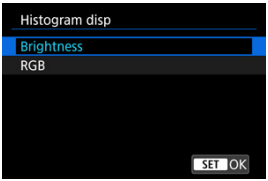
You can specify screens and accompanying information displayed during image playback.

1. **Select [▶: Playback information display] ( ).**

2. **Add a checkmark [✓] next to the number of screens to display.**

- Turn the < ◎ > dial and select the number.
- Press < SET > to clear a checkmark [✓]. Press it again to add a checkmark [✓].
- Repeat these steps to add a checkmark [✓] to the number of each screen to display, then select [**OK**].
- Your selected information can be accessed by pressing the < INFO > button during playback.

Histogram

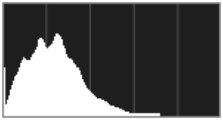


The histograms show signal levels across the tonal range. Brightness display (for checking the general exposure level and overall gradation) and RGB display (for checking saturation and gradation of red, green, and blue) are available. You can switch the histogram displayed by pressing the < ✳ > button when [✳] is displayed in the lower left of the [▶: **Playback information display**] screen.

[Brightness] display

This histogram is a graph showing the distribution of the image's brightness level, with the horizontal axis indicating the brightness level (darker on the left and brighter on the right) and the vertical axis indicating the pixel count at each brightness level. The more pixels there are toward the left, the darker the image, and the more pixels there are toward the right, the brighter the image. If there are too many pixels on the left, detail in shadows will be lost, and if there are too many pixels on the right, detail in highlights will be lost. The gradation in-between will be reproduced. By checking the image and its brightness histogram, you can see the exposure level inclination and the overall gradation.

Sample histograms



Dark image

Normal brightness

Bright image

[RGB] display

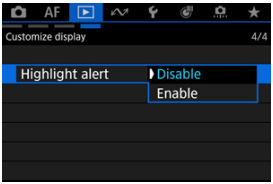
This histogram is a graph showing the distribution of each primary color's brightness level in the image (RGB or red, green, and blue), with the horizontal axis indicating the color's brightness level (darker on the left and brighter on the right) and the vertical axis indicating the pixel count at each color brightness level. The more pixels there are toward the left, the darker and less prominent the color, and the more pixels there are toward the right, the brighter and denser the color. If there are too many pixels on the left, the corresponding color information will be lacking, and if there are too many pixels on the right, the color will be too saturated, without gradation. By checking the image's RGB histogram, you can see the color's saturation and gradation conditions, as well as the white balance bias.

Displaying the Highlight Alert

You can specify blinking display of overexposed highlights on the playback screen. To obtain more detailed gradation in the blinking areas where you want the gradation to be faithfully reproduced, set the exposure compensation to a negative amount and shoot again for a better result.

1. **Select [▶: Highlight alert] ( ).**

2. **Select [Enable].**

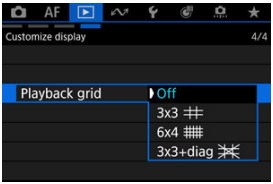


Playback Grid

You can display a grid over still photos shown in single-image display on the playback screen. This function is convenient for checking the image's vertical or horizontal tilt as well as composition.

1. **Select [▶: Playback grid] ( ).**

2. **Select an option.**



Note

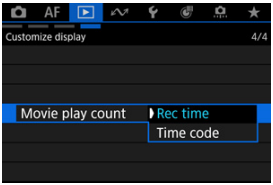
- When panoramic images are displayed, a single vertical and horizontal line are shown if [▶: **Playback grid**] is set to an option other than [**Off**].

Movie Play Count

You can select how time is displayed on the movie playback screen.

1. **Select [▶: Movie play count] ( ).**

2. **Select an option.**



- **Rec time**

  Displays the recording or playback time during movie playback.

- **Time code**

  Displays the time code during movie playback.

Note

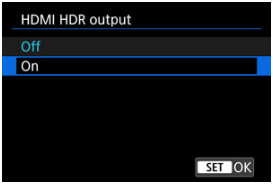
- Time codes are always recorded to movie files (except when High Frame Rate movies are set to [**Free run**]), regardless of the [**Movie rec count**] setting.
- The [**Movie play count**] setting in [📷: **Time code**] is linked to the [▶: **Movie play count**], so that these settings always match.
- The “frame” count is not displayed during movie recording or playback.

HDMI HDR Output

You can view RAW or HEIF images in HDR by connecting the camera to an HDR TV.

1. **Select [▶: HDMI HDR output] ( ).**

2. **Select [On].**



Note

- Make sure the HDR TV is set up for HDR input. For details on how to switch inputs on the TV, refer to the TV manual.
- Depending on the TV used, images may not look as expected.
- On HDR TVs, some information may not be displayed.

Communication Functions

This chapter describes how to send images, shoot remotely, and perform other operations using communication functions.

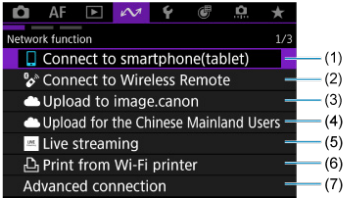
Caution

Important

- Note that Canon cannot be held liable for any loss or damage caused by erroneous wireless communication settings when using the camera. In addition, Canon cannot be held liable for any other loss or damage caused by use of the camera.
  When using wireless communication functions, establish appropriate security at your own risk and discretion. Canon cannot be held liable for any loss or damage caused by unauthorized access or other security breaches.

- Tab Menus: Communication Functions
- Connecting to a Smartphone or Tablet
- Connecting to a Wireless Remote Control
- Upload to image.canon
- Upload for the Chinese Mainland Users
- Live Streaming
- Connecting to a Printer via Wi-Fi
- Basic Communication Settings
- Reconnecting via Wi-Fi/Bluetooth
- Editing/Deleting Connection Settings
- Airplane Mode
- Wi-Fi Settings
- Bluetooth Settings
- Camera Name
- GPS Settings
- Error Details
- Responding to Error Messages
- App Selection for USB Connections
- Resetting Communication Settings
- Virtual Keyboard Operations
- Wireless Communication Precautions
- Security
- Checking Network Settings
- Wireless Communication Status

Network function



(1) Connect to smartphone(tablet)

(2) Connect to Wireless Remote

(3) Upload to image.canon

(4) Upload for the Chinese Mainland Users

(5) Live streaming

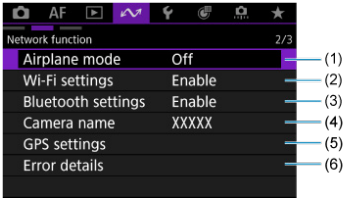
(6) Print from Wi-Fi printer

(7) Advanced connection

Caution

- Users living in the Chinese Mainland should select [: **Upload for the Chinese Mainland Users**], and those living outside the Chinese Mainland should select [: **Upload to image.canon**].

Network function



(1) Airplane mode

(2) Wi-Fi settings

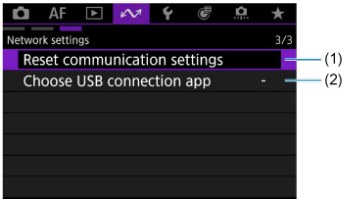
(3) Bluetooth settings

(4) Camera name

(5) GPS settings

(6) Error details

Network settings



(1) Reset communication settings

(2) Choose USB connection app

Caution

- Some menu items cannot be configured while the camera is connected to computers or other devices via an interface cable.
- With a Wi-Fi connection established, the camera's auto power off does not function.

Connecting to a Smartphone or Tablet

- Preparing the Smartphone
- Bluetooth Pairing and Wi-Fi Connection to Smartphones
- Main Functions of Camera Connect
- Maintaining a Wi-Fi Connection When the Camera Is Off
- Connecting via [Advanced connection]
- Automatic Image Transfer to a Smartphone as You Shoot
- Sending Images to a Smartphone from the Camera

You can do the following after the camera and smartphone are paired via Bluetooth.

- Establish a Wi-Fi connection using only the smartphone ( ).
- Establish a Wi-Fi connection with the camera even when it is off ( ).
- Geotag images with GPS information acquired by the smartphone ( ).
- Control the camera remotely from a smartphone ( ).

You can also do the following after connecting the camera to a smartphone via Wi-Fi.

- Browse and save images on the camera from a smartphone ( ).
- Control the camera remotely from a smartphone ( ).
- Send images to a smartphone from the camera ( ).

Note

- You can also establish an advanced Wi-Fi connection to smartphones without using Bluetooth ( ).

Preparing the Smartphone

Turning on Bluetooth and Wi-Fi on a Smartphone

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.

Installing Camera Connect on a Smartphone

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

- Use the latest version of the smartphone OS.
- Camera Connect can be installed from Google Play or App Store. Google Play or App Store can also be accessed using the QR codes that appear when the camera is paired or connected via Wi-Fi to a smartphone.

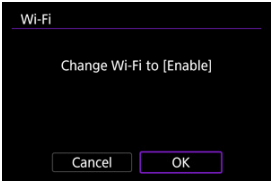
Note

- 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.

Bluetooth Pairing and Wi-Fi Connection to Smartphones

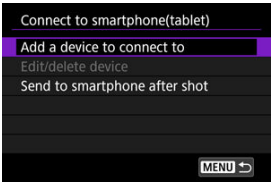
1. **Select [: Connect to smartphone(tablet)] ( ).**

2. **Select [OK].**



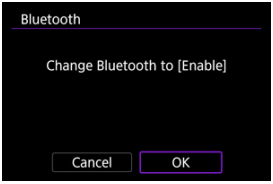
- This screen is not displayed if [: **Wi-Fi settings**] is already set to [**Enable**].

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

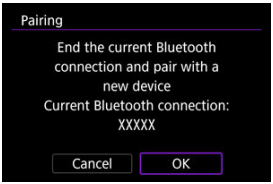


- When automatically transferring images to a smartphone during shooting, set [**Send to smartphone after shot**] ( ).

4. Select [OK].

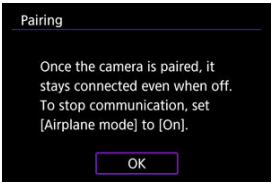


- This screen is not displayed if [: **Bluetooth settings**] is already set to [**Enable**].



- A message is displayed if the camera is already paired with another device. Select [**OK**] to end the current Bluetooth connection.

5. Press <SET>.



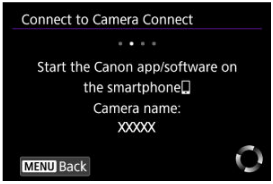
6. Start pairing.

- Press < SET > to start pairing.
- If Camera Connect is not installed, use the smartphone to scan the QR code on the screen, go to Google Play or App Store to install Camera Connect, then press < SET > to start pairing.

7. Start Camera Connect.

- Following the instructions in the app, select the camera for pairing.

8. Establish a Bluetooth connection.

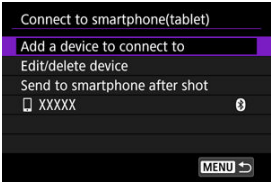


- When a message appears on the smartphone, use the smartphone as indicated.

- Press < (SET) >.

9. Complete the connection process.

- Press <SET>.



- The name of the connected device is displayed.

Caution

- The camera cannot be connected to two or more devices at the same time via Bluetooth. To switch to a different smartphone for the Bluetooth connection, see Reconnecting via Wi-Fi/Bluetooth.
- Keep in mind that the camera battery level may be low the next time you want to use it, because Bluetooth connections consume battery power even when the camera is off or auto power off is activated.

Troubleshooting pairing

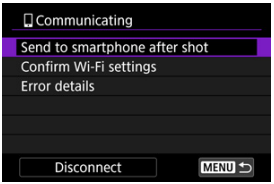
- Keeping pairing records for previously paired cameras on your smartphone will prevent it from pairing with this camera. Before you try pairing again, remove pairing records for previously paired cameras from your smartphone's Bluetooth settings screen.

10. Tap a Camera Connect function.

- For details on Camera Connect functions, see Main Functions of Camera Connect.
- Tap a Camera Connect function to initiate a Wi-Fi connection.

11. Confirm that the devices are connected via Wi-Fi.

- After a Wi-Fi connection is established, the camera screen switches to shooting standby.
- Selecting [: **Connect to smartphone(tablet)**] will display the [**Communicating**] screen on the camera ( ).

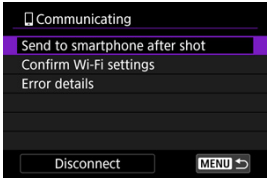


- If a Wi-Fi connection cannot be established, set [**Security**] on the camera to [**WPA2**] ( ).

The Wi-Fi connection to a smartphone is now complete.

- To end the Wi-Fi connection, select [**Disconnect**] on the [**Communicating**] screen.
- Terminating the Wi-Fi connection will switch the camera to the Bluetooth connection.
- To reconnect, start Camera Connect and tap the function you will use.

[Communicating] screen



- **Send to smartphone after shot**
  Images can be transferred to a smartphone automatically ( ).

- **Confirm Wi-Fi settings**
  You can check setting details for Wi-Fi connections.

- **Error details**
  After any Wi-Fi connection errors, you can check the error details ( ).

- **Disconnect**
  Terminates the Wi-Fi connection.

Main Functions of Camera Connect

Images on camera

- Images can be browsed, deleted, or rated.
- Images can be saved on a smartphone.
- Effects can be applied to RAW images and saved to a smartphone (Creative Assist).

Remote live view shooting

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

Auto transfer

- Enables camera and app setting adjustment for automatic transfer of your shots ( ).

Bluetooth remote Control

- Enables remote control of the camera from a smartphone paired via Bluetooth. (Not available when connected via Wi-Fi.)
- Auto power off is disabled while you are using the Bluetooth remote controller feature.

Camera settings

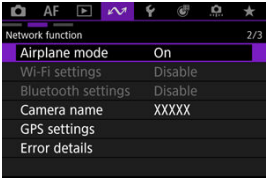
- Camera settings can be changed.

Note

- For details on other functions, you can check the main Camera Connect screen.

Maintaining a Wi-Fi Connection When the Camera Is Off

You can use a smartphone to browse images on the camera or perform other operations even when the camera is off, as long as it is paired to the smartphone via Bluetooth.
If you prefer not to stay connected to the camera via Wi-Fi or Bluetooth when it is off, either set [: **Airplane mode**] to [**On**] or set [: **Bluetooth settings**] to [**Disable**].



Caution

- This function can no longer be used if the wireless settings are reset or the smartphone connection information is erased.

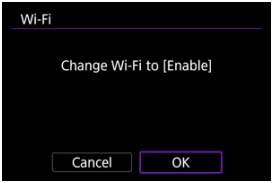
Connecting via [Advanced connection]

You can establish a direct Wi-Fi connection with a smartphone and use Camera Connect to control the camera.

Connecting to a smartphone or tablet

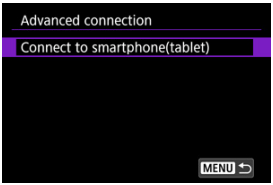
1. **Select [: Advanced connection] ( ).**

2. **Select [OK].**

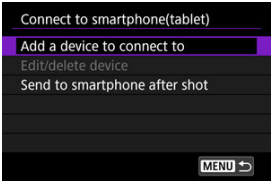


- This screen is not displayed if [: **Wi-Fi settings**] is already set to [**Enable**].

3. **Select [Connect to smartphone(tablet)].**



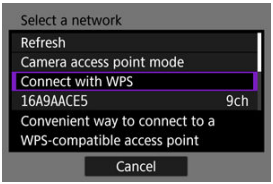
4. Select [Add a device to connect to].



5. Start searching for access points.

- To start searching if Camera Connect is already installed on the smartphone, press < SET >.
- If Camera Connect is not installed, use the smartphone to scan the QR code on the screen, go to Google Play or App Store to install Camera Connect, then press < SET > to start searching.

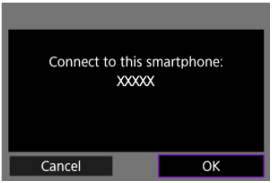
6. Establish a Wi-Fi connection.



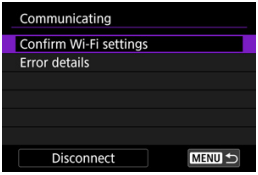
- For instructions on configuring communication functions, see Basic Communication Settings.

7. Start Camera Connect and tap the camera name.

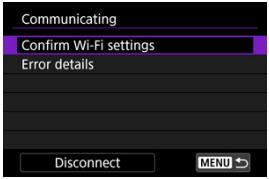
8. Select [OK].



- The [**Communicating**] screen is displayed on the camera ( ).



[Communicating] screen



- **Confirm Wi-Fi settings**
  You can check setting details for Wi-Fi connections.

- **Error details**
  After any Wi-Fi connection errors, you can check the error details ( ).

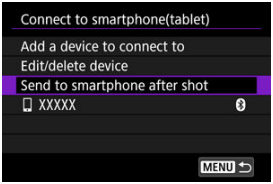
- **Disconnect**
  Terminates the Wi-Fi connection.

Automatic Image Transfer to a Smartphone as You Shoot

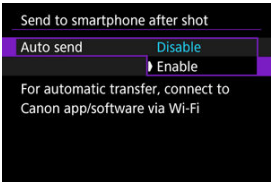
Your shots can be automatically sent to a smartphone. Before following these steps, make sure that the camera and smartphone Wi-Fi connection is terminated.

1. **Select [: Connect to smartphone(tablet)] ( ).**

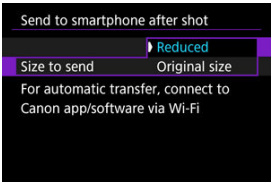
2. **Select [Send to smartphone after shot].**



3. **Set [Auto send] to [Enable].**



4. **Set [Size to send].**

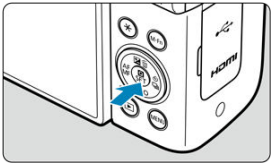


Sending Images to a Smartphone from the Camera

You can use the camera to send images to a smartphone connected via Wi-Fi.

1. **Switch to playback.**

2. **Press <(SET)>.**



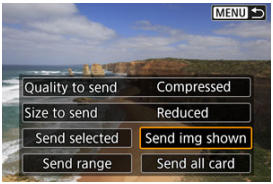
3. **Select [Send images to smartphone].**

- If you perform this step while connected via Bluetooth, a message is displayed requesting you to establish a Wi-Fi connection. After pressing <(SET)>, tap a Camera Connect function to connect via Wi-Fi, then start again from step 1.

4. Browse images.

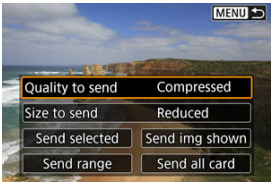
- Turn the < ◎ > dial to select images to send, then press < SET >.
- Images can be selected by touch from index display ( ).

5. Press < SET >.



Setting the quality to send

1. **Select [Quality to send].**



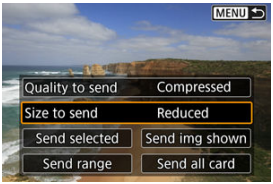
- You can select the image quality of the movies to send.

Note

- When sending multiple movies, you can change the [**Quality to send**] on the confirmation screen before sending.
- Selecting compression for movies applies to all movies sent at that time. However, the following movie formats are not compressed.
  - Movies recorded in FHD 29.97P (NTSC), FHD 25.00P (PAL), or FHD 23.98P (NTSC) sizes

Setting the size of images to send

1. **Select [Size to send].**



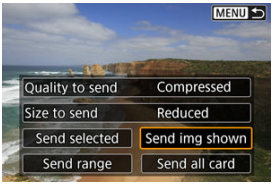
- Select the image size to send.

Note

- When sending multiple images, you can also change [**Size to send**] as needed on the confirmation screen before sending.
- Selecting the reduced size for still photos applies to all still photos sent at that time. Note that S2 size still photos are not reduced.

Sending the current image

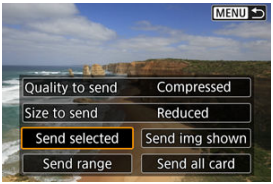
1. **Select [Send img shown].**



- Press < SET > with [**Send img shown**] selected to immediately send the image.

Selecting and sending images

1. **Select [Send selected].**



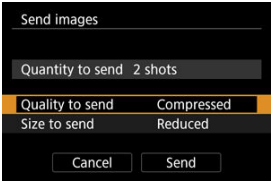
2. **Select images to send.**

- Turn the < ◯ > dial to select images to send, then press < SET >.
- To switch to selecting images from the 3-image display, press the zoom lever on the < ▦ > side. To return to the single-image display, press the zoom lever on the < 🔍 > side.

3. **Press the < MENU > button.**

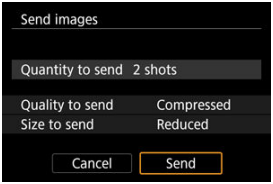
- Select [**OK**] if a message is displayed.

4. Select an option.



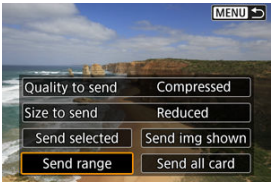
- You can change the [**Quality to send**] ( ) and [**Size to send**] ( ).

5. Select [Send].



Sending a selected range of images

1. **Select [Send range].**



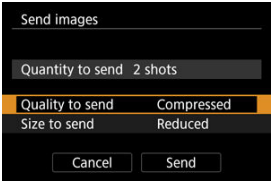
2. **Specify the range of images.**

- Select the first image (start point).
- Next, select the last image (end point). A checkmark [✓] will be appended to all the images within the range between first and last images.
- To cancel the selection, repeat this step.
- To change the number of images in the index display, use the zoom lever ( ).

3. **Press the < MENU > button.**

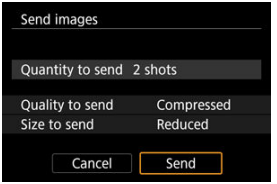
- Select [**OK**] if a message is displayed.

4. Select an option.



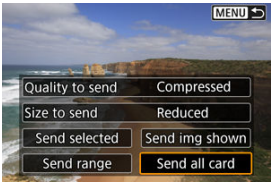
- You can change the [**Quality to send**] ( ) and [**Size to send**] ( ).

5. Select [Send].

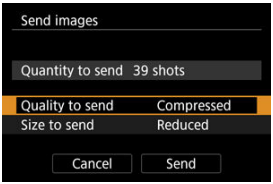


Sending all images on a card

1. **Select [Send all card].**

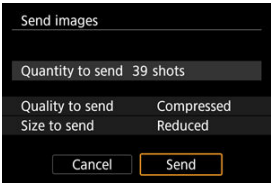


2. **Select an option.**



- You can change the [**Quality to send**] ( ) and [**Size to send**] ( ).

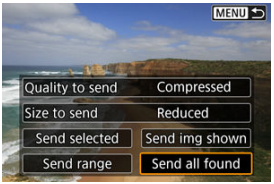
3. **Select [Send].**



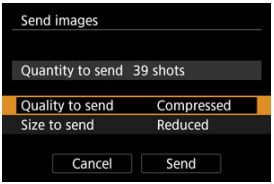
Sending images found by searching

Send all the images that match the search conditions set in [▶: **Set image search conditions**] at once. For details on [▶: **Set image search conditions**], see Setting Image Search Conditions.

1. **Select [Send all found].**

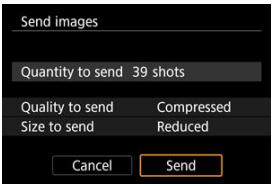


2. **Select an option.**



- You can change the [**Quality to send**] ( ) and [**Size to send**] ( ).

