Canon

EOS R50 V

Advanced User Guide

EN

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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.

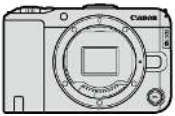
Copyrights

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 body cap (Camera Cover R-F-5) and shoe cover)

Battery Pack LP-E17
(with protective cover)

Battery Charger LC-E17/LC-E17E*

Strap

* Battery Charger LC-E17 or LC-E17E is provided. (The LC-E17E comes with a power cord.)

- The camera does not come with a memory card ( ), interface cable, or HDMI cable.
- If you purchased a Lens Kit, check that the lenses are included.
- Be careful not to lose any of these items.
- Software ( ) can be downloaded from the Canon website.

Caution

- When you need Lens Instruction Manuals, download them from the Canon website ( ).
  Lens Instruction Manuals (PDF files) are for lenses sold separately, and when a lens kit is purchased, some accessories included with the lens may not match those listed in the Lens Instruction Manual.

Supplemental Information

Refer to the following website for information on lenses compatible with camera features, and 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/C021/

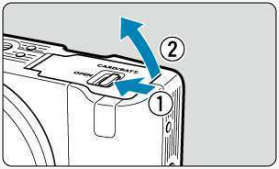
- **Lens Instruction Manuals**
  View or download from the following website.
  https://cam.start.canon/

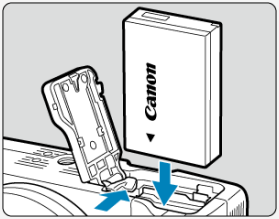
For software instruction manuals, see Software Instruction Manuals.

Note

- Select [: **Manual/software URL**] to display the QR code on the camera screen.

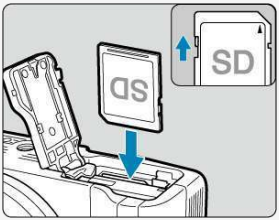
1. Insert the battery ( ).





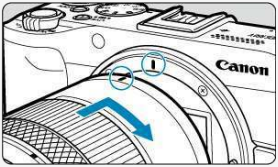
- Upon purchase, charge the battery to start using ( ).

2. Insert the card ( ).



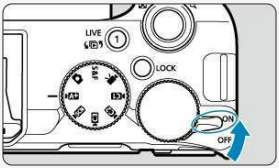
- Insert the card with the label facing the front of the camera until it clicks into place.

3. Attach the lens ( ).

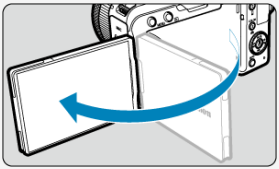


- Align the red mount index on the lens with the red mount index on the camera to attach the lens.

4. Set the power switch to < ON > ( ).



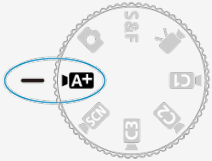
5. Flip out the screen ( ).



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

Recording movies

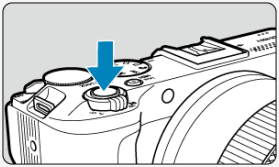
1. Set the Mode dial to < ▶A+ >.

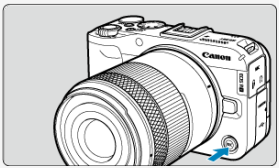


2. Focus on the subject ( ).

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

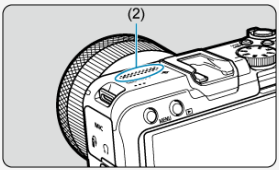
3. Record the movie ( ).





- Press the movie shooting button (on the top or front) 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.



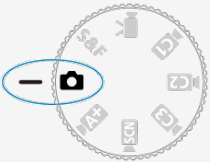
  - Sound is recorded with the movie microphone (2).
  - To stop recording the movie, press the movie shooting button again.
    You can also stop recording a movie by tapping [■] on the screen.

4. **Review the recorded movie ( ).**

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

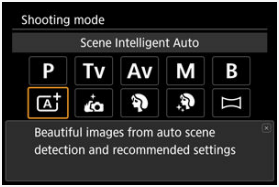
Shooting still photos

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



2. **Tap the shooting mode icon.**

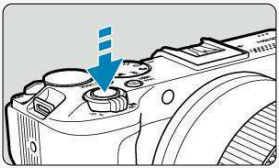
3. Select [A+].



4. 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.

5. Take the picture ( ).



- Press the shutter button completely to take the picture.

6. 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 Operating Instructions

Icons in This Guide

< >	Indicates the Main dial.
< >	Indicates the Quick control dial.
< ▲ > < ▼ > < ◀ > < ▶ >	Indicates the direction to press the cross keys (< ✥ >).
< >	Indicates the lens 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.
	Links to pages with related topics.
	Warning to prevent shooting problems.
	Supplemental information.
	Tips or advice for better shooting.
?	Troubleshooting advice.

Basic Assumptions for Operating Instructions

- Before following any instructions, make sure the power switch is set to < ON > ( ) and the Multi-function lock feature is off ( ).
- It is assumed that all the menu settings and Custom Functions are set to their defaults.
- Illustrations in this guide show the camera with the RF-S14-30mm F4-6.3 IS STM PZ lens attached as an example.
- Sample photos in this guide are only for illustration.
- In references to using EF or EF-S lenses, it is assumed that a mount adapter is used.

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 leave a lens or a camera/camcorder with a lens attached, exposed without the lens cap attached.

The lens may concentrate the light and cause 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 or through the viewfinder (on products with a viewfinder) for extended periods.

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.

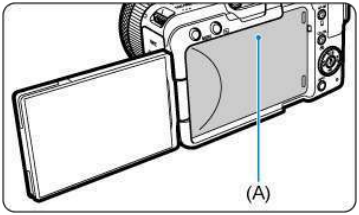
This may cause injury or may result in an accident.

- 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.

- After movie recording or repeated continuous shooting over an extended period, do not touch the screen storage compartment (A), which may be hot. 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 dry and clean cloth. If the camera has been exposed to salty air, wipe it 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.
- Do not block shutter curtain operation with your finger or other objects. Doing so may cause a malfunction.
- Only use a commercially available blower to blow away dust on the lens or other parts. 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 lens, 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 lens, 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. Even while the camera is in storage, press the shutter button a few times once in a while to check that the camera is still working.
- Avoid storing the camera where there are chemicals that result in rust and corrosion such as in a chemical lab.
- If the camera has not been used for an extended period, test all its functions before using it. If you have not used the camera for some time or if there is an important shoot such as a foreign trip coming up, have the camera checked by your nearest Canon Service Center or check the camera yourself and make sure it is working properly.
- The camera may become hot after repeated continuous shooting or still photo/movie shooting over an extended period. This is not a malfunction.
- If there is a bright light source inside or outside the image area, ghosting may occur.
- 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.

- Attach the lens cap to prevent direct sunlight and other light from entering the lens when you are not shooting.

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, but it will return to normal at room temperature.

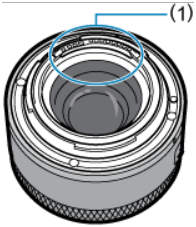
Cards

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.

Lens

- After detaching the lens from the camera, put down the lens with the rear end up and attach the rear lens cap to avoid scratching the lens surface and electrical contacts (1).

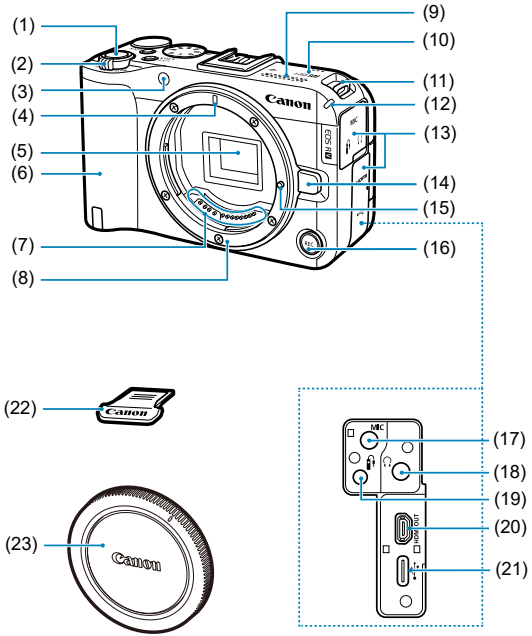


Smudges on the image sensor

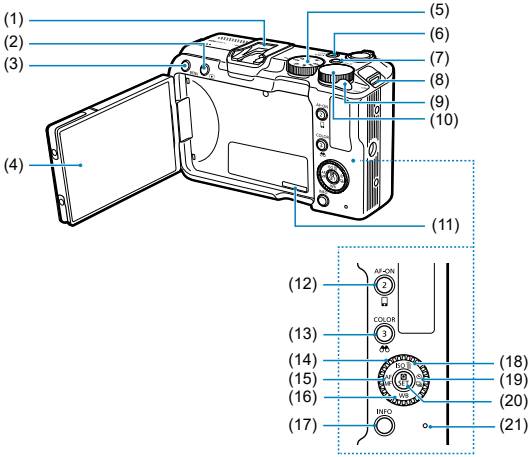
- You can use a commercially available blower to remove dust or debris on the image sensor that appears in images.
- Besides dust entering the camera from outside, in rare cases, lubricant from the camera's internal parts may adhere to the front of the sensor.
- If smudges are visible on images, have the sensor cleaned by a nearest Canon Service Center.

Part Names

Attaching the Strap



(1)	Shutter button/movie shooting button
(2)	Zoom lever During shooting: <**W**> Wide-angle/<**T**> Telephoto During playback: < ▦ > Index/< 🔍 > Magnify
(3)	AF-assist beam/red-eye reduction/self-timer/remote control lamp
(4)	RF lens mount index
(5)	Image sensor
(6)	Grip
(7)	Contacts
(8)	Lens mount
(9)	Microphone
(10)	Speaker
(11)	Strap mount
(12)	Tally lamp
(13)	Terminal cover
(14)	Lens release button
(15)	Lens lock pin
(16)	<**REC**> Movie shooting button (front)
(17)	< MIC > External microphone IN terminal
(18)	< 🎧 > Headphone terminal
(19)	< 🎙 > Remote control terminal
(20)	< HDMI OUT > HDMI micro OUT terminal
(21)	< •⭠ > Digital terminal
(22)	Shoe cover
(23)	Body cap


(1)
(2)
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(16)
(17)
(18)
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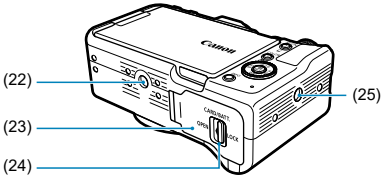
(20)
(21)
AF-ON
COLOR
INFO
MENU
COLOR
AF-ON
SET
WB
INFO


(22)
(23)
(24)
(25)
CARD/BATT.
OPEN
LOCK

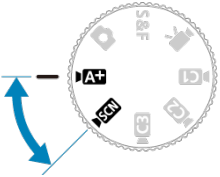
(1)	Multi-function shoe
(2)	< ▶ > Playback button
(3)	< MENU > Menu button
(4)	Screen
(5)	Mode dial
(6)	< 1 / LIVE / > 1/stream/movie-photo playback toggle button
(7)	<**LOCK**> Multi-function lock button
(8)	Strap mount
(9)	< ON / OFF > Power switch
(10)	< > Main dial
(11)	Serial number (body number)
(12)	< 2 / AF-ON / > 2/AF start/send images to smartphone button
(13)	< 3 / COLOR / > 3/color mode/image search button
(14)	< / >Quick control dial/cross keys
(15)	< ◀ / AF MF > Left/autofocus/manual focus button
(16)	< ▼ /**WB**> Down/white balance button
(17)	< INFO > Info button
(18)	< ▲ /**ISO**/ > Up/ISO/erase button
(19)	< ▶ / / > Right/self-timer/drive mode selection button
(20)	< > Quick Control/Set button
(21)	Access lamp
(22)	Tripod socket
(23)	Card/battery compartment cover
(24)	Card/battery compartment cover lock
(25)	Tripod socket

Mode Dial

The Mode dial is divided into Basic and Creative zones for movies and a zone for still photo shooting.

(1) Basic Zone movie modes

Simply press the movie shooting button and the camera sets everything to suit the subject or scene for shooting.
To select a recording mode in < SCN > mode, tap an icon in the upper left of the screen.



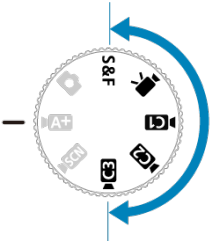
< A+ >: Scene Intelligent Auto movie ( )

< SCN >: Special scene movie ( )

[ ]	Smooth skin movie
[ ]	Movie for close-up demos
[ ]	Movie IS mode

(2) Creative Zone movie modes ( )

Record movies with your preferred exposure or other settings.
To select a recording mode for < S&F > or < >, tap an icon in the upper left of the screen.



< S&F >: Slow/fast motion movies

[ ]	S&F movie auto exposure
[ ]	S&F movie shutter-priority AE
[ ]	S&F movie aperture-priority AE
[ ]	S&F movie manual exposure

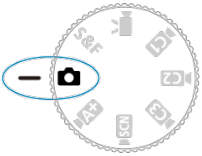
< >: Advanced movies

[ ]	Movie auto exposure
[ ]	Movie shutter-priority AE
[ ]	Movie aperture-priority AE
[ ]	Movie manual exposure

< C1 >< C2 >< C3 >: Custom recording modes ( )

(3) < >: Still photo shooting ( )

In Basic Zone modes, the camera determines optimal settings for the subject or scene.
In Creative Zone modes, you can shoot with your preferred exposure or other settings.
To select a shooting mode, tap an icon in the upper left of the screen.



- Basic Zone

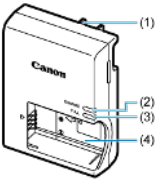
[ ]	Scene Intelligent Auto
[ ]	Self portrait
[ ]	Portrait
[ ]	Smooth skin
[ ]	Panorama
[ ]	Food
[ ]	Handheld night scene

- Creative Zone

[P]	Program AE
[Tv]	Shutter-priority AE
[Av]	Aperture-priority AE
[M]	Manual exposure
[B]	Bulb exposure

Battery Charger LC-E17

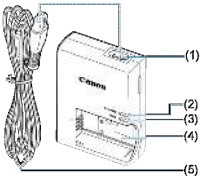
Charger for Battery Pack LP-E17 ( ).



(1)	Power plug
(2)	Charge lamp
(3)	Full-charge lamp
(4)	Battery slot

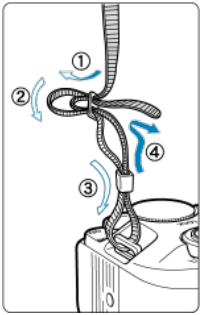
Battery Charger LC-E17E

Charger for Battery Pack LP-E17 ( ).



(1)	Power cord socket
(2)	Charge lamp
(3)	Full-charge lamp
(4)	Battery slot
(5)	Power cord

Attaching the Strap



Pass the end of the strap through the strap mount from the bottom, then pass it through the strap buckle as shown. Pull the strap to take up any slack and make sure the strap will not loosen from the buckle.

Software/Apps

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

Software/App Overview

Computer software

- **EOS Utility**
  Enables you to transfer captured images from the camera to a connected computer, set various camera settings from the computer, and shoot remotely from the computer.
- **Digital Photo Professional**
  Software recommended for users who shoot RAW images. Enables image viewing, editing, printing, and more.
- **Neural network Image Processing Tool**
  For RAW image processing with superior image quality, applying deep learning. Requires a paid subscription.
- **Neural network Upscaling Tool**
  For JPEG/TIFF upscaling, applying deep learning. Requires a paid subscription.
- **Picture Style Editor**
  Enables you to edit existing Picture Styles or create and save original Picture Style files.
- **Canon XF Utility**
  For transferring movie files to a computer, as well as playback and still photo extraction.

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/

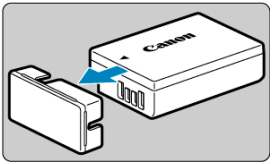
Preparation and Basic Operations

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

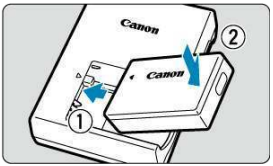
- Charging the Battery
- Inserting/Removing the Battery and Card
- Using the Screen
- Turning on the Power
- Attaching and Detaching RF/RF-S Lenses
- Attaching and Detaching EF/EF-S Lenses
- Multi-Function Shoe
- Basic Operations
- Menu Operations and Settings
- Quick Control
- Touch-Screen Operation

Charging the Battery

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



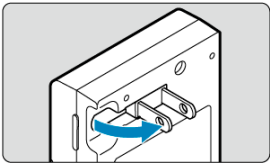
2. **Fully insert the battery into the charger.**



- Do the opposite to remove the battery.

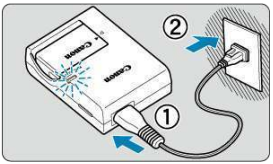
3. Charge the battery.

LC-E17

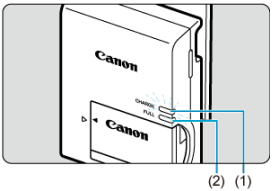


- Flip out the charger prongs as shown and plug the charger into a power outlet.

LC-E17E



- Connect the power cord to the charger and insert the plug 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.
- **Charging a depleted battery 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 (up to approx. 4 hr.).

- **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.

- **After charging the battery, remove it and disconnect the charger from the power outlet.**

- **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.

- **The battery charger can also be used in foreign countries.**
  The battery charger is compatible with a 100 V AC to 240 V AC 50/60 Hz power source. If necessary, attach a commercially available plug adapter for the respective country or region. Do not attach any portable voltage transformer to the battery charger. Doing so may damage the battery charger.

- **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.

Caution

- After disconnecting the charger's power plug, do not touch the prongs for approx. 5 sec.
- The provided charger cannot charge any battery other than Battery Pack LP-E17.

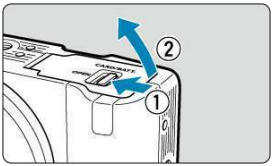
Inserting/Removing the Battery and Card

- Insertion
- Formatting the Card
- Removal

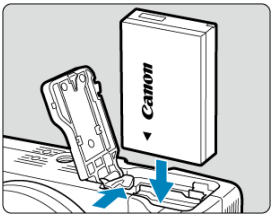
Insert a fully charged Battery Pack LP-E17 and card in the camera. The captured images are recorded onto the card.

Insertion

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

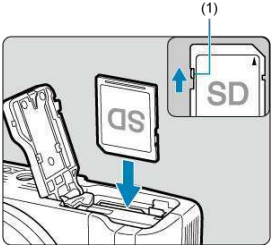


2. **Insert the battery.**



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

3. Insert the card.

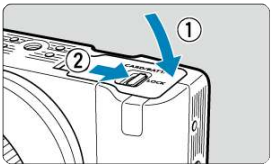


- Insert the card with the label facing the front of the camera until it clicks into place.

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

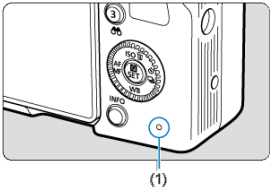
- You cannot use batteries other than the Battery Pack LP-E17.

Formatting the Card

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

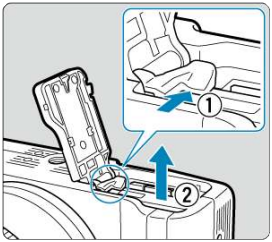
Removal

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



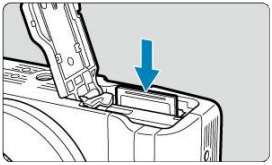
- Set the power switch to < OFF >.
- **Make sure the access lamp (1) is off before opening the card/ battery compartment cover.**
- If [**Saving...**] is displayed on the screen, close the cover.

2. **Removing the battery.**

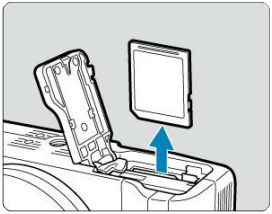


- Press the battery lock lever as shown by the arrow and remove the battery.
- To prevent short-circuits, always attach the included protective cover ( ) to the battery.

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. Set the power switch to < OFF > 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.
- Setting [: **Release shutter without card**] to [**Disable**] will prevent you from forgetting to insert a card ( ).

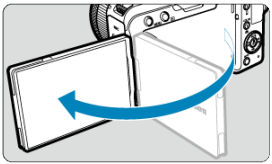
Caution

- **When the access lamp 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**
    (when using optional household power outlet accessories).
- 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.)

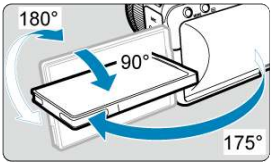
Using the Screen

You can change the direction and angle of the screen.

1. **Flip out the screen.**

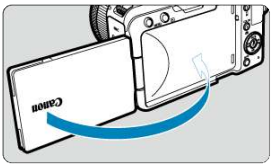


2. **Rotate the screen.**



- 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

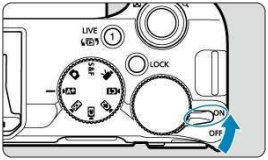
- Avoid forcing the screen into position as you rotate it, which puts undue pressure on the hinge.
- When a cable is connected to a camera terminal, the rotation angle range of the flipped-out screen will be limited.

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
- Connecting the Camera to a Smartphone
- Battery Level Indicator



- <ON>
  The camera turns on.

- <OFF>
  The camera is turned off and does not function. Set the power switch to this position when not using the camera.

Note

- [**Saving...**] is displayed if you set the power switch to <OFF> during image recording to the card, and the camera will turn off after recording is finished.

Setting the Display Language

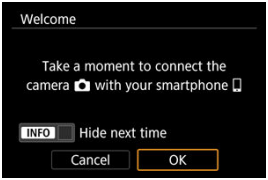
Set the Language if the [**Language**] setting screen appears after you turn on the camera.

Setting the Date, Time, and Time Zone

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

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

When the power switch is set to < ON >, the battery level will be indicated.

	Battery level is sufficient.
	Battery level is low, but the camera can still be used.
	Battery will be exhausted 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.
- Lens operations are powered by the camera's battery. Certain lenses may exhaust the battery faster than others.
- See [: **Battery info.**] to check the battery status ( ).
- In low ambient temperatures, shooting may not be possible even with a sufficient battery level.