3. **Select [Send].**



Ending image transfer

- Press the < MENU > button on the image transfer screen.
- To end the Wi-Fi connection, select [**Disconnect**] on the [**Communicating**] screen.

Caution

- During the image transfer operation, a picture cannot be taken even if the camera's shutter button is pressed.

Note

- You can cancel the image transfer by selecting [**Cancel**] during the transfer.
- You can select up to 999 files at a time.
- With a Wi-Fi connection established, disabling the smartphone's power saving function is recommended.
- When you use a battery to power the camera, make sure it is fully charged.

Connecting to a Wireless Remote Control

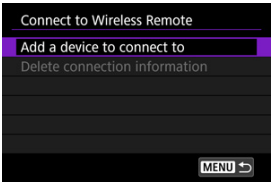
Deleting Connection Information

Reconnecting Using Connection Information

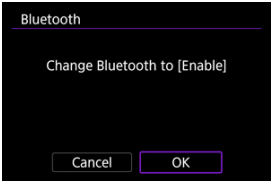
This camera can also be connected to Wireless Remote Control BR-E1 (sold separately,) via Bluetooth for remote control shooting.

1. **Select [: Connect to Wireless Remote] ( ).**

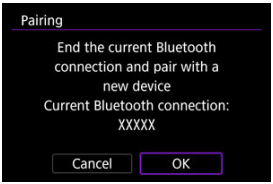
2. **Select [Add a device to connect to].**



3. Select [OK].



- This screen is not displayed if [: **Bluetooth settings**] is already set to [**Enable**].



- A message is displayed if the camera is already paired with another device. Select [**OK**] to end the current Bluetooth connection.

4. Pair the devices.

- When the screen shown above appears, press and hold the <**W**> and <**T**> buttons on the BR-E1 simultaneously for at least 3 sec.
- After a message confirms that the camera is paired with the BR-E1, press < SET >.

5. Set up the camera for remote shooting.

- For instructions after the pairing is complete, refer to the BR-E1's Instruction Manual.

Caution

- Bluetooth connections consume battery power even after the camera's auto power off is activated.

Note

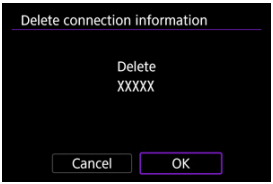
- When you will not use Bluetooth, setting [: **Bluetooth settings**] to [**Disable**] is recommended ( ).

Deleting Connection Information

You can delete the connection information. Pairing information for any connected BR-E1 units will deleted.

1. **Select [: Connect to Wireless Remote] ( ).**
2. **Select [Delete connection information].**

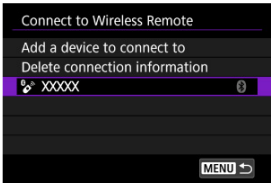
3. **Select [OK].**



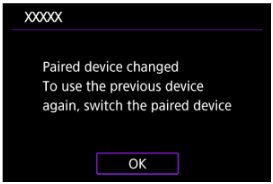
Reconnecting Using Connection Information

When paired via Bluetooth with another device, the camera can use the connection information to reconnect.

1. **Select [: Connect to Wireless Remote] ( ).**
2. **Select the device.**



3. **Press < >.**



Upload to image.canon

Link the camera to image.canon to send images directly from the camera.

- A smartphone with a browser and internet connection is required.
- For instructions on how to use image.canon services and details on countries and regions where it is available, visit the image.canon site (https://image.canon/).
- Separate ISP connection and access point fees may apply.

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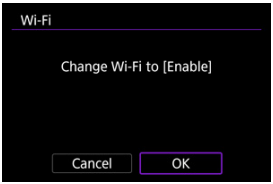
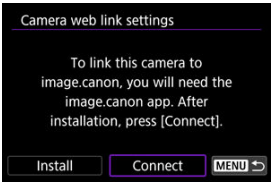
1. **Select [: Upload to image.canon] ( ).**
2. **Select [OK].**



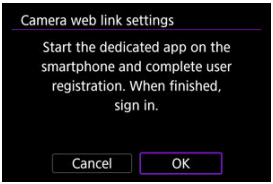
- This screen is not displayed if [: **Wi-Fi settings**] is already set to [**Enable**].

3. **Select [Connect].**



- If the dedicated app has not been installed, select [**Install**].

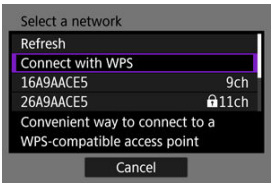
4. **Select [OK].**



5. **Scan the QR code with the dedicated app.**

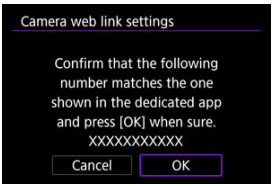
- Select [**OK**].

6. **Establish a Wi-Fi connection.**



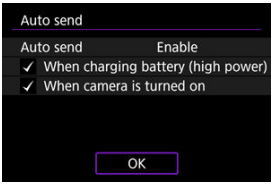
- For instructions on configuring communication functions, see Basic Communication Settings.

7. **Confirm that the number is displayed in the dedicated app.**



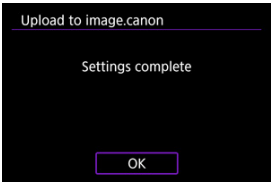
- Select [**OK**].

8. Set up automatic image transfer.



- [**When charging battery (high power)**]: Auto send starts when the camera is off and connected to a power source to charge it over USB. Note that auto send will start after the camera has been charged for a while if the remaining capacity is initially low.
- [**When camera is turned on**]: Auto send starts when the camera is turned on.
- Select [**OK**] and then press < SET >.

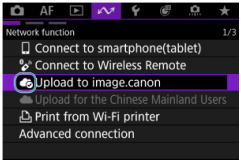
9. Complete the settings.



- Press < SET >.

Note

- The [ ] icon changes to [ ].



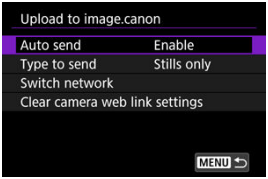
10. Check the dedicated app.

- Confirm that the camera model name is registered in the dedicated app.

Note

- Uploaded images are stored at image.canon for 30 days at the original image size, without storage limitations.

[Upload to image.canon] screen



- **Auto send**
  You can change the auto send settings.

- **Type to send**
  You can select the type of images uploaded.

- **Switch network**
  You can change the settings for Wi-Fi connections.

- **Clear camera web link settings**
  You can clear the camera web link settings.

Upload for the Chinese Mainland Users

Customers living in the Chinese Mainland can upload still photos and movies to a network service that supports the Canon Photo Upload Service.

- A smartphone with a browser and internet connection is required.
- For details on how to use the Canon Photo Upload Service and supported countries/areas, check the Canon Photo Upload Service website (http://ciu.canon.com.cn/).
- Separate ISP connection and access point fees may apply.

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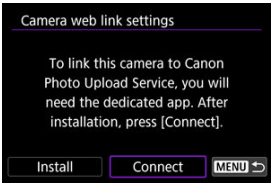
1. **Select [: Upload for the Chinese Mainland Users] ( ).**
2. **Select [OK].**

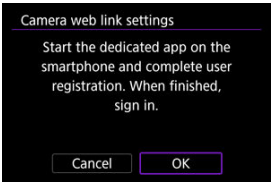
- This screen is not displayed if [: **Wi-Fi settings**] is already set to [**Enable**].

3. **Select [Connect].**



- If the dedicated app has not been installed, select [**Install**].

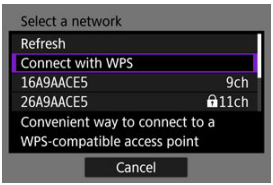
4. **Select [OK].**



5. **Scan the QR code with the dedicated app.**

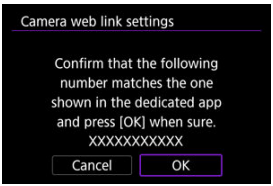
- Select [**OK**].

6. **Establish a Wi-Fi connection.**



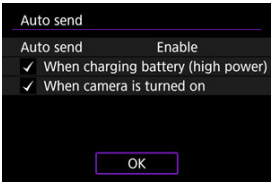
- For instructions on configuring communication functions, see Basic Communication Settings.

7. **Confirm that the number is displayed in the dedicated app.**



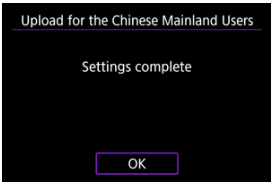
- Select [**OK**].

8. Set up automatic image transfer.



- [**When charging battery (high power)**]: Auto send starts when the camera is off and connected to a power source to charge it over USB. Note that auto send will start after the camera has been charged for a while if the remaining capacity is initially low.
- [**When camera is turned on**]: Auto send starts when the camera is turned on.
- Select [**OK**] and then press < SET >.

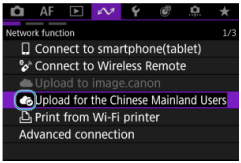
9. Complete the settings.



- Press < SET >.

Note

- The [ ] icon changes to [ ].



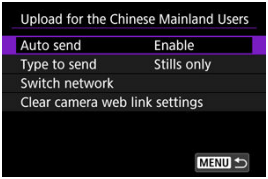
10. Check the dedicated app.

- Confirm that the camera model name is registered in the dedicated app.

Note

- Uploaded images are stored by the Canon Photo Upload Service for 45 days at the original image size, without storage limitations.

[Upload for the Chinese Mainland Users] screen



- **Auto send**
  You can change the auto send settings.

- **Type to send**
  You can select the type of images uploaded.

- **Switch network**
  You can change the settings for Wi-Fi connections.

- **Clear camera web link settings**
  You can clear the camera web link settings.

Live Streaming

Pairing with a Smartphone via Bluetooth

Setting Up Streaming

You can live-stream images from the camera.
Check the streaming requirements and terms of service in advance on the streaming site.

Pairing with a Smartphone via Bluetooth

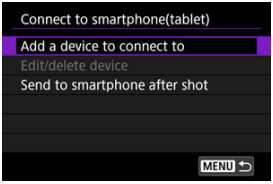
1. **Prepare the smartphone ( ).**

2. **Select [: Connect to smartphone(tablet)] ( ).**

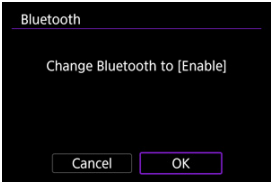
3. **Select [OK].**

- This screen is not displayed if [: **Wi-Fi settings**] is already set to [**Enable**].

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

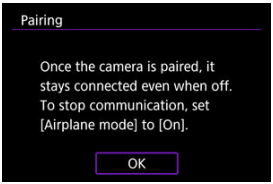


5. **Select [OK].**



- This screen is not displayed if the Bluetooth setting is already set to [**Enable**].

6. **Press <SET>.**



7. Start pairing.

- Press < SET > to start pairing.
- If Camera Connect is not installed, use the smartphone to scan the QR code on the screen, go to Google Play or App Store to install Camera Connect, then press < SET > to start pairing.

8. Start Camera Connect.

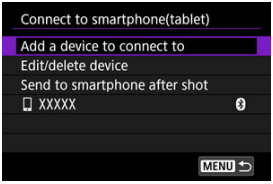
- Following the instructions in the app, select the camera for pairing.

9. Establish a Bluetooth connection.

- Press < SET >.

10. Complete the connection process.

- Press < SET >.
- When a message appears on the smartphone, use the smartphone as indicated.



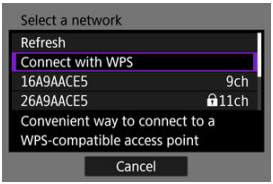
- The name of the connected device is displayed.
- Press the < MENU > button.

Setting Up Streaming

1. **Switch to movie recording ( ).**

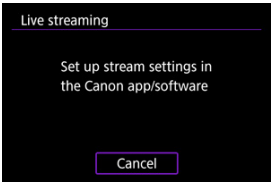
2. **Select [: Live streaming] ( ).**

3. **Establish a Wi-Fi connection.**



- For instructions on configuring communication functions, see Basic Communication Settings.

4. **Complete the streaming settings in Camera Connect.**



- Select the streaming platform you will use, then configure the settings accordingly.
- You can enter a URL on the screen to select a streaming site.
- Set the streaming quality, based on your communication environment.

5. Start streaming.

- [**STBY**] is shown on the recording standby screen.
- Use Camera Connect to start and stop streaming. You can also start or stop streaming by pressing the movie shooting button on the camera.

Caution

- Video and audio may be noisy during streaming, depending on the communication environment. Test streaming in advance and check the video and audio quality.
- Try the following if the video and audio is noisy or skips. These steps may improve the quality.
  - Bring the camera and access point (wireless router, tethering smartphone, etc.) closer together, change their relative positions, and keep the space between them free of people and objects.
  - Indoors, set up the access point and camera in the same room.
  - Set up away from devices that use the 2.4 GHz band, such as microwave ovens or cordless phones.
- If noise from an external microphone is distracting, try placing the microphone on the side of the camera with the external microphone IN terminal as far from the camera as possible.
- Although selecting 3.5 Mbps as the streaming quality in Camera Connect may enable more stable streaming than with 6 Mbps, image quality will be lower.
- The camera will become warmer during streaming. Use the stand or a tripod, or take other measures to avoid handheld recording.
- Note that Canon is in no way responsible for third-party services.
- No image is recorded to the card during streaming (but a card must be in the camera).
- Test streaming in advance to make sure that the image is straight and in the correct orientation, and adjust the orientation as needed.
- Be sure to read Wireless Communication Precautions.

Connecting to a Printer via Wi-Fi

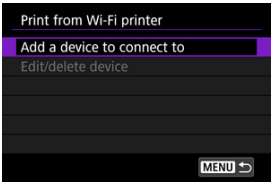
Image Printing

Print Settings

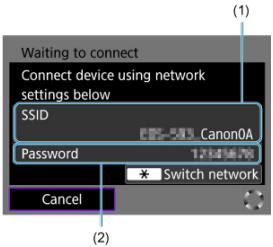
This section describes how to print images by establishing a direct Wi-Fi connection with a printer that can print over Wi-Fi. For printer operating instructions, refer to the printer user manual.

1. **Select [: Print from Wi-Fi printer] ( ).**

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



3. **Check the SSID (network name) and password.**

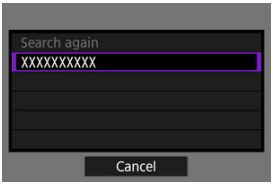


- Check the SSID (1) and Password (2) displayed on the camera screen.
- To establish a Wi-Fi connection using an access point, press the < ✱ > button.
- For instructions on configuring the communication functions, see here.

4. Set up the printer.

- In the Wi-Fi settings menu of the printer to be used, select the SSID you have checked.
- For the password, enter the password checked in step 3.
- If a Wi-Fi connection cannot be established, set [**Security**] on the camera to [**WPA2**] ( ).

5. Select the printer.



- In the list of detected printers, select the printer to connect to via Wi-Fi.
- If your preferred printer is not listed, selecting [**Search again**] may enable the camera to find and display it.

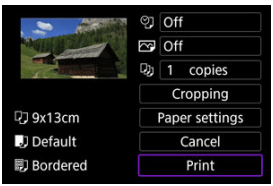
Printing images individually

1. **Select the image to print.**

- Turn the < ◎ > dial to select an image to print and press < ⊛ >.
- Operate the zoom lever to select the image from the index display.

2. **Select [Print image].**

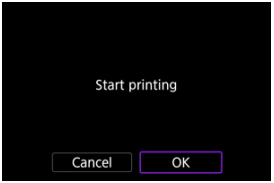
3. **Set the printing options.**



- For the print setting procedures, see Print Settings.
- Select [**Print**], then [**OK**] to start printing.

4. **Select [Print].**

5. **Print the image.**



- When [**OK**] is selected, printing starts.

Printing according to specified image options

1. **Press < (SET) >.**

2. **Select [Print order].**

3. **Set the printing options.**

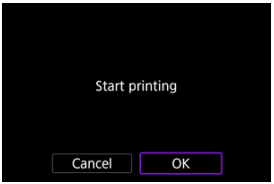
- For the print setting procedures, see Print Ordering (DPOF).

4. **Select [Print].**

- [**Print**] can be selected only when an image is selected and the printer is ready to print.

5. **Configure [Paper settings] ( ).**

6. **Print the image.**



- When [**OK**] is selected, printing starts.

Caution

- Shooting is not possible while connected to a printer via Wi-Fi.
- RAW images, HEIF images, and movies cannot be printed.
- Before printing, be sure to set the paper size.
- File number printing may not be supported by certain printers.
- Dates may be printed on the border by certain printers when [**Bordered**] is set.
- Depending on the printer, the date may appear faint if it is printed on a bright background or on the border.

Note

- Use a fully charged battery.
- It may take some time until printing starts after you select [**Print**], depending on file size and image quality.
- To stop printing, press < > while [**Cancel**] is displayed and select [**OK**].
- When printing with [**Print order**], you can select [**Resume**] to continue printing the remaining images if you have stopped printing in progress. Note that printing will not resume if any of the following occurs.
  - You change the print order or delete any of the specified images before resuming printing.
  - When index is set and you change the paper setting before resuming printing.
- If a problem occurs during printing, see Note.

Print Settings

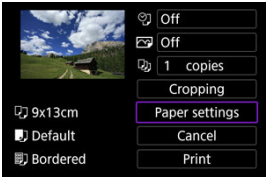
The screen display and setting options vary depending on the printer. Also, certain settings may not be available. For details, refer to the printer's instruction manual.

Print settings screen

(1)	Sets date or file number printing ( ).
(2)	Sets the printing effects ( ).
(3)	Sets the number of copies to print ( ).
(4)	Sets the print area ( ).
(5)	Sets the paper size, type, and layout (, ,).
(6)	Returns to the image selection screen.
(7)	Starts the printing.
(8)	The paper size, type, and layout you have set are displayed.

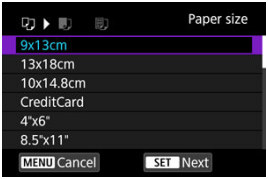
*** Depending on the printer, certain settings may not be selectable.**

Paper settings



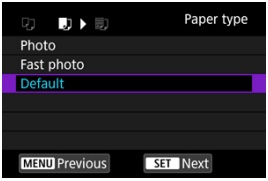
- Select [**Paper settings**].

[ ] Setting the paper size



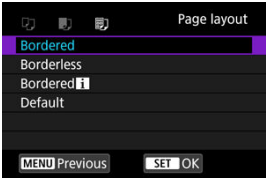
- Select the size of the paper in the printer.

[ ] Setting the paper type



- Select the type of the paper in the printer.

[ ] Setting the page layout

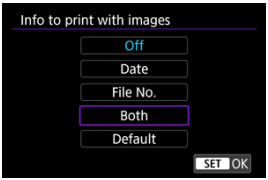


- Select the page layout.

Caution

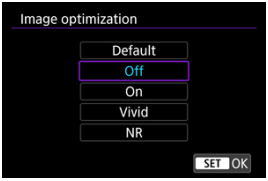
- If the image's aspect ratio is different from the printing paper's aspect ratio, the image may be cropped significantly when you print it as a borderless print. Images may also be printed at lower resolution.

[ ] Setting printing of the date/file number



- Select [ ].
- Select what to print.

[ ] Setting printing effects (image optimization)



- Select [ ].
- Select printing effects.

Caution

- ISO speeds may be misidentified in shooting information printed for images shot at an expanded ISO speed (**H**).
- [**Default**] in printing effects and other options refers to default settings determined by the printer manufacturer. For [**Default**] details, refer to the printer instruction manual.

[ ] Setting the number of copies

- Select [ ].
- Select the number of copies to print.

Cropping the image

Set cropping immediately before printing. Changing other print settings after you crop images may require you to crop the images again.

1. **Select [Cropping] on the print setting screen.**

2. **Set the cropping frame size, position, and orientation.**

- The image area within the cropping frame will be printed. The shape of the frame (aspect ratio) can be changed in [**Paper settings**].

Resizing the cropping frame size

Operate the zoom lever to resize the cropping frame.

Moving the cropping frame

Press the < ▲ >< ▼ >< ◀ >< ▶ > keys to move the frame vertically or horizontally.

Switching the orientation of the cropping frame

Pressing the < ✳ > button will toggle the cropping frame between the vertical and horizontal orientations.

3. **Press < SET > to exit cropping.**

- You can check the cropped image area in the upper left of the print setting screen.

Caution

- Depending on the printer, the cropped image area may not be printed as you specified.
- The smaller the cropping frame, the lower the resolution at which images are printed.

Note

Handling printer errors

- If printing does not resume after you resolve a printer error (such as no ink or paper) and select [**Continue**], use buttons on the printer. For details on resuming printing, refer to the printer's instruction manual.

Error messages

- If a problem occurs during printing, an error message will appear on the camera screen. After fixing the problem, resume printing. For details on how to fix a printing problem, refer to the printer's instruction manual.

Paper error

- Confirm that paper is loaded correctly.

Ink error

- Check the printer's ink level and the waste ink tank.

Hardware error

- Check for any printer problems other than paper and ink problems.

File error

- The selected image cannot be printed. Images taken with a different camera or images edited with a computer may not be printable.

Basic Communication Settings

- Checking the Type of Access Point
- Connecting via WPS (PBC Mode)
- Connecting via WPS (PIN Mode)
- Connecting Manually to Detected Networks
- Connecting Manually by Specifying Networks
- Connecting in Camera Access Point Mode
- Setting the IP Address

Checking the Type of Access Point

When connecting via an access point, check whether the access point supports WPS*, which simplifies connections between Wi-Fi devices.
If you are unsure about WPS compatibility, refer to the access point user manual or other documentation.
* Stands for Wi-Fi Protected Setup.

When WPS is supported

Two connection methods are available, as follows. You can connect more easily via WPS in PBC mode.

- Connecting via WPS (PBC mode) ( )
- Connecting via WPS (PIN mode) ( )

When WPS is not supported

- Connecting manually to detected networks ( )
- Connecting manually by specifying networks ( )

Access point encryption

See Authentication and data encryption methods for details on types of authentication and encryption.

Caution

- **Connections may not be possible when access point stealth functions are enabled. Deactivate stealth functions.**
- Ask any network administrator in charge of networks you will join for setting details.

Note

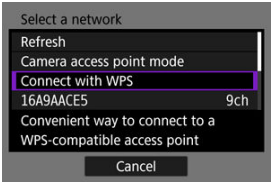
- If MAC address filtering is used on networks you will join, add the camera's MAC address to the access point. The MAC address can be checked on the [**MAC address**] screen ( ).

Connecting via WPS (PBC Mode)

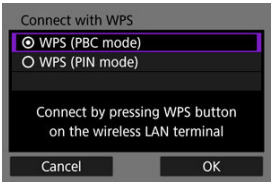
Instructions in this section are continued from Checking the Type of Access Point.
This is a connection method used with access points compatible with WPS. In pushbutton connection mode (PBC mode), the camera and access point can be connected simply by pressing the WPS button on the access point.

- Connecting may be more difficult if multiple access points are active nearby. If so, try to connect with [**WPS (PIN mode)**].
- Check the position of the WPS button on the access point in advance.
- It may take approx. 1 min. to establish a connection.