Attaching and Detaching RF/RF-S Lenses

Attaching a Lens

Detaching a Lens

Caution

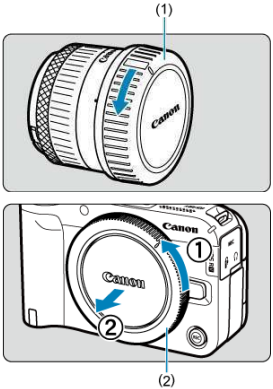
- Do not look at the sun directly through any lens. Doing so may cause loss of vision.
- When attaching or detaching a lens, set the camera's power switch to < OFF >.
- If the front part (focusing ring) of the lens rotates during autofocusing, do not touch the rotating part.

Tips for avoiding smudges and dust

- When changing lenses, do it quickly in a place with minimal dust.
- When storing the camera without a lens attached, be sure to attach the body cap to the camera.
- Remove smudges and dust on the body cap before attaching it.

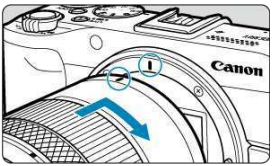
Attaching a Lens

1. **Remove the caps.**



- Remove the rear lens cap (1) and body cap (2) by turning them as shown by the arrows.

2. **Attach the lens.**



- Align the red mount index on the lens with the red mount index on the camera and turn the lens as shown by the arrow until it clicks into place.

3. Set the focus mode to < AF >.

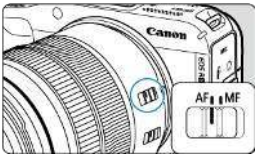
- < AF > stands for autofocus.
- < MF > stands for manual focus. Autofocus is disabled.

- **For RF lenses without a focus mode switch**

  Set [**AF**: **Focus mode**] to [**AF**].

- **For RF lenses with a focus mode switch**

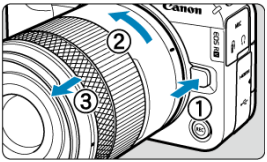
  Set the lens focus mode switch to < AF >. Because the setting on the lens takes precedence, the camera setting has no effect.



4. Remove the front lens cap.

Detaching a Lens

While pressing the lens release button, turn the lens as shown by the arrow.



- Turn the lens until it stops, then detach it.
- Attach the rear lens cap to the lens you removed.

Attaching and Detaching EF/EF-S Lenses

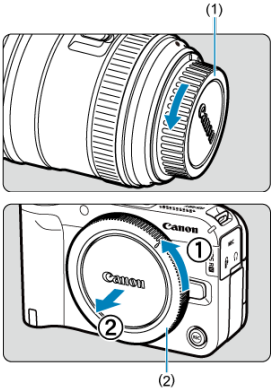
Attaching a Lens

Detaching a Lens

All EF and EF-S lenses can be used by attaching an optional Mount Adapter EF-EOS R.
The camera cannot be used with EF-M lenses.

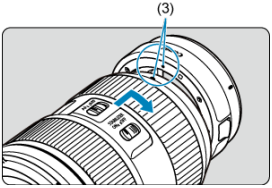
Attaching a Lens

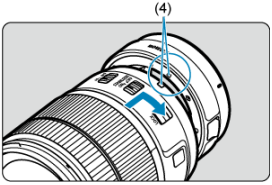
1. **Remove the caps.**



- Remove the rear lens cap (1) and body cap (2) by turning them as shown by the arrows.

2. Attach the lens to the adapter.



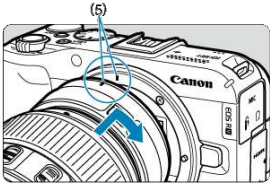


- Align the red or white mount index on the lens with the corresponding mount index on the adapter and turn the lens as shown by the arrow until it clicks into place.

  (3) Red index

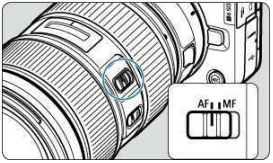
  (4) White index

3. Attach the adapter to the camera.



- Align the red mount indexes (5) on the adapter and camera and turn the lens as shown by the arrow until it clicks into place.

4. Set the lens's focus mode switch to < AF >.

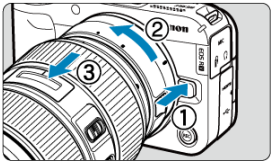


- < AF > stands for autofocus.
- < MF > stands for manual focus. Autofocus is disabled.

5. Remove the front lens cap.

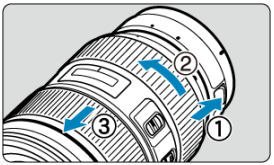
Detaching a Lens

1. **While pressing the lens release button, turn the adapter as shown by the arrow.**



- Turn the lens until it stops, then detach it.

2. **Detach the lens from the adapter.**



- Hold down the lens release lever on the adapter and turn the lens counterclockwise.
- Turn the lens until it stops, then detach it.
- Attach the rear lens cap to the lens you removed.

Caution

- For lens precautions, see Attaching and Detaching RF/RF-S Lenses.

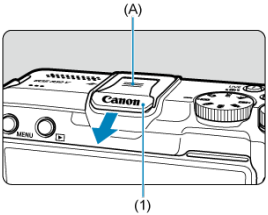
Multi-Function Shoe

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

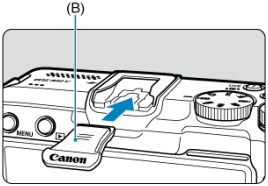


- Remove the shoe cover (1) by pressing the part labeled (A) in the figure as shown with your finger. After removal, keep the shoe cover in a convenient place to avoid losing it.

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
- < > Main Dial
- < > Quick Control Dial
- <LOCK > Multi-Function Lock Button
- <INFO > Info Button
- < > Control Ring
- < 1 / LIVE / > 1/Stream/Movie-Photo Playback Toggle Button
- < 2 / AF-ON / > 2/AF Start/Send Images to Smartphone Button
- < 3 / COLOR / > 3/Color Mode/Image Search Button

Holding the Camera

Viewing the screen as you shoot

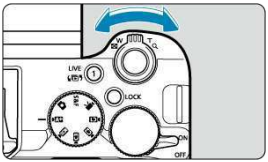
As you shoot, you can tilt the screen to adjust it. For details, see Using the Screen.

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

Zoom Lever

You can zoom with the zoom lever when using a power zoom lens. The following operations are also available.

- Digital zooming ( )
- Switching between menu tabs
- Magnifying/reducing images during playback

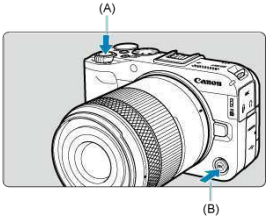


Note

- You can zoom faster or slower with power zoom lenses by pressing the lever more or less ( ).

Movie Shooting Button

Press the movie shooting button (A or B) to start recording a movie. Press it again to stop recording.



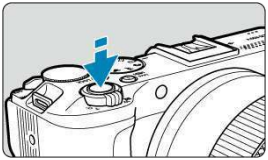
Note

- Movie shooting button A functions as a shutter button in still photo shooting.

Shutter Button

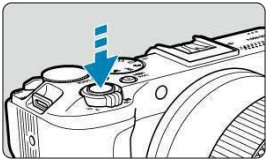
The shutter button has two steps. You can press the shutter button halfway. Then you can further press the shutter button completely.

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:

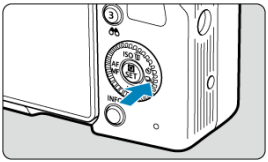
- Hold the camera still, as shown in Holding the Camera.
- Press the shutter button halfway to autofocus, then slowly press the shutter button completely.

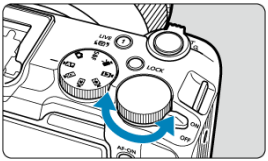
Note

- 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.

< > Main Dial

(1) After pressing a button, turn the < > dial.

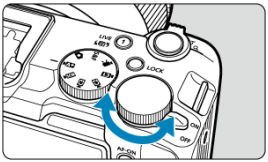




Press a button such as < >, then turn the < > dial.
If you press the shutter button halfway, the camera will go back to shooting standby.

- Used for operations such as setting the ISO speed.

(2) Turn only the < > dial.



Watch the screen as you turn the < > dial.

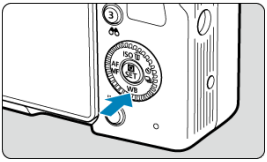
- Use this dial to set the shutter speed, aperture value, etc.

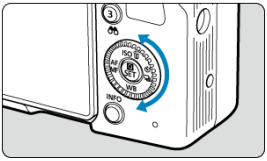
Note

- The operations in (1) can be performed even when controls are locked with the Multi-function lock ( ).

< ◎ > Quick Control Dial

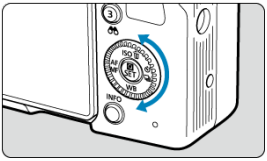
(1) After pressing a button, turn the < ◎ > dial.





Press a button such as <**WB**>, then turn the < ◎ > dial.
If you press the shutter button halfway, the camera will go back to shooting standby.

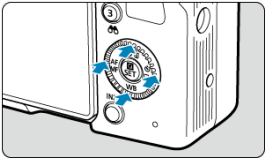
(2) Only turn the < ◎ > dial.



Watch the screen as you turn the < ◎ > dial.

- Used for operations such as setting the exposure compensation amount and the aperture value setting for manual exposures.

(3) After pressing a button, press the < ▲ >< ▼ >< ◀ >< ▶ > keys.



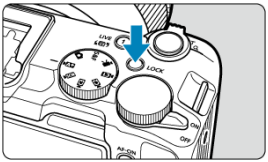
Press < MENU > or < SET >, then press the < ▲ >< ▼ >or < ◀ >< ▶ > keys to set menu or Quick Control features.

Note

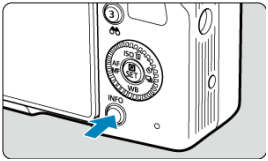
- The operations in (1) and (3) can be performed even when controls are locked with the Multi-function lock ( ).

<LOCK> Multi-Function Lock Button

Configuring [: **Multi function lock**] ( ) and pressing the <LOCK> button prevents settings from being changed by accidentally touching the Main dial, Quick control dial, control ring, or touch-screen panel. Press the <LOCK> button again to unlock the controls.

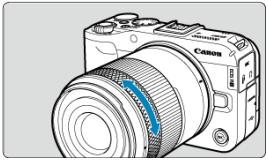


< INFO > Info Button



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

< > Control Ring

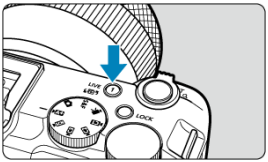


By default, exposure compensation can be set in Creative Zone modes by turning the control ring of RF lenses or mount adapters while pressing the shutter button halfway. Otherwise, you can assign a different function to the control ring by configuring [ ] in [: **Customize dials/control ring**] ( ).

Caution

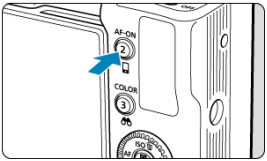
- [: **Focus/control ring**] must be set when using lenses that have a combination focus/control ring but have no switch to switch between these features ( ).

< 1 / LIVE / > 1/Stream/Movie-Photo Playback Toggle Button



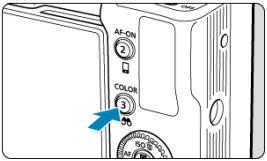
Press during movie recording to access the streaming settings screen ( ). Press during playback to switch between movie and still photo playback.

< 2 / AF-ON / ⊡ > 2/AF Start/Send Images to Smartphone Button



Press during movie recording to activate autofocus (except in Basic Zone movie modes). Pressing this button in still photo shooting is equivalent to pressing the shutter button halfway (except in basic shooting). Press during playback to access the setting screen for sending images to a smartphone ( ).

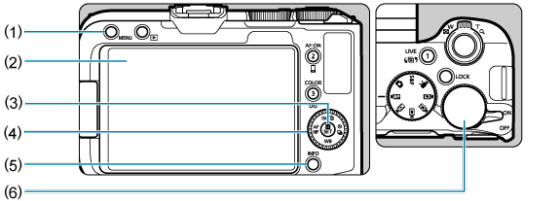
< 3 / COLOR / 🔍 > 3/Color Mode/Image Search Button



Press during movie recording or still photo shooting to access the color mode selection screen ( ). Press during playback to display images found using the current search conditions.

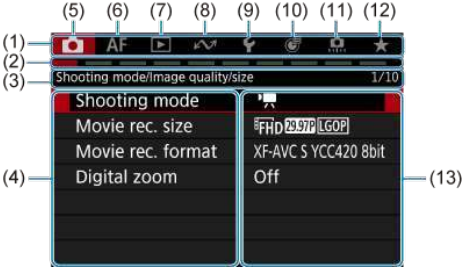
Menu Operations and Settings

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



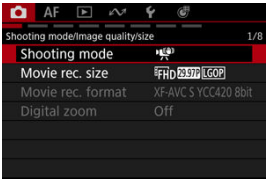
(1)	< MENU > button
(2)	Screen
(3)	< > button
(4)	< / >Quick control dial/cross keys
(5)	< INFO > button
(6)	< > Main dial

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

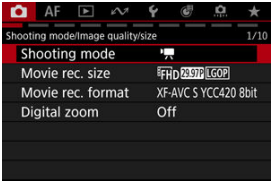
Basic Zone Menu Screen



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

Menu Setting Procedure

1. **Display the menu screen.**

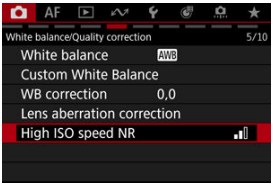


- Press the < MENU > button to display the menu screen.

2. **Select a tab.**

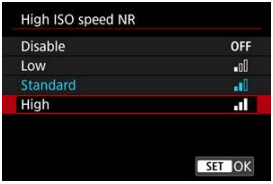
- Press the < INFO > button to switch between main tabs (groups of functions). You can also switch tabs with the zoom lever.
- Turn the < > dial to select a secondary tab.

3. **Select an item.**



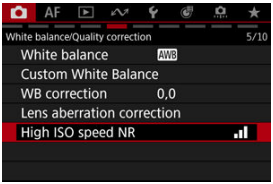
- Turn the < > dial to select an item, then press < >.

4. Select an option.



- Turn the < ◎ > dial to select an option.
- The current setting is indicated in blue.

5. Set an option.



- Press < SET > to set it.

6. Exit the setting.

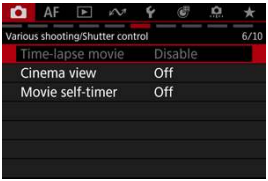
- Press the < MENU > button to return to shooting standby.

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 or using < ✥ >.
- To cancel the operation, press the < MENU > button.

Dimmed Menu Items

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



Dimmed menu items cannot be set. The menu item is dimmed if another function setting is overriding it.

You can see the overriding function by selecting the dimmed menu item and pressing < (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.

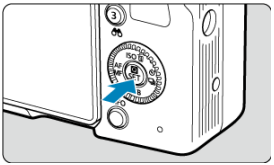
Note

- 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 < > (10).**



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

Movie recording

Still photo shooting

- Turn the < > dial to select an option.
- Turn the < > dial to adjust the setting. Some items are set by pressing a button after this.

Note

- You can select the position of the Quick Control screen as displayed in movie recording modes ( ).

Touch-Screen Operation

- Tapping
- Dragging
- Shooting with the Touch Shutter

Tapping

Sample screen (Quick Control)

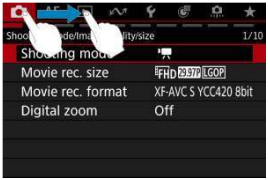
- Use your finger to tap (touch briefly and then remove your finger from) the screen.
- For example, when you tap [Q], the Quick Control screen appears. By tapping [↩], you can return to the preceding screen.

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.
- When [ ] is set, the AF point turns green when focus is achieved, then the picture is taken automatically.
- If focus is not achieved, the AF point turns orange and the picture cannot be taken. Tap the face or subject on the screen again.

Caution

- The camera shoots in single shooting mode regardless of the drive mode setting ([ ], [ ], 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 [ ].

Note

- To shoot with bulb exposure, tap the screen twice. Tap once to start exposure and again to stop it. Be careful not to shake the camera when tapping the screen.

Movie Recording Modes

This chapter describes how to use Basic and Creative zone movie modes on the Mode dial. In Basic Zone movie modes, simply press the shutter button to start recording, and all features will be set automatically.

Basic Zone movie modes

- <A+>: Fully Automatic Recording (Scene Intelligent Auto)
- <SCN>: Special Scene Recording

Creative Zone movie modes

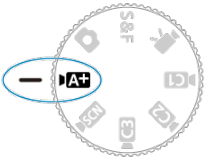
- Creative Zone movie modes

<A+>: Fully Automatic Recording (Scene Intelligent Auto)

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.

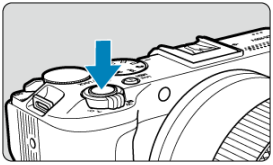
1. **Set the Mode dial to < A+ >.**



2. **Focus on the subject.**

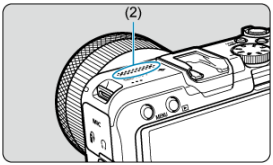
- By default, [AF: **Movie Servo AF**] is set to [**Enable**] so that the camera always keeps focusing ( ).

3. Record the movie.



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

- While the movie is being recorded, [●**REC**] (1) is displayed, the screen is outlined in red, and the tally lamp is lit.



- 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.

Scene Icons

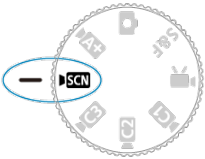
In < A+ > recording mode, the camera detects the type of scene and configures all settings accordingly. The detected scene type is indicated in the upper left of the screen. For icon details, see Scene Icons.

<SCN>: Special Scene Recording

- Smooth Skin Movie
- Movie for Close-Up Demos
- Movie IS Mode

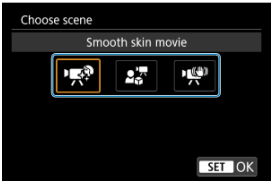
Selecting a shooting mode according to the subject and scene automatically sets the features that are suitable for shooting.
* < SCN > stands for Special Scene.

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



2. **Tap the shooting mode icon.**

3. Select a shooting mode.



- [ ]: Smooth skin movie
- [ ]: Movie for close-up demos
- [ ]: Movie IS mode

Smooth Skin Movie

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.**

  Focus by moving closer to or farther from the subject's face, so that the AF point [ ] appears on it. With [**AF for close-up demos**] set to [**On**], the camera focuses on the closest subject, which enables you to shoot with any face in front of the camera 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

Subjects near the camera can be given priority for focusing. This is useful for demonstrations, product reviews, or similar situations.
Adjust the brightness or other settings on the Quick Control screen.

Caution

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

Movie IS Mode

Enables movie recording with reduced camera shake.
Adjust the brightness or other settings on the Quick Control screen.

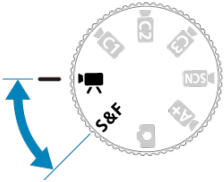
Note

- Control by the camera will ensure effective exposure tracking if brightness changes greatly between scenes, as when you switch between shooting people and scenery.

Creative Zone movie modes

- Movie Auto Exposure
- Movie Shutter-Priority AE
- Movie Aperture-Priority AE
- Movie Manual Exposure
- Slow/Fast Motion Recording
- Custom Recording Modes

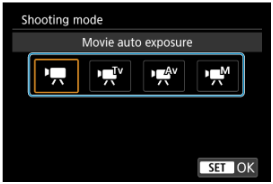
1. **Set the Mode dial to < > or < S&F >.**



2. **Tap the shooting mode icon.**

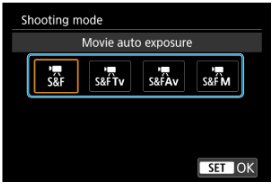
3. Select a shooting mode.

< >: Advanced movies



- [ ]: Movie auto exposure
- [ ]: Movie shutter-priority AE
- [ ]: Movie aperture-priority AE
- [ ]: Movie manual exposure

< S&F >: Slow/fast motion recording



- [ ]: S&F movie auto exposure
- [ ]: S&F movie shutter-priority AE
- [ ]: S&F movie aperture-priority AE
- [ ]: S&F movie manual exposure

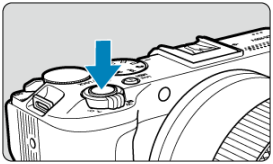
Movie Auto Exposure

Exposure is controlled automatically to suit the brightness.

1. **Focus on the subject.**

- By default, [AF: **Movie Servo AF**] is set to [**Enable**] so that the camera always keeps focusing ( ).
- By default, pressing the < AF-ON > button focuses using your specified AF area.

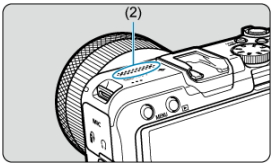
2. Record the movie.



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

(1)

- [●**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 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.

Movie Shutter-Priority AE

You can set your preferred shutter speed for movie recording. ISO speed and aperture values are set automatically to suit the brightness and obtain standard exposure.

1. **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.

2. **Focus and record the movie.**

- Same as steps 1 and 2 for Movie Auto Exposure.

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.

Movie Aperture-Priority AE

You can set your preferred aperture value for movie recording. ISO speed and shutter speed are set automatically to suit the brightness and obtain standard exposure.

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

(1)

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

2. **Focus and record the movie.**

- Same as steps 1 and 2 for Movie Auto Exposure.

Caution

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

Note

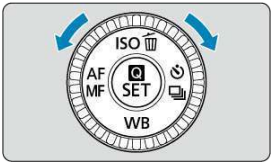
Notes for [ ], [ ], [ ], [ ], [ ], and [ ] modes

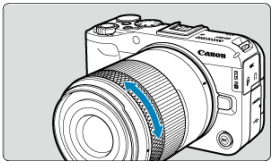
- You can lock the exposure (AE lock) by pressing the button assigned to AE locking. For details, see Customize Buttons for Shooting.
- Exposure compensation can be set in a range of up to ±3 stops by pressing the < > button.
- In [ ] mode, the ISO speed, shutter speed, and aperture value are not recorded in movie Exif information.
- The camera supports automatic Speedlite LED light activation under low light. For details, refer to the Instruction Manual of the EX series Speedlite equipped with an LED light.

Movie Manual Exposure

You can set your preferred shutter speed, aperture value, and ISO speed for movie recording.

1. 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 ( ).

2. Focus and record the movie.

- Same as steps 1 and 2 for Movie Auto Exposure.