1. **Select [Connect with WPS] on the [Select a network] screen.**

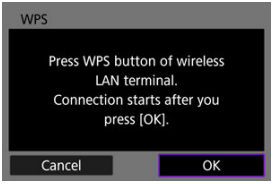


2. **Select [WPS (PBC mode)].**



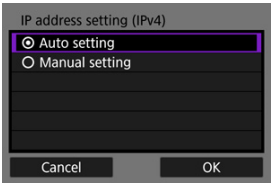
- Select [**OK**].

3. Connect to the access point.



- Press the access point's WPS button. For details on where the button is and how long to press it, refer to the access point user manual.
- Select [**OK**] to initiate connection with the access point.
- The following screen is displayed once the camera is connected to the access point.

4. Set the IP address.



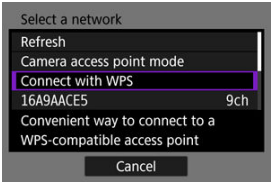
- Go to Setting the IP Address.

Connecting via WPS (PIN Mode)

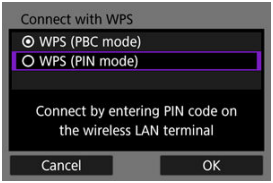
Instructions in this section are continued from Checking the Type of Access Point.
This is a connection method used with access points compatible with WPS. In PIN code connection mode (PIN mode), an 8-digit identification number indicated on the camera is entered on the access point to establish a connection.

- Even if multiple access points are active nearby, connecting by using this shared identification number is relatively reliable.
- It may take approx. 1 min. to establish a connection.

1. **Select [Connect with WPS] on the [Select a network] screen.**

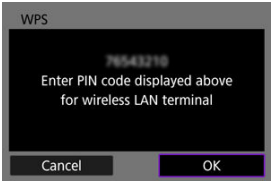


2. **Select [WPS (PIN mode)].**



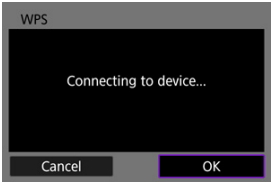
- Select [**OK**].

3. Enter the PIN code.



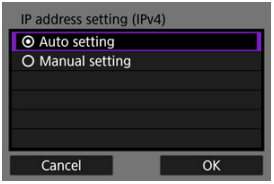
- On the access point, enter the 8-digit PIN code displayed on the camera screen.
- For instructions on entering PIN codes on the access point, refer to the access point's Instruction Manual.
- After entering the PIN code, select [**OK**] on the camera.

4. Connect to the access point.



- Select [**OK**] to initiate connection with the access point.
- The following screen is displayed once the camera is connected to the access point.

5. Set the IP address.



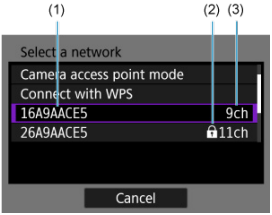
- Go to Setting the IP Address.

Connecting Manually to Detected Networks

Instructions in this section are continued from Checking the Type of Access Point.
Connect to an access point by selecting its SSID (or ESS-ID) in a list of active access points nearby.

Selecting the access point

1. **Select an access point on the [Select a network] screen.**



(1) SSID

(2) Security icon (only for encrypted access points)

(3) Channel used

- Turn the < ◌ > dial to select the access point to connect to in the list of access points.

Note

[Refresh]

- To display [**Refresh**], scroll down the screen in step 1.
- Select [**Refresh**] to search for access points again.

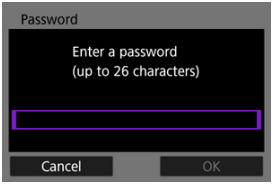
Entering the access point encryption key

- Enter the encryption key (password) set on the access point. For details on the encryption key that has been set, refer to the access point's user manual.
- The screens displayed in steps 2–3 vary depending on the authentication and encryption set on the access point.
- Go to Setting the IP Address if the [**IP address set.**] screen is displayed instead of the screens shown for steps 2–3.

2. Select a key index.

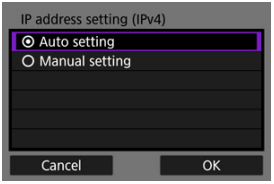
- The [**Key index**] screen is displayed for WEP-encrypted access points.
- Select the key index number set on the access point.
- Select [**OK**].

3. Enter the encryption key.



- Press < SET > to access the virtual keyboard ( ), then enter the encryption key.
- Select [**OK**] to initiate connection with the access point.
- The following screen is displayed once the camera is connected to the access point.

4. Set the IP address.



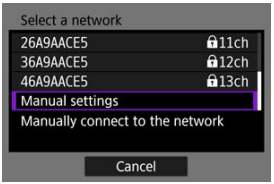
- Go to Setting the IP Address.

Connecting Manually by Specifying Networks

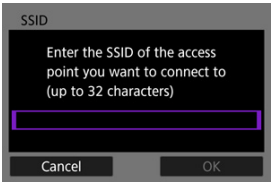
Instructions in this section are continued from Checking the Type of Access Point.
Connect to an access point by entering its SSID (or ESS-ID).

Entering the SSID

1. **Select [Manual settings] on the [Select a network] screen.**



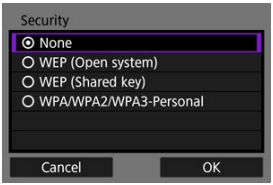
2. **Enter the SSID (network name).**



- Press < SET > to access the virtual keyboard ( ), then enter the SSID.
- Select [**OK**].

Setting the access point authentication method

3. Select the type of security.

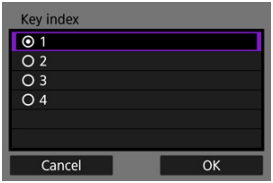


- Select an option and then [**OK**] to go to the next screen.

Entering the access point encryption key

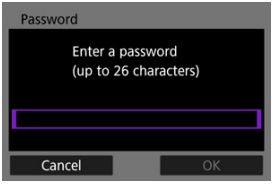
- Enter the encryption key (password) set on the access point. For details on the encryption key that has been set, refer to the access point's user manual.
- The screens displayed in steps 4–5 vary depending on the authentication and encryption set on the access point.
- Go to Setting the IP Address if the [**IP address set.**] screen is displayed instead of the screens shown for steps 4–5.

4. Select a key index.



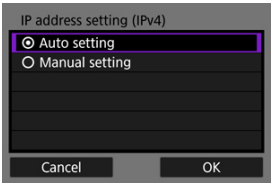
- Select the key index number set on the access point.
- Select [**OK**].

5. Enter the encryption key.



- Press < SET > to access the virtual keyboard ( ), then enter the encryption key.
- Select [**OK**] to initiate connection with the access point.
- The following screen is displayed once the camera is connected to the access point.

6. Set the IP address.



- Go to Setting the IP Address.

Connecting in Camera Access Point Mode

Camera access point mode is a connection method for directly connecting the camera and other devices via Wi-Fi without using an access point. Two connection methods are available, as follows.

Caution

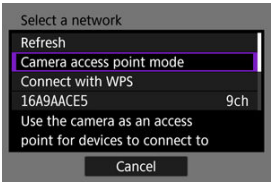
- Some printers may not be able to connect when the camera is used as an access point.
  If connection in camera access point mode is not possible, you may be able to establish a connection as follows.
  - Establish a Wi-Fi connection via an access point
  - Start access point mode on the printer

Connecting with Easy connection

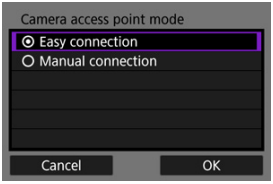
Network settings for camera access point mode are configured automatically.

- For instructions on using the devices you will connect to, refer to the device instruction manual.

1. **Select [Camera access point mode] on the [Select a network] screen.**

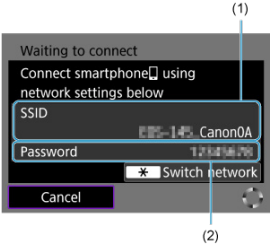


2. Select [Easy connection].



- Select [**OK**].

3. Use the other device to connect to the camera.



(1) SSID (network name)

(2) Encryption key (password)

- In other device's Wi-Fi settings, select the SSID (network name) shown on the camera screen, then enter the password.

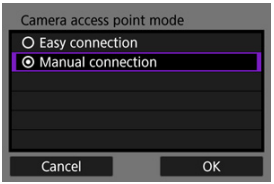
4. Complete the connection settings based on the device to connect to.

- If a Wi-Fi connection cannot be established, set [**Security**] on the camera to [**WPA2**] ( ).

Connecting with Manual connection

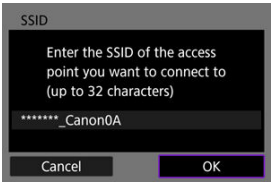
Network settings for camera access point mode are configured manually. Set [**SSID**], [**Channel setting**], and [**Encryption settings**] on each screen displayed.

1. **Select [Manual connection].**



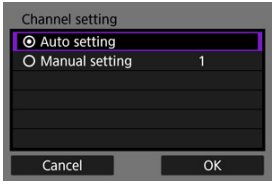
- Select [**OK**].

2. **Enter the SSID (network name).**



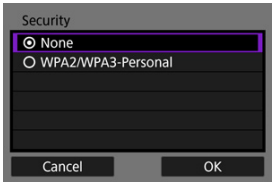
- Press < SET > to access the virtual keyboard ( ), then enter the SSID. After input, press < MENU >.
- Select [**OK**].

3. Select a channel setting option.



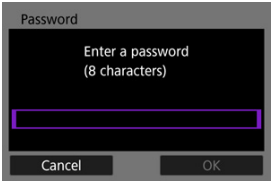
- To specify the settings manually, select [**Manual setting**], then turn the <) > dial.
- Select [**OK**] to go to the next screen.

4. Select the type of security.



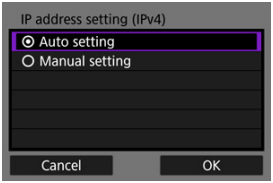
- Select [**OK**] to go to the next screen.
- If you have selected [**None**], the [**IP address setting (IPv4)**] screen is displayed ( ).
- The same type of security must be set on both the other device and the camera. See Authentication and data encryption methods for details on types of authentication and encryption.

5. Enter the password.



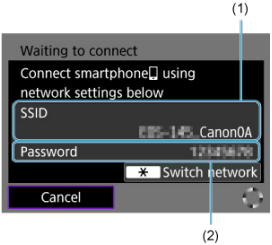
- Press < SET > to access the virtual keyboard ( ), then enter the password.

6. Select [Auto setting].



- Select [**OK**].
- If an error is displayed for [**Auto setting**], set the IP address manually ( ).

7. Use the other device to connect to the camera.



(1) SSID (network name)

(2) Encryption key (password)

8. Complete connection settings for the communication function.

- If a Wi-Fi connection cannot be established, set [**Security**] on the camera to [**WPA2**] ( ).

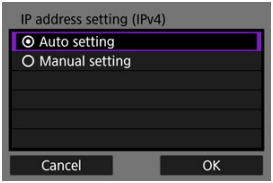
Setting the IP Address

Select a method of setting the IP address, and then set the IP address on the camera.

Setting the IP address automatically

Set up the IP address settings automatically.

1. **Select [Auto setting].**



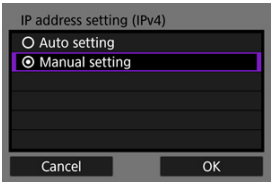
- Select [**OK**].
- If an error is displayed for [**Auto setting**], set the IP address manually ( ).

2. **Complete the connection settings based on the device to connect to.**

Setting the IP address manually

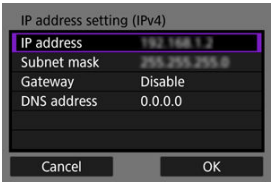
Set up the IP address settings manually. Note that the items displayed vary depending on the communication function.

1. **Select [Manual setting].**



- Select [**OK**] to go to the next screen.

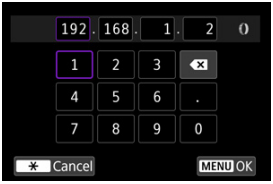
2. **Select an option to configure.**



- The items displayed vary depending on the communication function.
- Select an option to access the screen for numerical input.

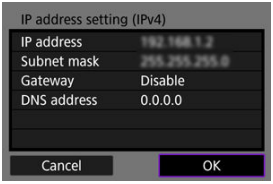
- To use a gateway, select [**Enable**], then select [**Address**].

3. Enter the number.



- Turn the < > dial to switch to other input fields at the top of the screen and turn the < > dial to select the numbers to enter. Press < > to enter the selected number.
- To set the entered numbers and return to the screen for step 2, press the < MENU > button.

4. Select [OK].



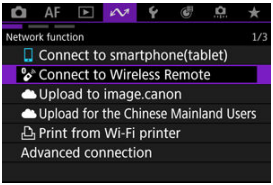
- When you have completed setting the necessary items, select [**OK**].
- If you are unsure what to enter, see Checking Network Settings or ask the network administrator or other person in charge of the network.

5. Complete the connection settings based on the device to connect to.

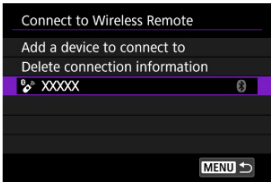
Reconnecting via Wi-Fi/Bluetooth

Connection settings for devices you have connected to via Wi-Fi or Bluetooth are retained on the camera. You can use these settings to reconnect to the same device.

1. **Select an option.**



2. **Select the device for the connection.**



- Select the connection option in the list of past connections.

Note

- For all communication features used, settings for up to 10 past connections are retained.

3. **Follow the on-screen instructions and connect the camera to the device.**

Editing/Deleting Connection Settings

Changing Connection Nicknames

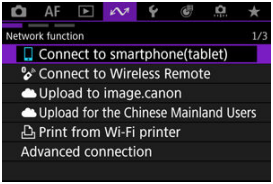
Deleting Connection Information

Before changing or deleting connection settings, end the Wi-Fi connection.

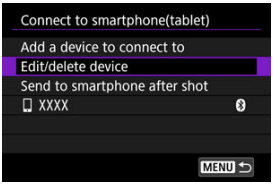
Changing Connection Nicknames

You can change connection setting nicknames.

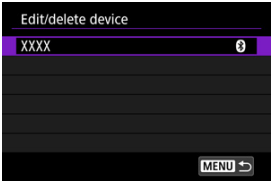
1. **Select an option.**



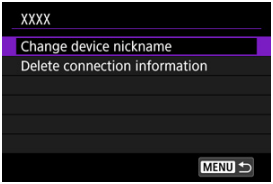
2. **Select [Edit/delete device].**



3. **Select the device to connect.**



4. **Select [Change device nickname].**



5. **Change the nickname.**

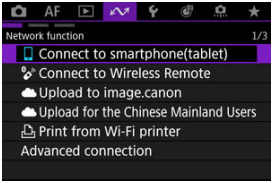
- Use the virtual keyboard ( ) to enter the nickname.

6. **Press the < MENU > button.**

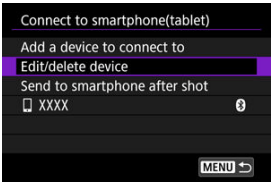
- Select [**OK**] if a message is displayed.

Deleting Connection Information

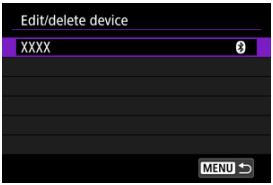
1. **Select an option.**



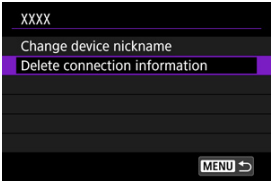
2. **Select [Edit/delete device].**



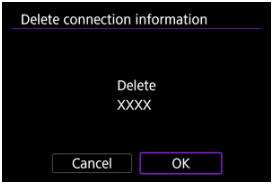
3. **Select the device to delete.**



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



5. **Select [OK].**

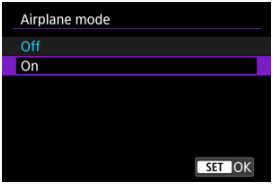


Airplane Mode

You can temporarily disable Wi-Fi and Bluetooth functions.

1. **Select [: Airplane mode] ( ).**

2. **Set to [On].**



- [ ] is displayed on the screen.

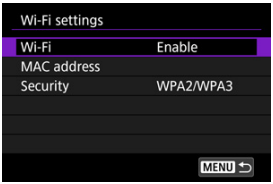
Note

- [ ] may not be displayed in still photo shooting, movie recording, or playback, depending on display settings. If it is not displayed, press the < INFO > button repeatedly to access detailed information display.

Wi-Fi Settings

1. **Select [: Wi-Fi settings] ( ).**

2. **Select an option.**



- **Wi-Fi**
  When the use of electronic devices and wireless devices is prohibited, such as on board airplanes or in hospitals, set it to [**Disable**].

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

- **Security**
  Select the Security protocol to use when connecting in camera access point mode.

Caution

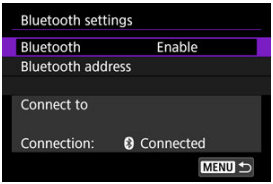
Transferring movies

- Each movie file is large, and transferring large files over Wi-Fi may take some time. Referring to Wireless Communication Precautions, arrange your network environment for stable communication between devices and the access point.

Bluetooth Settings

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

2. **Select an option.**



- **Bluetooth**
  If you will not use the Bluetooth function, select [**Disable**].

- **Bluetooth address**
  You can check the camera's Bluetooth address.

- **Connect to**
  You can check the name and communication status of the paired device.

Camera Name

You can change the camera name (displayed on smartphones and other cameras) as needed.

1. **Select [: Camera name] ( ).**

2. **Change the camera name.**

- Use the virtual keyboard ( ) to enter the camera name.

3. **Press the < MENU > button.**

- Select [**OK**] if a message is displayed.

GPS Settings

GPS via Mobile

GPS Information Display

GPS via Mobile

You can use a smartphone to geotag images.
Complete these settings after installing the dedicated Camera Connect app ( ) on the smartphone.

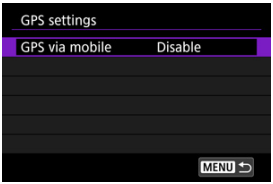
1. **On the smartphone, activate location services.**

2. **Establish a Bluetooth connection.**

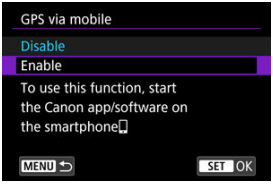
   - Start Camera Connect and pair the camera and smartphone via Bluetooth.

3. **Select [: GPS settings] ( ).**

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



5. **Select [Enable].**



6. **Take the picture.**

- Images are geotagged with the information from the smartphone.

GPS Information Display

You can check the status of smartphone location information acquisition in the GPS connection icon on the screens for still photo shooting or movie recording (and , respectively).

- Gray: Location services are off
- Blinking: Location information cannot be acquired
- On: Location information acquired

Geotagging images as you shoot

Images you shoot while the GPS icon is on are geotagged.

Geotagging information

You can check the location information added to your shots on the shooting information screen ( ).

(1) Latitude

(2) Longitude

(3) Elevation

(4) UTC (Coordinated Universal Time)

Caution

- The smartphone can acquire location information only while it is paired with the camera via Bluetooth.
- Direction information is not acquired.
- Acquired location information may not be accurate, depending on traveling conditions or smartphone status.
- It may take some time to acquire location information from the smartphone after you turn the camera on.
- Location information is no longer acquired after any of the following operations.
  - Pairing with a wireless remote control via Bluetooth
  - Turning the camera off
  - Quitting Camera Connect
  - Deactivating location services on the smartphone
- Location information is no longer acquired in any of the following situations.
  - The camera power turns off
  - The Bluetooth connection is ended
  - The smartphone's remaining battery level is low

Note

- Coordinated Universal Time, abbreviated as UTC, is essentially the same as Greenwich Mean Time.
- For movies, the GPS information initially acquired is added.

Error Details

You can display details of errors affecting the camera's wireless communication functions.

1. **Select [: Error details] ( ).**

   - Details of errors that have occurred are displayed.
   - For more information on errors, see Responding to Error Messages.

Responding to Error Messages

When an error occurs, display the details of the error by following one of the procedures below. Then, eliminate the cause of the error by referring to the examples shown in this chapter.

- Select [: **Error details**].
- Select [**Error details**] on the [**Communicating**] screen.

Click the following error numbers to jump to the corresponding section.

11	12						
21	22	23					
61	64	65					
91							
121	125	127					
130	131	132	133	134	135	136	137
141	142						
161							

Note

- In case of errors, [**Err****] is displayed to the right of [: **Error details**]. It is no longer displayed after the camera is turned off.

11: Connection target not found

- **In the case of [: Connect to smartphone(tablet)], is Camera Connect running?**
  - Establish a connection using Camera Connect ( ).

- **Are the camera and the access point set to use the same encryption key for authentication?**
  - This error occurs if the encryption keys do not match when the authentication method for encryption is [**Open system**].
    Check upper- and lower-case letters, and make sure the correct encryption key for authentication is set on the camera ( ).

12: Connection target not found

- **Are the target device and access point turned on?**
  - Turn on the target device and access point, then wait a while. If a connection still cannot be established, perform the procedures to establish the connection again.

21: No address assigned by DHCP server

What to check on the camera

- **On the camera, the IP address is set to [Auto setting]. Is this the correct setting?**
  - If no DHCP server is used, configure the setting after setting the IP address to [**Manual setting**] on the camera ( ).

What to check on the DHCP server

- **Is the power of the DHCP server on?**
  - Turn on the DHCP server.

- **Are there enough addresses for assignment by the DHCP server?**
  - Increase the number of addresses assigned by the DHCP server.
  - Remove devices assigned addresses by the DHCP server from the network to reduce the number of addresses in use.

- **Is the DHCP server working correctly?**
  - Check the DHCP server settings to make sure it is working correctly as a DHCP server.
  - If applicable, ask your network administrator to ensure the DHCP server is available.

22: No response from DNS server

What to check on the camera

- **On the camera, does the DNS server's IP address setting match the server's actual address?**
  - Configure the IP address on the camera to match the actual DNS server address (,).

What to check on the DNS server

- **Is the power of the DNS server on?**
  - Turn the DNS server on.
- **Are the DNS server settings for IP addresses and the corresponding names correct?**
  - On the DNS server, make sure IP addresses and the corresponding names are entered correctly.
- **Is the DNS server working correctly?**
  - Check the DNS server settings to make sure the server is working correctly as a DNS server.
  - If applicable, ask your network administrator to ensure the DNS server is available.

What to check on the network as a whole

- **Does your network include a router or similar device that serves as a gateway?**
  - If applicable, ask your network administrator for the network gateway address and set it on the camera (,).
  - Make sure that the gateway address setting is correctly entered on all network devices including the camera.

23: Device with same IP address exists on selected network

- **Is another device on the camera network using the same IP address as the camera?**
  - Change the camera's IP address to avoid using the same address as another device on the network. Otherwise, change the IP address of the device that has a duplicate address.
  - If the camera's IP address is set to [**Manual setting**] in network environments using a DHCP server, change the setting to [**Auto setting**] ( ).

Note

Responding to error messages 21–23

- Also check the following points when responding to errors numbered 21–23.
  Are the camera and the access point set to use the same password for authentication?
  - This error occurs if the passwords do not match when the authentication method for encryption is set to [**Open system**]. Check upper- and lower-case letters, and make sure the correct password for authentication is set on the camera ( ).