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.**]
  - Turn the control ring while pressing the shutter button halfway
- When ISO Auto is set, you can lock the ISO speed by pressing the button assigned to [✱]. After locking during movie recording, ISO speed lock can be canceled by pressing the button assigned to [✱] again.
- You can check the difference between an initial exposure level when you first press the button assigned to [✱] and then press it again after recomposing the shot, which is shown on the exposure level indicator ( ).
- You can set the ISO speed manually or select [AUTO] to set it automatically.

Slow/Fast Motion Recording

S&F Recording Mode

Movies captured using slow or fast motion recording are played back in slow or fast motion. Sound is not recorded. Set the slow or fast motion speed (playback speed) in [: **Movie rec. size**].

1. **Select [: Movie rec. size].**

2. **Select a recording size.**

- Turn the < > dial to switch tabs.
- Use the < ◀ >< ▶ > keys to select an item.

3. **Select a recording frame rate.**

- Turn the < > dial to switch tabs.
- Use the < ◀>< ▶ > keys to select an item.

4. **Select a playback frame rate.**

- Turn the < ◎ > dial to switch tabs.
- Use the < ◀ >< ▶ > keys to select an item.
- Playback speed is shown in the upper right.

5. **Press < SET >.**

S&F Recording Mode

- **[S&F]: S&F movie auto exposure**
  Exposure is controlled automatically to suit the brightness. Record just as you would for Movie Auto Exposure.

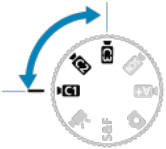
- **[S&F Tv]: S&F movie shutter-priority AE**
  Set your preferred shutter speed for slow or fast recording. Record just as you would for Movie Shutter-Priority AE.

- **[S&F Av]: S&F movie aperture-priority AE**
  Set your preferred aperture value for slow or fast recording. Record just as you would for Movie Aperture-Priority AE.

- **[S&F M]: S&F movie manual exposure**
  Set your preferred shutter speed, aperture value, and ISO speed for slow or fast recording. Record just as you would for Movie Manual Exposure.

Custom Recording Modes

You can record using the camera function settings assigned to [: **Custom shooting mode (C1-C3)**] ( ).
< C1 >, < C2 >, and < C3 > on the Mode dial correspond to [**C. shooting mode**: C1], [**C. shooting mode**: C2], and [**C. shooting mode**: C3].



Still Photo Shooting Mode

This chapter describes how to use [Still photo mode] on the Mode dial.
In Basic modes, simply compose the shot and press the shutter button, and all features will be set automatically.

- Setting the Shooting Mode

Advanced shooting

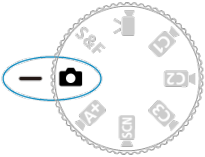
- P: Program AE
- Tv: Shutter-Priority AE
- Av: Aperture-Priority AE
- M: Manual Exposure
- Exposure Lock (AE Lock)
- B: Bulb Exposure

Basic shooting

- A+: Fully Automatic Shooting (Scene Intelligent Auto)
- Self Portrait
- Portrait
- Smooth Skin
- Panoramic Shot
- Food
- Handheld Night Scene

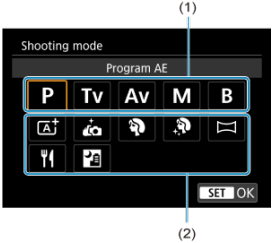
Setting the Shooting Mode

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



2. **Tap the shooting mode icon.**

3. Select a shooting mode.



(1) Creative Zone
Set your preferred exposure or other settings for the subject or scene.

- [**P**]: Program AE
- [**Tv**]: Shutter-priority AE
- [**Av**]: Aperture-priority AE
- [**M**]: Manual exposure
- [**B**]: Bulb exposure

(2) Basic Zone
The camera sets everything to suit the subject or scene.

- [A+]: Scene Intelligent Auto
- [ ]: Self portrait
- [ ]: Portrait
- [ ]: Smooth skin
- [ ]: Panoramic shot
- [ ]: Food
- [ ]: Handheld night scene

P: Program AE

The camera automatically sets the shutter speed and aperture value to suit subject brightness.
* [**P**] stands for Program.
* AE stands for Auto Exposure.

1. **Focus on the subject.**

   - The shutter speed and aperture value are set automatically.

2. **Check the display and shoot.**

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

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 use an ND filter (sold separately) to reduce the amount of light entering the lens.

Note

Differences between [P] and [A+] modes

- [A+] mode limits available functions and sets the AF area, metering mode, and many other functions automatically. [**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 to display the shutter speed or aperture value to set.
- 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

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: 1/30 sec.)

Frozen motion
(Fast speed: 1/2000 sec.)

---

1. **Set the desired shutter speed.**

- Turn the < > dial to set it.

2. **Focus on the subject.**

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

3. 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

Depth-of-Field Preview

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
(With a low aperture value: f/5.6)

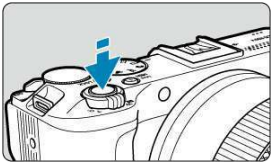
Sharp foreground and background
(With a high aperture value: f/32)

---

1. **Set the desired aperture value.**

- Turn the < > dial to set it.

2. Focus on the subject.



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

3. 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 the 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 lens. If no lens is attached to the camera, "**F00**" will be displayed for the aperture.

Depth-of-Field Preview

The aperture changes only at the moment you shoot, and it remains open at other times. For this reason, the depth of field shown on the screen looks narrow, or shallow. To check the area in focus, assign [ ] (depth-of-field preview) to a button and press it.

Note

- The larger the aperture value, the wider the area in focus, from the foreground to the background.
- The depth-of-field effect is readily apparent on images as you press the button assigned to depth-of-field preview.
- Exposure is locked (AE lock) as you hold down the button assigned to depth-of-field preview.

M: Manual Exposure

Exposure Compensation with ISO Auto

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 ISO speed ( ).**

- Press the < ISO > button to set it.
- With ISO Auto, you can set exposure compensation ( ).

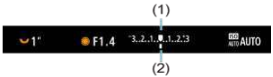
2. **Set the desired shutter speed.**

- Turn the < > dial to set it.

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

- Turn the < > dial to set it.

4. **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.

(1) Standard exposure index
(2) Exposure level mark

5. **Set the exposure and take the picture.**

- Check the exposure level indicator and set the desired shutter speed and aperture value.

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
- Set [: **Exposure comp.**]
- Turn < > while pressing the shutter button halfway ( )

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 lock the ISO speed by pressing the button assigned to AE lock.
- You can check the difference between an initial exposure level when you first press the button assigned to AE lock and then press it again after recomposing the shot, which is shown on the exposure level indicator.
- For details on assigning AE lock, see Customize Buttons for Shooting.
- 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**] mode ( ).

Exposure Lock (AE Lock)

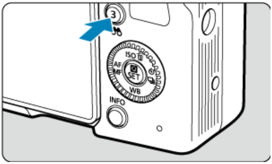
☑ Effect of AE Lock

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. Lock the exposure by pressing the button assigned to AE lock, 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 assigned to AE lock.**



   - 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.**

Note

- For details on assigning AE lock, see Customize Buttons for Shooting.
- AE lock is not possible with bulb exposures.

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 ( ).

B: Bulb Exposure

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 desired aperture value.**

   - Turn the < > dial to set it.

2. **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

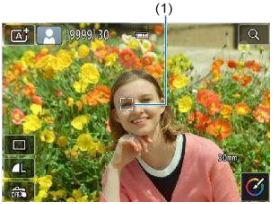
- You can reduce the noise generated during long exposures by using [: **Long exp. noise reduction**] ( ).
- Using a tripod and remote control is recommended for bulb exposures.
- Refer to the remote control instruction manual for bulb exposure remote control instructions.

A+: Fully Automatic Shooting (Scene Intelligent Auto)

- FAQ
- Shooting Moving Subjects
- Scene Icons
- Adjusting Settings
- Creative Assist

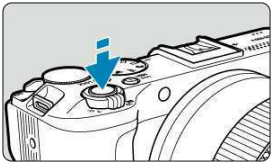
In [A+] mode, the camera analyzes the scene and sets optimal settings automatically. Subject movement is also detected, so that the camera can keep subjects in focus ( ).

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



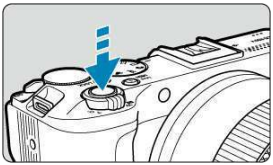
- An AF point (1) may be displayed on the subject, under some shooting conditions.
- When an AF point is displayed on the screen, aim it over the subject.
- To apply a Creative Assist effect, press < > and select the effect ( ).

2. Focus on the subject.



- Press the shutter button halfway to focus.
- You can also focus by tapping a person's face or other subject on the screen.
- 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).

3. 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.
- [A+] mode makes the colors look more impressive in nature, outdoor, and sunset scenes. If you prefer other colors, switch to a Creative Zone shooting mode (), select a Picture Style other than [A], then shoot again ().

? FAQ

- **Focusing is not possible (indicated by an orange 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. If you are using a lens hood, try removing it before shooting.

Note

- Under low light, when camera shake tends to occur, hold the camera steady or use a tripod. When using a zoom lens, 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 ( ).

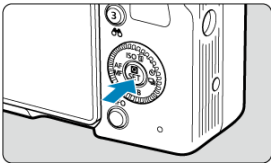
Adjusting Settings

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

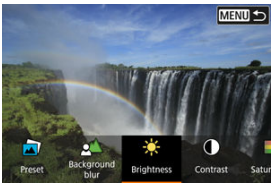
Creative Assist

You can shoot with your preferred effects applied.

1. **Press < (SET) >.**



2. **Select an effect.**



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

3. **Select the effect level and other details.**

- Set with the < (dial) > dial and press < (SET) >.
- To reset the setting, press the < COLOR > 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 lens brightness (f/number), 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

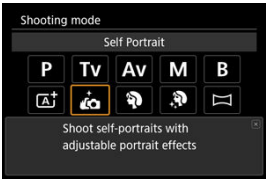
- [**Background blur**] is not available in flash photography.
- These settings are reset when you switch shooting modes or set the power switch to < OFF >. To save the settings, set [: **Retain Creative Assist data**] to [**Enable**].

Saving effects

To save the current setting to the camera, tap [INFO. **Register**] on the [**Creative Assist**] setting screen, then select [**OK**]. Up to three presets can be saved as [**USER***]. After three have been saved, an existing [**USER***] preset must be overwritten to save a new one.

Self Portrait

Shoot with settings optimized for shots of yourself. Rotate the screen around to face you.



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 [OFF] to change it to [ ] ( ).

Caution

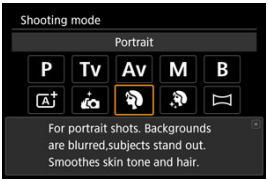
- After the camera achieves focus, do not change the distance between you and the camera until the picture is taken.
- Be careful not to drop the camera.

Note

- The self-timer lamp ( ) will not blink.

Portrait

Blurs the background to make the person you shoot stand out, while also softening skin tones and hair.



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 a telephoto lens.**

  If you have a zoom lens, use the telephoto end to fill the frame with the subject from the waist up.

- **Focus on the face.**

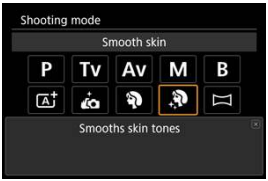
  As you focus before shooting, make sure the AF point on the subject's face is green. When shooting close-ups of faces, you can set [AF: **Eye detection**] to [**Enable**] to shoot with the subject's eyes in focus.

- **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

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.

Panoramic Shot

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.

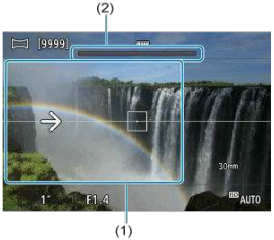
1. **Choose a shooting direction.**

- 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. Shoot.



- Press the shutter button completely and move the camera at a constant speed in the direction of 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

- For details on lenses that can counteract blur from swinging the camera, visit the Canon website ( ).
- 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 reduce panorama images if you will print them from a memory card inserted in a Canon printer.
  If panoramas are not compatible with certain software or online 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 using a lens with a long focal length, or when shooting night scenes or under low light.

Food

A good choice for culinary photography. Also reduces the reddish tinge from tungsten lights or similar light sources.

Shooting tips

- **Change the color tone.**

  [**Color tone**] can be adjusted. After pressing < ⊛ >, set toward [**Warm tone**] (red) to increase the reddish tinge of food, or set toward [**Cool tone**] (blue) to reduce an excessive red tinge.

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

For handheld night shooting without a tripod or similar equipment.

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 set.
- Flash photography is not available.
- 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.
- Images may not be aligned correctly if they are patterned (with a lattice or stripes, for example), are generally flat and uniform, or are greatly out of alignment due to camera shake or other issues.
- 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.

Shooting and Recording

This chapter describes shooting and recording and introduces menu settings on the shooting [📷] tab.
To switch between movie recording and still photo shooting, use the Mode dial ( ).

Caution

- After switching between movie recording and still photo shooting, check the camera settings again before shooting.
- Still photo shooting is not available during movie recording.
- Pressing the movie shooting button during still photo shooting starts movie recording.

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

Movie recording

- Movie Recording Size
- Movie Recording Format
- Digital Zoom
- Sound Recording
- Exposure Compensation ☆
- Movie ISO Speed Settings ☆
- Movie Av in 1/8-Stop Increments ☆
- Movie Auto Slow Shutter ☆
- AE for Priority Subjects During AF
- Color Mode ☆
- Clarity ☆
- HDR Shooting (PQ) ☆
- Auto Lighting Optimizer ☆
- Highlight Tone Priority ☆
- White Balance ☆
- White Balance Correction ☆
- Lens Aberration Correction ☆
- High ISO Speed Noise Reduction ☆
- Time-Lapse Movies
- Cinema View ☆
- Movie Self-Timer
- Tally Lamp ☆

- Image Stabilizer (IS Mode)
- Movie Auto Level
- Metadata ☆
- Time Code
- HDR/C. Log View Assist ☆
- False Color Settings ☆
- Zebra Settings ☆
- Shooting Information Display
- Auto Rotate Movie Shooting Info Display
- Quick Control Screen
- Customizing Quick Controls ☆
- Reverse Display
- Auto Power Off Temperature
- Standby: Low Resolution
- Display During HDMI Connection
- Canon Log HDMI Output Range ☆
- General Movie Recording

Still photo shooting

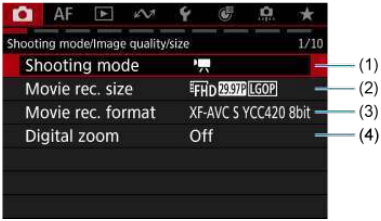
- Still Photo Image Quality
- Dual Pixel RAW
- Still Image Aspect Ratio
- Digital Tele-Converter ☆
- Exposure Compensation ☆
- Still Photo ISO Speed Settings ☆
- Anti-Flicker Shooting ☆
- Metering Mode ☆
- AE for Priority Subjects During AF
- Color Mode ☆
- Clarity ☆
- HDR Shooting (PQ) ☆
- HDR Mode ☆
- Auto Lighting Optimizer ☆
- Highlight Tone Priority ☆
- White Balance ☆
- White Balance Correction ☆
- Lens Aberration Correction ☆
- Long Exposure Noise Reduction ☆
- High ISO Speed Noise Reduction ☆

- Dust Delete Data Acquisition ☆
- Focus Bracketing ☆
- Drive Mode
- Interval Timer Shooting
- Silent Shutter Function ☆
- Shutter Mode ☆
- Enabling Shutter Release Without a Card
- Image Stabilizer (IS Mode)
- Review Duration
- High-Speed Display ☆
- Display Simulation ☆
- HDR/C. Log View Assist ☆
- Shooting Information Display
- Customizing Quick Controls ☆
- Display Frame Rate
- Reverse Display
- Auto Power Off Temperature
- Retain Creative Assist Data
- General Still Photo Shooting
- Shooting with Speedlites ☆
- Flash Photography Settings ☆

Tab Menus: Movie Recording

Information Display (Movie Recording)

Shooting mode/Image quality/size



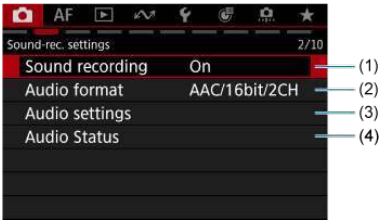
(1) Shooting mode

(2) Movie rec. size

(3) Movie rec. format

(4) Digital zoom

Sound-rec. settings



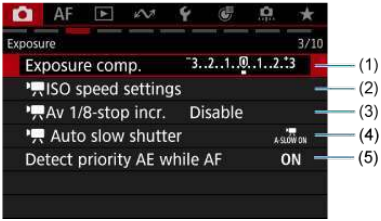
(1) Sound recording

(2) Audio format

(3) Audio settings ☆

(4) Audio Status

Exposure



(1) Exposure comp. ☆

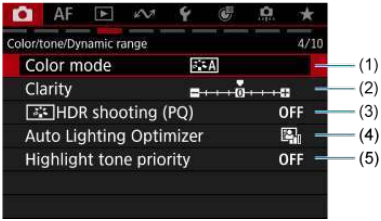
(2) ISO speed settings ☆

(3) Av 1/8-stop incr. ☆

(4) Auto slow shutter ☆

(5) Detect priority AE while AF

Color/tone/Dynamic range



(1) Color mode ☆

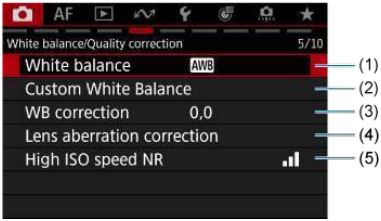
(2) Clarity ☆

(3) HDR shooting (PQ) ☆

(4) Auto Lighting Optimizer ☆

(5) Highlight tone priority ☆

White balance/Quality correction



(1) White balance ☆

(2) Custom White Balance ☆

(3) WB correction ☆

(4) Lens aberration correction ☆

(5) High ISO speed NR ☆

Various shooting/Shutter control

(1) Time-lapse movie

(2) Cinema view ☆

(3) Movie self-timer

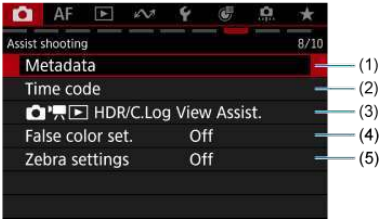
Assist shooting

(1) Tally lamp ☆

(2) IS (Image Stabilizer) mode

(3) Auto level

Assist shooting



(1) Metadata ☆

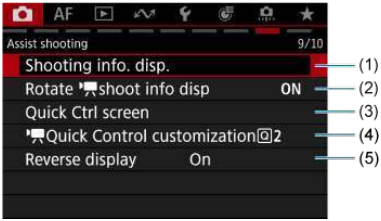
(2) Time code

(3) HDR/C.Log View Assist. ☆

(4) False color set. ☆

(5) Zebra settings ☆

Assist shooting



(1) Shooting info. disp.

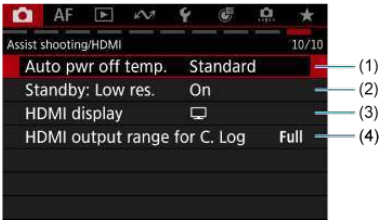
(2) Rotate shoot info disp

(3) Quick Ctrl screen

(4) Quick Control customization 2 ☆

(5) Reverse display

Assist shooting/HDMI



(1) Auto pwr off temp.

(2) Standby: Low res.

(3) HDMI display

(4) HDMI output range for C. Log ☆

Information Display (Movie Recording)

For details on the icons on the movie recording 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 ( ).

Tab Menus: Still Photo Shooting

Shooting mode/Image quality/size

(1) Shooting mode

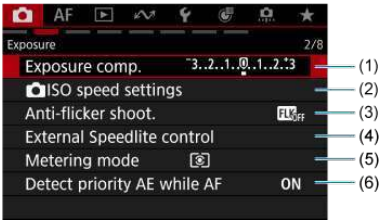
(2) Image quality

(3) Dual Pixel RAW

(4) Still img aspect ratio

(5) Digital tele-conv ☆

Exposure



(1) Exposure comp. ☆

(2) ISO speed settings ☆

(3) Anti-flicker shoot. ☆

(4) External Speedlite control ☆

(5) Metering mode ☆

(6) Detect priority AE while AF

Color/tone/Dynamic range

(1) Color mode ☆

(2) Clarity ☆

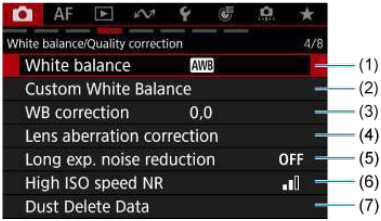
(3) HDR shooting (PQ) ☆

(4) HDR Mode ☆

(5) Auto Lighting Optimizer ☆

(6) Highlight tone priority ☆

White balance/Quality correction



(1) White balance ☆

(2) Custom White Balance ☆

(3) WB correction ☆

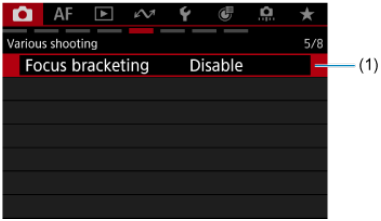
(4) Lens aberration correction ☆

(5) Long exp. noise reduction ☆

(6) High ISO speed NR ☆

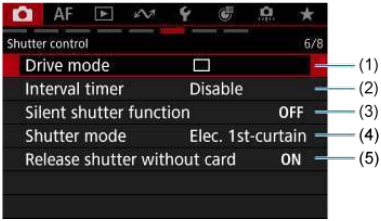
(7) Dust Delete Data ☆

Various shooting



(1) Focus bracketing ☆

Shutter control



(1) Drive mode

(2) Interval timer

(3) Silent shutter function ☆

(4) Shutter mode ☆

(5) Release shutter without card

Assist shooting

(1) IS (Image Stabilizer) mode

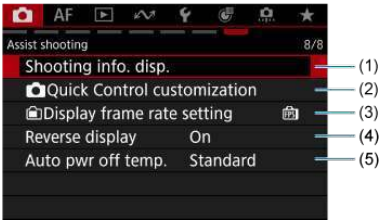
(2) Review duration

(3) High speed display ☆

(4) Display simulation ☆

(5) HDR/C.Log View Assist. ☆

Assist shooting



(1) Shooting info. disp.

(2) Quick Control customization ☆

(3) Display frame rate setting

(4) Reverse display

(5) Auto pwr off temp.

Note

- In [ ] mode, [**Retain Creative Assist data**] is displayed ( ).

Movie Recording Size

- 4K Movie Recording
- Image Area
- 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 [: **System frequency**] setting ( ).

1. **Select [: Movie rec. size] ( ).**

2. **Set the item.**

- Turn the < > dial to select a tab (1).
- Press the < > keys vertically or horizontally to change the setting (2).
- When finished, press < >.

Resolution	Image Size	Aspect Ratio
4K	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 [: **System frequency**] is set to [**For NTSC**].

Compression method

- [LGOP] Standard (Long GOP)
  Compresses multiple frames at a time efficiently for recording.

Movie recording format

- For details, see “Movie Recording Format” ( ).

Caution

- If you change the [: **System frequency**] setting, also set [: **Movie rec. size**] again.
- Normal playback of files such as 4K or High Frame Rate movies may not be possible on other devices, because playback is processing-intensive.
- Apparent resolution and noise vary slightly depending on the movie recording size setting and lens used.

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.

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 ( ).

Image Area

For details on the image area at various resolutions, see the specifications ( ).

Caution

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

Cards That Can Record Movies

For details on cards that can record at each movie recording size, see Estimated recording time, video bit rate, file size, and card performance requirements.
Test cards by recording a few movies to make sure they can record correctly at your 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

- Individual movie files exceeding 4 GB cannot be recorded to SD cards.
- With SDHC cards, once the movie file size reaches 4 GB, a new movie file is created automatically. During playback, these files are automatically played consecutively.
- With SDXC cards, individual movies are recorded as a single file, even if they exceed 4 GB.

Caution

- When importing movie files exceeding 4 GB to a computer, use either EOS Utility or 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.
- Multiple files are displayed for any single movie file exceeding 4 GB that you transfer from an SDHC card to a computer. Deleting the first file will prevent playback of the remaining movie files.
- When connecting to a computer with an interface cable, do not use the computer to delete movie files on the camera. Movie files may not be recognized correctly.

Total Movie Recording Time and File Size Per Minute

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

Movie Recording Time Limit

For details on the maximum recording time per movie, see the specifications ( ).
Recording stops automatically when the maximum time is reached.

Caution

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

High Frame Rate

High Frame Rate movie recording at 119.9/100.0 fps is available in [ ], [ ], [ ], or [ ] shooting mode with the resolution set to [FHD].

Caution

- [ ] and [ ] specifications in slow/fast motion recording differ from the specifications for this High Frame Rate recording.
- Time code display during movie recording advances 4 sec. per second.
- Time codes are not recorded when [**Count up**] is set to [**Free run**] in [: **Time code**] ( ).
- The screen may flicker under fluorescent or LED lighting.
- For a moment when you start or stop recording, the movie is not updated. Be aware of this when recording movies to external devices via HDMI.
- Frame rates shown on the screen during recording do not correspond to the frame rate of the recorded movie.
- 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.

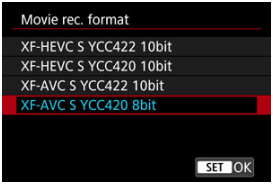
Movie Recording Format

XF-HEVC S and XF-AVC S Movies

You can specify the format of movie files recorded.

1. **Select [: Movie rec. format] ( ).**

2. **Select an option.**



XF-HEVC S and XF-AVC S Movies

XF-HEVC S and XF-AVC S movies are in original Canon video formats that are extensions of H.265/HEVC and MPEG-4 AVC/H.264, respectively. These formats maintain image quality while offering high data compression.

Movie recording format	Codec	Brightness, Hue, Saturation (YCbCr)/Color Depth	Description	Restrictions
XF-HEVC S YCC422 10bit	H.265/ HEVC	4:2:2/10-bit	XF-HEVC S can be used to record 10-bit YCC 4:2:2 signals. It is assumed that this material will be edited on a computer.	May not be played back correctly by some software.
XF-HEVC S YCC420 10bit	H.265/ HEVC	4:2:0/10-bit	XF-HEVC S can be used to record 10-bit YCC 4:2:0 signals.	–
XF-AVC S YCC420 8bit	MPEG-4 AVC/H.264	4:2:0/8-bit	XF-AVC S can be used to record 8-bit YCC 4:2:0 signals. A recording format with wide playback compatibility in software.	Not available with [: **HDR shooting (PQ)**] set to [**HDR PQ**].
XF-AVC S YCC422 10bit	MPEG-4 AVC/H.264	4:2:2/10-bit	XF-AVC S can be used to record 10-bit YCC 4:2:2 signals. It is assumed that this material will be edited on a computer.	May not be played back correctly by some software.

Note

- Consider selecting a 10-bit recording format for custom picture files with a color space set to [**C.Gamut**] or [**BT.2020**] ( ).

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 < > to set it.

Note

- HEIF is available when [: **HDR shooting (PQ)**] is set to [**HDR PQ**]. 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.

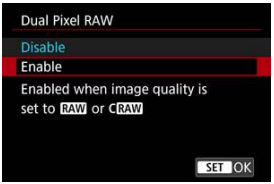
Note

- 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 [H].

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 switch is set to <**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: multiple exposures, HDR shooting, focus bracketing, electronic shutter, and one-touch image quality setting.

Note

Amount and effect of Dual Pixel RAW correction

- Larger lens apertures increase the amount and effect of correction.
- The amount and effect of correction may not be sufficient, depending on the lens used, the shooting situation, and other factors.
- 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 Image Aspect Ratio

You can change the image's aspect ratio.

1. **Select [: Still img aspect ratio] ( ).**

2. **Set the aspect ratio.**

- Select an aspect ratio.

- **JPEG images**
  The images will be recorded with the set aspect ratio.

- **RAW Images**
  The images will always be recorded in the [**3:2**] aspect ratio. The selected aspect ratio information is added to the RAW image file, which enables Digital Photo Professional (EOS software) to generate an image with the same aspect ratio as set at the time of shooting when you process RAW images with this software.

Aspect ratio		
4:3	**16:9**	**1:1**

Note

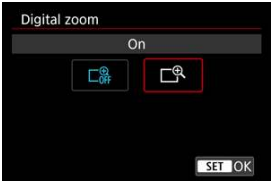
- RAW images shot at an aspect ratio of [**4:3**], [**16:9**], or [**1:1**] are displayed during playback with lines indicating the shooting area, but these lines are not recorded in the image.

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 [**Enable**], 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 [▲**T**] or press the < ▲ > key to zoom in, and tap [▼**W**] or press the < ▼ > key to zoom out. You can also zoom with the zoom lever.
- Pressing the < AF-ON > button focuses with [**1-point AF**] (fixed at center).
- To cancel digital zoom, select [**Off**] in step 2.

Caution

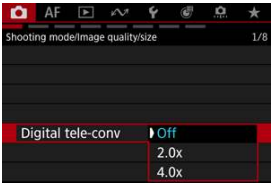
- Using a tripod to prevent camera shake is recommended.
- Maximum ISO speed is ISO 12800.
- A magnified view is not available.
- Since Movie digital zoom processes the image digitally, the image will look grainier at higher magnifications. Noise, dots of light, etc. may also become noticeable.
- Also 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 [**Disable**] and cannot be changed ( ).

Digital Tele-Converter

Shooting magnification can be increased beyond lens magnification by enlarging the center of the image area.

1. **Select [: Digital tele-conv] ( ).**

2. **Select a shooting magnification.**



- Shooting magnification is not adjusted when [**Off**] is selected.

Caution

- Higher shooting magnification results in lower image quality.
- Not available when RAW image quality is selected.

Note

- One AF point is used, fixed at the center. Tracking frames are not displayed.

Sound Recording

- Sound Recording
- Audio Format
- Audio Settings
- Recording Mode
- Recording Level
- Wind Filter
- Audio Noise Reduction
- Attenuator
- Microphone Directionality
- Audio Status

Sound Recording

Select [**On**] for sound recording during movie recording. The built-in microphone is used for recording unless you use microphones that are external or designed for the multi-function shoe.

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

2. Select an option.

- Set the recording level and other settings as needed in [: **Audio settings**] ( ).

Caution

- Microphones may pick up sounds from Wi-Fi operations. For best results, avoid using wireless features when recording.
- Make sure any output plugs of external microphones are fully inserted in the camera.
- 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.
- Do not connect anything other than an external microphone to the camera's external microphone IN terminal.
- Sound that is recorded using four-channel recording may not be played correctly by some software.

Note

- Audio is also output when the camera is connected to televisions via HDMI, except when set to [**Disable**]. 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 sampling rate.

Four-channel recording

The camera supports four-channel sound recording.
Four-channel recording can include combinations of the following sources.

- Microphone designed for a multi-function shoe (2 channels) + built-in microphone (2 channels)
- Microphone designed for a multi-function shoe (2 channels) + external microphone (2 channels)
- External microphone (2 channels) + external microphone (2 channels)
- Built-in microphone (2 channels) + built-in microphone (2 channels)

When both an external microphone and one designed for the multi-function shoe are used, the latter is assigned to channels 1 and 2, and the former, channels 3 and 4.

Caution

- Movie files recorded with [**LPCM/24bit/4CH**] selected may not be played correctly by some software ( ).

Note

- To check which microphone input is currently enabled, access [: **Audio Status**] ( ).

Audio Format

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

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

2. **Select an option.**

Caution

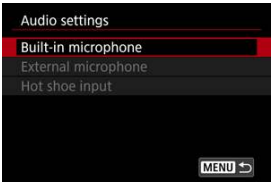
- Selecting [**LPCM/24bit/4CH**] enables four-channel sound recording (with multiple microphones). Selecting [**AAC/16bit/2CH**] restricts recording to two channels (with a single microphone).
- Sound that is recorded using four-channel recording may not be played correctly by some software.

Audio Settings ☆

Configure microphones for sound recording in these settings. When using microphones that are external or designed for a multi-function shoe, also refer to the microphone instruction manual.

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

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



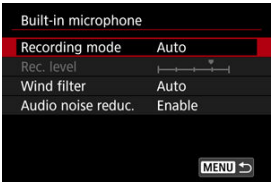
- **Built-in microphone**
  For configuring settings for the built-in microphone.

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

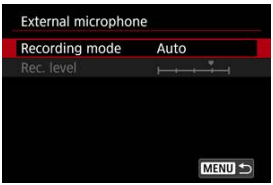
- **Hot shoe input**
  For configuring settings for microphones designed for a multi-function shoe.

3. Set the item.

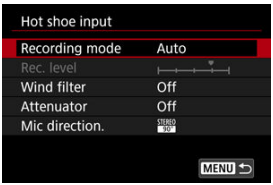
When set to [Built-in microphone]



When set to [External microphone]



When set to [Hot shoe input]

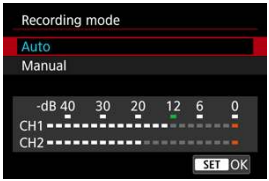


- Available setting items vary depending on the microphone used.

Caution

- Sound recording is momentarily paused to reduce noise when [**Recording mode**], [**Rec. level**], [**Wind filter**], or [**Attenuator**] is set.

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**].

Caution

- Do not change the [**Recording mode**] settings when listening with headphones. This may cause sudden loud output that may hurt your ears.

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 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.

Audio Noise Reduction

When recording with the built-in microphone, this feature reduces mechanical lens sounds caused by autofocusing, as well as white noise.

- **Disable**
  Disables audio noise reduction.
- **Enable**
  Enables audio noise reduction.
- **High**
  Reduces audio noise more than with [**Enable**].

Caution

- Audio quality may be different when set to [**Enable**] than when set to [**Disable**].
- Although [**High**] reduces audio noise more than with [**Enable**], this option may also have a greater impact on audio quality.
- Effectiveness of audio noise reduction varies by lens.
- 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 and the shooting environment.
- To reduce audio noise in headphone output, configure [**Audio monitoring**] ( ).

Attenuator

As a function that suppresses sound distortion caused by loud noises during recording, the attenuator can be enabled or disabled when using microphones designed for a multi-function shoe. For details, refer to the microphone instruction manual.

Microphone Directionality

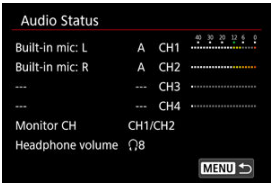
Available when using multi-function shoe microphones for which directivity can be switched. For details, refer to the microphone instruction manual.

Audio Status

Indicates audio status such as the active microphone and the headphone volume.

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

2. **Check the details as needed.**



Note

- [**Monitor CH**] indicates channels set in [**Shoot. monitor CH**] for [**Headphones**] in [: **Audio monitor**].

Exposure Compensation

You can set exposure compensation toward the positive or negative side to brighten or darken images relative to the standard exposure determined by the camera.
Exposure compensation is available in these shooting modes.
Movie recording: [P] [Tv] [Av] [M] [S&F] [S&F Tv] [S&F Av] [S&F M]
Still photo shooting: [**P**] [**Tv**] [**Av**] [**M**]

- To adjust exposure compensation when using Live View, press the shutter button halfway and turn the < ◎ > dial.
  Increased exposure, to brighten images

  Decreased exposure, to darken images

- To adjust exposure compensation from the menu, select [: **Exposure comp.**] and set the amount of exposure on this screen.

Note

- A [] icon is displayed to indicate exposure compensation.
- To cancel exposure compensation, return the exposure level to the standard exposure index ([]) or "0."
- For details on exposure compensation when [**M**] mode and ISO Auto are both set, see M: Manual Exposure.
- The exposure compensation amount will remain in effect even after you set the power switch to < OFF >.

Movie ISO Speed Settings

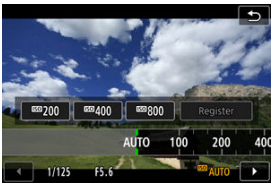
Max for Auto

Max for Auto

In [M] or [S&F 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 or select a registered setting value.
- You can register frequently used ISO speed setting values by specifying an option other than [**AUTO**] and selecting [**Register**].
- 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 < INFO > button to set the speed to [**AUTO**].

ISO speed guide

- Low ISO speeds reduce image noise but may increase the risk of camera shake and subject blur 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.

Caution

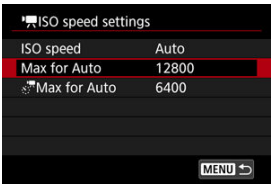
- Image noise (such as graininess, dots of light, or banding), irregular colors, or color shift may be noticeable at high ISO speeds, in high temperatures, or with long exposures.
- When shooting in conditions that produce an extreme amount of noise, such as a combination of high ISO speed, high temperature, 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.

Max for Auto

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

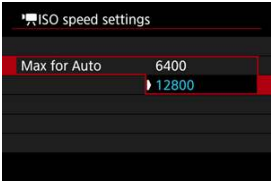
1. **Select [: ISO speed settings] ( ).**

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



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

3. **Select the ISO speed.**



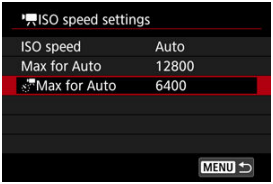
- Select the ISO speed, then press < SET >.

Max for Auto

You can set the maximum limit for ISO Auto in 4K time-lapse/Full HD time-lapse movie recording in [], [Tv], or [Av] mode or in [M] mode with ISO Auto.

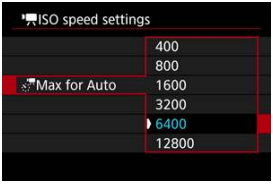
1. **Select [: ISO speed settings] ( ).**

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



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

3. Select the ISO speed.



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

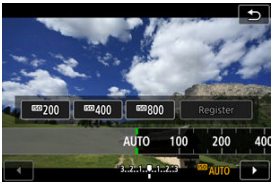
Still Photo ISO Speed Settings

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 or select a registered setting value.
- You can register frequently used ISO speed setting values by specifying an option other than [**AUTO**] and selecting [**Register**].
- 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 <**INFO**> 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

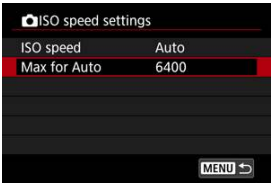
- Image noise (such as graininess, dots of light, or banding), irregular colors, or color shift may be noticeable at high ISO speeds, in high temperatures, or with long exposures.
- When shooting in conditions that produce an extreme amount of noise, such as a combination of high ISO speed, high temperature, 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.

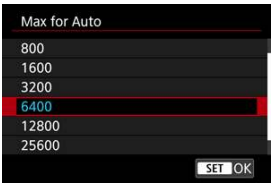
1. **Select [: ISO speed settings] ( ).**

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



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

3. **Select the ISO speed.**



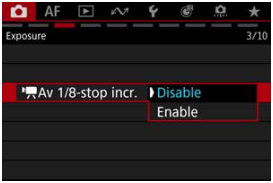
- Select the ISO speed, then press < >.

Movie Av in 1/8-Stop Increments

Aperture values can be set in 1/8-stop increments for movie recording with RF lenses. Available in [M], [Av], [S&F M], or [S&F Av] recording mode.

1. **Select [: Av 1/8-stop incr.] ( ).**

2. **Select an option.**

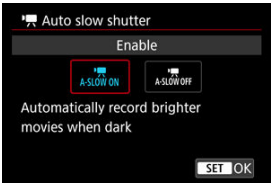


Movie Auto Slow Shutter

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. 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

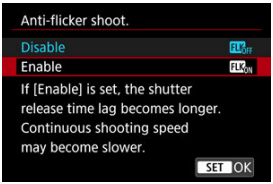
- Setting to [**Disable**] is recommended when recording moving subjects under low light, or when afterimages such as trails may occur.

Anti-Flicker Shooting

Uneven exposure and color may appear in continuous shooting at fast shutter speeds under flickering light sources such as fluorescent lights, due to uneven vertical exposure. Anti-flicker shooting enables you to take pictures when exposure and colors are less affected by flickering.

1. **Select [: Anti-flicker shoot.] ( ).**

2. **Select [Enable].**



3. **Take the picture.**

Caution

- When [**Enable**] is set and you shoot under a flickering light source, the shutter-release time lag may become longer. Also, the continuous shooting speed may become slower, and the shooting interval may become irregular.
- Flicker at a frequency other than 100 Hz or 120 Hz cannot be detected. Also, if the flickering frequency of the light source changes during continuous shooting, effects of the flicker cannot be reduced.
- In [**P**] or [**Av**] mode, color tone of captured images may vary if the shutter speed changes during continuous shooting or if you take multiple shots of the same scene at different shutter speeds. To avoid inconsistent color tone, shoot in [**M**] or [**Tv**] mode at a fixed shutter speed.
- Color tone of captured images may vary between [**Enable**] and [**Disable**].
- Shutter speed, aperture value, and ISO speed may change when you start shooting with AE lock.
- If the subject is against a dark background or if there is a bright light in the image, flicker may not be properly detected.
- Flicker reduction may not be possible under special lighting.
- Depending on the light source, flicker may not be detected properly.
- Depending on the light sources or shooting conditions, the expected result may not be obtained even if you use this function.

Note

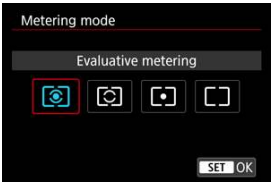
- Taking test shots in advance is recommended.
- Detect flicker manually if the screen flickers (as when the light source changes) by pressing the < ⊛ > button, selecting [**Anti-flicker shoot.**], then pressing the < INFO > button.
- Flicker is not reduced in Basic Zone modes.
- Flicker reduction also works with flash photography. However, the expected result may not be obtained for wireless flash photography.

Metering Mode

Four methods (metering modes) to measure the subject's brightness are provided. Normally, evaluative metering is recommended. In Basic Zone modes, evaluative metering is set automatically.

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.

- **: Partial metering**
  Effective where there are much brighter lights around the subject due to backlight, etc. The partial metering area is indicated on the screen.

- **: 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.

Caution

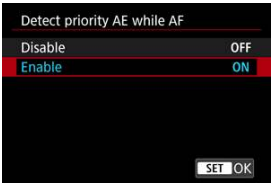
- With (evaluative metering), holding down the shutter button halfway when shooting with **[One-Shot AF]** locks the exposure value (AE lock). With (partial metering), (spot metering), or (center-weighted average metering), exposure is set at the moment the picture is taken (without locking the exposure value when the shutter button is pressed halfway).

AE for Priority Subjects During AF

Performs metering for subjects detected based on the [AF: **Subject to detect**] setting.

1. **Select [: Detect priority AE while AF] (,).**

2. **Select an option.**



- [**Enable**]: Metering is based on the AF point or AF area where the subject was detected.
- The entire screen is metered when [**Disable**] is selected.

Caution

- In still photo shooting, [**Enable**] is available only with [: **Metering mode**] set to [**Evaluative metering**].
- Has no effect during manual focusing (MF).

Note

- Metering is also based on the entire screen when [AF: **Subject to detect**] is set to [**None**].

Color Mode

Picture Style

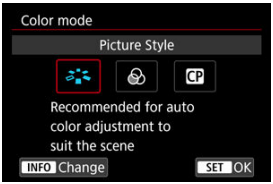
Color Filter

Custom Picture

You can set your preferred movie or still photo image characteristics from the Picture Style, Color Filter, or Custom Picture menu.

1. **Select [: Color mode] (,).**

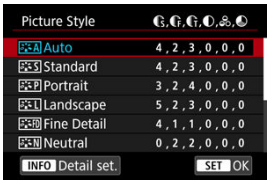
2. **Select an option.**



- Select [**INFO**] to access the corresponding menu.

Picture Style

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



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

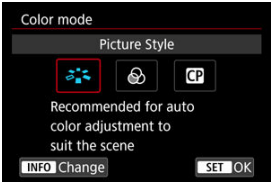
- For movie recording, "*, *" is indicated for the [**Fineness**] and [**Threshold**] parameters of [**Sharpness**]. [**Fineness**] and [**Threshold**] cannot be set for movie recording.

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 [: Color mode] (,).**

2. **Select [Picture Style].**

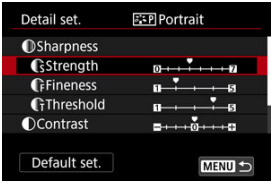


- Select a Picture Style, then press the <**INFO**> button.

3. **Select a Picture Style.**

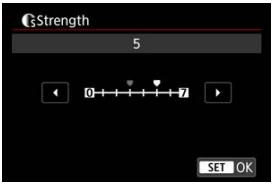
- Select the Picture Style to adjust, then press the <**INFO**> button.