61: Selected SSID wireless LAN network not found

- **Are any obstacles blocking the line of sight between the camera and the antenna of the access point?**
  - Move the antenna of the access point to a position clearly visible from the point of view of the camera.

What to check on the camera

- **Does the SSID set on the camera match that of the access point?**
  - Check the SSID at the access point, then set the same SSID on the camera ( ).

What to check at the access point

- **Is the access point turned on?**
  - Turn on the power of the access point.

- **If filtering by MAC address is active, is the MAC address of the camera in use registered at the access point?**
  - Register the MAC address of the camera used to the access point.
    The MAC address can be checked on the [**MAC address**] screen ( ).

64: Cannot connect to wireless LAN terminal

- **Are the camera and the access point set to use the same encryption method?**
  - See Authentication and data encryption methods for the encryption methods.

- **If filtering by MAC address is active, is the MAC address of the camera in use registered at the access point?**
  - Register the MAC address of the camera used to the access point. The MAC address can be checked on the [**MAC address**] screen ( ).

65: Wireless LAN connection lost

- **Are any obstacles blocking the line of sight between the camera and the antenna of the access point?**
  - Move the antenna of the access point to a position clearly visible from the point of view of the camera.

- **The wireless LAN connection was lost, for some reason, and the connection cannot be restored.**
  - The following are possible reasons: excessive access to the access point from another device, a microwave oven or similar appliance in use nearby (interfering with IEEE 802.11b/g/n (2.4 GHz band)), or influence of rain or high humidity.

91: Other error

- **A problem other than error code number 11 to 65 occurred.**
  - Turn the camera power off and on.

121: Not enough free space on server

- **The target Web server does not have enough free space.**
  - Delete unnecessary images on the Web server, check the free space on the Web server, then try sending the data again.

125: Check the network settings

- **Is the network connected?**
  - Check the connection status of the network.

127: An error has occurred

- **A problem other than error code number 121 to 126 occurred while the camera is connected to the Web service.**
  - Try again to establish the Wi-Fi connection.

130: The server is currently busy Please wait a moment and try again

- **The web service is temporarily overloaded.**
  - Please wait a moment and try to establish the Wi-Fi connection once again.

131: Try again

- **An error occurred in the web service Wi-Fi connection.**
  - Try again to establish the Wi-Fi connection.

132: Error detected on server Try again later

- **The web service is currently offline for maintenance.**
  - Please wait a moment and try to establish the Wi-Fi connection once again.

133: Cannot log in to Web service

- **An error occurred during the web service login.**
  - Check the login settings.
  - Please wait a moment and try to establish the Wi-Fi connection once again.

134: Set the correct date and time

- **The date, time, and time zone settings are incorrect.**
  - Check the [🔧: **Date/Time/Zone**] settings.

135: Web service settings have been changed

- **The web service settings have been changed.**
  - Check the login settings.

136: The QR code shown on the camera was not scanned correctly by the dedicated app. Try camera web link setup again.

- **The QR code was not scanned correctly by the smartphone.**
  - Reconfigure camera web link settings and scan the QR code displayed again on the camera.

137: The QR code shown on the camera has expired. Try camera web link setup again.

- **The QR code displayed has expired.**
  - Reconfigure camera web link settings and scan the QR code displayed again on the camera.

141: Printer is busy. Try connecting again.

- **Is the printer performing a printing process?**
  - Try again to establish the Wi-Fi connection to the printer after the printing process is finished.

- **Is another camera connected to the printer via Wi-Fi?**
  - Try again to establish the Wi-Fi connection to the printer after the Wi-Fi connection to the other camera has been terminated.

142: Could not acquire printer information. Reconnect to try again.

- **Is the power of the printer on?**
  - Try again to establish the Wi-Fi connection after turning on the printer.

161: An error has occurred

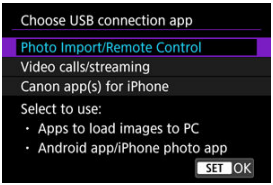
- **A streaming error has occurred.**
  - Check the streaming settings.
  - Try streaming again.

App Selection for USB Connections

By connecting the camera to a smartphone or computer with the interface cable, you can transfer images or import images to the smartphone or computer.

1. **Select [: Choose USB connection app] ( ).**

2. **Select an option.**



- **Photo Import/Remote Control**
  Select if you will use dedicated Android apps or the iOS version of Photos.

- **Video calls/streaming**
  Select if you will use UVC/UAC-compatible applications after connecting to a computer.
  After selecting [**Video calls/streaming**], use the interface cable to connect to the computer, then start the application.
  The resolution and frame rate of image output is 2K (1920×1080) at 30 fps.

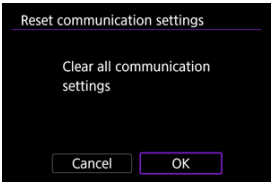
- **Canon app(s) for iPhone**
  Select if you will use an iOS app.
  Connecting the camera to a smartphone requires a cable for this purpose. For details, refer to the Canon website.

Resetting Communication Settings

All wireless communication settings can be deleted. By deleting the wireless communication settings, you can prevent their information from being exposed when you lend or give your camera to other people.

1. **Select [: Reset communication settings] ( ).**

2. **Select [OK].**



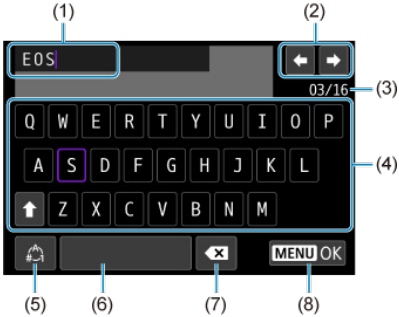
Caution

- 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.

Note

- All wireless communication settings can be cleared by selecting the [**Communication settings**] option for [**Other settings**] in [: **Reset camera**].

Virtual Keyboard Operations



(1)	Input area, for entering text
(2)	Cursor keys, for moving in the input area
(3)	Current no. of characters/no. available
(4)	Keyboard
(5)	Switch input modes
(6)	Space
(7)	Delete a character in the input area
(8)	Exit input

- Use the < ◐ > dial to move within (1).
- Use < ✥ > or the < ◯ > dial to move within (2) and (4)–(7).
- Press < SET > to confirm input or when switching input modes.

Wireless Communication Precautions

- Distance Between the Camera and the Smartphone
- Installation Location of the Access Point
- Nearby Electronic Devices
- Precautions for Using Multiple Cameras

If the transmission rate drops, the connection is lost, or other problems occur when using the wireless communication functions, try the following corrective actions.

Distance Between the Camera and the Smartphone

If the camera is too far from the smartphone, a Wi-Fi connection may not be established even when Bluetooth connection is possible. In this case, bring the camera and the smartphone closer together, then establish a Wi-Fi connection.

Installation Location of the Access Point

- When using indoors, install the device in the room where you are using the camera.
- Install the device where people or objects do not come between the device and the camera.

Nearby Electronic Devices

If the Wi-Fi transmission rate drops because of the influence of the following electronic devices, stop using them or move further away from the devices to transmit communication.

- The camera communicates over Wi-Fi via IEEE 802.11b/g/n using radio waves in the 2.4 GHz band. For this reason, the Wi-Fi transmission rate will drop if there are Bluetooth devices, microwave ovens, cordless telephones, microphones, smartphones, other cameras, or similar devices operating on the same frequency band nearby.

Precautions for Using Multiple Cameras

- When connecting multiple cameras to one access point via Wi-Fi, make sure the cameras' IP addresses are different.
- When multiple cameras are connected to one access point via Wi-Fi, the transmission rate drops.
- When there are multiple IEEE 802.11b/g/n (2.4 GHz band) access points, leave a gap of five channels between each Wi-Fi channel to reduce radio wave interference. For example, use channels 1, 6, and 11, channels 2 and 7, or channels 3 and 8.

Security

When connecting the camera to a network, make sure to use a secure network environment. It is recommended to use the camera with the default settings.
When connecting the camera to a network, there is a risk of unauthorized access from unintended third parties or cyber-attacks. If access from an external network is not required, physically and/or virtually block access so that only specified devices can access the network. Additionally, Wi-Fi (wireless LAN) may be intercepted by malicious third parties, posing a risk of eavesdropping on communication content.
If access to an external network is required, it is important to implement a secure method of communication, such as using a VPN (Virtual Private Network) that can block access from the outside. Use Wi-Fi in a secure environment. AES encryption is recommended.
In particular, the following functions do not support protocol encryption for communication with the camera; therefore, use these functions in a secure network environment.

- Content Transfer Professional
- Camera Connect
- EOS Utility

Caution

- Canon shall not be liable for any direct or indirect damages caused by network security issues.
- The camera cannot be directly connected to the communication lines (including public wireless LAN) of telecommunications carriers (mobile communications companies, fixed-line communications companies, Internet providers, etc.). When connecting the camera to the Internet, be sure to connect via a router or similar device.

Checking Network Settings

Windows

Open the Windows [**Command Prompt**], then enter ipconfig/all and press the <Enter> key.
In addition to the IP address assigned to the computer, the subnet mask, gateway, and DNS server information are also displayed.

macOS

In macOS, open the [**Terminal**] application, enter ifconfig -a, and press the <Return> key.
The IP address assigned to the computer is indicated in the [**enX**] item (X: number) next to [**inet**], in the format "***.***.***.***".
For information about the [**Terminal**] application, refer to the macOS help.

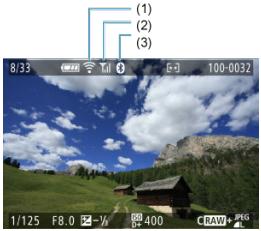
To avoid using the same IP address for the computer and other devices on the network, change the rightmost number when configuring the IP address assigned to the camera in the processes described in Setting the IP address manually.
Example: 192.168.1.**10**

Wireless Communication Status

Wireless communication status can be checked on the screen.

Information display screen during movie recording

Information display screen during still photo playback



(1) Wi-Fi function
(2) Wireless signal strength
(3) Bluetooth function

Wi-Fi function/signal strength indicator

Communication Status		Screen	
		Wi-Fi Function	Wireless Signal Strength
Not connected	Wi-Fi: Disable	OFF	Off
	Wi-Fi: Enable	OFF	
Connecting		(Blinking)	
Connected			
Sending data			
Connection error		(Blinking)	

Bluetooth function indicator

Bluetooth Function	Connection Status	Screen
Other than [Disable]	Bluetooth connected	
	Bluetooth not connected	
[Disable]	Bluetooth not connected	Not displayed

Set-up

This chapter describes menu settings on the set-up [🔧] tab.
☆ to the right of titles indicates functions only available in Creative Zone modes (<**P**>, <**Tv**>, <**Av**>, or <**M**>).

- Tab Menus: Set-up
- Folder Settings
- File Numbering
- Card Formatting
- Auto Rotate
- Adding Orientation Information to Movies
- Date/Time/Zone
- Language
- Units
- Video System
- Feature Guide
- Beeps
- Volume
- Headphones
- Screen Brightness
- Night Display
- UI Magnification
- Start-up Image
- HDMI Resolution
- Cooling Fan Settings
- Lens Retraction
- Password Management
- Power Saving
- Resetting the Camera ☆
- Custom Shooting Mode (C1–C3) ☆
- Battery Information
- Copyright Information ☆
- Other Information

Tab Menus: Set-up

File/card setting

(1) Select folder
- Creating a Folder

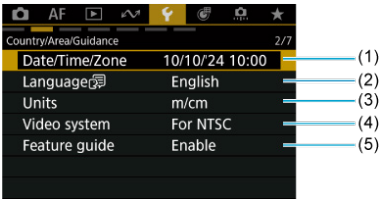
(2) File numbering

(3) Format card

(4) Auto rotate

(5) Add rotate info

Country/Area/Guidance



(1) Date/Time/Zone

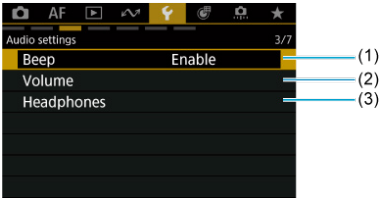
(2) Language

(3) Units

(4) Video system

(5) Feature guide

Audio settings



(1) Beep

(2) Volume

(3) Headphones

Customize display

(1) Screen brightness

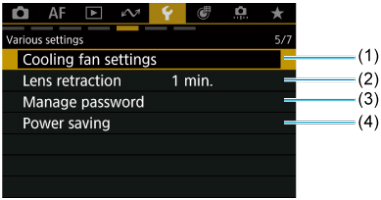
(2) Night display

(3) UI magnification

(4) Start-up image

(5) HDMI resolution

Various settings



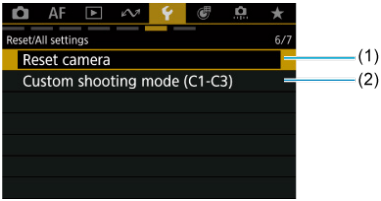
(1) Cooling fan settings

(2) Lens retraction

(3) Manage password

(4) Power saving

Reset/All settings



(1) Reset camera ☆

(2) Custom shooting mode (C1-C3) ☆

Various settings

(1) Battery info.

(2) Copyright information ☆

(3) Show log

(4) Manual/software URL

(5) Manual for the Chinese Mainland Users

(6) Certification Logo Display ☆

(7) Firmware

Folder Settings

Creating a Folder

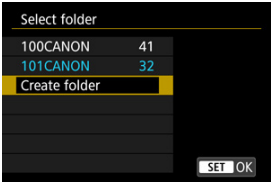
Selecting a Folder

You can freely create and select the folder where the captured images are to be saved.

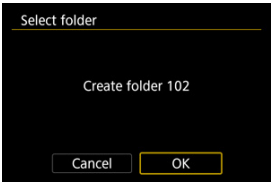
Creating a Folder

1. **Select [: Select folder] ( ).**

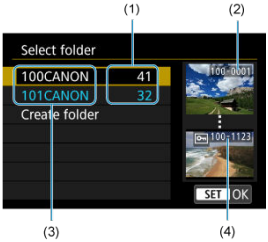
2. **Select [Create folder].**



3. **Select [OK].**



Selecting a Folder



(1) Number of images in folder

(2) Lowest file number

(3) Folder name

(4) Highest file number

- Select a folder on the folder selection screen.
- Captured images are stored in your selected folder.

Note

Folders

- A folder can contain up to 9999 images (file number 0001–9999). When a folder becomes full, a new folder with the folder number increased by one is created automatically. Also, if manual reset ( ) is executed, a new folder will be created automatically. Folders numbered from 100 to 999 can be created.

Creating folders with a computer

- With the card open on the screen, create a new folder with "**DCIM**" as the name. Open the DCIM folder and create as many folders as necessary to save and organize your images. "**100ABC_D**" is the required format for folder names, and the first three digits must be a folder number in the range 100–999. The last five characters can be any combination of upper- and lower-case letters from A to Z, numerals, and the underscore "_". The space cannot be used. Also note that two folder names cannot share the same three-digit folder number (for example, "100ABC_D" and "100W_XYZ") even if the remaining five characters in each name are different.

File Numbering

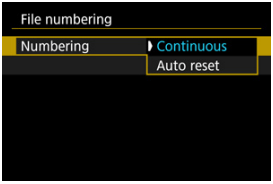
- Continuous
- Auto Reset
- Manual Reset

The captured images saved in a folder are assigned a file number from 0001 to 9999. You can change how the image files are numbered.

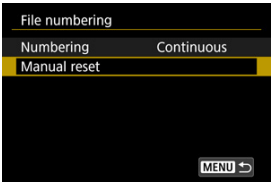
(Example)
IMG_0001.JPG
(1)
(1) File number

1. **Select [: File numbering] ( ).**

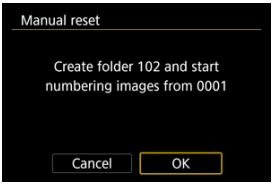
2. Set the item.



- Select [**Numbering**].
- Select [**Continuous**] or [**Auto reset**].



- If you want to reset the file numbering, select [**Manual reset**] ( ).



- Select [**OK**] to create a new folder, and the file number will start with 0001.

Caution

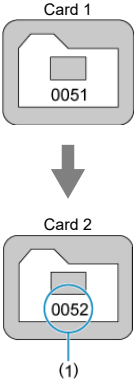
- If the file number in folder 999 reaches 9999, shooting will not be possible even if the card still has free space. After a message requesting you to replace the card is displayed, switch to a new card.

Continuous

For continuous file numbering regardless of switching cards or creating folders

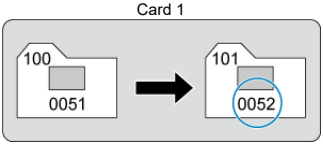
Even after you replace the card or create a new folder, the file numbering continues in sequence up to 9999. This is useful when you want to save images numbered anywhere between 0001 to 9999 on multiple cards or in multiple folders into one folder on a computer. If the replacement card or existing folder already contains images recorded previously, the file numbering of the new images may continue from the file numbering of the existing images on the card or in the folder. If you want to use continuous file numbering, it is recommended that you use a newly formatted card each time.

File numbering after replacing the card



(1) Next sequential file number

File numbering after creating a folder

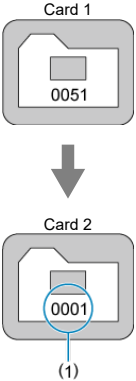


Auto Reset

For restarting file numbering from 0001 after switching cards or creating folders

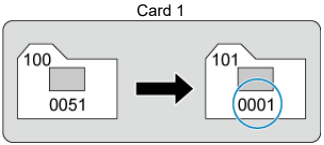
When you replace the card or create a folder, the file numbering restarts from 0001 for the new images saved. This is useful if you want to organize images by cards or folders.
If the replacement card or existing folder already contains images recorded previously, the file numbering of the new images may continue from the file numbering of the existing images on the card or in the folder. If you want to save images with the file numbering starting from 0001, use a newly formatted card each time.

File numbering after replacing the card



(1) File numbering is reset

File numbering after creating a folder



Manual Reset

For resetting file numbering to 0001 or starting from 0001 in new folders

When you reset the file numbering manually, a new folder is created automatically and the file numbering of images saved to that folder starts from 0001.
This is useful, for example, if you want to use different folders for the images taken yesterday and the ones taken today.

Card Formatting

If the card is new or was previously formatted (initialized) by another camera or computer, format the card with this camera.

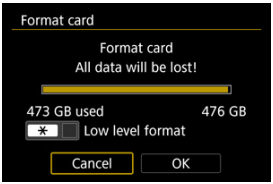
Caution

- **When the card is formatted, all images and data on the card will be erased. Even protected images will be erased, so make sure there is nothing you need to keep. If necessary, transfer the images and data to a computer, etc. before formatting the card.**

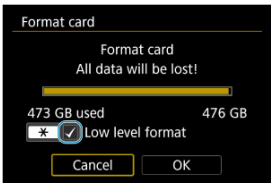
---

1. **Select [: Format card] ( ).**

2. **Format the card.**



- Select [**OK**].



- For low-level formatting, press the < > button to add a checkmark [✓] to [**Low level format**], then select [**OK**].

Conditions requiring card formatting

- **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 ( ).**

Low-level formatting

- Perform low-level formatting if the card's writing or reading speed seems slow or if you want to totally erase the data on the card.
- Since low-level formatting will format all recordable sectors on the card, the formatting will take longer than normal formatting.
- During low-level formatting, you can cancel formatting by selecting [**Cancel**]. Even in this case, normal formatting will already be complete and you can use the card as usual.

Card file formats

- SD cards will be formatted in FAT12 or FAT16, SDHC cards in FAT32, and SDXC cards in exFAT.
- Individual movies recorded to exFAT-formatted cards are recorded as a single file (without splitting them into multiple files) even if they exceed 4 GB, so the resulting movie file will exceed 4 GB.

Caution

- It may not be possible to use SDXC 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

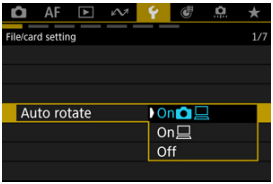
- The card capacity displayed on the card format screen may be smaller than the capacity indicated on the card.
- This device incorporates exFAT technology licensed from Microsoft.

Auto Rotate

You can change the auto rotation setting that straightens images shot in vertical orientation when they are displayed.

1. **Select [: Auto rotate] ( ).**

2. **Select an option.**



- **On**
  Automatically rotates images for display on both the camera and computers.

- **On**
  Automatically rotates images only for display on computers.

- **Off**
  Images are not automatically rotated.

Caution

- Images captured with auto rotation set to [**Off**] will not rotate during playback even if you later set auto rotation to [**On**].

Note

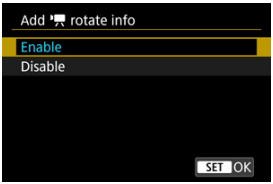
- If a picture is taken while the camera is aimed up or down, automatic rotation to the proper orientation for viewing may not be performed correctly.
- If images are not rotated automatically on a computer, try using EOS software.

Adding Orientation Information to Movies

For movies recorded with the camera held vertically, orientation information indicating which side is up can be added automatically to enable playback in the same orientation on smartphones or other devices.

1. **Select [: Add rotate info] ( ).**

2. **Select an option.**



- **Enable**
  Play movies on smartphones or other devices in the orientation in which they were recorded.

- **Disable**
  Play movies horizontally on smartphones or other devices, regardless of the recording orientation.

Caution

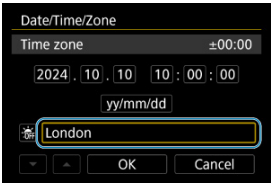
- Movies are played horizontally on the camera and via HDMI video output, regardless of this setting.

Date/Time/Zone

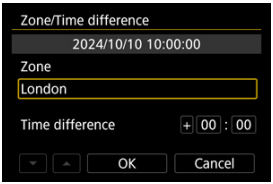
When you turn on the power for the first time or if the date/time/zone have been reset, follow these steps to set the time zone first.
By setting the time zone first, you can simply adjust this setting as needed in the future and the date/time will be updated to match it.
Since the captured images will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

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

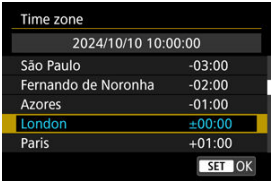
2. **Set the time zone.**



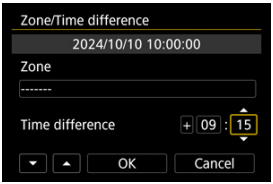
- Use the < > keys to select [**Time zone**] and then press < >.



- Press < >.

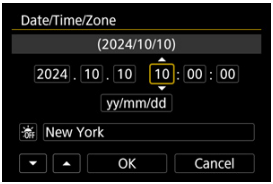


- Use the < ▲ >< ▼ > keys to select the zone and then press < (SET) >.
- If your time zone is not listed, press the < MENU > button, then set the difference from UTC in [**Time difference**].



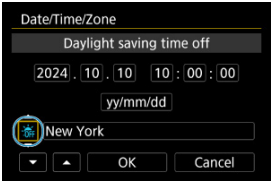
- Use the < ◀ >< ▶ > keys to select a [**Time difference**] option (+–/hour/minute) and then press < (SET) >.
- Set with the < ▲ >< ▼ > keys and then press < (SET) >.
- After entering the time zone or time difference, select [**OK**].