4. Select an option.

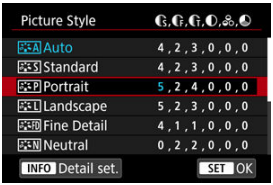


- Select an option, then press < SET >.
- For details on settings and effects, see Settings and Effects.

5. 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.

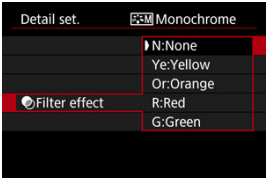
Settings and Effects

	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



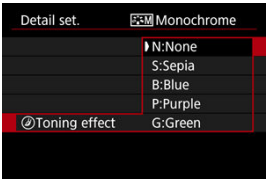
With a filter effect applied to a monochrome image, you can make white clouds or green trees stand out more.

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



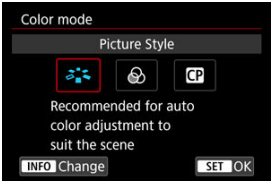
By applying a toning effect, you can create a monochrome image in the selected color. Effective when you want to create memorable images.

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.

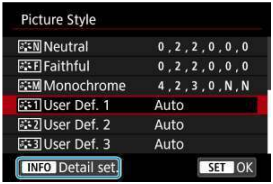
1. **Select [: Color mode] (,).**

2. Select [Picture Style].



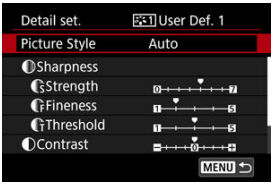
- Select a Picture Style, then press the <**INFO**> button.

3. Select [User Def. *].



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

4. Press < SET >.

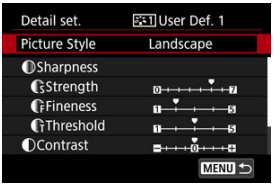


- With [**Picture Style**] selected, press < SET >.

5. Select a base Picture Style.

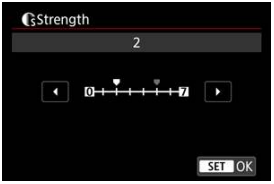
- Select the base Picture Style, then press < SET >.

6. Select an option.

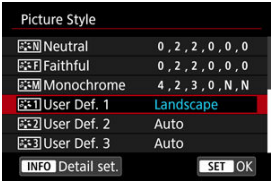


- Select an option, then press < SET >.

7. 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

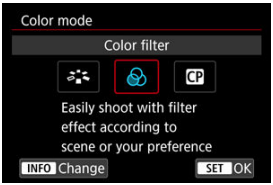
- To shoot with a registered Picture Style, select the registered [**User Def. ***], then shoot.

Color Filter

You can add effects to images by selecting preset filters.

1. **Select [: Color mode] (,).**

2. **Select [Color filter].**



3. **Select a color filter.**

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

Custom Picture

Custom picture files on the camera enable you to adjust color tones in movie recording by applying a combination of settings (gamma/color space, color matrix, and look files), mainly in preparation for post-production processing.

- You can select a custom picture file to record movies with your preferred image characteristics.
- Preset custom picture files can be edited to create new ones.
- To adjust movie color tones, you can register look files.

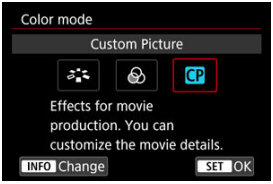
Caution

- Applying custom pictures may change the metering level.

Selecting custom picture files

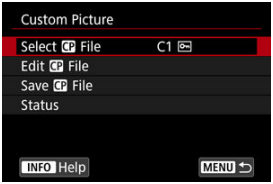
1. **Select [: Color mode] ( ).**

2. **Select [Custom Picture].**

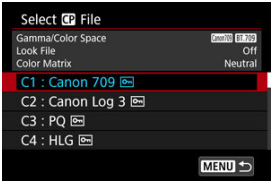


- Select [**Custom Picture**], then press the <**INFO**> button.

3. **Select [Select CP File].**



4. Select a custom picture file.



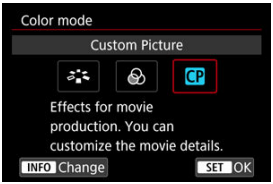
Custom Picture File	Gamma/Color Space	Look File	Color Matrix	Summary
C1: Canon 709	**Canon 709** / **BT.709**	**Off**	**Neutral**	Wider dynamic range than BT.709 Standard Suitable for display on BT.709 compliant-monitors Also suitable without post-processing
C2: Canon Log 3	**Canon Log 3** / **C.Gamut**	**Off**	**Neutral**	Uses Canon Log 3 gamma; post-processing required Retains Canon Log characteristics while expanding the dynamic range
C3: PQ	**PQ** / **BT.2020**	**Off**	**Neutral**	Uses an HDR gamma curve compliant with the ITU-R BT.2100 (PQ) standard (in 8-bit recording, equivalent to the ITU-R BT.2100 (PQ) standard)
C4: HLG	**HLG** / **BT.2020**	**Off**	**Neutral**	Uses an HDR gamma curve compliant with the ITU-R BT.2100 (HLG) standard (in 8-bit recording, equivalent to the ITU-R BT.2100 (HLG) standard)
C5: BT.709 Standard	**BT.709 Standard** / **BT.709**	**Off**	**Video**	Suitable for display on BT.709 compliant-monitors Uses a gamma curve compliant with the ITU-R BT.709 standard
C6 to C20 (User06 to User20)	**Canon 709** / **BT.709**	**Off**	**Neutral**	Wider dynamic range than BT.709 Standard Suitable for display on BT.709 compliant-monitors Also suitable without post-processing

Editing custom pictures

You can edit settings of the selected custom picture file.

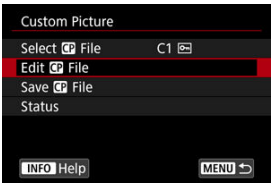
1. **Select [: Color mode] ( ).**

2. **Select [Custom Picture].**

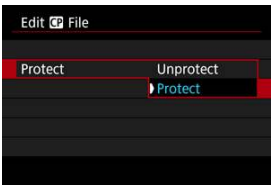


- Select [**Custom Picture**], then press the <**INFO**> button.

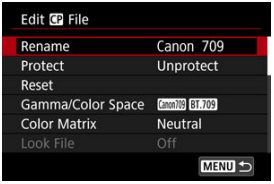
3. **Select [Edit CP File].**



- To edit a protected ([ ]) custom picture file, select [**Unprotect**] by [**Protect**] to enable editing.

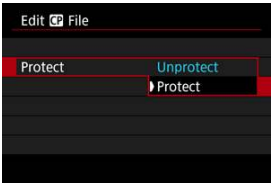


4. Edit the settings as needed.



- Select a setting to edit, then adjust it on the screen displayed ( ).
- To save an edited custom picture file with a new name, select [**Rename**] and enter a name.
- To reset editing, select [**Reset**], then select the custom picture file to reset.
- For instructions on look files, see Using look files.

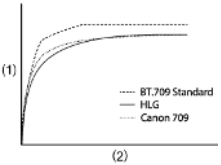
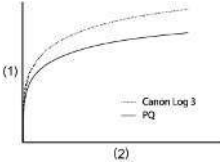
5. Protect the image.



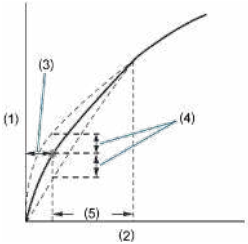
- When you are finished editing, select [**Protect**].

Custom picture setting items

The following items can be set by using [**Edit CP File**].

Setting Item		Description
Gamma/Color Space **Set the combination of gamma curve and color space**		
Gamma	(1) Output (2) Input  	
	Canon Log 3	Gamma that retains Canon Log characteristics but with expanded dynamic range Requires image processing in post-production
	PQ	HDR gamma compliant with the ITU-R BT.2100 (PQ) standard (in 8-bit recording, equivalent to the ITU-R BT.2100 (PQ) standard)
	HLG	HDR gamma compliant with the ITU-R BT.2100 (HLG) standard (in 8-bit recording, equivalent to the ITU-R BT.2100 (HLG) standard)
	BT.709 Standard	Gamma compliant with the ITU-R BT.709 standard Suitable for display on BT.709 compliant-monitors
	Canon 709	Gamma with a wide dynamic range that is also suitable without post-processing Suitable for viewing on BT.709 compliant-monitors
Color space	**C.Gamut**	Color space developed by Canon based on image sensor characteristics, covering a wider color gamut than that of BT.2020 Also recommended when converting to the ACES2065-1 color space
	BT.2020	Color space compliant with the ITU-R BT.2020 standard for UHDTV (4K/8K)
	BT.709	Standard color space compliant with sRGB standards

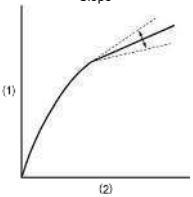
Color Matrix **Color reproduction setting**		
Neutral		Faithful color reproduction
Production Camera		Cinematic color reproduction
Video		Color reproduction with a contrast for broadcast TV
Look File **Use of look files**		
On		Enables color adjustment based on look files
Off		Disables color adjustment based on look files
Look File Setup **Look file registration/removal**		
Register		Registers look files (.cube format) to custom pictures
Delete		Removes look files registered to custom pictures
HLG Color **Hybrid log-gamma (HLG) color setting** **Available when the [Gamma/Color Space] gamma is set to [HLG] and color space is [BT.2020]**		
BT.2100		Color equivalent to ITU-R BT.2100
Vivid		Color equivalent to “traditional color” in ITU-R BT.2390
Black **Black level adjustment** **Not available with [Gamma/Color Space] set to [Canon Log 3]**		
Master Pedestal	–50 to +50	Increases or decreases the black level. Higher values brighten dark image areas but decrease contrast. Negative values darken blacks.
Master Black Red **Master Black Green** **Master Black Blue**	–50 to +50	Corrects red, green, or blue color cast in blacks

Black Gamma **Lower gamma curve correction, for dark image areas** **Raises or lowers the black part of the gamma curve in the following ranges** **Available with [Gamma/Color Space] set to [BT.709 Standard]**		
(1) Output (2) Input (3) Point (4) Level (5) Range 		
Level	–50 to +50	Sets the height of the lower gamma curve
Range	–20 to +50	Sets the adjustment range, relative to [Point]
Point		Sets the vertex position
Low Key Saturation **Color saturation adjustment in dark image areas**		
Activate	On, Off	Adjustment is enabled when set to [**On**]
Level	–50 to +50	Sets the amount of adjustment

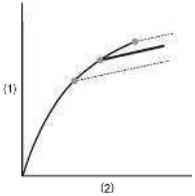
Knee
Compression of bright image areas to prevent clipped highlights
Available with [Gamma/Color Space] set to [BT.709 Standard]

(1) Output
(2) Input

Slope



Point



Activate	On, Off	Adjustment with each setting is enabled when set to [**On**]
Slope	–35 to +50	Adjusts the slope above the knee point
Point	50 to 109	Adjusts the knee point
Saturation	–10 to +10	Adjusts color saturation in bright image areas

Sharpness **Sharpness adjustment**		
Level	–10 to +50	Increases or decreases the level of edge sharpness
Detail Frequency	–8 to +8	Sets the center frequency for edge enhancement Higher values increase the frequency, sharpening images
Coring Level	–30 to +50	Sets the contrast threshold between edges and surrounding image areas, which determines edge enhancement Higher values prevent emphasizing subtle details, reducing noise
Limit	–50 to +50	Restricts the amount of edge enhancement
Noise Reduction **Reduction of image noise**		
Automatic	On, Off	Automatically adjusted when set to [**On**]
Spatial Filter	Off, 1 to 12	Reduces noise by applying a soft focus-like effect to the entire image Although no artifacts are produced, the image as a whole is softened when set to an option other than [**Off**]
Frame Correlation	Off, 1 to 3	Reduces noise by comparing current and previous images (fields) when set to a value other than off Although apparent resolution is not affected, moving subjects may result in artifacts
Skin Detail **Skin-softening settings** **Controls skin tone detection and noise reduction** **Detected skin tone areas are displayed with a zebra pattern**		
Effect Level	Off, Low, Middle, High	Sets the level of the skin-softening filter, with [**High**] as the highest level
Hue	–16 to +16	Sets the hue of skin tone to detect
Chroma	0 to 31	Sets the saturation of skin tone to detect
Area		Sets the color range of skin tone to detect
Y Level		Sets the brightness of skin tone to detect
Color Matrix Tuning **Fine-tuning of image color tones**		
Gain	–50 to +50	Adjusts color intensity
Phase	–18 to +18	Adjusts hue
R-G	–50 to +50	Adjusts tint between cyan to green and between red to magenta
R-B		Adjusts tint between cyan to blue and between red to yellow
G-R		Adjusts tint between magenta to red and between green to cyan
G-B		Adjusts tint between magenta to blue and between green to yellow
B-R		Adjusts tint between yellow to red and between blue to cyan
B-G		Adjusts tint between yellow to green and between blue to magenta

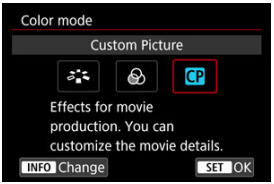
Color Correction **Settings to correct image areas with certain color characteristics** **Areas for correction are detected accordingly** **With the settings configured, areas not detected are displayed in neutral colors (except when adjusting [Area A Revision Level], [Area B Revision Level], [Area A Revision Phase], and [Area B Revision Phase])**		
Select Area	Off, Area A, Area B, Area A&B	Specifies areas (A or B) for color correction Area A is corrected when set to [**Area A**] Area B is corrected when set to [**Area B**] Both areas are corrected when set to [**Area A&B**]
Area A Setting Phase	0 to 31	Sets the color phase of Area A
Area A Setting Chroma		Sets the saturation of Area A
Area A Setting Area		Sets the color range of Area A
Area A Setting Y Level		Sets the brightness of Area A
Area A Revision Level	–50 to +50	Sets the amount of correction applied to saturation in Area A
Area A Revision Phase	–18 to +18	Sets the amount of correction applied to the color phase of Area A
Area B Setting Phase	0 to 31	Sets the color phase of Area B
Area B Setting Chroma		Sets the saturation of Area B
Area B Setting Area		Sets the color range of Area B
Area B Setting Y Level		Sets the brightness of Area B
Area B Revision Level	–50 to +50	Sets the amount of correction applied to saturation in Area B
Area B Revision Phase	–18 to +18	Sets the amount of correction applied to the color phase of Area B
Other Functions **[Over 100%] determines how the camera handles signals exceeding 100%** **Available with [Gamma/Color Space] set to [BT.709 Standard]**		
Over 100%	**Through**	Unmodified output
	Press	Compresses signals that are up to 108% so that they are at 100% levels
	Clip	Discards portions of signals exceeding 100%

Checking custom picture settings

You can review custom picture file settings from the [**Custom Picture**] menu.

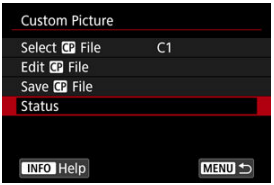
1. **Select [: Color mode] ( ).**

2. **Select [Custom Picture].**

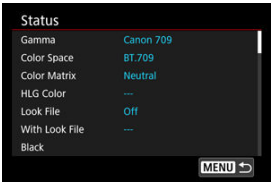


- Select [**Custom Picture**], then press the <**INFO**> button.

3. **On the [Custom Picture] screen, select [Status].**



4. **Check the settings.**

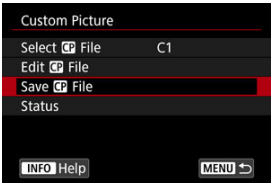


Saving and loading custom picture files

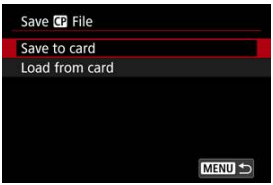
Edited custom picture files can be saved to a card and used with other cameras of the same model.

1. **Select a custom picture file to save ( ).**

2. **On the [Custom Picture] screen, select [Save CP File].**



3. **Select an option.**



- **Save to card**
  Saves the edited custom picture file. Select a destination, then select [**OK**].
  Up to 20 files can be saved. [**New File**] is displayed when you save the file, unless more than 20 files have already been saved. If 20 files have been saved, the files are overwritten with new files you save.

- **Load from card**
  Loads a custom picture file from a card. Select the file to load, then select [**OK**].

Using look files

You can register 17- or 33-grid 3D LUT files in .cube format from the Blackmagic Design application DaVinci Resolve as look files in custom picture files to adjust the color tone of movies you record.

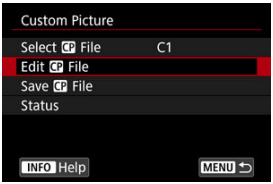
Registering look files

Before you begin, the look file to register should be copied to a card.

1. **Load the card in the camera.**

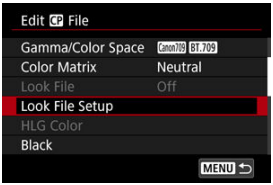
2. **Select a custom picture file ( ).**

3. **Select [Edit CP File].**

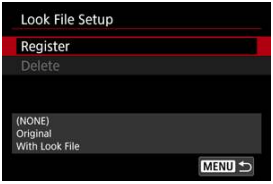


- To edit a protected ([ ]) custom picture file, select [**Unprotect**] by [**Protect**] to enable editing.
- If you will edit a custom picture file and register a look file at the same time, do the look file registration last.

4. **Select [Look File Setup].**



5. **Select [Register].**



- Look files on the card are listed.

6. **Select a look file.**

7. **After applying the look file, select the gamma/color space.**

8. **Select [OK].**

Caution

- The following look files are not compatible.
  - Input range outside a range of 0–1 in the header (“LUT_3D_INPUT_RANGE”)
  - 2 MB or larger, or with names exceeding 65 characters (including file extension)
  - With file names that include unsupported characters
    Supported characters: 0–9, a–z, A–Z, underscore (_), hyphen (-), period (.), or single-byte space
  - Data section includes values outside a range of 0–1
- Color tones will not be converted correctly unless a suitable gamma/color space is used for input and output.
- A registered look file cannot be used if you change [**Gamma/Color Space**], [**HLG Color**], or [**Over 100%**] settings after registration.
- Signals above 100% or below 0% are not be used with [**Gamma/Color Space**] set to [**BT.709 Standard**]. Before registering look files for any signals above 100% that you will use, select [**Press**] in [**Over 100%**].

Using look files for color adjustment

You can use registered look files for color adjustment.

1. **On the [Edit CP File] screen, select [Look File].**

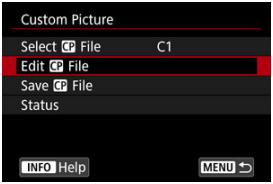
2. **Select [On].**

   - To disable color adjustment based on look files, select [**Off**].

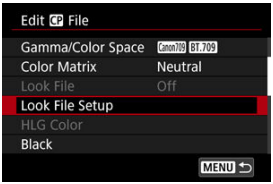
Removing look files

1. **Select a custom picture file ( ).**

2. **Select [Edit CP File].**



3. **Select [Look File Setup].**



4. **Select [Delete].**

5. **Select [OK].**

Canon Log image quality

- With Canon Log, skies, white walls, and similar subjects may be affected by noise or uneven gradation, exposure, or colors, depending on the subject or shooting conditions. Banding or noise may also be noticeable in dark image areas.
- Noise may become more noticeable if you enhance the contrast or edit images in similar ways.
- Record a few test movies and check the results in advance.
- Image quality may improve if you change the ISO speed or, in post-production, perform color grading.

Caution

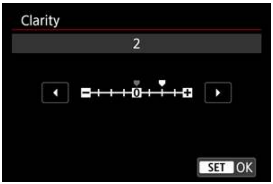
- With Canon Log, autofocusing may be more difficult for subjects under low light, or for low-contrast subjects.
  Difficulty in autofocusing can be reduced by shooting near maximum aperture or using a bright lens.
- Noise may appear at image edges if [**Peripheral illum corr**] in [: **Lens aberration correction**] is set to [**Enable**] when Canon Log is set.
- Histograms with [: **HDR/C.Log View Assist.**] set to on 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.

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.

HDR Shooting (PQ)

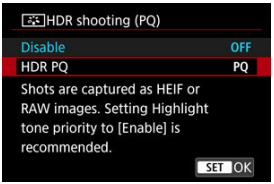
[**HDR shooting (PQ)**] enables you to capture HDR images conforming to the PQ specification (referring to the input signal gamma curve for HDR image display) defined in ITU-R BT.2100 and SMPTE ST.2084.

Note

- Captured as HEIF or RAW images.
- For optimal viewing, use an HDR display device.
- Display varies depending on monitor performance.

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

2. **Select [HDR PQ].**



- [V.Assist] and [HDR PQ] icons are shown on the screen.
- For display on the camera screen, images are converted to resemble how they would look on an HDR display device.

Caution

- [**HDR PQ**] is not available with [: **Movie rec. format**] set to [**XF-AVC S YCC420 8bit**].
- Appearance on HDR and non-HDR display devices may vary.
- Image areas shown in gray in the histogram roughly indicate signal values that are not used.
- [: **Display frame rate setting**] is automatically set to [**Smooth**].

HDR Mode

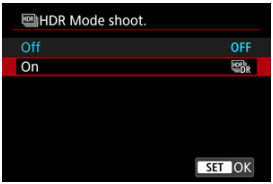
You can shoot still photos with clipped highlights and shadows reduced for a high dynamic range of tones even in high-contrast scenes. HDR shooting is effective for landscape and still-life shots.

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.

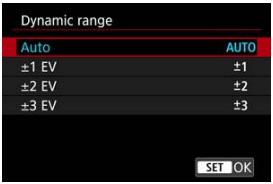
* HDR stands for High Dynamic Range.

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

2. **Select [On].**

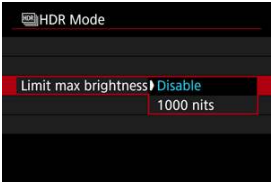


3. **Set [Dynamic range].**



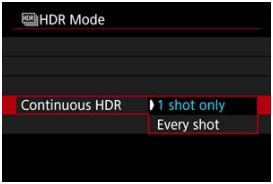
- Selecting [**Auto**] will have the dynamic range set automatically depending on the image's overall tonal range.
- The higher the number, the wider the dynamic range will be.
- To cancel HDR shooting, select [**Off**] in step 2.

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



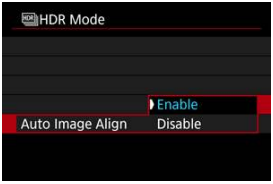
- With [**Disable**], maximum brightness is not limited. Recommended when you will review images on a monitor supporting display at brightnesses exceeding 1000 nits.
- With [**1000 nits**], maximum brightness is limited to approx. 1000 nits.

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. 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

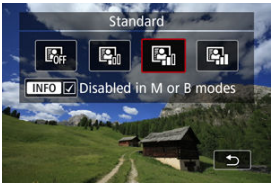
- Expanded ISO speeds (H) are not available in HDR shooting.
- The flash will not fire during HDR shooting.
- RAW image quality cannot be set.
- In HDR shooting, three images are captured with settings such as shutter speed automatically adjusted. For this reason, even in [**Tv**] or [**M**] mode, the shutter speed and ISO speed will change, relative to your specified speed.
- To prevent camera shake, the camera may set a high ISO speed.
- When shooting HDR images with [**Auto Image Align**] set to [**Enable**], AF point display information ( ) and Dust Delete Data ( ) will not be appended to the image.
- 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. Effects of flickering may be reduced by setting [**Anti-flicker shoot.**] to [**Enable**].
- 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.

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**] and [**B**] modes, press the < INFO > button in step 2 to clear the checkmark [✓] for [**Disabled in M or B modes**].

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 when you set [: **HDR shooting (PQ)**] to [**HDR PQ**] after pressing the < COLOR > button to select this option.
- [: **Highlight tone priority**] is set to [**Disable**] when [: **HDR Mode**] is set to [**On**], even if you set [: **HDR shooting (PQ)**] to [**HDR PQ**].

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.
- You can assign color temperatures to [K1], [K2], [K3], or [K4]. Select [K1] – [K4], then turn the < > dial to adjust the value.

(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 <**INFO**> button.

3. **Select an option.**

Caution

Precautions when set to [AWBW] (White priority)

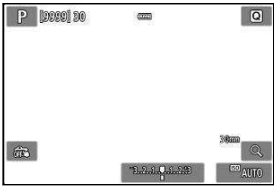
- The warm color cast of subjects may fade.
- When multiple light sources are included in the scene, the warm color cast of the picture may not be reduced.
- When using flash, the color tone will be the same as with [AWB] (Ambience priority).

[ ] 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.**



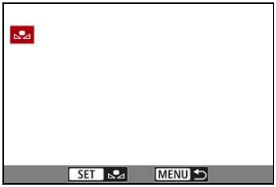
- Aim the camera at a plain white object, so that white fills the screen.
- Set the camera to manual focus ( ) and shoot so that the white object has standard exposure.
- You can use any of the white balance settings.

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.

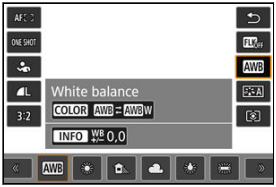
4. Select [: White balance] (,).

5. Select [].

Shooting and registering white balances

1. **Press < SET >.**

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

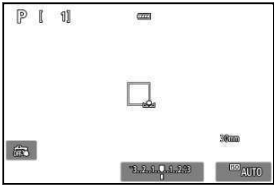


- Press the < ▲ >< ▼ > keys for selection.

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

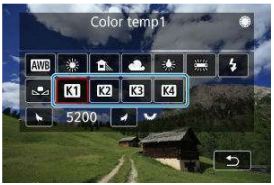
- Instead of shooting a white object, you can also shoot a gray card or standard 18% gray reflector (commercially available).

[K] Color Temperature

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

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

2. **Select a color temperature.**



3. **Set the color temperature.**

- Turn the < > dial to set a color temperature, then press < >.
- The color temperature can be set from approx. 2500K to 10000K in 100K increments.

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

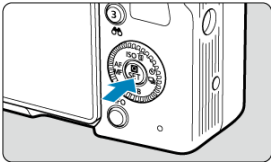
White Balance Correction

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.

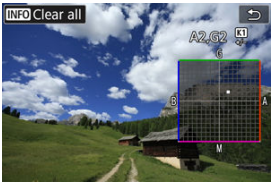
White Balance Correction

1. **Select [: WB correction] (,).**

2. Set the white balance correction.



Sample setting: A2, G1



- Press the < ✥ > keys to move the [■] mark on the screen to your preferred position.
- 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.
- To clear all [📷: **WB correction**] settings, press the < INFO > button.
- 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.)

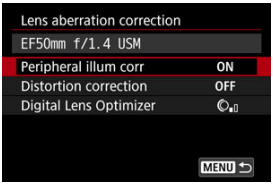
Lens Aberration Correction

- Peripheral Illumination Correction
- Distortion Correction
- Focus Breathing Correction
- Digital Lens Optimizer
- Chromatic Aberration Correction
- Diffraction Correction

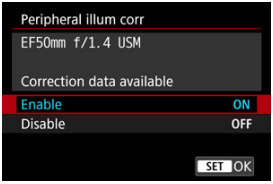
Vignetting, image distortion, and other issues may be caused by lens optical characteristics. The camera can compensate for these phenomena by using [**Lens aberration correction**].

1. **Select [: Lens aberration correction] (,).**

2. **Select an option.**



3. **Select a setting.**



- Confirm that the name of the attached lens and [**Correction data available**] are displayed.
- If [**Correction data not available**] or [ ] is displayed, see Digital Lens Optimizer.

Peripheral Illumination Correction

Vignetting (dark image corners) can be corrected.

Caution

- Depending on shooting conditions, noise may appear on the image periphery.
- The higher the ISO speed, the lower the amount of correction will be.

Note

- The amount of correction applied will be lower than the maximum correction amount applied with Digital Photo Professional (EOS software).

Distortion Correction

Distortion (image warping) can be corrected.

Caution

- Specifying distortion correction may subtly change the angle of view, resulting in images that are cropped a little and seem slightly less sharp.
- The amount of image cropped may vary between still photos and movies.

Note

- With RF lenses, distortion correction during movie recording is supported.

Focus Breathing Correction

Angle of view fluctuations from changes in focal position during movie recording can be reduced.
This feature can be configured when [**Distortion correction**] is set to [**Enable**].

Caution

- [**Focus breathing correction**] is not displayed in still photo shooting.
- Applying focus breathing correction will narrow the angle of view. The extent of narrowing depends on shooting conditions.
- Test focus breathing correction before use, because the image processing may affect apparent image resolution and noise.
- Optimal correction is applied based on the position of the focusing distance range switch on the lens. (The correction is also applied in MF mode.) Correction is not applied to any difference between the actual focusing distance and the range of the switch.
- Movies with abrupt changes to the angle of view may be recorded if you move the focusing distance range switch during recording.
- Correction artifacts may occur, depending on the lens and shooting conditions.
- For details on lenses compatible with this feature, visit the Canon website ( ).

Digital Lens Optimizer

Various aberrations from lens optical characteristics can be corrected, along with diffraction and low-pass filter-induced loss of resolution.

If [**Correction data not available**] or [ ] is displayed by [**Digital Lens Optimizer**], you can use EOS Utility to add the lens correction data to the camera. For details, refer to the EOS Utility Instruction Manual.

Caution

- Image processing after you shoot takes longer when set to [**High**] (which causes the access lamp to be illuminated longer).
- Maximum burst is lower with [**High**]. Image recording to the card also takes longer.
- Depending on shooting conditions, noise may be intensified together with the effects of correction. Image edges may also be emphasized. Adjust Picture Style sharpness or set [**Digital Lens Optimizer**] to [**Disable**] as needed before shooting.
- The higher the ISO speed, the lower the amount of correction will be.
- For movie recording, [**Digital Lens Optimizer**] will not appear. (Correction is not possible.)
- The effect of Digital Lens Optimizer cannot be checked on the screen at the time of shooting.

Note

- With [**Digital Lens Optimizer**] set to [**Standard**] or [**High**], [**Chromatic aberr corr**] and [**Diffraction correction**] are not displayed, but they are both set to [**Enable**] for shooting.

Chromatic Aberration Correction

Chromatic aberration (color fringing around subjects) can be corrected.

Note

- [**Chromatic aberr corr**] is not displayed when [**Digital Lens Optimizer**] is set to [**Standard**] or [**High**].

Diffraction Correction

Diffraction (loss of sharpness caused by the aperture) can be corrected.

Caution

- Depending on shooting conditions, noise may be intensified together with the effects of correction.
- The higher the ISO speed, the lower the amount of correction will be.
- For movie recording, [**Diffraction correction**] will not appear. (Correction is not possible.)
- The effect of diffraction correction cannot be checked on the screen at the time of shooting.

Note

- “Diffraction correction” corrects degraded resolution not only from diffraction but also from the low-pass filter and other factors. Thus, correction is also effective for exposures with the aperture wide open.
- [**Diffraction correction**] is not displayed when [**Digital Lens Optimizer**] is set to [**Standard**] or [**High**].

Caution

General precautions for lens aberration correction

- Lens aberration correction cannot be applied to existing JPEG/HEIF images.
- When using a non-Canon lens, setting the corrections to [**Disable**] is recommended even if [**Correction data available**] is displayed.
- Magnifying the periphery of the image may display parts of the image that will not be recorded.
- The amount of correction (except diffraction correction) is less for lenses that do not provide distance information.

Note

General notes for lens aberration correction

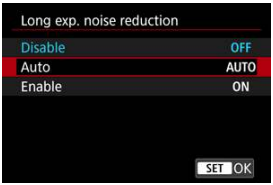
- Effects of lens aberration correction vary by lens and shooting conditions. Also, the effect may be difficult to discern depending on the lens used, shooting conditions, etc.
- If the correction is difficult to discern, magnifying and checking the image after shooting is recommended.
- Corrections are applied even when an extender or life-size converter is attached.
- If the correction data for the attached lens is not registered to the camera, the result will be the same as when the correction is set to [**Disable**] (except for diffraction correction).
- If necessary, refer to the EOS Utility Instruction Manual as well.

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

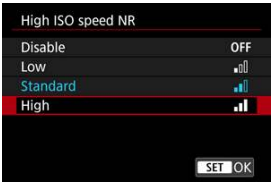
- With [**Auto**] or [**Enable**] set, noise reduction after you shoot may take as long as exposure for the shot.
- Images may look grainier with the [**Enable**] setting than with the [**Disable**] or [**Auto**] setting.
- [**BUSY**] is displayed as noise is reduced, and the shooting screen is not displayed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

Dust Delete Data Acquisition

Preparation

Dust Delete Data Appending

Dust Delete Data used to erase dust spots can be appended to images. The Dust Delete Data is used by Digital Photo Professional (EOS software) to erase the dust spots automatically.

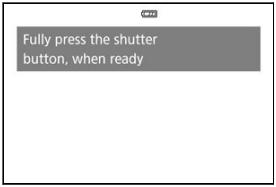
Preparation

- Use an RF or EF lens.
- Prepare a solid white object such as a sheet of paper.
- Set the lens focal length to 50 mm or longer.
- Set the focus mode to MF ( ) and focus manually at infinity (∞). If the lens has no distance scale, rotate the camera to face toward you and turn the focusing ring clockwise all the way.

1. **Select [: Dust Delete Data] ( ).**

2. **Select [OK].**

3. Shoot a plain white object.



- Shoot with a plain white object (such as a new sheet of white paper) filling the screen, at a distance of 20–30 cm (0.7–1.0 ft.).
- Since the image will not be saved, the data can still be obtained even if there is no card in the camera.

- When the picture is taken, the camera will start collecting the Dust Delete Data. When the Dust Delete Data is obtained, a message will appear.
- If the data is not obtained successfully, an error message will appear. Check the information in Preparation, select [**OK**], and shoot again.

Dust Delete Data Appending

The camera will append the Dust Delete Data obtained to all shots from now on. Acquiring Dust Delete Data before shooting is recommended.
For details about using Digital Photo Professional (EOS software) to erase dust spots automatically, refer to the Digital Photo Professional Instruction Manual.
File size is essentially unaffected by Dust Delete Data appended to images.

Caution

- If the object has any pattern or design, it may be recognized as dust data and affect the accuracy of the dust deletion with the Digital Photo Professional (EOS software).
- Dust Delete Data is not added to shots taken under the following conditions.
  - In HDR mode shooting
  - When [**Distortion correction**] in [📷: **Lens aberration correction**] is set to [**Enable**]

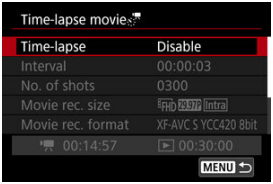
Time-Lapse Movies

Still photos captured at your specified interval can be automatically combined to create a 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.

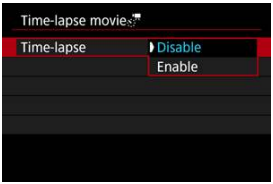
Note that the frame rate is updated automatically to match the [: **System frequency**] setting ( ).

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

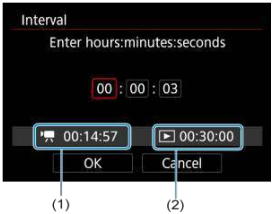
2. **Select [Time-lapse].**



3. **Select an option.**

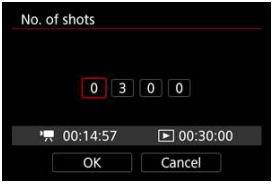


4. Set the shooting interval.



- Refer to [: **Time required**] (1) and [▶: **Playback time**] (2) as you set it.
- 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.



- Refer to [: **Time required**] and [▶: **Playback time**] as you set the number.
- Select the digit.
- Press < SET > to set < ⊕ >.
- Use the < ▲ >< ▼ > keys to set a value, then press < SET >. (Returns to < ▭ >.)
- Make sure [▶: **Playback time**] is not displayed in red.
- Select [**OK**] to register the setting.

Note

- For details on cards that can record time-lapse movies (card performance requirements), see Estimated recording time, video bit rate, file size, and card performance requirements.
- 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.

- For details, see “Movie Recording Size” ( ).

7. Select a movie recording format.

- For details, see “Movie Recording Format” ( ).

8. Set [Auto exposure].

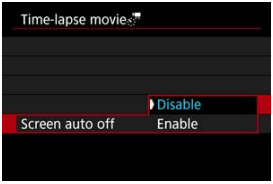
- **Fixed 1st frame**
  When taking the first shot, metering is performed to set the exposure automatically to match the brightness. The exposure setting for the first shot will be applied to subsequent shots. Other shooting-related settings for the first shot will also be applied for subsequent shots.

- **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**].

9. 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.

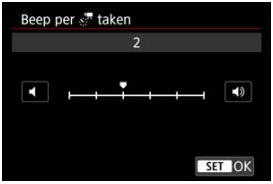
Caution

- Even if [**Screen auto off**] is set to [**Disable**], the screen turns off during exposure. Also note that images may not be displayed if the interval between shots is too brief.

Note

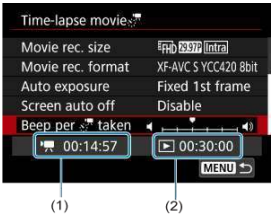
- During time-lapse movie recording, you can press the < INFO > button to turn on/off the screen.

10. Set [Beep per taken].



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

11. Check the settings.



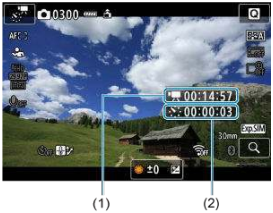
- **Time required (1)**
  Indicates the time required to shoot the set number of shots with the set interval. If it exceeds 24 hours, "*** days" will be displayed.

- **Playback time (2)**
  Indicates the movie recording time (equivalent to the time required for playback).

12. Close the menu.

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

13. Take a test shot.



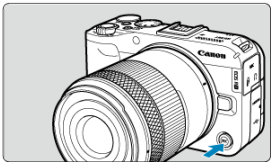
- Press the < INFO > button and double-check the Time required (1) and Interval (2) shown on the screen.
- As in still photo shooting, set the exposure and shooting functions, then press the < AF-ON > button to focus.
- Press the movie shooting button to take a test shot, which is recorded to the card as a still photo.
- After the following screen is displayed, check the results of shooting, then select [**OK**].

- To take more test shots, repeat this step.

Note

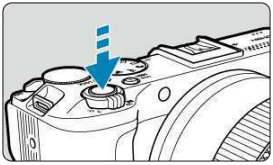
- Test shots are captured in JPEG L quality.
- You can set the maximum limit for Auto ISO in [▶■], [▶Tv], and [▶Av] mode or in [▶M] mode with ISO Auto, in the [**Max for Auto**] option of [: **ISO speed settings**] ( ).
- If you have set [**Half-press**] in [: **Shutter btn function for movies**] to [**Meter.+▶■ Servo AF**], it is automatically changed to [**Meter.+One-Shot AF**] when you set up time-lapse movie recording.

14. Press the front movie shooting button.



- The camera is now ready to start recording a time-lapse movie.
- To return to step 13, press the front 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.
- A recording icon "●" is displayed on 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].**

Note

- Using a tripod is recommended.
- Taking test shots as in step 13 or even recording test time-lapse movies beforehand is recommended.
- 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 in [**Playback time**].
- If the shooting time is long, using the household power outlet accessories (sold separately) is recommended.
- YCbCr 4:2:0 (8-bit) color sampling and the BT.709 color space are used for Full HD time-lapse movies.

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 movies cannot be recorded 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 the lens during time-lapse movie recording. Zooming the lens may cause the image to be out of focus, the exposure to change, or the lens aberration correction not to function properly.
- 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. In such cases, the [Exp.SIM] icon will blink.
- 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.
- To start or stop time-lapse movie recording, you can press the shutter button completely, regardless of the [: **Shutter btn function for movies**] setting.
- 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**].
- If the shutter speed exceeds the shooting interval (such as for long exposures), or if a slow shutter speed is set automatically, the camera may not be able to shoot at the set interval. Shooting may also be prevented by shooting intervals nearly the same as the shutter speed.
- 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 and use EOS Utility (EOS software). Options other than [**Disable**] will prevent the camera from communicating with the computer.
- Image stabilization is not applied in time-lapse movie recording.
- Time-lapse movie shooting ends if the power switch is set to < OFF >, for example, and the setting is changed 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**]
  - Turning the Mode dial
- Image quality may be lower if you start time-lapse movie recording while a white [] or red [] icon ( ) is displayed. For best results, before recording, wait until the white [] or red [] icon is no longer displayed, which indicates that the camera has cooled down.
- 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.

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 Wireless Remote Control BR-E1 with the camera ( ).
- After you take some test shots and the camera is ready to shoot (as in step 14,), set the release timing/movie shooting switch on the BR-E1 to <●> (immediate release) or <2> (2-sec. delay).
- If the remote control's switch has been set to < >, the time-lapse movie recording cannot start.

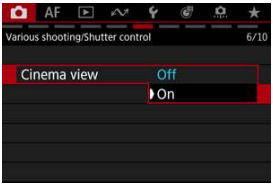
Camera Status/Remote Control Setting	<●> Immediate Release <2> 2-sec. Delay	< > Movie Recording
Test-recording screen	Test recording	To recording standby
Recording standby	Starts recording	To test-recording screen
During time-lapse movie recording	Ends recording	Ends recording

Cinema View

You can record movies with a cinematic angle of view and frame rate.

1. **Select [: Cinema view] ( ).**

2. **Select [On].**



- Movies are recorded with a 2.35:1 CinemaScope angle of view.
- During recording, black bars are displayed on the top and bottom of the screen, which is 16:9.
- The frame rate is fixed at 23.98 (NTSC) or 25.00 (PAL) fps.

Note

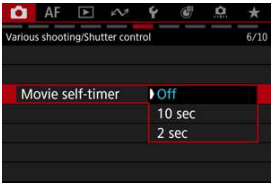
- For an even more cinematic look, you can use a color filter ( ).

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

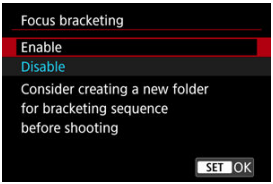
- To cancel the self-timer, either tap the screen or press < >.

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].**

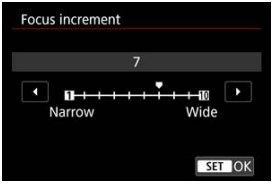


- Select [**Enable**].

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

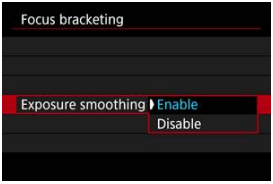
- Specify the number of images captured per shot.
- Can be set in a range of [**2**]–[**999**].

4. Set [Focus increment].



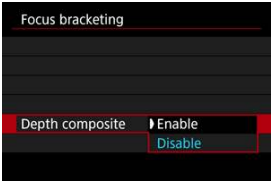
- Specify how much to shift the focus. This amount is automatically adjusted to suit the aperture value at the time of shooting.
  Larger aperture values increase the focus shift and make focus bracketing cover a wider range under the same focus increment and number of shots.
- After completing the settings,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

5. Set [Exposure smoothing].



- You can compensate for changes in image brightness during focus bracketing by selecting [**Enable**], so that the camera makes adjustments based on differences between the displayed and actual aperture value (effective f/number), which varies by focal position.
- Select [**Disable**] if you prefer not to compensate for changes in image brightness during focus bracketing. Use this option for purposes other than depth compositing of the captured images in applications such as DPP.

6. Set [Depth composite].

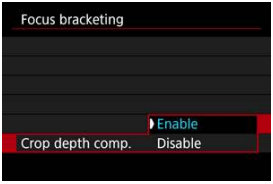


- Select [**Enable**] for in-camera depth compositing. The depth-composited image is saved.
- Select [**Disable**] if you prefer not to perform in-camera depth compositing. Only captured images are saved.

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.

7. 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.

8. 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.
- For details on lenses compatible with this feature, visit the Canon website ( ).
- 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 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

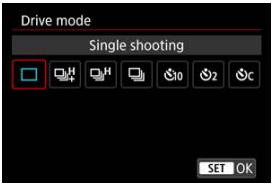
- Consider using a tripod, wireless remote control (sold separately,), or other means of securing the camera.
- For best results, set the aperture value in a range of f/5.6–11 before shooting.
- Details such as shutter speed, aperture value, and ISO speed are determined by conditions for the first shot.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

Drive Mode

You can select drive mode options from the menu. For details, see “Selecting the Drive Mode” ( ).