3. Set the date and time.



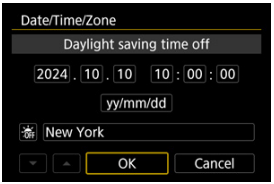
- Select an option with the < ◀ >< ▶ > keys and then press < (SET) >.
- Set with the < ▲ >< ▼ > keys and then press < (SET) >.

4. Set daylight saving time.



- Set it as necessary.
- Select [☀off] or [☀] and then press < SET >.
- When the daylight saving time is set to [☀], the time set in step 3 will advance by 1 hour. If [☀off] is set, the daylight saving time will be canceled and the time will go back by 1 hour.

5. Exit the setting.



- Select [**OK**].

Caution

- The date, time, and time zone settings may be reset when the camera is stored without the battery, when the battery is exhausted, or when it 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.

Language

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

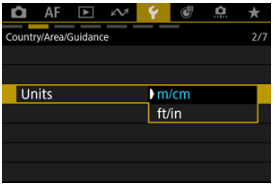
2. **Set the desired language.**

Units

You can change the distance indicator units displayed when zooming or manual focus shooting from [m/cm] to [ft/in].

1. **Select [: Units] ( ).**

2. **Select an option.**

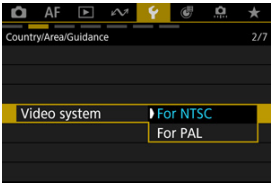


Video System

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 option.**



- **For NTSC**
  For areas where the TV system is NTSC (North America, Japan, South Korea, Mexico, etc.).

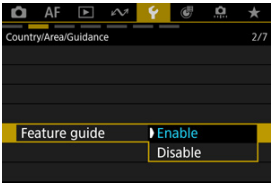
- **For PAL**
  For areas where the TV system is PAL (Europe, Russia, China, Australia, etc.).

Feature Guide

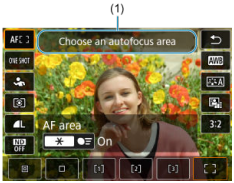
A brief description of functions and items can be displayed when you use Quick Control.

1. **Select [: Feature guide] ( ).**

2. **Select an option.**



Sample screens



(1) Feature guide

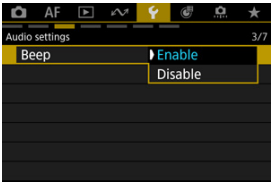
Note

- To clear a description, either tap it or continue performing operations.

Beeps

1. **Select [: Beep] ( ).**

2. **Select an option.**



- **Enable**
  Enables beeping when in focus and during touch control, etc.

- **Disable**
  Disables beeping.

Note

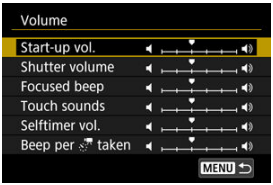
- By default, beeping volume for touch operations is set to [**0**] ( ).

Volume

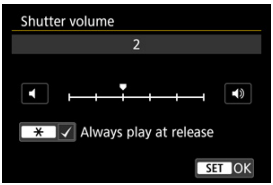
The volume of camera sounds is adjustable.

1. **Select [: Volume] ( ).**

2. **Select an option.**



3. **Adjust the volume.**



- Adjust the volume with < ◀ >< ▶ > keys and then press < >.

Note

- The camera always beeps, regardless of [: **Shutter mode**] settings, with [**Always play at release**] selected in [**Shutter volume**] settings.

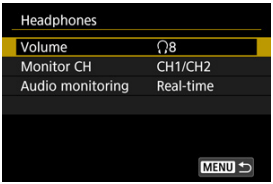
Headphones

- Volume
- Monitor CH
- Audio Monitor

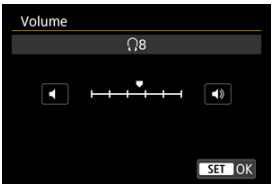
Volume

1. **Select [: Headphones] ( ).**

2. **Select [Volume].**



3. **Adjust the volume.**



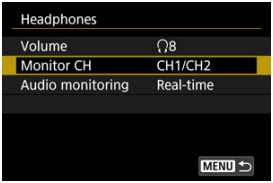
- Turn the < > dial to adjust the volume, then press < >.

Note

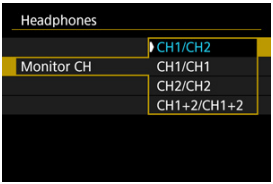
- You can check sound from the built-in microphone or an external microphone on headphones when [📷: **Sound recording**] is set to an option other than [**Disable**] and [📷: **High Frame Rate**] is set to [**Off**].

Monitor CH

1. **Select [Monitor CH].**



2. **Select the combination of channels for audio output (L/R).**

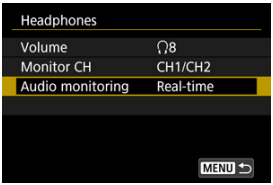


- [CH1+2] indicates that the signal is a combination of channels 1 and 2.

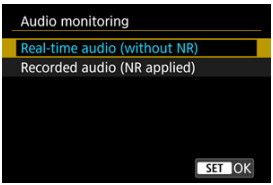
Audio Monitor

You can choose the audio during movie recording that is used for headphone output. To reduce noise in audio recording, configure [**Audio noise reduc.**] ( ).

1. **Select [Audio monitoring].**



2. **Select an option.**



- **Real-time audio (without NR)**
  Audio output without noise reduction.

- **Recorded audio (NR applied)**
  Audio output with noise reduction.

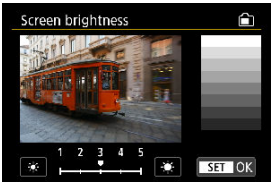
Caution

- Selecting [**Recorded audio (NR applied)**] results in audio output that is slightly out of sync with video. Audio in recorded movies is not delayed.

Screen Brightness

1. **Select [: Screen brightness] ( ).**

2. **Make the adjustment.**



- Referring to the gray image, use the < ◀ >< ▶ > keys to adjust the screen brightness and then press < SET >. Check the effect on the screen.

Note

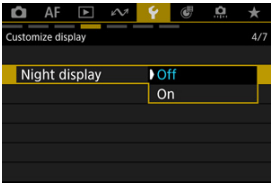
- To check the image's exposure, referring to the histogram is recommended ( ).

Night Display

Change the color of the information displayed on the screen and the Menu Screen to a color that is suitable for shooting in dark areas.

1. **Select [: Night display] ( ).**

2. **Select an option.**



Note

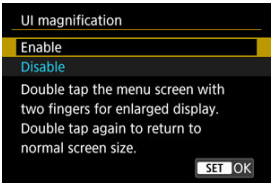
- Press < ▼ > for 1 sec. or more during single-image display on the shooting screen or the playback display to reset [: **Night display**] to [**Off**].

UI Magnification

You can magnify menu screens by double-tapping with two fingers. Double-tap again to restore the original display size.

1. **Select [: UI magnification] ( ).**

2. **Select [Enable].**



Caution

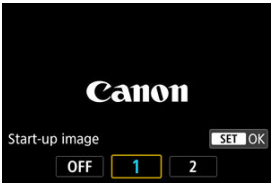
- Use camera controls when configuring menu functions with the display magnified. Touch-screen operations are not supported.

Start-up Image

Specify display of the start-up screen shown when you turn the camera on.

1. **Select [: Start-up image] ( ).**

2. **Select an option.**



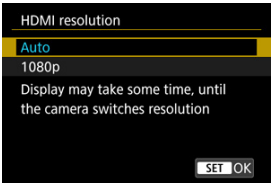
- Select an item, then press < >.

HDMI Resolution

Set the image output resolution used when the camera is connected to a television or external recording device with an HDMI cable.

1. **Select [: HDMI resolution] ( ).**

2. **Select an option.**



- **Auto**
  The images will automatically be displayed at the optimum resolution matching the connected television.

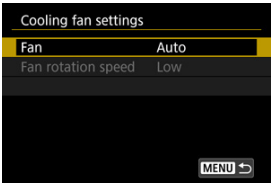
- **1080p**
  Output at 1080p resolution. Select if you prefer to avoid display or delay issues when the camera switches resolution.

Cooling Fan Settings

You can run the cooling fan to exhaust the heat inside the camera.

1. **Select [: Cooling fan settings] ( ).**

2. **Select [Fan].**

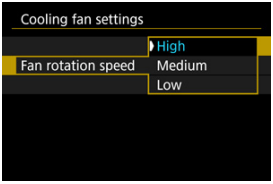


- **Auto**
  The cooling fan automatically activates according to the temperature inside the camera. The cooling fan rotation speed increases when the internal temperature rises and decreases when the internal temperature falls.
  Cooling fan noise may be recorded during shooting.

- **On**
  The fan remains on at the speed set in [**Fan rotation speed**].

- **Off**
  Keeps the fan off.

3. Select [Fan rotation speed].



- The fan rotates according to the speed setting.
  The recorded noise grows louder as the fan rotation speed increases.

Caution

- Warm air is discharged from the exhaust vent while the cooling fan is on.
- Be careful not to cover the intake vent or the exhaust vent with your fingers or tape, etc.

Note

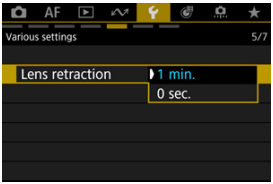
- The cooling fan may not stop even when set to [**Auto**] when operating under high temperatures and other shooting environments.

Lens Retraction

Press the < ▶ > button in shooting mode to safely retract the lens after approx. 1 min. To immediately retract lens after pressing the < ▶ > button, set the retraction time to [0 sec.].

1. **Select [: Lens retraction] ( ).**

2. **Select an option.**



Password Management

Use these settings to manage the password entered when the power switch is set to < ON > or the camera resumes operation from auto power off. For instructions on setting the password required on camera startup, see Setting a Password.

Password Request

Changing the Password

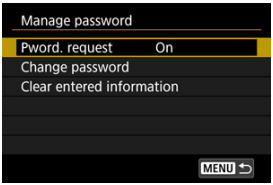
Clearing Entered Information

Password Request

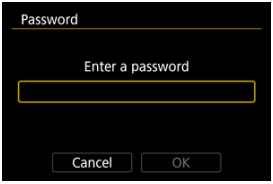
You can choose whether a password must be entered after the power switch is set to < ON > or the camera resumes operation from auto power off.

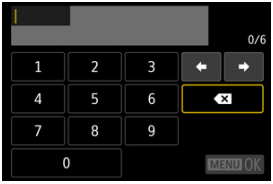
1. **Select [: Manage password] ( ).**

2. **Select [Pword. request].**

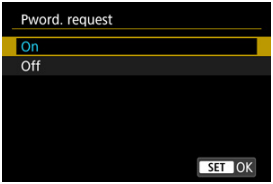


3. **Enter the password initially set.**





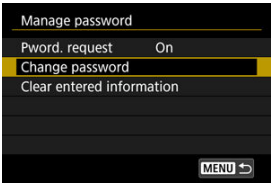
4. **Select an option.**



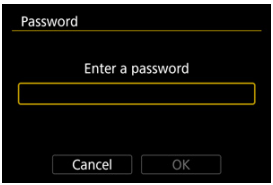
Changing the Password

You can change the password to enter when the power switch is set to < ON > or the camera resumes operation from auto power off.

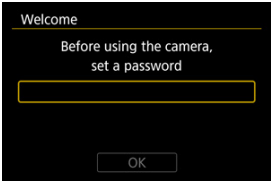
1. **Select [Change password].**

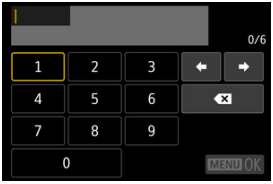


2. **Enter the password initially set.**



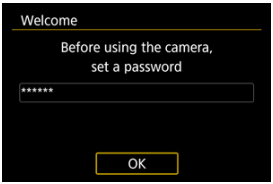
3. Enter a new password.



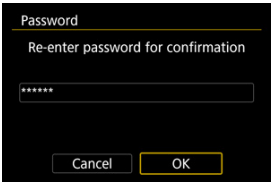


- Enter a six-digit number, then select [**OK**].

4. Select [OK].



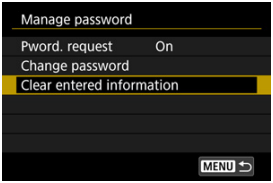
5. Reenter the password, then select [OK].



Clearing Entered Information

You can clear the password and other information entered on the camera.

1. **Select [Clear entered information].**



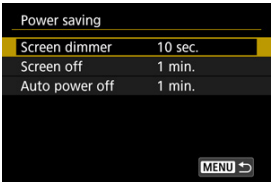
2. **Select [OK].**

Power Saving

You can adjust the timing of when the screen dims, when the screen dims and then turns off, and when the camera turns off after the camera is left idle (Screen dimmer, Screen off, and Auto power off).

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

2. **Select an option.**



Note

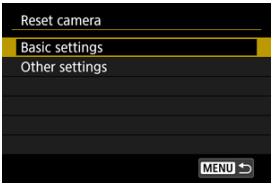
- [**Screen dimmer**] and [**Screen off**] apply while the shooting screen is displayed. These settings do not apply during menu display or image playback.
- The camera turns off during menu display or image playback after the time set in [**Screen dimmer**], [**Screen off**], and [**Auto power off**] elapses.
- To protect the screen, the screen turns off 30 min. after it is dimmed (although the camera itself remains on), even if [**Screen off**] and [**Auto power off**] are set to [**Disable**].
- Images on the screen are displayed at a lower frame rate after the screen dims during still photo shooting standby.

Resetting the Camera ☆

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

1. **Select [: Reset camera] ( ).**

2. **Select an option.**



- **Basic settings**
  Restores default settings for camera shooting functions and menu settings.

- **Other settings**
  Settings for individual selected options can be reset.

3. **Clear the settings.**

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

Caution

- Dots of light may appear in captured images or on the shooting screen if the sensor is affected by cosmic rays or similar factors. If so, it may help to reduce their appearance by doing one of the following with [**Basic settings**] selected: (1) Hold down the < ▶ > key and press < MENU > button, or (2) Press the < SET >, then select [**OK**] (but note that (2) restores default camera settings).

Custom Shooting Mode (C1–C3) ☆

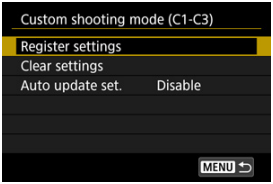
Automatic Update of Registered Settings

Canceling Registered Custom Shooting Modes

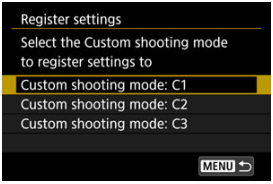
You can register current camera settings such as shooting, menu, and Custom Function settings as Custom shooting modes assigned to < C1 > to < C3 > modes. You can register different functions to use when shooting still photos or movies.

1. **Select [: Custom shooting mode (C1-C3)] ( ).**

2. **Select [Register settings].**



3. Register the desired items.



- Select the Custom shooting mode to register, then select [**OK**] on the [**Register settings**] screen.
- The current camera settings are registered to Custom shooting mode C*.
- In still photo shooting, the registered shooting mode is indicated in the Custom shooting mode icon (as in [C1Tv], [C2Av], [C3M]).
- Custom shooting mode icons change to [C1P], [C2P], and [C3P] for movie recording.

Automatic Update of Registered Settings

If you change a setting while shooting in Custom shooting mode, the mode can be automatically updated with the new setting (Auto update). To enable this automatic update, set [**Auto update set.**] to [**Enable**] in step 2.

Canceling Registered Custom Shooting Modes

If you select [**Clear settings**] in step 2, the settings of each mode can be restored to default settings, as they were before registration.

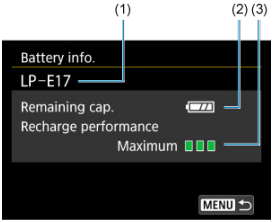
Note

- You can also change shooting and menu settings in Custom shooting modes.

Battery Information

You can check the conditions of the battery you are using on the screen.

1. Select [: Battery info.] ( ).



(1) Model of battery used

(2) Remaining battery level ( )

(3) Battery recharge performance, in three levels

■ ■ ■ (Green): Battery recharge performance is good.

■ ■ □ (Green): Battery recharge performance is slightly degraded.

■ □ □ (Red): Purchasing a new battery is recommended.

Caution

- Using a genuine Canon Battery Pack LP-E17 is recommended. Use of non-genuine batteries may prevent the camera from operating at full performance and may lead to malfunction.

Note

- If a battery communication error message is displayed, follow the instructions in the message.

Copyright Information ☆

Checking the Copyright Information

Deleting the Copyright Information

When you set the copyright information, it will be recorded to the image as Exif information.

Caution

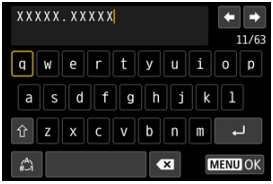
- If the entry for “Author” or “Copyright” is long, it may not be displayed entirely when you select [**Display copyright info.**].

---

1. **Select [: Copyright information] ( ).**

2. **Select an option.**

3. **Enter text.**

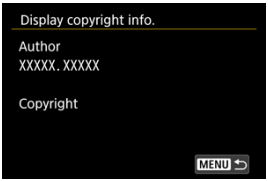


- Use the < ✥ > keys to select a character and then press < SET > to enter it.
- By selecting [#], you can change the input mode.
- Select [⌫] to delete a character.

4. **Exit the setting.**

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

Checking the Copyright Information



When you select [**Display copyright info.**] in step 2, you can check the [**Author**] and [**Copyright**] information that you entered.

Deleting the Copyright Information

When you select [**Delete copyright information**] in step 2, you can delete the [**Author**] and [**Copyright**] information.

Other Information

Show log

Select [: **Show log**] to display a record of any changes to the password, to network information, or to other settings.

Manual/software URL, Manual for the Chinese Mainland Users

To download instruction manuals, select [: **Manual/software URL**] or [: **Manual for the Chinese Mainland Users**] and scan the displayed QR code with a smartphone ( ). You can also use a computer to access the website at the URL displayed and download software.
When accessing from Mainland China, select [: **Manual for the Chinese Mainland Users**].

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

Used to update the firmware of the camera, lens, or other compatible accessories in use.
An asterisk after the icon and [: **Firmware**] when online features such as [**Upload to image.canon**] are set and the camera can connect to the internet indicates that new firmware is available on Canon servers. To update the firmware, select [: **Firmware**] and follow the on-screen instructions. The asterisk is cleared when [**Wi-Fi**] in [: **Wi-Fi settings**] is set to [**Disable**], or if you connect a different device.
You can also update the camera firmware from Camera Connect ( ).

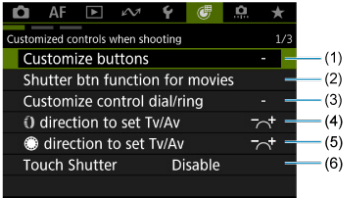
Control Customization

You can assign frequently used functions to camera buttons or dials according to your preferences for easy operations.

- Tab Menus: Control Customization Functions
- Control Customization Details

Tab Menus: Control Customization Functions

Customized controls when shooting



(1) Customize buttons ☆

(2) Shutter btn function for movies

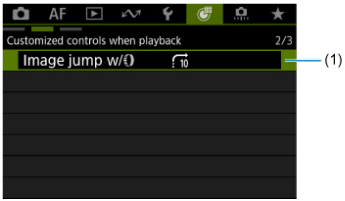
(3) Customize control dial/ring ☆

(4) direction to set Tv/Av ☆

(5) direction to set Tv/Av ☆

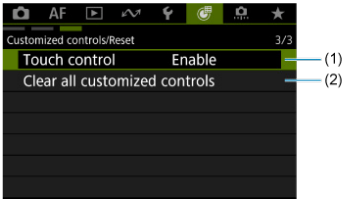
(6) Touch Shutter

Customized controls when playback



(1) Image jump w/

Customized controls/Reset



(1) Touch control

(2) Clear all customized controls ☆

Control Customization Details

[Customized controls when shooting]

[Customized controls when playback]

[Customized controls/Reset]

You can customize camera features on the [ ] tab to suit your shooting preferences.

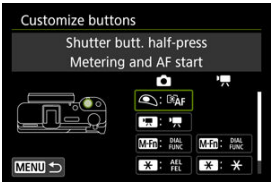
[Customized controls when shooting]

Customize buttons

You can assign frequently used functions to camera buttons that are easy for you to use. Different functions, for use when shooting still photos or movies, can be assigned to the same button.

1. **Select [: Customize buttons] ( ).**

2. **Select a camera control.**



3. **Select a function to assign.**

- Press < SET > to set it.
- You can configure advanced settings for functions labeled with [**Detail set.**] in the lower left of the screen by pressing the < > button.

Note

- [ ]: “Menu direct” button on Speedlites.
- [: **Customize buttons**] settings are not cleared even if you select [: **Clear all Custom Func. (C.Fn)**]. To clear the settings, select [: **Clear all customized controls**].

Functions available for customization

AF

●: Default ○: Available for customization

		M-Fn		
AF: Metering and AF start				
●*1	-	-	○	-
AF-OFF: AF stop				
-	○*1	○	○	-
: AF point selection				
-	○*1	○	○	-
: Set AF point to center				
-	○*1	○	○	-
: Start/stop whole area AF tracking				
-	○*1	○	○	-
: Direct AF area selection*1				
-	○	○	○	-
: Direct select of sub to detect*1				
-	○	○	○	-
ONE SHOT SERVO: One-Shot AF ⇄ Servo AF*1				
-	○	○	○	-
AF □: AF area				
-	○*1	○	○	-
AF: AF on detected subject*1				
-	-	○	○	-
AF: Eye Detection AF*1				
-	-	○	○	-
: Eye detection				
-	○*1	○	○	-

PEAK: Peaking				
-	○*1	○	○	-

* 1: Cannot be assigned as a function available in movie recording.

Exposure

●: Default ○: Available for customization

		M-Fn		
: Metering start*1				
○	-	-	-	-
: AE lock				
-	○*1	○	●*3	-
AEL FEL: AE lock/FE lock*1				
-	○	○	●*4	-
ISO: ISO speed				
-	○*1	○	○	-
: Metering mode*1				
-	○	○	○	-
FEL: FE lock*1				
-	○	○	○	-

* 1: Cannot be assigned as a function available in movie recording.
* 3: Default in movie recording.
* 4: Default in still photo shooting.

Image

●: Default ○: Available for customization

		M-Fn		
: Image quality*1				
-	○	○	○	-
RAW JPEG: One-touch image quality setting*1				
-	○	○	○	-
RAW JPEG H: One-touch image quality (hold)*1				
-	○	○	○	-
: Cropping/aspect ratio*1				
-	○	○	○	-
: Switch between crop/aspect*1				
-	○	○	○	-
: Auto Lighting Optimizer				
-	○*1	○	○	-
ND: ND filter				
-	○*1	○	○	-
WB: White balance selection				
-	○*1	○	○	-
: Picture Style				
-	○*1	○	○	-
: Protect				
-	○*1	○	○	-
★: Rating				
-	○*1	○	○	-
: Select folder				
-	○*1	○	○	-

* 1: Cannot be assigned as a function available in movie recording.

Movies

●: Default ○: Available for customization

		M-Fn		
: Zebra*2				
-	-	○	○	-
: Movie recording				
-	●*1	○	○	-
SERVO AF: Pause Movie Servo AF				
-	○*1	○	○	-
: Digital zoom*2				
-	-	○	○	-
: Standby: Low res.*2				
-	-	○	○	-

* 1: Cannot be assigned as a function available in movie recording.
* 2: Cannot be assigned as a function available in still photo shooting.