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

2. **Select an option.**

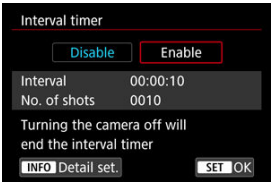


Interval Timer Shooting

With the interval timer, you can set the shooting interval and number of shots, so that the camera takes individual shots repeatedly according to your interval until your specified number of shots are taken.

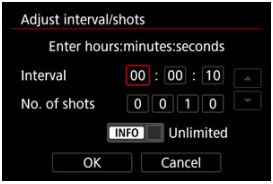
1. **Select [: Interval timer] ( ).**

2. **Select [Enable].**



- Select [**Enable**], then press the < INFO > button.

3. Set the shooting interval and number of shots.

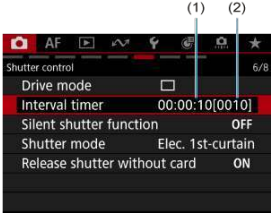


- Select an option to set (hours : minutes : seconds / number of shots).
- Press < SET > to display [ ].
- Set the desired number, then press < SET >. (Returns to [ ].)

- **Interval**
  Can be set in a range of [**00:00:01**]–[**99:59:59**].

- **No. of shots**
  Can be set in a range of [**0001**]–[**9999**]. To keep the interval timer on until you cancel it, select [**Unlimited**].

4. Select [OK].



- The interval timer settings will be displayed on the menu screen.
  (1) Interval
  (2) Number of shots

5. Take the picture.

- First shot is taken and shooting continues according to the interval timer settings.
- During interval timer shooting, [TIMER] will blink.
- After the set number of shots are taken, the interval timer shooting will stop and be automatically canceled.

Note

- Using a tripod is recommended.
- Taking test shots in advance is recommended.
- Even during interval timer shooting, you can still shoot as usual by pressing the shutter button completely. Note that the camera will prepare for the next interval timer shot approx. 5 sec. in advance, which will temporarily prevent operations such as adjusting shooting settings, accessing menus, and playing back images.
- If the next scheduled interval timer shot is not possible because the camera is shooting or processing images, it will be skipped. For this reason, fewer shots than specified will be taken.
- Even during interval timer operation, auto power off is triggered after approx. 8 sec. of inactivity, as long as [**Auto power off**] under [: **Power saving**] is not set to [**Disable**].
- To stop interval timer shooting, select [**Disable**] or set the power switch to <OFF>.

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.
- In < AF > focus mode, the camera will not shoot unless subjects are in focus. Consider setting the mode to manual focus and focusing manually before shooting.
- If the shooting time is long, using the household power outlet accessories (sold separately) is recommended.
- Shooting long exposures or using shutter speeds longer than the shooting interval will prevent shooting at the specified interval. For this reason, fewer shots than specified will be taken. Using shutter speeds nearly the same as the shooting interval may also reduce the number of shots.
- 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.
- When using flash with interval timer shooting, set an interval longer than the flash charge time. Intervals that are too short may prevent the flash from firing.
- Intervals that are too short may prevent shooting or autofocusing.
- Interval recording is canceled when the power switch is set to < OFF >, and the setting changes to [**Disable**].
- During interval timer shooting, you cannot use Remote Control Shooting or remote-release shooting with a Speedlite.

Silent Shutter Function

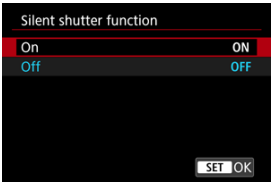
Limits shutter release sounds and operating sounds, and disables firing and illumination of flash units and other light sources.
The silent shutter function restricts settings as follows.

- Shutter release sound, focused beep: restricted to headphone output
- Touch sounds, self-timer sounds: not produced
- Anti-flicker shooting: [**Disable**]
- Long exposure noise reduction: [**Disable**]
- Shutter mode: [**Electronic ES**]
- AF-assist beam firing: [**Disable**]
- Self-timer lamp: not illuminated
- Remote control lamp: not illuminated

When using lenses equipped with focus preset, consider turning off the focus preset beep.

1. **Select [: Silent shutter function] ( ).**

2. **Select [On].**

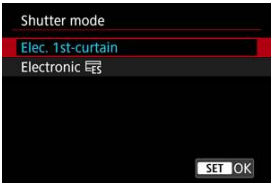


Shutter Mode

You can choose the method of shutter release.

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

2. **Select an option.**



- **Elec. 1st-curtain**

- **Electronic ES**
  Enables reduced sound and vibration from shutter operations, compared to electronic first-curtain.
  Recommended when shooting with the aperture of a bright lens wide open.
  Maximum shutter speed can be set higher than for electronic first-curtain.

  - A white frame blinks on the screen when you press the shutter button completely.

  - Shutter operations are accompanied by beeps. You can disable beeping in [: **Beep**].

Caution

- With the camera set to [**Elec. 1st-curtain**], defocused image areas may be incomplete when you shoot near maximum aperture at high shutter speeds under some shooting conditions. If you dislike the appearance of defocused image areas, shooting as follows may give better results.
  - Shoot with [**Electronic ES**].
  - Lower the shutter speed.
  - Increase the aperture value.
- Setting [**: Silent shutter function**] to [**On**] sets the shutter mode to [**Electronic ES**].
- Zooming during continuous shooting may cause changes in exposure even at the same f/number. For details, refer to the Canon website ( ).

Precautions when set to [Electronic ES]

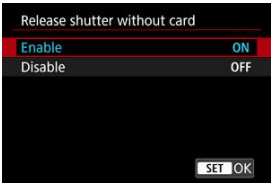
- The continuous shooting speed may become slower depending on the shooting conditions.
- Images may lack suitable exposure if the aperture value changes in [**P**] mode (Program AE) or [**Tv**] mode (Shutter-priority AE).
- With some lenses and under some shooting conditions, lens focusing and aperture 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.

Enabling Shutter Release Without a Card

Set to [**Disable**] to avoid shooting unless there are cards in the camera.

1. **Select [: Release shutter without card] ( ).**

2. **Select [Disable].**

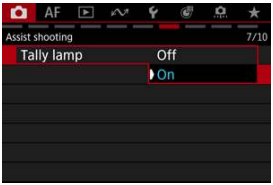


Tally Lamp

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.

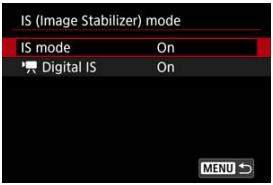
Lit	Movie recording in progress
Blinking rapidly	• Cannot record movies, due to a low battery level or insufficient card free space • High internal camera temperature, due to hot shooting conditions or extended movie recording
Blinking slowly	Movie recording is now possible for up to 6 min.

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.**



- IS mode (movies/still photos)
  Activates image stabilization using lens IS. Displayed when IS lenses without an IS switch are used. Not displayed for other lenses.
  When using IS lenses with an IS switch, set the IS switch to ON.
- 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.

Caution

- [**IS mode**] is not available for lenses with an IS switch ([📷: **IS (Image Stabilizer) mode**] cannot be used in still photo shooting). Use the IS switch on the lens instead.

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.

Note

- Consider using [**Movie IS mode**] ( ) when switching between recording people and scenery while moving around, for example.

Movie Auto Level

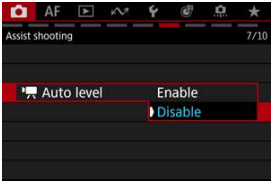
Auto leveling helps keep movies straight during recording.

Caution

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

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

2. **Select an option.**



Metadata

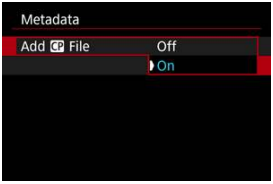
Embedding Custom Picture Files

Custom picture files can be embedded in movie files by setting [**Add CP File**] to [**On**] when [**CP function**] in [**: Custom Picture**] is set to [**On**].

Embedding Custom Picture Files

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

2. **Select an option.**

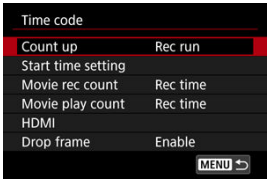


Time Code

- 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 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 added to movie files, 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

- 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**
  Corrects the discrepancy automatically by skipping time code numbers (DF: drop frame).

- **Disable**
  The discrepancy is not corrected (NDF: non-drop frame).
  Time codes are displayed as follows.

  - **Enable (DF)**
    00:00:00. (Playback: 00:00:00.00)

  - **Disable (NDF)**
    00:00:00: (Playback: 00:00:00:00)

Note

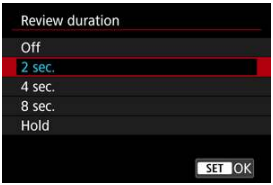
- The [**Drop frame**] setting item is not displayed when the frame rate is set to 23.98P (23.98 fps) and [: **System frequency**] to [**For PAL**].

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. **Set a time option.**



Note

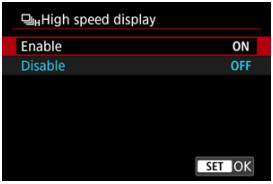
- When [**Hold**] is set, images are displayed as long as the time set in the [**Screen off**] option of [: **Power saving**].

High-Speed Display

High-speed display that switches between each shot and the live image is available when shooting in [H] (high-speed continuous shooting) drive mode and [**Elec. 1st-curtain**] shutter mode.

1. **Select [: High speed display] ( ).**

2. **Select an option.**



- Select [**Enable**] for display that switches between each shot and the live image.

Caution

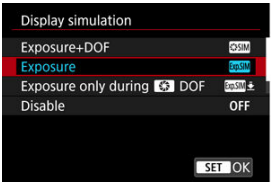
- Images may waver or flicker during high-speed display. This occurs more often at high shutter speeds. However, this does not affect shooting results.
- High-speed display is not performed for shutter speeds slower than 1/30 sec., aperture values higher than f/11, conditions that make autofocusing difficult, flash photography, or high ISO expansion. It may also stop as you are shooting.
- High-speed display is not available in the following cases.
  - With [: **Display simulation**] set to [**Disable**] or [**Exposure only during DOF**]

Display Simulation

With display simulation, display of image brightness and depth of field more closely matches the actual brightness (exposure) of your shots.

1. **Select [: Display simulation] ( ).**

2. **Select an option.**



- **Exposure+DOF (SIM)**
  Image brightness and depth of field as displayed closely matches the actual brightness (exposure) of your shots. If you set exposure compensation, the image brightness will change accordingly. Similarly, changes to the aperture value will alter the depth of field.

- **Exposure (Exp.SIM)**
  Image brightness as displayed closely matches the actual brightness (exposure) of your shots. If you set exposure compensation, the image brightness will change accordingly.

- **Exposure only during DOF (Exp.SIM)**
  Normally, the image is displayed at standard brightness, so it is easy to see. Only when you press and hold the button assigned to depth-of-field preview will image brightness resemble actual brightness (exposure) of your shot, and you can check depth of field.

- **Disable (OFF)**
  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.

Caution

Notes on [Exposure+DOF]

- Display may flicker at some shutter speeds.
- With EF lenses, this setting may increase the shutter-release time lag.
- The depth of field shown is only a guideline. For more precise indication of the depth of field, press the button assigned to depth-of-field preview ( ).
- [**Exposure+DOF**] is not available with some lenses.
- [SIM] blinks if either exposure or depth of field cannot be simulated, or if neither can be simulated.
- [SIM] is dimmed if either exposure or depth of field simulation stops, or if both simulations stop.

HDR/C. Log View Assist

View Assist Display Conditions

View Assist Display Settings

The appearance of images in HDR shooting ( ) with [: **HDR shooting (PQ)**] or in shooting with custom pictures ( ) applied, as shown on the camera screen or non-HDR display devices connected via HDMI, can be made to resemble the appearance on HDR display devices.

Caution

- Recorded movies will look different from how they appear on the screen.

View Assist Display Conditions

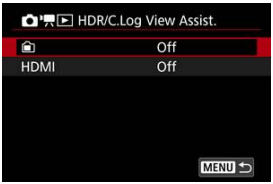
- [: **HDR shooting (PQ)**] is set to [**HDR PQ**]
- [**Gamma/Color Space**] in [: **Custom Picture**] is set as follows
  - Canon Log 3 / C.Gamut
  - PQ / BT.2020
  - HLG / BT.2020

  * HLG stands for Hybrid Log-Gamma.
- The following gamma/color space is selected in Registering look files, before setting [**Look File**] to [**On**]
  - HDR PQ(BT.2100)
  - HDR HLG(BT.2100)

View Assist Display Settings

1. **Select [: HDR/C.Log View Assist.] (,).**

2. **Select screen or viewfinder display.**

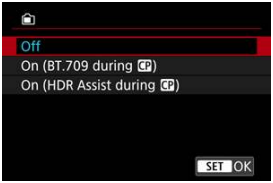


-
  Use View Assist display on the screen.

- **HDMI**
  Use view-assisted display on non-HDR display devices connected via HDMI.

3. Select an option.

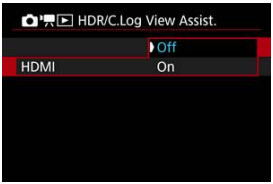
For the screen



- **On (BT.709 during CP)**
  When the camera is set to [**HDR PQ**], converted images are displayed that resemble how the images would look on an HDR display device. Image display with a custom picture applied involves basic conversion to a standard gamma/color space.

- **On (HDR Assist during CP)**
  When the camera is set to [**HDR PQ**], converted images are displayed that resemble how the images would look on an HDR display device. Image display with a custom picture applied involves conversion so that subjects with intermediate brightness resemble how they would appear on an HDR display device.

[HDMI]



- Select [**On**].

Note

- [V.Assist] is shown on the information display screen during movie recording with View Assist.
- View Assist is also used with magnified view.
- View Assist display settings do not affect the images captured.

False Color Settings

False Color Display

Color-coded display in six colors based on the brightness level is shown on the screen during movie recording. This can help you adjust the exposure.

1. **Select [: False color set.] ( ).**

2. **Select [False color].**

- Select [**On**].

3. **Adjust the exposure as needed ( ).**

- Adjust the exposure, referring to false color descriptions in False Color Display if necessary.

False Color Display

False color display is available for images on the camera screen. On the following types of external monitors, the actual image is displayed.

- External monitors connected via HDMI
- External monitors used with Camera Connect or EOS Utility

Color	Meaning
Red	White clipping
Yellow	Just below white clipping
Pink	One stop over 18% gray
Green	18% gray
Blue	Just above black clipping
Purple	Black clipping
Neutral color	Brightness other than above

Caution

- Colors indicating the brightness level may change when the screen switches between recording standby and movie recording, and under some shooting settings.

Note

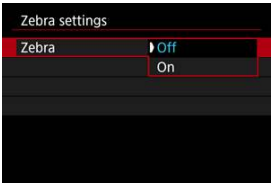
- The following features are not available when the camera is set to use false colors.
  - Color Filter
  - Cinema View
  - Time-Lapse Movies
  - Auto Lighting Optimizer
  - Zebra display
  - View Assist for HDR/Canon Log
  - HDR Movie Mode
  - MF peaking

Zebra Settings

To help you adjust exposure before or during movie recording, you can display a striped pattern over or around image areas of a specified brightness.

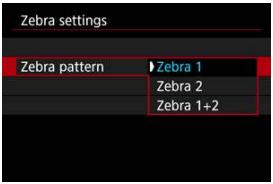
1. **Select [: Zebra settings] ( ).**

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

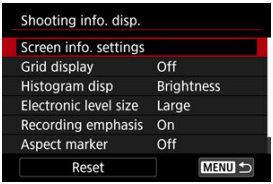
- Customizing Information on the Screen
- Grid
- Histogram
- Electronic Level Size
- Card Free Space (%) Display
- Lens Information Display
- Recording Emphasis
- Aspect Marker
- Clearing Settings

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 < INFO > button.

4. Edit the screen.

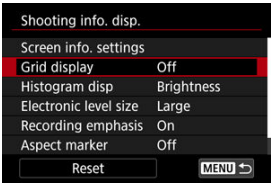
- Press the < ▲ >< ▼ > keys to select options to show on the information screen.
- For items you prefer not to display, press < (SET) > to clear the checkmark [✓].
- Select [**OK**] to register the setting.

Grid

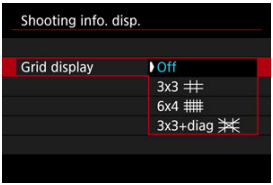
A grid can be displayed on the screen.

1. **Select [: Shooting info. disp.] (,).**

2. **Select [Grid display].**



3. **Select an option.**

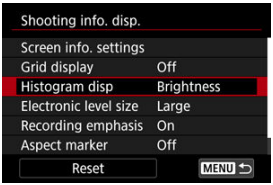


Histogram

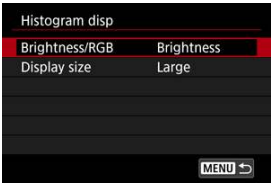
You can select the content and display size of the histogram.

1. **Select [: Shooting info. disp.] (,).**

2. **Select [Histogram disp].**



3. **Select an option.**



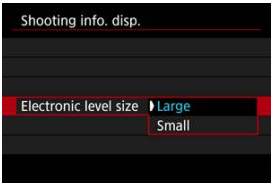
- Select the content ([**Brightness**] or [**RGB**]) and display size ([**Large**] or [**Small**]).

Electronic Level Size

You can select the display size of the electronic level.

1. **Select [: Shooting info. disp.] (,).**

2. **Select [Electronic level size].**

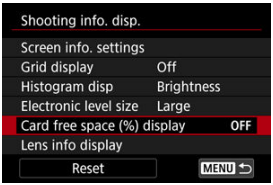


Card Free Space (%) Display

You can display card free space on the screen.

1. **Select [: Shooting info. disp.] (,).**

2. **Select [Card free space (%) display].**



3. **Select [On].**

Note

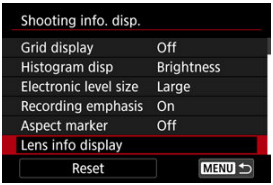
- During still photo shooting or when writing to cards, the number of available shots is shown instead of the free space.

Lens Information Display

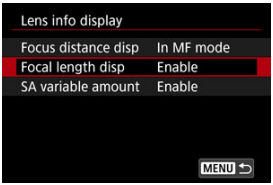
You can display information about the lens in use.

1. **Select [: Shooting info. disp.] (,).**

2. **Select [Lens info display].**



3. **Select an option.**



- **Focus distance disp**
  You can display focus distance when using RF lenses. In focus distance display, you can select the timing and unit of measurement.

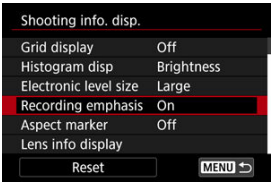
- **Focal length disp**
  You can display the focal length of the lens in use.

- **SA variable amount**
  You can display the amount of correction set when using lenses featuring spherical aberration control.
  * SA: spherical aberration

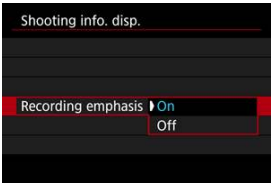
Recording Emphasis

1. **Select [: Shooting info. disp.] (,).**

2. **Select [Recording emphasis].**



3. **Select an option.**



- **On**
  Screen edges are lit in red while movie recording is in progress.

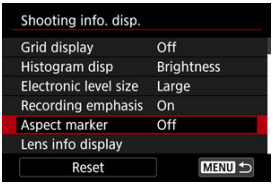
- **Off**
  No frame is displayed to call attention to recording in progress.

Aspect Marker

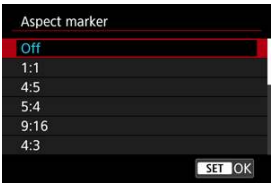
If you will change the image aspect ratio when editing the recorded movie, you can display aspect markers on the movie recording screen (during standby and recording) to be aware of the final angle of view after editing.

1. **Select [: Shooting info. disp.] (,).**

2. **Select [Aspect marker].**



3. **Select an option.**



- Select a display option.

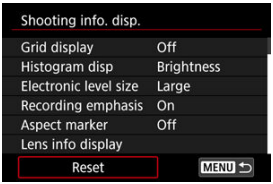
Note

- Markers are not shown during movie playback (recorded movies are not tagged with aspect marker information).

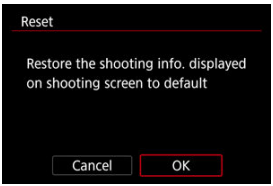
Clearing Settings

1. **Select [: Shooting info. disp.] (,).**

2. **Select [Reset].**



3. **Select [OK].**

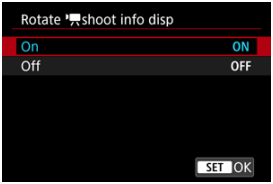


Auto Rotate Movie Shooting Info Display

You can automatically rotate information on the screen when holding the camera vertically in movie recording.

1. **Select [: Rotate shoot info disp] ( ).**

2. **Select an option.**



Quick Control Screen

You can change the Quick Control ( ) views available during movie recording.

1. **Select [: Quick Ctrl screen] ( ).**

2. **Select the view to display.**

- Turn the < > dial to select Quick Control display options.
- For items you prefer not to display, press < > to clear the checkmark [✓]. The [✓] mark cannot be cleared from all items at the same time.
- To select a display position for Quick Control items, press the < INFO > button when viewing [Q1].
- With [✓] selected ([Q2]), you can customize the Custom Quick Control screen using [: **Quick Control customization** Q2].
- Select [**OK**] to register the setting.

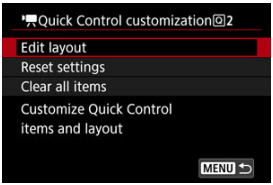
Customizing Quick Controls

Resetting the Custom Quick Control Screen or Clearing All Items

Quick Control items and the layout are customizable.

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

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



3. **Select items to remove.**

- Use the < > dial or < > keys to select an item to remove, then press < >.
- Items shown on the Quick Control screen are labeled with a checkmark. Items without a checkmark will be removed.

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 < INFO > button.

5. Change the layout.

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

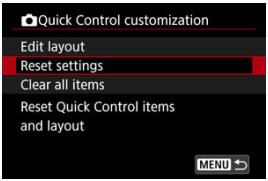
- Press the < ▲ >< ▼ > keys to move the item, then press < (SET) >.
- Press the < MENU > button to exit setup.

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

7. **Review the screen.**

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

Resetting the Custom 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.