Operation

●: Default ○: Available for customization

: Flash function settings*1				
-	○	○	○	●
Gr: Quick flash group control*1				
-	○	○	○	○
DIAL FUNC: Dial function settings				
-	○*1	●	○	-
: Screen off				
-	○*1	○	○	-
: Touch Shutter*1				
-	○	○	○	-
FPS: Display frame rate setting*1				
-	○	○	○	-
: Communication function				
-	○*1	○	○	-
: Create folder*1				
-	○	○	○	-
OFF: No function (disabled)				
-	○*1	○	○	○*1

* 1: Cannot be assigned as a function available in movie recording.

Shutter btn function for movies

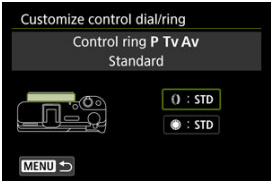
You can set the functions performed by pressing the shutter button halfway during movie recording.

Customize control dial/ring

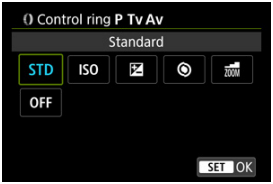
Frequently used functions can be assigned to < > < > dials.

1. **Select [: Customize control dial/ring] ( ).**

2. Select a camera control.



3. Select a function to assign.



- Press < (SET) > to set it.

Note

- The [: **Customize control dial/ring**] settings are not cleared even if you select [: **Clear all Custom Func. (C.Fn)**]. To clear the settings, select [: **Clear all customized controls**].

Functions available for each control

●: Default ○: Available for customization

	Function		
Tv	Shutter speed setting in M mode	○	-
Av	Aperture setting in M mode	●*1	-
ISO	Set ISO speed	○	-
	Exposure compensation	○	-
STD	Standard	●*2	●
	Focus	○	-
ZOOM	Step zoom	○	-
OFF	No function (disabled)	○	○

* 1: Default in <**M**> and [M] modes.
* 2: Default in <**P**>, <**Av**>, <**Tv**>, [ ], [Av], and [Tv] modes.

Note

- < >: control ring and < >: control dial.

direction to set Tv/Av

The control ring direction when setting the shutter speed and aperture value can be reversed.

- **: Normal**
- **: Reverse direction**

direction to set Tv/Av

The control dial direction when setting the shutter speed and aperture value can be reversed.

- **: Normal**
- **: Reverse direction**

Touch Shutter

Touch Shutter can be specified. When set to [**On**], [OFF] display in the lower left of the shooting screen changes to [ ], and Touch Shutter is enabled.
For Touch Shutter instructions, see Shooting with the Touch Shutter.

[Customized controls when playback]

Image jump w/

To set how the camera jumps through images, you can turn the < > dial on the playback screen in single-image display.

Note

- With [**Jump images by the specified number**], you can turn the < > dial to select the number of images to jump by.
- With [**Display by image rating**], turn the < > dial to select the rating ( ). Selecting ★ will show all rated images as you browse.

[Customized controls/Reset]

Touch control

- To disable touch operations, select [**Disable**].

Caution

Precautions for touch-screen panel operations

- Do not use sharp objects such as fingernails or ballpoint pens for touch operations.
- Do not use wet fingers for touch operations. If the screen has any moisture or if your fingers are wet, the touch-screen panel may not respond or malfunction may occur. In this case, turn off the power and wipe off the moisture with a cloth.
- Attaching a commercially available protective sheet or a sticker on the screen may impair responsiveness to touch operations.

Clear all customized controls

Selecting [: **Clear all customized controls**] clears all customized controls.

Note

- To clear settings configured with [: **Customize buttons**] and [: **Customize control dial/ring**], select [: **Clear all customized controls**].

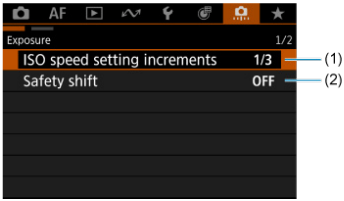
Custom Functions/My Menu

You can adjust camera functions in detail to suit your shooting preferences. You can also add menu items and Custom Functions that you adjust frequently to My Menu tabs.

- Tab Menus: Custom Functions
- Custom Function Setting Items
- Tab Menus: My Menu
- Registering My Menu

Tab Menus: Custom Functions

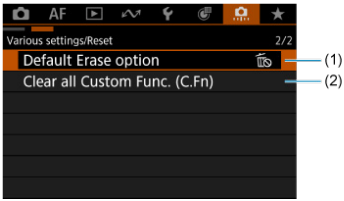
Exposure



(1) ISO speed setting increments ☆

(2) Safety shift ☆

Various settings/Reset



(1) Default Erase option ☆

(2) Clear all Custom Func. (C.Fn) ☆

Selecting [: **Clear all Custom Func. (C.Fn)**] clears all Custom Function settings.

Custom Function Setting Items

[Exposure]

[Various settings/Reset]

You can customize camera features on the [ ] tab to suit your shooting preferences. Any settings you change from default values are displayed in blue.

[Exposure]

ISO speed setting increments

You can change the manual ISO speed setting increment to a whole stop.

- **1/3: 1/3-stop**
- **1/1: 1-stop**

Note

- Even if [**1-stop**] is set, ISO speed will be automatically set in 1/3-stop increments when ISO Auto is set.

Safety shift

You can shoot with the shutter speed and aperture value automatically adjusted to enable standard exposure if standard exposure would not be available under your specified shutter speed or aperture value in <**Tv**> or <**Av**> mode.

- **OFF: Disable**
- **ON: Enable**

[Various settings/Reset]

Default Erase option

You can set which option is selected by default in the erase menu ( ), which is accessed by pressing the < > button during image playback or during review after shooting.
By setting an option other than [**Cancel**], you can simply press < > to erase images quickly.

- **: [Cancel] selected**
- **: [Erase] selected**
- **RAW: [EraseRAW] selected**
- **J/H: [Erase non-RAW] selected**

Caution

- Be careful not to erase images accidentally when an option other than [**Cancel**] is set.

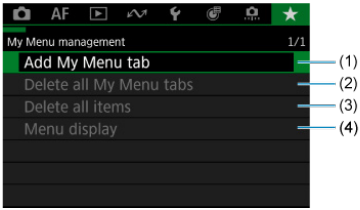
Clear all Custom Func. (C.Fn)

Selecting [: **Clear all Custom Func. (C.Fn)**] clears all Custom Function settings except [: **Customize buttons**] and [: **Customize control dial/ring**].

Note

- To clear settings configured with [: **Customize buttons**] and [: **Customize control dial/ring**], select [: **Clear all customized controls**].

Tab Menus: My Menu



(1) Add My Menu tab ☆

(2) Delete all My Menu tabs ☆

(3) Delete all items ☆

(4) Menu display ☆

Registering My Menu

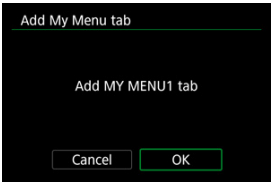
- Creating and Adding My Menu Tabs
- Registering Menu Items on My Menu Tabs
- My Menu Tab Settings
- Deleting All My Menu Tabs/Deleting All Items
- Menu Display Settings

On the My Menu tab, you can register menu items and Custom Functions you often adjust.

Creating and Adding My Menu Tabs

1. **Select [★: Add My Menu tab] ( ).**

2. **Select [OK].**

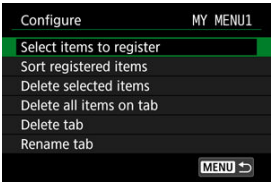


- You can create up to five My Menu tabs by repeating steps 1 and 2.

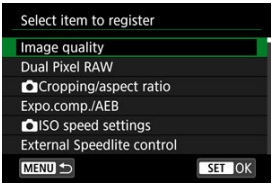
Registering Menu Items on My Menu Tabs

1. **Select [MY MENU*: Configure].**

2. **Select [Select items to register].**

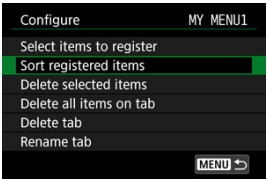


3. **Register the desired items.**



- Select an item, then press < SET >.
- Select [**OK**] on the confirmation screen.
- You can register up to six items.
- To return to the screen in step 2, press the < MENU > button.

My Menu Tab Settings



You can sort and delete items on the menu tab, and rename or delete the menu tab itself.

- **Sort registered items**
  You can change the order of the registered items in My Menu. Select [**Sort registered items**], select an item to rearrange, then press < SET >. With [⬍] displayed, press the < ▲ >< ▼ > keys to rearrange the item and then press < SET >.

- **Delete selected items/Delete all items on tab**
  You can delete any of the registered items. [**Delete selected items**] deletes one item at a time, and [**Delete all items on tab**] deletes all the registered items on the tab.

- **Delete tab**
  You can delete the current My Menu tab. Select [**Delete tab**] to delete the [**MY MENU***] tab.

- **Rename tab**
  You can rename the My Menu tab from [**MY MENU***].

1. **Select [Rename tab].**

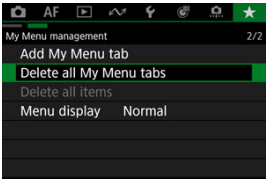
2. **Enter text.**

- Use the < ✥ > keys to select a character and then press < SET > to enter it.
- By selecting [#], you can change the input mode.
- Select [⌫] to delete a character.

3. **Confirm input.**

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

Deleting All My Menu Tabs/Deleting All Items



You can delete all the created My Menu tabs or My Menu items registered on them.

- **Delete all My Menu tabs**

  You can delete all My Menu tabs you created. When you select [**Delete all My Menu tabs**], all the tabs from [**MY MENU1**] to [**MY MENU5**] will be deleted and the [★] tab will revert to its default.

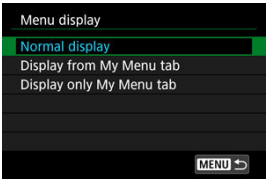
- **Delete all items**

  You can delete all the items registered under the [**MY MENU1**] to [**MY MENU5**] tabs. The tabs themselves will remain.

Caution

- Performing [**Delete tab**] or [**Delete all My Menu tabs**] will also delete tab names renamed with [**Rename tab**].

Menu Display Settings



You can select [**Menu display**] to set the menu screen that is to appear first when you press the < MENU > button.

- **Normal display**

  Displays the last displayed menu screen.

- **Display from My Menu tab**

  Displays with the [★] tab selected.

- **Display only My Menu tab**

  Restricts the display to the [★] tab ([📷]/[AF]/[▶]/[✎]/[⚡]/[⏱]/[🎥] tabs are not displayed).

Reference

This chapter provides reference information on camera features.

- Importing Images to a Computer
- Importing Images to a Smartphone
- Troubleshooting Guide
- Error Codes
- Information Display
- Specifications

Importing Images to a Computer

- Connecting to a Computer with an Interface Cable
- Using a Card Reader

Connecting to a Computer with an Interface Cable

You can use an interface cable to import images from the camera to a computer.

Caution

- With a Wi-Fi connection established, the camera cannot communicate with the computer even if they are connected with an interface cable.

Using a Card Reader

You can use a card reader to import images to a computer.

1. **Install Digital Photo Professional ( ).**

2. **Insert the card into the card reader.**

3. **Use Digital Photo Professional to import the images.**

   - Refer to the Digital Photo Professional Instruction Manual.

Note

- When downloading images from the camera to a computer with a card reader, copy the DCIM folder on the card to the computer.

Importing Images to a Smartphone

Preparation

Using Camera Connect

Using Smartphone Features

You can import images captured with the camera to a smartphone by connecting the smartphone to the camera with Multi-Function Shoe Adapter for Smartphone Link AD-P1 (sold separately, for Android smartphones only) or a USB cable.

Preparation

1. **Select an option in [: Choose USB connection app] ( ).**

   - Select [**Photo Import/Remote Control**] when connecting an Android smartphone, or when connecting an iPhone and using the Photos app.
   - Select [**Canon app(s) for iPhone**] when connecting an iPhone and using Camera Connect.
   - After the settings are complete, turn the camera off.

2. **Connect the camera to the smartphone with AD-P1 or a USB cable.**

   - When using AD-P1, refer to the instruction manual included with AD-P1.
   - Use of a Canon USB cable (Interface Cable IFC-100U) is recommended when connecting Android smartphones.
   - For details on USB cables used to connect iPhones, visit the Canon website.

Using Camera Connect

1. **Install Camera Connect on the smartphone and start it.**

   - For details on installing Camera Connect, see “Installing Camera Connect on a Smartphone” ( ).

2. **Turn the camera on.**

3. **Tap [Images on camera].**

   - Select images displayed to import them to the smartphone.

1. **Turn the camera on.**

2. **Use the smartphone to import images.**

   - Android smartphones: In the [**Files**] menu, select [**Canon Digital Camera ***]**, then import images in the DCIM folder.
   - iPhones: Start the Photos app, then import images from the card.

Troubleshooting Guide

- Power-related problems
- Shooting-related problems
- Problems with wireless features
- Operation problems
- Display problems
- Playback problems
- Problems with the multi-function shoe

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

Power-related problems

Batteries cannot be charged with the battery charger.

- Do not use any battery packs other than a genuine Canon Battery Pack LP-E17.
- In case of charging or charger issues, see Charging the Battery.

The battery charger lamp is blinking.

- Orange blinking of the lamp indicates that a protection circuit has prevented charging because (1) there is a problem with the battery charger or battery, or (2) communication with a non-Canon battery has failed. In the case of (1), unplug the charger, reinsert the battery, and wait a few minutes before plugging the charger in again. If the problem persists, take the camera to the nearest Canon Service Center.

Batteries cannot be charged with the USB power adapter (sold separately).

- Batteries are not charged while the camera is on. However, batteries are charged during auto power off.
- Operating the camera will stop charging in progress.

The access lamp blinks during charging with the USB power adapter.

- In case of charging problems, the access lamp blinks in orange and the protective circuit stops charging. In this case, unplug the power cord, reattach the battery, and wait a few minutes before plugging it in again. If the problem persists, take the camera to the nearest Canon Service Center.
- If batteries are hot or cold, the access lamp blinks in orange and the protective circuit stops charging. In this case, let the battery adjust to the ambient temperature before attempting to charge it again.

The access lamp is not lit during charging with the USB power adapter.

- Try unplugging the USB power adapter and plugging it in again.

The camera cannot be powered with the USB power adapter.

- Check the remaining battery level. When batteries are depleted, the adapter charges them. In this case, power is not supplied to the camera.

The camera is not activated even when turned on.

- Make sure the battery is inserted properly in the camera ( ).
- Make sure the card/battery compartment cover is closed ( ).
- Charge the battery ( ).

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

- If the power is turned off while an image is being recorded to the card, the access lamp (green) will remain on or continue to blink for a few seconds. When the image recording is complete, the power will turn off automatically.

[Battery communication error. Does this battery/ do these batteries display the Canon logo?] is displayed.

- Do not use any battery packs other than a genuine Canon Battery Pack LP-E17.
- Remove and install the battery again ( ).
- If the electrical contacts are dirty, use a soft cloth to clean them.

The battery becomes exhausted quickly.

- Use a fully charged battery ( ).
- The battery performance may have degraded. See [: **Battery info.**] to check the battery recharge performance level ( ). If the battery performance is poor, replace the battery with a new one.
- The number of available shots will decrease with any of the following operations:
  - Pressing the shutter button halfway for a prolonged period
  - Activating the AF frequently without taking a picture
  - Using the lens's Image Stabilizer
  - Using the wireless communication functions

The camera turns off by itself.

- Auto power off is in effect. To deactivate auto power off, set [**Auto power off**] in [: **Power saving**] to [**Disable**] ( ).
- Even if [**Auto power off**] is set to [**Disable**], the screen will still turn off after the camera is left idle for the time set in [**Screen off**] (although the camera itself remains on).

Shooting-related problems

No images can be shot or recorded.

- Make sure the card is properly inserted ( ).
- Slide the card's write-protect switch to the Write/Erase setting ( ).
- 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 the Battery and Card and Error Codes.

An error message is displayed when the card is inserted in another camera.

- Since SDXC cards are formatted in exFAT, if you format a card with this camera and then insert it into another camera, an error may be displayed and it may not be possible to use the card.

The image is out of focus or blurred.

- Set the focus mode to [**AF**] ( ).
- Press the shutter button gently to prevent camera shake ( ).
- In low light, the shutter speed may become slow. Use a faster shutter speed ( ), set a higher ISO speed ( ), use flash ( ), or use a tripod.
- See Minimizing blurred photos.

I cannot lock the focus and recompose the shot.

- Set the AF operation to One-Shot AF ( ). Shooting with the focus locked is not possible with Servo AF ( ).

The continuous shooting speed is slow.

- High-speed continuous shooting may be slower depending on the battery level, ambient temperature, shutter speed, aperture value, subject conditions, brightness, AF operation, use of flash, shooting settings, and other conditions (,).

The maximum burst during continuous shooting is lower.

- Shooting intricate subjects such as fields of grass may result in larger file sizes, and the actual maximum burst may be lower than the guidelines in Still photo file size/Number of shots available/Maximum burst for continuous shooting.

Even after I change the card, the maximum burst displayed for continuous shooting does not change.

- Estimated maximum burst does not change when you switch cards, even if you switch to a high-speed card. Maximum burst listed in Still photo file size/Number of shots available/Maximum burst for continuous shooting is based on the standard Canon test card, and the actual maximum burst is higher for cards with faster writing speeds. For this reason, estimated maximum burst may differ from actual maximum burst.

ISO 100 cannot be set for still photo shooting.

- The minimum speed in the ISO speed range is ISO 200 when [: **Highlight tone priority**] is set to [**Enable**] or [**Enhanced**].

Expanded ISO speeds cannot be selected for still photo shooting.

- Check the [**ISO speed**] setting in [: **ISO speed settings**].
- H (Expanded ISO speeds) cannot be selected when [: **Highlight tone priority**] is set to [**Enable**] or [**Enhanced**].

Even if I set a decreased exposure compensation, the image comes out bright.

- Set [: **Auto Lighting Optimizer**] to [**Disable**] ( ). When [**Low**], [**Standard**], or [**High**] is set, even if you set a decreased exposure compensation or flash exposure compensation, the image may come out bright.

I cannot set the exposure compensation when both manual exposure and ISO Auto are set.

- See M: Manual Exposure Shooting to set the exposure compensation.

Using flash in <Av> or <P> mode lowers the shutter speed.

- Set [**Slow synchro**] in [: **External Speedlite control**] to [**1/250-1/60sec. auto**] or [**1/250 sec. (fixed)**] ( ).

The external Speedlite does not fire.

- Make sure any external flash units are securely attached to the camera.

The Speedlite always fires at full output.

- Flash units other than EL/EX series Speedlites used in autoflash mode always fire at full output ( ).
- The flash always fires at full output when [**Flash metering mode**] in external flash Custom Function settings is set to [**1:TTL**] (autoflash) ( ).

External flash exposure compensation cannot be set.

- If flash exposure compensation is set with the external Speedlite, compensation amount cannot be set with the camera. When the Speedlite's flash exposure compensation is canceled (set to 0), flash exposure compensation can be set with the camera.

High-speed sync is not available in <Av> mode.

- Set [**Slow synchro**] in [: **External Speedlite control**] to an option other than [**1/250 sec. (fixed)**] ( ).

Remote control shooting is not possible.

- Check the position of the remote control's release timing switch.
- If you are using Wireless Remote Control BR-E1, see Remote Control Shooting or Connecting to a Wireless Remote Control.
- To use a remote control for time-lapse movie recording, see Time-Lapse Movies.

A red [FAN] icon is displayed.

- If there is a problem with the cooling fan, [FAN] flashes in red. Take the camera to the nearest Canon Service Center.

A white [ ] or red [ ] icon is displayed during movie recording.

- Indicates that the camera's internal temperature is high. For details, see the information on warning indicator display during shooting or recording ( ).

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 Card performance requirements (movie recording) [write/read speed]. To find out the card's writing speed, refer to the card manufacturer's website, etc.
- Perform low-level formatting to initialize the card if the card's writing or reading speed seems slow ( ).
- Recording stops automatically once your movie reaches 6 hr. (or 1 hr. 30 min. for a High Frame Rate movie).

The ISO speed cannot be set for movie recording.

- ISO speed is set automatically in [🎥] recording mode. In [🎥M] mode, you can manually set the ISO speed (⚙).
- The minimum speed in the ISO speed range is ISO 200 when [📷: **Highlight tone priority**] is set to [**Enable**] or [**Enhanced**].

Expanded ISO speeds cannot be selected for movie recording.

- Check the [**ISO speed**] setting in [📷: 🎥**ISO speed settings**].
- Expanded ISO speeds are not available when [📷: **Highlight tone priority**] is set to [**Enable**] or [**Enhanced**].

The exposure changes during movie recording.

- If you change the shutter speed or aperture value during movie recording, the changes in the exposure may be recorded.
- Recording a few test movies is recommended if you intend to perform zooming during movie recording. Zooming as you record movies may cause exposure changes or lens sounds to be recorded, or loss of focus.

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. In [🎥M] mode, using a slower shutter speed may reduce the problem. The problem may be more noticeable in time-lapse movie recording.

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. The problem may be more noticeable in time-lapse movie recording.

Sound is not recorded in movies.

- Sound is not recorded in High Frame Rate movies.

A time code is not added.

- Time codes are not added when you record High Frame Rate movies with [**Count up**] in [: **Time code**] set to [**Free run**] ( ). Additionally, no time code is added to HDMI video output ( ).

Time codes advance faster than the actual time.

- Time codes in High Frame Rate movie recording advance 4 sec. per second ( ).

I cannot take still photos during movie recording.

- Still photos cannot be taken during movie recording. To shoot still photos, stop recording the movie, then select a shooting mode for still photos.

I cannot record movies during still photo shooting.

- It may not be possible to record movies during still photo shooting if operations such as extended Live View display increase the camera's internal temperature. Turn off the camera or take other measures, and wait until the camera cools down.
- Reducing the movie recording size may enable recording.

Problems with wireless features

Cannot pair with a smartphone.

- Use a smartphone compliant with Bluetooth Specification Version 4.1 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. In this case, remove the camera's registration retained in the Bluetooth settings on the smartphone and try pairing again ( ).

Wi-Fi functions cannot be set.

- If the camera is connected to a computer or another device with an interface cable, Wi-Fi functions cannot be set. Disconnect the interface cable before setting any functions ( ).

A device connected with an interface cable cannot be used.

- Other devices, such as computers, cannot be used with the camera by connecting them with an interface cable while the camera is connected to devices via Wi-Fi. Terminate the Wi-Fi connection before connecting the interface cable.

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.

- Even with a combination of the same camera and smartphone, if you have changed the settings or selected a different setting, reconnection may not be established even after selecting the same SSID. 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.

Cannot connect via Wi-Fi to a Wi-Fi printer.

- Update the printer firmware.
- Connect using the printer as an access point.
- On the camera, set [**Security**] to [**WPA2**] ( ).

Operation problems

Settings change when I switch from still photo shooting to movie recording or vice versa.

- Separate settings are retained for use when shooting still photos and recording movies.

Touch operation is not possible.

- Make sure that [: **Touch control**] is set to [**On**] ( ).

A camera button or dial does not work as expected.

- In movie recording, check the [: **Shutter btn function for movies**] setting ( ).
- Check the [: **Customize buttons**] and [: **Customize control dial/ring**] settings (,).

Display problems

The menu screen shows fewer tabs and items.

- Tabs and items on the menu screen vary for still photos and movies.

The display starts with [★] My Menu, or the [★] tab alone is displayed.

- [**Menu display**] on the [★] tab is set to [**Display from My Menu tab**] or [**Display only My Menu tab**]. Set [**Normal display**] ( ).

The file name's first character is an underscore ("_").

- Set [: **Color space**] to [**sRGB**]. If [**Adobe RGB**] is set, the first character will be an underscore ( ).

The file numbering does not start from 0001.

- If the card already contains recorded images, the image number may not start from 0001 ( ).

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 ( ).

The date and time are not in the image.

- The shooting date and time do not appear in the image. The date and time are recorded in the image data as shooting information. When you print photos, this information can be used to include the date and time ( ).

[###] is displayed.

- If the number of images recorded on the card exceeds the number the camera can display, [**###**] will be displayed.

The screen does not display a clear image.

- If the screen is dirty, use a soft cloth to clean it.
- The screen display may seem slightly slow in low temperatures or may look black in high temperatures. It will return to normal at room temperature.

Playback problems

Part of the image blinks in black.

- [▶: **Highlight alert**] is set to [**Enable**] ( ).

The image cannot be erased.

- If the image is protected, it cannot be erased ( ).

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.

Only few images can be played back.

- The images have been filtered for playback with [▶: **Set image search conditions**] ( ). Clear the image search conditions.

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

- The camera's built-in microphone may also record mechanical sounds of the lens or sounds of camera/lens operations if AF operations are performed or the camera or lens is operated during movie recording. If so, it may help reduce these sounds if you use an external microphone equipped with an output plug and position it away from the camera and lens.

Movie playback stops by itself.

- Extended movie playback or movie playback under high ambient temperature may cause the camera's internal temperature to rise, and movie playback may stop automatically.
  If this happens, playback is disabled until the camera's internal temperature decreases, so turn off the power and let the camera cool down a while.

The movie appears to freeze momentarily.

- Significant change in the exposure level during autoexposure movie recording may cause recording to stop momentarily until the brightness stabilizes. In this case, record in [M] mode ( ).

The movie is played in slow motion.

- High Frame Rate movies are recorded at 29.97 fps or 25.00 fps, so they are played in slow motion at 1/4 speed.

No picture appears on the television.

- Make sure [: **Video system**] is set to [**For NTSC**] or [**For PAL**] correctly for the video system of your television.
- Make sure the HDMI cable's plug is inserted all the way in ( ).

There are multiple movie files for a single movie recording.

- If the movie file size reaches 4 GB, another movie file will be created automatically ( ). However, if you use an SDXC card formatted with the camera, you can record a movie in a single file even if it exceeds 4 GB.

My card reader does not recognize the card.

- Depending on the card reader used and the computer's operating system, SDXC cards may not be correctly recognized. In this case, connect the camera to the computer with the interface cable and import the images to the computer.

Images cannot be resized or cropped.

- This camera cannot resize JPEG S2 images, RAW images, or frame-grab images from 4K movies saved as still photos ( ).
- This camera cannot crop RAW images or frame-grab images from 4K movies saved as still photos ( ).

Problems with the multi-function shoe

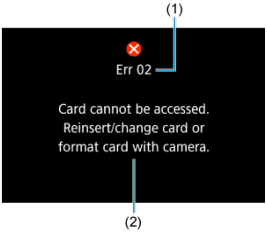
A message was displayed on the screen when I attached an accessory.

- If [**Communication error Reattach accessory**] is displayed, reattach the accessory. In case this message is displayed again after reattachment, make sure the terminals of the multi-function shoe and accessory are clean and dry. If you cannot remove the dirt or moisture, contact a Canon Service Center.
- If [**Accessory unavailable status**] is displayed, check the terminals of the multi-function shoe and accessory and make sure the accessory is not damaged.

I cannot use USB on the camera while using Multi-Function Shoe Adapter for Smartphone Link AD-P1.

- The camera USB port is not available while Multi-Function Shoe Adapter for Smartphone Link AD-P1 is in use. To use the camera USB port, disconnect AD-P1.

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 (Err xx) and request service.

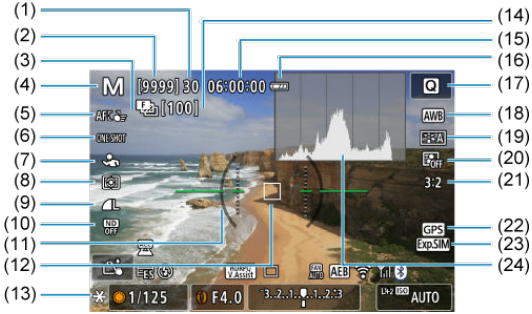
Information Display

- Still Photo Shooting Screen
- Movie Recording Screen
- Scene Icons
- Image Stabilizer Icons
- Playback Screen

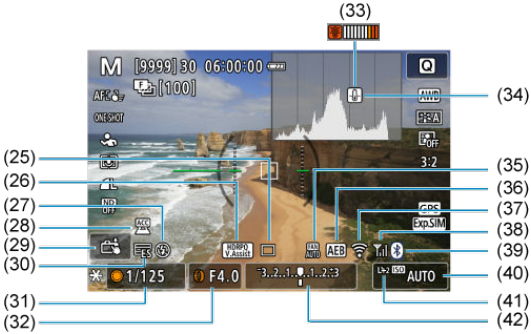
Still Photo Shooting Screen

Each time you press the < INFO > button, the information display will change.

- The display will show only the settings currently applied.



(1)	Maximum burst
(2)	Number of available shots/Sec. until self-timer shoots
(3)	Focus bracketing/HDR shooting/Multi Shot Noise Reduction
(4)	Shooting mode
(5)	AF area
(6)	AF operation
(7)	Subject to detect
(8)	Metering mode
(9)	Image quality
(10)	ND filter
(11)	Electronic level
(12)	AF point (1-point AF)
(13)	Release AE Lock
(14)	Number of remaining shots for focus bracketing
(15)	Movie recording time available
(16)	Battery level
(17)	Quick Control button
(18)	White balance/White balance correction
(19)	Picture Style
(20)	Creative filters
(21)	Still image aspect ratio
(22)	GPS
(23)	Exposure simulation
(24)	Histogram (Brightness/RGB)



(25)	Drive mode
(26)	HDR PQ
(27)	Flash ready/FE lock/High-speed sync
(28)	Accessory attached indicator
(29)	Electronic shutter
(30)	Touch Shutter
(31)	Shutter speed
(32)	Aperture value
(33)	Overheating warning
(34)	Still photo image quality warning
(35)	Cooling fan
(36)	AEB/FEB
(37)	Wi-Fi function
(38)	Wi-Fi signal strength
(39)	Bluetooth function
(40)	ISO speed
(41)	Highlight tone priority
(42)	Exposure level indicator/Exposure compensation

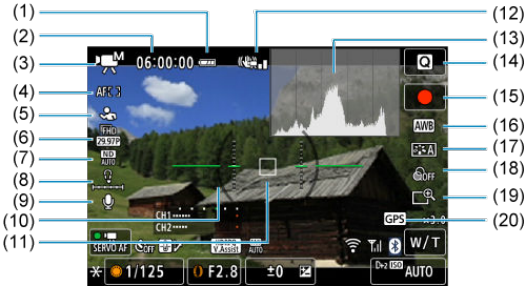
Note

- You can specify the information displayed in response to pressing the < INFO > button ( ).
- The electronic level is not displayed when the camera is connected via HDMI to a television.
- Other icons may be displayed temporarily after setting adjustments.

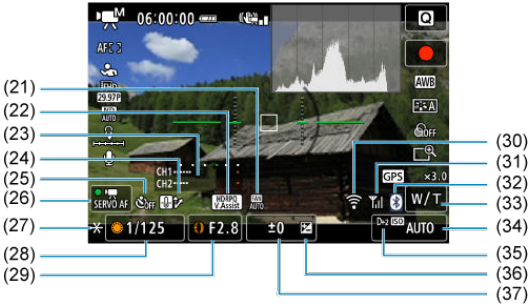
Movie Recording Screen

Each time you press the < INFO > button, the information display will change.

- The display will show only the settings currently applied.



(1)	Battery level
(2)	Movie recording time available/Elapsed recording time
(3)	Shooting mode
(4)	AF area
(5)	Subject to detect
(6)	Movie recording size
(7)	ND filter
(8)	Headphones
(9)	Microphone
(10)	Electronic level
(11)	AF point (1-point AF)
(12)	Movie digital IS
(13)	Histogram (Brightness/RGB)
(14)	Quick Control button
(15)	Movie shooting button
(16)	White balance/White balance correction
(17)	Picture Style
(18)	Creative filters
(19)	Digital zoom
(20)	GPS



(21)	Cooling fan
(22)	HDR PQ
(23)	Audio recording level indicator (manual)
(24)	Overheat control
(25)	Movie self-timer
(26)	Movie Servo AF
(27)	AE lock
(28)	Shutter speed
(29)	Aperture value
(30)	Wi-Fi function
(31)	Wi-Fi signal strength
(32)	Bluetooth function
(33)	Digital zoom
(34)	ISO speed
(35)	Highlight tone priority
(36)	Exposure compensation
(37)	Exposure level indicator (metering levels)

Caution

- You can specify the information displayed in response to pressing the < INFO > button ( ).
- The electronic level is not displayed when the camera is connected via HDMI to a television.
- The electronic level, grid lines, and histogram cannot be displayed during movie recording (and if they are currently displayed, recording a movie will clear the display).
- When movie recording starts, the movie recording remaining time will change to the elapsed time.

Note

- Other icons may be displayed temporarily after setting adjustments.

Scene Icons

In < A+ > shooting mode, the camera detects the type of scene and sets all settings accordingly. The detected scene type is indicated in the upper left of the screen.

Subject / Background	People		Subjects Other Than People			Background Color
		In Motion*1	Nature/ Outdoor Scene	In Motion*1	Close	
Bright						Gray
Backlit						
Blue Sky Included						Light blue
Backlit						
Sunset	–	–		–	–	Orange
Spotlight						Dark blue
Dark						
With Tripod*1	*2				–	

* 1: Not displayed during movie recording.
* 2: Displayed when all the following conditions apply.
The shooting scene is dark, it is a night scene, and the camera is mounted on a tripod.

Note

- For certain scenes or shooting conditions, the icon displayed may not match the actual scene.
- The icon may blink when [: A+ **Assist**] is set to [**Advanced** A+] ( ).

Image Stabilizer Icons

When the Shooting mode is set to < >, the optimal image stabilization is automatically set according to the shooting conditions, and the following icons are displayed.

	Image stabilization for still images (Normal)
	Image stabilization for still images when panning (Panning)*1
	Image stabilization for angular camera shake and shift-shake in macro shots (Hybrid IS). For movies, [] is displayed and [] image stabilization is also applied.
	Image stabilization for movies, reducing strong camera shake, as when recording while walking (Dynamic)
	Stop image stabilization when the camera is mounted on a tripod, etc. However, [] is displayed during movie recording, and image stabilization is applied to reduce the impact of vibration due to wind, etc. (Tripod IS).

* When [**IS mode**] is set to [**Off**] under [: **IS (Image Stabilizer) mode**], the Image Stabilizer icons are not displayed.
* 1: Displayed when shooting (panning) while following a moving subject with the camera. When following a subject that is moving in the horizontal direction, compensation is only applied to camera shaking in the vertical direction, and the horizontal compensation stops. In addition, when following a subject that is moving in the vertical direction, compensation is only applied to camera shaking in the horizontal direction.

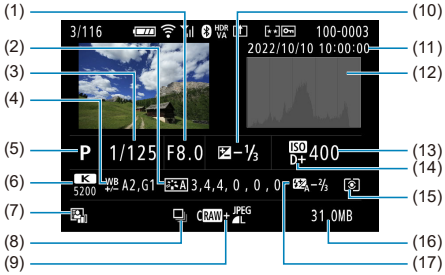
Basic information display for still photos

(1)	HDR output status/View Assist
(2)	Bluetooth function
(3)	Wi-Fi signal strength
(4)	Wi-Fi function
(5)	Battery level
(6)	Current image no./Total images/No. of images found
(7)	Shutter speed
(8)	Aperture value
(9)	Exposure compensation amount
(10)	Already sent to a computer/smartphone
(11)	Rating
(12)	Image protection
(13)	Folder no.-File no.
(14)	Image quality/Edited image/Cropping/Frame Grab
(15)	ISO speed
(16)	Highlight tone priority

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.

Detailed information display for still photos



(1)	Aperture value
(2)	Picture Style/Settings
(3)	Shutter speed
(4)	White balance correction/Bracketing
(5)	Shooting mode/Frame Grab
(6)	White balance
(7)	Auto Lighting Optimizer
(8)	First image of scene
(9)	Image quality/Edited image/Cropping
(10)	Exposure compensation amount
(11)	Shooting date and time
(12)	Histogram (Brightness/RGB)
(13)	ISO speed
(14)	Highlight tone priority
(15)	Metering mode
(16)	File size
(17)	Flash exposure compensation amount/Bounce/HDR shooting/Multi Shot Noise Reduction

* For images captured in RAW+JPEG/HEIF shooting, indicates RAW file sizes.
* Lines indicating the image area are displayed for images taken with the aspect ratio set ( ) and with RAW or RAW+JPEG set for image quality.
* For images with added cropping information, lines are shown to indicate the image area.

* During flash photography without flash exposure compensation, [ ] will be displayed.

* [ ] indicates images shot with bounce flash photography.
* The dynamic range adjustment amount is shown for images captured in HDR shooting.

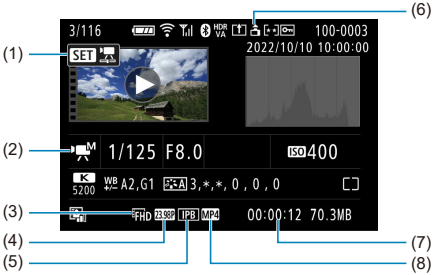
* [NR] indicates images processed with Multi Shot Noise Reduction.

* [ ] indicates test shots for time-lapse movies.

* [ ] indicates images created and saved by performing resizing, cropping, or frame-grabbing.

* [ ] indicates images cropped and then saved.

Detailed information display for movies



(1)	Movie playback
(2)	Movie recording mode/High Frame Rate mode
(3)	Movie recording size
(4)	Frame rate
(5)	Compression method
(6)	Movie orientation information
(7)	Recording time/Time code
(8)	Movie recording format

* For simplicity, explanations are omitted for items that are also included in basic/detailed information display for still photos, which are not shown here.

Note

- During movie playback, "*, *" is displayed for the [**Fineness**] and [**Threshold**] parameters of [**Sharpness**] in [**Picture Style**].

Specifications

Lens

Focal length	Movie recording (4K, 16:9)	8.2–25.6 mm Equivalent to approx. 17–52 mm (35 mm equivalent)
	Still photo shooting (without cropping)	8.2–25.6 mm Equivalent to approx. 16–50 mm (35 mm equivalent)
	Still photo shooting (1.4x crop)	8.2–25.6 mm Equivalent to approx. 23–71 mm (35 mm equivalent)
Angle of view	Movie recording (4K, 16:9)	104.4–44.9°
	Still photo shooting (without cropping)	107.0–46.8°
	Still photo shooting (1.4x crop)	86.8–33.7°
Aperture	Number of blades	9
	F-number (max. aperture)	f/2.8–4.5
	Minimum aperture	WIDE / TELE: f/11
Lens configuration		9 elements in 8 groups
Focusing range		WIDE: 0.05 m–∞ / 0.16 ft–∞ TELE: 0.15 m–∞ / 0.49 ft–∞

Image sensor

Type: 1.4 type CMOS sensor

Effective pixels*1*2	Movie recording	Max. approx. 18.7 megapixels
	Still photo shooting	Max. approx. 22.3 megapixels
Total pixels*1		Approx. 23.9 megapixels
Screen size		Approx. 18.4×12.3 mm
Dual Pixel CMOS AF		Supported

* 1: Rounded to the nearest 100,000.
* 2: The effective pixel count may be lower with certain image processing.

Recording system

Image recording format: Compliant with Design rule for Camera File system 2.0 and Exif 2.31*1

* 1: Supports time difference information.

Image type/recording format/extension

Image type / recording format		Extension
Still photo	JPEG	.JPG
	HEIF	.HIF
	RAW	.CR3
	C-RAW	
	Dual Pixel RAW	
Movie	ALL-I*1 / IPB (Standard) / IPB (Light)	.MP4

* 1: Time-lapse movies only.

Recording media

Recording media

SDXC/SDHC/SD memory cards

UHS-II	Supported
UHS-I	Supported
UHS speed class	Supported
SD speed class	Supported

Still photo recording

Recording pixel count

Image size		Resolution (Pixels)				
		Still photo cropping / aspect ratio				
		3:2 (aspect ratio)	1.4× (crop)*1	1:1 (aspect ratio)	4:3 (aspect ratio)	16:9 (aspect ratio)
JPEG / HEIF	L	Approx. 22.1 megapixels (5760×3840)	Approx. 10.8 megapixels (4032×2688)	Approx. 14.7 megapixels (3840×3840)	Approx. 19.7 megapixels (5120×3840)	Approx. 18.7 megapixels (5760×3240)
	M	9.8 megapixels (3840×2560)		Approx. 6.6 megapixels (2560×2560)	Approx. 8.7 megapixels*2 (3408×2560)	Approx. 8.3 megapixels (3840×2160)
	S1	Approx. 5.5 megapixels (2880×1920)		Approx. 3.7 megapixels (1920×1920)	Approx. 4.9 megapixels (2560×1920)	Approx. 4.7 megapixels*2 (2880×1616)
	S2	Approx. 3.8 megapixels (2400×1600)	Approx. 3.8 megapixels (2400×1600)	Approx. 2.6 megapixels (1600×1600)	Approx. 3.4 megapixels*2 (2112×1600)	Approx. 3.2 megapixels*2 (2400×1344)
RAW C-RAW Dual Pixel RAW	RAW / C RAW	Approx. 22.1 megapixels (5760×3840)	Approx. 10.8 megapixels (4032×2688)	Approx. 22.1 megapixels*2 (5760×3840)		

* Values for recorded pixels are rounded to the nearest 100,000.
* RAW/C-RAW images are generated in “3:2”, and the set aspect ratio information is appended to the images.
* JPEG/HEIF images are generated in the set aspect ratio.
* These aspect ratios and pixel counts also apply to resizing.
* 1: Angle of view of approx. 1.4 times the focal length.
* 2: Aspect ratios are slightly different for these image sizes.

Still photo file size/Number of shots available/Maximum burst for continuous shooting

Mechanical shutter

Image quality		File size [Approx. MB]	Available shots [Approx.]*1	Maximum burst [Approx.]*1
JPEG*2	◢L	7.6	3970	160
	▟L	4.1	7260	370
	◢M	4.3	7040	560
	▟M	2.4	12240	560
	◢S1	2.9	10430	740
	▟S1	1.7	17050	740
	S2	1.8	16640	960
HEIF*3	◢L	7.2	4110	150
	▟L	5.5	5310	210
	◢M	4.5	6420	290
	▟M	3.5	8060	310
	◢S1	3.1	9110	360
	▟S1	2.6	11050	380
	S2	1.8	14660	460
RAW*2*4	RAW	23.5	1290	24
	CRAW	11.7	2620	69
RAW*4+JPEG*2	RAW+◢L	23.5 + 7.6	970	22
	CRAW+◢L	11.7 + 7.6	1580	53
RAW*4+HEIF*3	RAW+◢L	25.5 + 7.2	910	22
	CRAW+◢L	13.7 + 7.2	1430	53

* 1: Available shots and maximum burst for SD cards applies to 32 GB UHS-I SD cards conforming to Canon testing standards.
* 2: When [**HDR shooting (PQ)**: **Disable**] is set.
* 3: When [**HDR shooting (PQ)**: **Enable**] is set.
* 4: When [**Dual Pixel RAW**: **Disable**] is set.
* Maximum burst as measured under conditions conforming to Canon testing standards (One-shot AF, High-speed continuous shooting+, ISO 100, and Standard Picture Style).
* File size varies by shooting conditions (such as cropping/aspect ratio, subject, ISO speed, and Picture Style).
* Available shots and maximum burst varies depending on shooting conditions (such as cropping/aspect ratio, subject, memory card brand, ISO speed, and Picture Style).

Electronic shutter

Image quality		File size [Approx. MB]	Available shots [Approx.]*1	Maximum burst [Approx.]*1
JPEG*2	◢L	See "Mechanical shutter".		69
	▟L			69
	◢M			72
	▟M			72
	◢S1			72
	▟S1			72
	S2			72
HEIF*3	◢L			64
	▟L			64
	◢M			73
	▟M			73
	◢S1			73
	▟S1			73
	S2			74
RAW*2*4	RAW			19
	CRAW			45
RAW*4+JPEG*2	RAW+◢L			19
	CRAW+◢L			45
RAW*4+HEIF*3	RAW+◢L			16
	CRAW+◢L			45

* 1: Available shots and maximum burst for SD cards applies to 32 GB UHS-I SD cards conforming to Canon testing standards.
* 2: When [**HDR shooting (PQ)**: **Disable**] is set.
* 3: When [**HDR shooting (PQ)**: **Enable**] is set.
* 4: When [**Dual Pixel RAW**: **Disable**] is set.
* Maximum burst as measured under conditions conforming to Canon testing standards (One-shot AF, High-speed continuous shooting+, ISO 100, and Standard Picture Style).
* File size varies by shooting conditions (such as cropping/aspect ratio, subject, ISO speed, and Picture Style).
* Available shots and maximum burst varies depending on shooting conditions (such as cropping/aspect ratio, subject, memory card brand, ISO speed, and Picture Style).

Movie recording

Movie recording format

Canon Log		OFF		ON (Canon Log 3)
HDR PQ		OFF	ON	OFF
Container format		MP4		
Compression		H.264 / MPEG-4 AVC	H.265 / HEVC	
Color sampling method		YCbCr 4:2:0	YCbCr 4:2:2	
Standards compliance		Rec. ITU-R BT.709	Rec. ITU-R BT.2100	—
Audio	IPB (Standard)	AAC / Linea PCM		
	IPB (Light)	AAC / Linea PCM		

Movie recording size

	Resolution	Aspect ratio	Frame rate (fps)		Video compression format	Audio compression format
			NTSC	PAL		
4K	3840×2160 (UHD)	16:9	29.97 23.98	25.00	IPB (Standard) IPB (Light)	AAC Linear PCM
4K (cropped)*1			59.94	50.00	IPB (Standard) IPB (Light)	AAC Linear PCM
4K time-lapse movies*5			29.97*2	25.00*2	ALL-I	
Full HD High Frame Rate movies*3	1920×1080		119.88*4	100.00*4	IPB (Standard) IPB (Light)	
Full HD			59.94	50.00	IPB (Standard) IPB (Light)	AAC Linear PCM
			29.97 23.98	25.00		
Full HD time-lapse movies*5			29.97*2	25.00*2	ALL-I	
Creative filters*6			29.97 23.98	25.00	IPB (Standard) IPB (Light)	AAC Linear PCM

* 1: 4K 59.94 / 50.00 fps will result in cropped shooting.
* 2: Playback frame rate.
* 3: No audio is recorded for High Frame Rate movies.
* 4: Recording frame rate.
* 5: No audio is recorded for time-lapse movies.
* 6: No audio is recorded for miniature effect movies.

Color sampling method

Recording format		Internal recording		HDMI output	
		Color sampling	Color space	Color sampling	Color space
4K / Full HD	8 bits	YCbCr 4:2:0	BT.709	YCbCr 4:2:0	BT.709
	Canon Log 3 10 bits	YCbCr 4:2:2	BT.709	YCbCr 4:2:2	BT.709
			BT.2020		BT.2020*1
			Cinema Gamut		
	HDR PQ 10 bits	YCbCr 4:2:2	BT.2100 (PQ)	YCbCr 4:2:2	BT.2100 (PQ)*2

* 1: When connected to a BT.2020 monitor.
* 2: When connected to an HDR display supported monitor.

Built-in microphone: Stereo microphones

Estimated recording time, movie bit rate, and file size
Canon Log: OFF, HDR PQ: OFF

Movie recording size				Total recording time (Approx.)			Movie bit rate (Approx. Mbps)	File size (Approx. MB/min.)
Movie recording	Frame rate (fps)		Compres-sion method	32 GB	128 GB	512 GB		
	NTSC	PAL						
4K (cropped)	59.94	50.00	IPB (Standard)	18 min.	1 hr. 14 min.	4 hr. 56 min.	230	1647
			IPB (Light)	35 min.	2 hr. 21 min.	9 hr. 27 min.	120	861
4K	29.97 23.98	25.00	IPB (Standard)	35 min.	2 hr. 21 min.	9 hr. 27 min.	120	861
			IPB (Light)	1 hr. 10 min.	4 hr. 43 min.	18 hr. 52 min.	60	432
Full HD High Frame Rate movies	119.88	100.00	IPB (Standard)	35 min.	2 hr. 22 min.	9 hr. 28 min.	120	859
			IPB (Light)	1 hr. 00 min.	4 hr. 3 min.	16 hr. 15 min.	70	501
Full HD	59.94	50.00	IPB (Standard)	1 hr. 10 min.	4 hr. 43 min.	18 hr. 52 min.	60	432
			IPB (Light)	2 hr. 1 min.	8 hr. 4 min.	32 hr. 15 min.	35	253
	29.97 23.98	25.00	IPB (Standard)	2 hr. 20 min.	9 hr. 23 min.	37 hr. 35 min.	30	217
			IPB (Light)	5 hr. 47 min.	23 hr. 11 min.	92 hr. 47 min.	12	88
4K time-lapse movies	29.97	25.00	ALL-I	9 min.	36 min.	2 hr. 25 min.	470	3362
Full HD time-lapse movies	29.97	25.00	ALL-I	47 min.	3 hr. 9 min.	12 hr. 38 min.	90	644

* Bit rate only applies to video output, not audio or metadata.
* When [**Audio format**: **AAC/16bit/2CH**] is set.
* Movie recording stops when the maximum recording time per movie is reached.
* Sound is not recorded for approx. the last two frames when the compression method for movie recording quality is IPB (Standard) or IPB (Light). Moreover, the video and sound may be slightly out of sync when movies are played back in Windows.

Canon Log: ON, or HDR PQ: ON

Movie recording size				Total recording time (Approx.)			Movie bit rate (Approx. Mbps)	File size (Approx. MB/min.)
Movie recording	Frame rate (fps)		Compres-sion method	32 GB	128 GB	512 GB		
	NTSC	PAL						
4K (cropped)	59.94	50.00	IPB (Standard)	12 min.	50 min.	3 hr. 20 min.	340	2434
			IPB (Light)	25 min.	1 hr. 40 min.	6 hr. 40 min.	170	1218
4K	29.97 23.98	25.00	IPB (Standard)	25 min.	1 hr. 40 min.	6 hr. 40 min.	170	1218
			IPB (Light)	50 min.	3 hr. 20 min.	13 hr. 20 min.	85	610
Full HD High Frame Rate movies	119.88	100.00	IPB (Standard)	23 min.	1 hr. 34 min.	6 hr. 19 min.	180	1288
			IPB (Light)	42 min.	2 hr. 50 min.	11 hr. 22 min.	100	716
Full HD	59.94	50.00	IPB (Standard)	47 min.	3 hr. 9 min.	12 hr. 36 min.	90	646
			IPB (Light)	1 hr. 24 min.	5 hr. 39 min.	22 hr. 38 min.	50	360
	29.97 23.98	25.00	IPB (Standard)	1 hr. 34 min.	6 hr. 17 min.	25 hr. 8 min.	45	324
			IPB (Light)	2 hr. 30 min.	10 hr. 3 min.	40 hr. 15 min.	28	203
4K time-lapse movies	29.97	25.00	ALL-I	9 min.	36 min.	2 hr. 25 min.	470	3362
Full HD time-lapse movies	29.97	25.00	ALL-I	31 min.	2 hr. 6 min.	8 hr. 25 min.	135	966

* Bit rate only applies to video output, not audio or metadata.
* When [**Audio format**: **AAC/16bit/2CH**] is set.
* Movie recording stops when the maximum recording time per movie is reached.
* Sound is not recorded for approx. the last two frames when the compression method for movie recording quality is IPB (Standard) or IPB (Light). Moreover, the video and sound may be slightly out of sync when movies are played back in Windows.

Card performance requirements (movie recording) [write/read speed]

<table>
<tr><th colspan="4">Movie recording size</th><th colspan="2">SD card</th></tr>
<tr><th rowspan="2">Resolution</th><th colspan="2">Frame rate (fps)</th><th rowspan="2">Compression method</th><th rowspan="2">8 bits</th><th rowspan="2">10 bits (HDR PQ)</th></tr>
<tr><th>NTSC</th><th>PAL</th></tr>
<tr><td rowspan="2">4K (cropped)</td><td rowspan="2">59.94</td><td rowspan="2">50.00</td><td>IPB (Standard)</td><td>UHS Speed Class 3 or higher</td><td>Video Speed Class V60 or higher</td></tr>
<tr><td>IPB (Light)</td><td colspan="2">UHS Speed Class 3 or higher</td></tr>
<tr><td rowspan="2">4K</td><td rowspan="2">29.97
23.98</td><td rowspan="2">25.00</td><td>IPB (Standard)</td><td colspan="2">UHS Speed Class 3 or higher</td></tr>
<tr><td>IPB (Light)</td><td>SD Speed Class 10 or higher</td><td>UHS Speed Class 3 or higher</td></tr>
<tr><td rowspan="2">Full HD
High Frame Rate movies</td><td rowspan="2">119.88</td><td rowspan="2">100.00</td><td>IPB (Standard)</td><td colspan="2">UHS Speed Class 3 or higher</td></tr>
<tr><td>IPB (Light)</td><td>SD Speed Class 10 or higher</td><td>UHS Speed Class 3 or higher</td></tr>
<tr><td rowspan="4">Full HD</td><td rowspan="2">59.94</td><td rowspan="2">50.00</td><td>IPB (Standard)</td><td>SD Speed Class 10 or higher</td><td>UHS Speed Class 3 or higher</td></tr>
<tr><td>IPB (Light)</td><td>SD Speed Class 6 or higher</td><td>SD Speed Class 10 or higher</td></tr>
<tr><td rowspan="2">29.97
23.98</td><td rowspan="2">25.00</td><td>IPB (Standard)</td><td colspan="2">SD Speed Class 6 or higher</td></tr>
<tr><td>IPB (Light)</td><td colspan="2">SD Speed Class 4 or higher</td></tr>
<tr><td>4K
time-lapse movies</td><td>29.97</td><td>25.00</td><td>ALL-I</td><td colspan="2">Read speed of 60 MB/sec. or higher</td></tr>
<tr><td>Full HD
time-lapse movies</td><td>29.97</td><td>25.00</td><td>ALL-I</td><td colspan="2">Read speed of 30 MB/sec. or higher</td></tr>
</table>

Auto stopping of movie recording

Maximum recording time per recording

High Frame Rate: Disable	59.94 fps or less	Maximum: 6 hr. 00 min. 00 sec.
High Frame Rate: Enable	119.88 / 100.00 fps	Maximum: 1 hr. 30 min. 00 sec.

* Longest time available per recording.
* Except when recording stops from overheating or due to the power source used, errors, or other reasons.

Autofocus (AF)

Focusing method: Dual Pixel CMOS AF

Focusing brightness range

Still photo shooting
WIDE: EV -4.0–20, TELE: EV -2.0–20
* Center AF point, One-Shot AF, at room temperature, ISO 100.

Movie recording
4K 30p / Full HD 30p
WIDE: EV -2.0–20, TELE: EV 0–20
* Center AF point, One-Shot AF, at room temperature, ISO 100, and 29.97 / 25.00 fps

Focusing operation

	Still photo shooting	Movie recording
AF operation	• One-Shot AF • AI Focus AF • Servo AF	• Movie Servo AF
Manual focus (MF)	Supported	Supported

* When set to AI Focus AF, the camera automatically switches from One-Shot AF to Servo AF in response to subject movement (also applies during continuous shooting).
* Automatically set to [**AI Focus AF**] in < A+ > mode.

Focusing area
Still photo

Still photo cropping/aspect ratio	AF area	
	Width	Height
3:2 (aspect ratio)	Approx. 90%	Approx. 90%
1.4× (crop)*1*2	Approx. 100%	Approx. 100%

* May not be possible to move AF points to the edge of the screen under some scene and subject conditions.
* 1: AF area corresponding to a 1.4x crop image area.
* 2: With the camera set to Whole area AF, or with subject detection if Whole area AF is not set.

Movie

Movie cropping	AF area	
	Width	Height
4K	Approx. 90%	Approx. 100%
4K (cropped)*1*2	Approx. 100%	Approx. 100%
Full HD	Approx. 90%	Approx. 100%

* May not be possible to move AF points to the edge of the screen under some scene and subject conditions.
* At an aspect ratio of 16:9.
* 1: AF area corresponding to the 4K (cropped) image area.
* 2: With the camera set to Whole area AF, or with subject detection if Whole area AF is not set.

Number of AF area available for automatic selection

Number of AF zones	Still photos	Max. 425 zones (25×17)
	Movies	Max. 375 zones (25×15)

* Focusing area: Horizontal: approx. 90%, Vertical: approx. 90%
* May vary depending on settings.

Selectable positions for AF point

Numbers of positions	Still photos	Max. 3431 positions (73×47)
	Movies	Max. 3139 positions (73×43)

* Focusing area: Horizontal: approx. 90%, Vertical: approx. 90%
* When set to 1-point AF and selected using the cross keys in focusing selection mode.
* Values for the selectable positions for AF points do not represent AF performance.

Screen/Display settings

Type: TFT color LCD screen
Screen size: Approx. 7.5 cm (3.0 inch) (screen aspect ratio of 3:2)
Dot count: Approx. 1,040,000 dots
Angle of view: Approx. 170° vertically and horizontally
Coverage: Approx. 100% vertically and horizontally (at L image size and an aspect ratio of 3:2)
Touch-screen: Capacitive sensing

HDMI output

Output terminal: HDMI output terminal (Type D)
* HDMI CEC not supported.

Exposure control

Metering functions under various shooting conditions

Item		Still photo shooting	Movie recording
Metering sensor		Based on the image sensor output signals	
		384-zone (24×16) metering*1	384-zone (24×16) metering*1
Metering mode	Evaluative metering	○	○
	Spot metering*2	○ * Approx. 3.1% in the center of the screen*3	
	Center-weighted average	○	—
Metering brightness range (at room temperature, ISO 100)		EV -1 to 20	EV 1 to 20

* 1: Same applies when [**1.4x (crop)**] is set.
* 2: Multi-spot metering not available (not supported).
* 3: When [**3:2 (aspect ratio)**] is set. Same applies when set to [**1.4x (crop)**].

ISO speed (recommended exposure index) in still photo shooting

Manual ISO speed setting for still photos

	ISO speed
Normal ISO speed	ISO 100–32000 (in 1/3- or 1-stop increments)
Expanded ISO speeds	H (equivalent to ISO 51200)

* When set to [**Highlight tone priority**], the available manual setting range is ISO 200–32000.
* Expanded ISO speeds are not available when [**HDR shooting (PQ)**: **Enable**] is set.

Manual ISO speed setting range for still photos

ISO speed range	ISO speed
Minimum	ISO 100–32000
Maximum	ISO 200–H (equivalent to ISO 51200)

ISO Auto setting range for still photos

Auto range	ISO speed
Minimum	ISO 100–25600
Maximum	ISO 200–32000

ISO Auto details for still photos

Shooting mode		No flash	Using flash
Creative Zone	P / Tv / Av / M (other than bulb)	ISO 100*1*2–32000*2	ISO 100*1*2–1600*2
	M (bulb)	ISO 400*3	ISO 400*3
Basic Zone	A+	ISO 100–6400	ISO 100–1600
	SCN	Varies by shooting mode	
		Varies by shooting mode	

* 1: ISO 200 when set to [**Highlight tone priority**].
* 2: Varies depending on the [**Maximum**] and [**Minimum**] settings for [**Auto range**].
* 3: If outside the setting range, changed to the value most close to ISO 400.

ISO speed (recommended exposure index) in movie recording

Manual ISO speed setting for movies (in M mode)

	Canon Log 3	ISO speed
Normal ISO speed	Off	ISO 100–12800 (in 1/3- or 1-stop increments)
	On	ISO 800–12800 (in 1/3- or 1-stop increments)
Expanded ISO speed	Off	H (equivalent to ISO 16000, 20000, or 25600)
	On	L (equivalent to ISO 100, 125, 160, 200, 250, 320, 400, 500, or 640) H (equivalent to ISO 16000, 20000, or 25600)

* Maximum ISO speed when set manually corresponds to the [**ISO speed range**] setting.
* When set to [**Highlight tone priority**], the setting range is ISO 200–12800.
* [**Highlight tone priority**] is not available when Canon Log 3 is set.
* Expanded ISO speeds are not available in Highlight tone priority or HDR PQ movie recording, in movie recording with shooting creative filters, or with digital zoom.
* The default setting range when set to Canon Log 3 is L and ISO 800–12800.

Automatic ISO speed setting for movies (in P / Tv / Av mode, and in M mode with ISO Auto)

	Canon Log 3	ISO speed
Normal ISO speed	Off	ISO 100–12800 (in 1/3- or 1-stop increments)
	On	ISO 800–12800 (in 1/3- or 1-stop increments)
Expanded ISO speed	Off	H (equivalent to ISO 16000, 20000, or 25600)
	On	

* Maximum ISO speed when set automatically corresponds to the [**Max for Auto**] setting.
* When set to [**Highlight tone priority**], the setting range is ISO 200–12800.
* Expanded ISO speeds are not available in Highlight tone priority or HDR PQ movie recording, in movie recording with shooting creative filters, or with digital zoom.

Manual ISO speed setting range for movies

ISO speed range	ISO speed
Minimum	ISO 100–12800 (in 1-stop increments)
Maximum	ISO 200–12800 or H (equivalent to ISO 25600), in 1-stop increments

Maximum ISO Auto setting for movies

	ISO speed
Max for Auto	ISO 6400, 12800, or H (equivalent to ISO 25600), in 1-stop increments

Maximum ISO auto setting for time-lapse movies

	ISO speed
Max for Auto	ISO 400–12800 (in 1-stop increments)

Shutter

Still photo shooting

Type:
Electronically controlled lens shutter
Rolling shutter, using the image sensor

Shutter mode

Shutter mode	Flash photography
Mechanical shutter	Possible
Electronic shutter	Disabled

Shutter speed

Shutter mode	Setting range
Mechanical shutter	1/2000–30 sec. (1/3-stop increments), bulb
Electronic shutter*1	1/16000*2, 1/8000–30 sec. (1/3-stop increments), bulb

* 1: Shutter speeds of faster than 1/8000 sec. are only available in Tv or M mode (up to 1/8000 sec. in P or Av mode).
* 2: Maximum shutter speed when shooting with focus bracketing is 1/8000 sec.

Flash sync speed

Shutter mode	Flash sync speed		
	EL/EX Speedlite		Non-Canon flash unit
	Other than those listed to the right	1.4x (crop)	
Mechanical shutter	1/250 sec.		

Movie recording

Type: Rolling shutter, using the image sensor

Shutter speed: 1/8000*1–1/25*2*3 sec. (1/3-stop increments)
Movies in Tv or M mode: 1/8000*1–1/8*2*3 sec. (1/3-stop increments)

* 1: Maximum of 1/4000 sec. in time-lapse movie shooting.
* 2: In normal movie recording, the minimum speed varies depending on the recording mode and frame rate.
* 3: Minimum speed is 1/125 sec. (NTSC) or 1/100 sec. (PAL) when the frame rate is set to 119.88 / 100.00 fps.

Image Stabilizer features

Lens optical IS

Drive

Drive mode and continuous shooting speed

[Max. approx.]

Drive mode	AF operation	Mechanical shutter	Electronic shutter
Single shooting		Yes	Yes
High-speed continuous shooting +	One-Shot AF AI Focus AF Servo AF	15 shots/sec.	30 shots/sec.
High-speed continuous shooting	One-Shot AF AI Focus AF Servo AF	8.2 shots/sec.	16 shots/sec.
Low-speed continuous shooting	One-Shot AF AI Focus AF Servo AF	3.0 shots/sec.	5.0 shots/sec.
Self-timer: 10 sec.		Yes	Yes
Self-timer: 2 sec.		Yes	Yes
Self-timer: Continuous		Yes	Yes

External flash

Contacts for multi-function shoe: 21-pin
Flash exposure compensation: ±3 stops (in 1/3-stop increments)

Frame grab from 4K movies

Individual frames of 4K movies recorded with the camera can be saved as approx. 8.3-megapixel (3840×2160) still photos (JPEG or HEIF).
* From normal movies, still photos are saved as JPEGs, and from HDR PQ movies, as HEIF images.
* Extraction is not possible from Canon Log 3 movies.
* In-camera resizing or cropping is not supported for extracted still photos, and these images cannot be edited with Creative filters or Creative Assist.

Print order (DPOF)

Compliant with DPOF Version 1.1

External interface

Digital terminal

Terminal type	USB Type-C™
Transmission	Equivalent to Hi-Speed USB (USB 2.0)
Applications	• For computer communication / smartphone communication • USB battery charging / camera power supply * USB PD not supported.

HDMI output terminal: HDMI terminal (Type D)
* Resolution switches automatically.
* HDMI CEC not supported.
External microphone input terminal: 3.5 mm diameter stereo mini jack (3-pin)
* Stereo Microphone DM-E100 is recommended if plug-in power will be used.
Headphone terminal: 3.5 mm diameter stereo mini jack

Power source

Battery

Compatible battery packs	LP-E17
Quantity used	1

USB charging time

The in-camera charging time with USB Power Adapter PD-E2 is as follows.

Battery	Charging time*1	Measurement conditions*2
LP-E17	Approx. 2 hr.	Room temperature*3 New battery Using USB Power Adapter PD-E2

* 1: To fully recharge a completely depleted battery (unless over-discharged; details conform to Canon testing standards).
* 2: The charging time required and the amount charged vary depending on ambient temperature and remaining capacity.
* 3: Charging is possible in a range of 5–40°C / 41–104°F. For safety, charging takes longer in colder environments (5–15°C / 41–59°F).

Number of shots available

Shooting method	Temperature	Available shots (approx.)	
		Power saving*1	Smooth*2
On-screen shooting	+23℃ / 73°F	400	340

* 1: Based on CIPA standards.
* 2: According to Canon measurement conditions, which are based on CIPA standards.
* With a new, fully charged LP-E17.
* The number of shots available may vary greatly depending on the shooting environment.
* Fewer shots may be available with a compatible accessory attached to the multifunction shoe, because the camera powers the accessory.

Available operating time

Conditions of use			Temperature	Available operating time
Time available for movie recording*1	4K (cropped)	• 59.94 / 50.00 fps • IPB (Light)	+23°C / 73°F	Approx. 1 hr. 5 min.
			0°C / 32°F	Approx. 1 hr.
	4K	• 29.97 / 25.00 fps • IPB (Standard)	+23°C / 73°F	Approx. 1 hr. 10 min.
			0°C / 32°F	Approx. 1 hr. 5 min.
	Full HD	• 59.94 / 50.00 fps • IPB (Standard)	+23°C / 73°F	Approx. 1 hr. 25 min.
			0°C / 32°F	Approx. 1 hr. 20 min.
Time available for movie playback (normal playback)	4K	• 59.94 / 50.00 fps • IPB (Light)	+23°C / 73°F	Approx. 3 hr.

* With a new, fully charged LP-E17.
* 1: When [**Movie Servo AF**: **Disable**] is set.

Dimensions and weight

Dimensions

(W)×(H)×(D)	Approx. 118.3×68.0×52.5 mm / 4.66×2.68×2.07 in.

* Based on CIPA guidelines.

Weight

Body (including battery and card) * Based on CIPA guidelines.	Approx. 426 g / 15.03 oz.
Body only	Approx. 379 g / 13.37 oz.

* Does not include shoe cover or windscreen.

Operating environment

Operating temperature: 0–40°C / 32–104°F
Operating humidity: 10–90%

Wi-Fi (wireless LAN)

Supported standards (equivalent to IEEE 802.11b/g/n standards)

Wi-Fi standards (equivalent)	Transmission method	RU TYPE	Maximum link speed
			2.4 GHz band
IEEE 802.11n	OFDM modulation (CSMA / CA)	—	72 Mbps
IEEE 802.11g			54 Mbps
IEEE 802.11b	DSSS modulation	—	11 Mbps

Transmission frequency (Center frequency)

2.4 GHz band

Frequency	2412 to 2462 MHz
Channels	1 to 11 ch

Authentication and data encryption methods

2.4 GHz band

Connection method	Authentication	Encryption
Camera access point	WPA2 / WPA3-Personal	AES
	Open	Disable
Infrastructure	Open	WEP
		Disable
	Shared key	WEP
	WPA / WPA2 / WPA3-Personal	TKIP AES

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 (except weight for camera body only).
- Product specifications and appearance are subject to change without notice.

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- Trademarks
- About MPEG-4 Licensing
- Accessories
- Regulations

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This product is designed to achieve optimum performance when used with genuine Canon accessories. Therefore, using this product with genuine accessories is highly recommended. Canon shall not be liable for any damage to this product and/or accidents such as malfunction, fire, etc. caused by the failure of non-genuine Canon accessories (e.g., a leakage and/or explosion of a battery). Please note that repairs arising out of the malfunction of non-genuine accessories will not be covered by the warranty for repairs, although you may request such repairs on a chargeable basis.

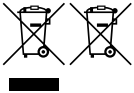
Caution

- Battery Pack LP-E17 is dedicated to Canon products only. Using it with an incompatible battery charger or product may result in malfunction or accidents for which Canon cannot be held liable.

Check the following website for details on compatible accessories.

- https://cam.start.canon/H002/

Only for European Union and EEA (Norway, Iceland and Liechtenstein)



These symbols indicate that this product is not to be disposed of with your household waste, according to the WEEE Directive (2012/19/EU), the Battery Regulation ((EU) 2023/1542) and/or national legislations implementing those Directive and Regulation. If a chemical symbol is printed beneath the symbol shown above, in accordance with the Battery Regulation, this indicates that a heavy metal (Pb = Lead) is present in this battery at a concentration above an applicable threshold specified in the Battery Regulation.

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