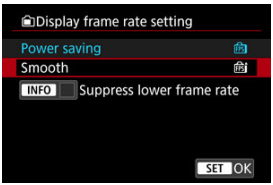
Display Frame Rate

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 < INFO > button to add a checkmark, you can include low-light locations in the scenarios for suppressing lower display frame rates.

Caution

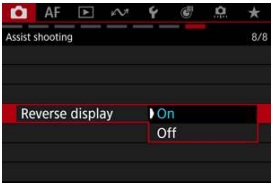
- Shooting under low light with [**Suppress lower frame rate**] set for shooting screen display may affect performance as follows.
  - Faster battery consumption
  - Fewer shots available
  - Lower image display brightness
  - Difficulty in autofocusing
  - Lower metering precision
  - Lower flicker detection 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].**



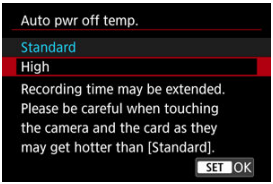
- Select [**Off**] if you prefer not to reverse display when the screen is facing the subject.

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.

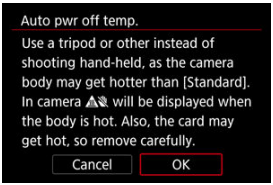
1. **Select [: Auto pwr off temp.] (,).**

2. **Select [High].**



- [**High**] sets the maximum temperature higher than the standard setting.

3. **Select [OK].**



Caution

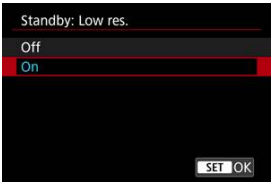
- The camera and memory cards may become hotter when [: **Auto pwr off temp.**] is set to [**High**].
  - We recommend using a tripod or the like to avoid handheld shooting, which may cause problems such as low-temperature contact burns.
  - Do not touch cards immediately after shooting. Cards may be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

Standby: Low Resolution

Set to [**On**] to conserve battery power and control the rise of camera temperature during standby.
As a result, it may enable you to record movies over a longer period.

1. **Select [: Standby: Low res.] ( ).**

2. **Select an option.**



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.
- Setting digital zoom to [**On**] restricts this setting to [**Off**] ( ).

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 [ ].

1. **Select [: HDMI display] ( ).**

2. **Select an option.**

- +
  Movies are displayed on the camera and on the device connected via HDMI. Camera operations such as image playback or menu display are shown on the camera.
- +
  Movies are displayed on the camera and on the device connected via HDMI. Camera operations such as image playback or menu display are shown on the other device via HDMI.
-
  Movies and camera operations such as image playback or menu display are shown on the other device via HDMI. The camera screen is deactivated. What is displayed on the other device via HDMI will be recorded, so to restrict recording to movies, press the < INFO > button to display only movies.

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.
- 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

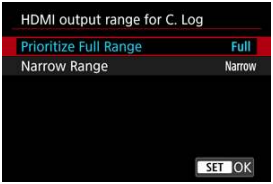
- To continue HDMI output for longer than 30 min., select [📷+🖵] or [📷+🖵], then set [**Auto power off**] in [🔧: **Power saving**] to [**Disable**] (🔗).
- By pressing the < INFO > button, you can change the information displayed.
- Time codes can be added to HDMI video output (🔗).
- Audio is also output via HDMI, except when [**Sound rec.**] is set to [**Disable**].

Canon Log HDMI Output Range

You can select the output range of video signals output via an HDMI connection.

1. **Select [: HDMI output range for C. Log] ( ).**

2. **Select an option.**



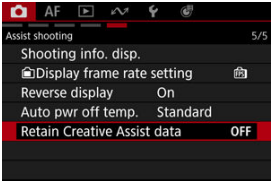
- **Prioritize Full Range**
  Full-range output is used whenever possible. Note that the output range will be automatically adjusted to suit display specifications.

- **Narrow Range**
  Narrow-range (video range) output is used.

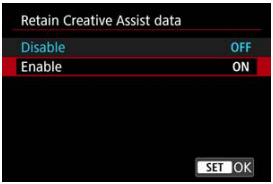
Retain Creative Assist Data

By storing Creative Assist settings used in [A+] mode, you can skip the step of selecting the effect again in subsequent shooting.

1. **Select [: Retain Creative Assist data].**



2. **Select [Enable].**



General Movie Recording

Warning Indicator Display in Movie Recording

General Movie Recording Precautions

Warning Indicator Display in Movie Recording

A 10-level indicator (1) is displayed during 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 a while. Note that the camera may overheat again after you resume recording.

General Movie Recording Precautions

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.
- 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.
- If you perform AF with a USM lens during movie recording in low light, horizontal banding noise may be recorded in the movie. The same type of noise may occur if you focus manually with certain lenses equipped with an electronic focusing ring.
- 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, inaccurate lens aberration correction, 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 the attached lens has an Image Stabilizer and you set the Image Stabilizer switch to < ON >, the Image Stabilizer will operate at all times even if you do not press the shutter button halfway. This will consume battery power, and it may reduce the total movie recording time. When the Image Stabilizer is not necessary, such as when using a tripod, it is recommended that you set the Image Stabilizer switch to < OFF >.
- If the brightness changes as you record a movie with auto exposure, the movie may appear to stop momentarily. In this case, record movies with manual exposure.
- 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 shooting 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.
- Field of view (coverage) is approx. 100%.
- To enable starting/stopping movie recording by pressing the shutter button completely, set [**Fully-press**] for [: **Shutter btn function for movies**] to [**Start/stop mov rec**] ( ).
- 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.
- Focus preset during movie recording is available when using (super) telephoto lenses equipped with this function released in and after the second half of 2011.

General Still Photo Shooting

Information Display in Still Photo Shooting

General Still Photo Shooting Precautions

Information Display in Still Photo Shooting

For details on the icons displayed for still photo shooting, see Information Display.

Note

- White display of the [Exp.SIM] icon indicates that your shots will be about as bright as the image displayed.
- If the [Exp.SIM] icon is blinking, it indicates that the image is displayed at a brightness that differs from the actual shooting result because of low- or bright-light conditions. However, the actual image recorded will reflect the exposure setting. Note that the noise may be more noticeable than the actual image recorded.
- Display simulation may not be performed under some shooting settings. The [Exp.SIM] icon and histogram will be displayed in gray. The image will be displayed on the screen at the standard brightness. The histogram may not be properly displayed in low- or bright-light conditions.
- No histogram is displayed when [: **Display simulation**] ( ) is set to [**Disable**] or [**Exposure only during DOF**].

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. 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.
- 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.

Shooting results

- In magnified view, the shutter speed and aperture value will be displayed in orange. If you take the picture in magnified view, the exposure may not come out as desired. Return to the normal view before taking the picture.
- Even if you take the picture in magnified view, the image will be captured with the image area of the normal view.

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 image.

Lens

- If the attached lens has an Image Stabilizer and you set the Image Stabilizer switch to < ON >, the Image Stabilizer will operate at all times even if you do not press the shutter button halfway. The Image Stabilizer consumes battery power and may decrease the number of available shots depending on the shooting conditions. When the Image Stabilizer is not necessary, such as when using a tripod, it is recommended that you set the Image Stabilizer switch to < OFF >.
- With EF lenses, focus preset during shooting is only available when using (super) telephoto lenses equipped with this function released in and after the second half of 2011.

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.

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
- FE Memory Function

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) ( ).

FE lock

This enables you to obtain appropriate flash exposure for a specific part of the subject. To activate FE lock, center the subject on the screen and press the button assigned to FE lock. After this, compose the shot and take the picture.

Caution

- Use of accessories not designed for a multi-function shoe requires Multi-Function Shoe Adapter AD-E1, sold separately.
- 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.

Note

- 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.

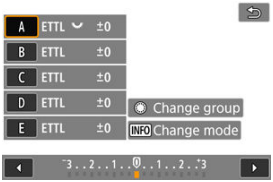
Quick Flash Group Control

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 for shooting**]. This example is based on assigning the < 1 > 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 < 1 > button.**



   - A setting screen for each flash group is displayed.
   - Turn the < ◎ > dial to select a flash group (A–E) to configure.
   - Press the < INFO > button to set the flash mode.
   - Turn the < ☼ > dial to adjust 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 < 1 > button displays the [**Flash function settings**] screen.

FE Memory Function

You can set the flash output captured in [**ETTL**] flash mode as the flash output for [**M**] flash mode by pressing the button assigned to [**ETTL ⇄ M**] in [: **Customize buttons for shooting**]. This example is based on assigning the < 1 > button ( ).

1. **Set the flash Custom Function setting [FE memory] to [2:Enable(MODE ETTL ⇄ M)] ( ).**

   - For the setting procedure with the flash, refer to the instruction manuals of flash units (except the EL-1) supporting FE memory.

2. **Shoot with the flash mode set to [ETTL].**

   - Press the shutter button completely to take the picture.

3. **During standby, press the < 1 > button.**

   - The flash mode switches to [**M**] and the flash output captured in step 2 is displayed.
   - Pressing the < 1 > button again after shooting in [**M**] flash mode switches the mode to [**ETTL**] and displays the flash exposure compensation amount.
   - To change the flash output or the flash exposure compensation, perform operations with the flash or set with [**Flash function settings**] ( ).

Note

- The FE memory function is available in [**P**], [**Tv**], [**Av**], [**M**], and [**B**] modes.
- Pressing the < 1 > button does not switch flash modes on Speedlites currently in a mode other than [**ETTL**] or [**M**].

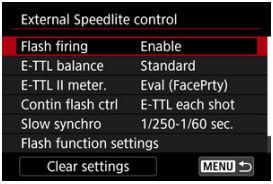
Flash Photography Settings

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

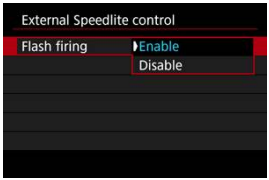
Functions of EL/EX series Speedlites compatible with flash function settings can be set via a camera menu screen. Attach the Speedlite to the camera and turn on the Speedlite before setting the flash functions.
For details on the Speedlite's functions, refer to the Speedlite's Instruction Manual.

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

2. **Select an option.**

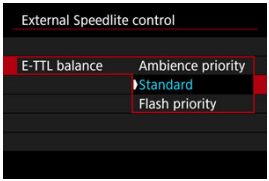


Flash Firing



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

E-TTL Balance



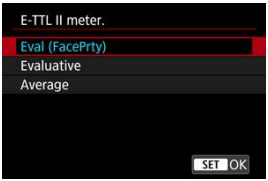
You can set your preferred appearance (balance) for flash shots. This setting enables you to adjust the ratio of ambient light to Speedlite light output.

- 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.

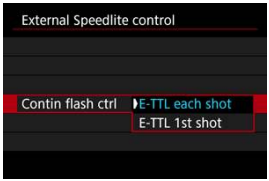
Note

- 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



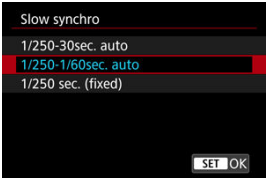
- Set to [**E-TTL each shot**] to perform flash metering for each shot.
- Set to [**E-TTL 1st shot**] to perform flash metering for only the first shot before continuous shooting. The flash output level for the first shot is applied to all subsequent shots. Useful when prioritizing continuous shooting 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**].

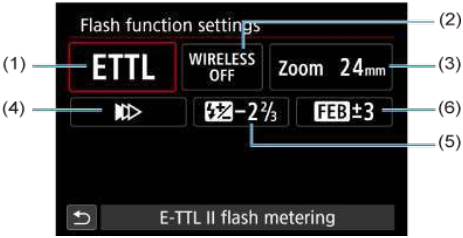
Caution

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

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



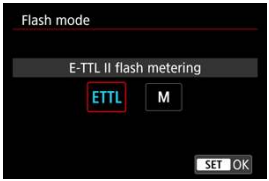
(1)	Flash mode
(2)	Wireless functions/ Firing ratio control (RATIO)
(3)	Flash zoom (flash coverage)
(4)	Shutter synchronization
(5)	Flash exposure compensation
(6)	Flash exposure bracketing

Caution

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

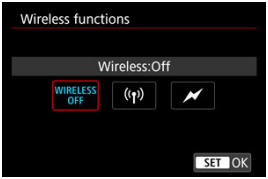
Flash mode

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



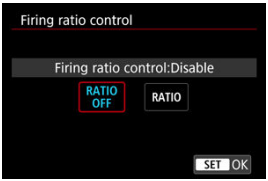
- [**E-TTL II flash metering**] is the standard mode of EL/EX series Speedlites for automatic flash photography.
- [**Manual flash**] is for setting the Speedlite's [**Flash output level**] yourself.
- Regarding other flash modes, refer to the Instruction Manual of a Speedlite compatible with the respective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

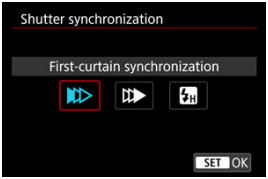


With a macro flash, you can set the firing ratio control.
For details on firing ratio control, refer to the Instruction Manual of the macro flash.

Flash zoom (flash coverage)

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

Shutter synchronization

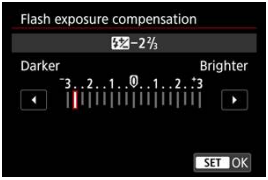


Normally, set this to [**First-curtain synchronization**] so that the flash fires immediately after the shooting starts.
Set to [**Second-curtain synchronization**] and use low shutter speeds for natural-looking shots of subject motion trails, such as car headlights.
Set to [**High-speed synchronization**] 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

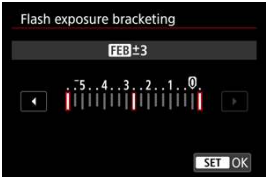


Just as exposure compensation is adjustable, you can also adjust flash output.

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

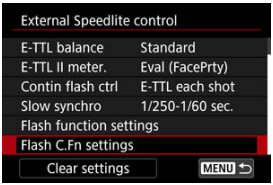


Speedlites equipped with flash exposure bracketing (FEB) can change the external flash output automatically as three shots are taken at once.

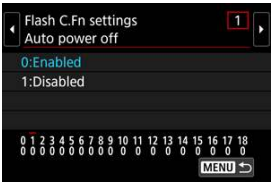
Flash Custom Function Settings

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.**



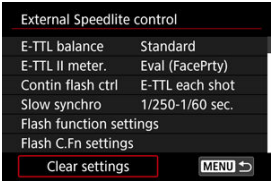
- Select the number.
- Select an option.

Caution

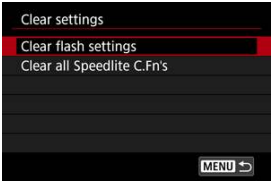
- With an EL/EX series Speedlite, the Speedlite will always fire at full output if the [**Flash metering mode**] Custom Function is set to [**1:TTL**] (autoflash).
- The Speedlite's Personal Function (P.Fn) cannot be set or canceled from the camera's [📷: **External Speedlite control**] screen. Set it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

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.

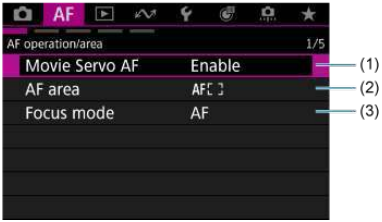
Note

- < 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 ☆
- Manual Focus
- Registering People to Prioritize
- Customizing AF Functions ☆
- Selecting the Drive Mode
- Using the Self-Timer
- Remote Control Shooting
- Customizing Operation ☆

Tab Menus: AF (Movie Recording)

AF operation/area

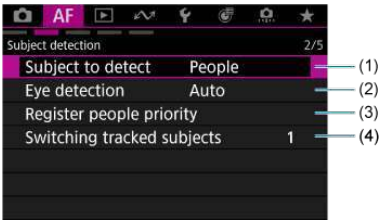


(1) Movie Servo AF

(2) AF area ☆

(3) Focus mode ☆

Subject detection



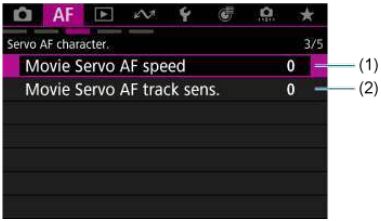
(1) Subject to detect ☆

(2) Eye detection

(3) Register people priority

(4) Switching tracked subjects ☆

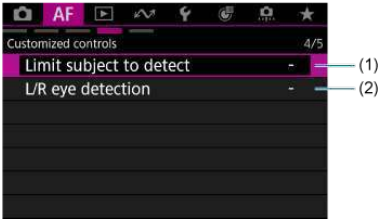
Servo AF character.



(1) Movie Servo AF speed ☆

(2) Movie Servo AF track sens. ☆

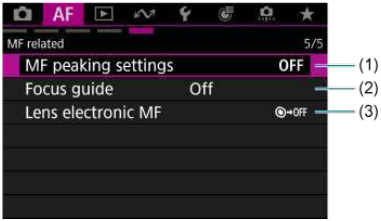
Customized controls



(1) Limit subject to detect ☆

(2) L/R eye detection ☆

MF related



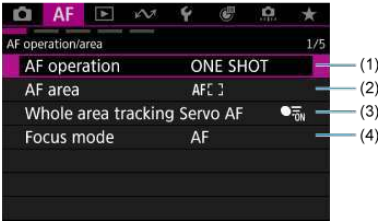
(1) MF peaking settings ☆

(2) Focus guide

(3) Lens electronic MF ☆

Tab Menus: AF (Still Photos)

AF operation/area



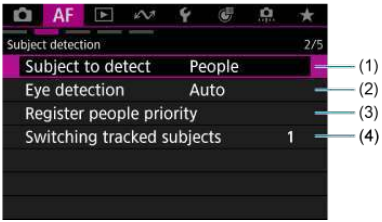
(1) AF operation ☆

(2) AF area ☆

(3) Whole area tracking Servo AF ☆

(4) Focus mode ☆

Subject detection



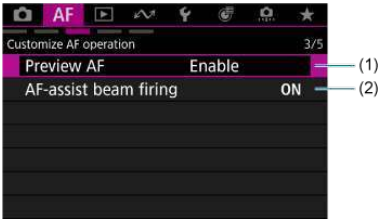
(1) Subject to detect ☆

(2) Eye detection

(3) Register people priority

(4) Switching tracked subjects ☆

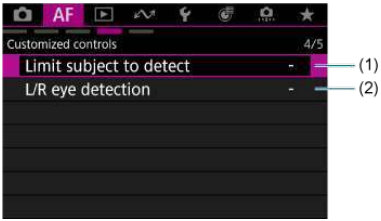
Customize AF operation



(1) Preview AF

(2) AF-assist beam firing

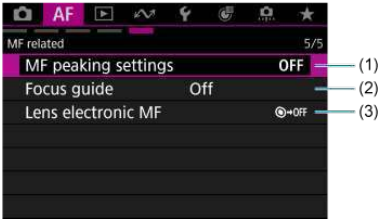
Customized controls



(1) Limit subject to detect ☆

(2) L/R eye detection ☆

MF related



(1) MF peaking settings ☆

(2) Focus guide

(3) Lens electronic MF ☆

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 the focus mode to AF.

- **For RF lenses without a focus mode switch**

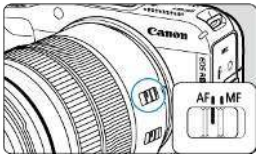
  Set [AF: **Focus mode**] to [**AF**].

Note

- You can also select [**AF**] or [**MF**] by pressing the < ◀ > key when the shooting screen is displayed.

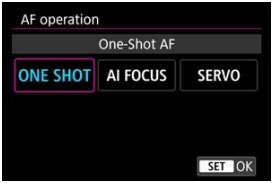
- **For RF lenses with a focus mode switch**

  Set the lens focus mode switch to < AF >.



2. Select [AF: AF operation] ( ).

3. Select an option.



Note

- If focus is not achieved, the AF point will turn orange. When using One-Shot AF, either recompose the shot and try to focus again or see “Shooting Conditions That Make Focusing Difficult” ( ).
- With Servo AF, the camera shoots even when subjects are not in focus.

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.
- See Lens electronic MF when using a lens that supports electronic manual 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 beeper will not sound even when focus is achieved.
- 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 lens, the distance to the subject, and how fast the subject is moving.
- Zooming during continuous shooting may throw off the focus. Zoom first, then recompose and shoot.
- 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

Subject Detection AF

With this function enabled, the camera focuses on the subject continuously during movie recording.

1. **Set the Mode dial to < >, < A+ >, < SCN >, or < S&F >.**

2. **Select [AF: Movie Servo AF].**

3. Select [Enable].

Enable

- By default, pressing the < AF-ON > button focuses using your specified AF area.
- By default, pressing the shutter button halfway starts metering.
- To keep the focus at a specific position, or if you prefer not to record mechanical sounds from the lens, you can temporarily stop Movie Servo AF by tapping [SERVO AF] in the lower left of the screen.

- Movie Servo AF will resume after pausing if you return to movie recording after operations such as pressing the < MENU > or < ▶ > button or changing the AF area.

Disable

- By default, pressing the < AF-ON > button focuses using your specified AF area.
- By default, pressing the shutter button halfway starts metering.

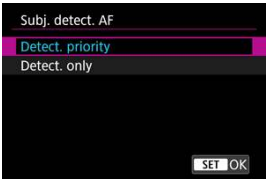
Caution

Precautions when set to [Movie Servo AF: Enable]

- Autofocusing when recording with Canon Log or at frame rates of 100 fps or higher 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 or using a bright lens.
- **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 lens is driven continuously and the battery power is consumed, the possible movie recording time will be shortened.
- 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 Servo AF pauses during zooming or magnified view.
- 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).

Subject Detection AF

You can specify whether to use Movie Servo AF if the subject set in [AF: **Subject to detect**] ( ) is not detected.



- **Detect. priority**

  Movie Servo AF is used for automatically selected subjects within the area set in [AF: **AF area**] ( ).
  Subjects set in [AF: **Subject to detect**] are prioritized for automatic selection.

- **Detect. only**

  Movie Servo AF is only used for subjects set in [AF: **Subject to detect**]. Movie Servo AF stops if no subject is detected.

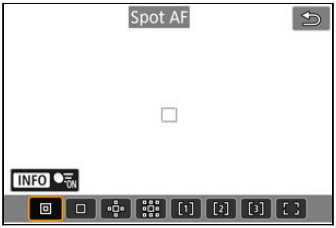
Selecting the AF Area

- AF Area ☆
- Selecting the AF Area ☆
- Whole Area Tracking Servo AF ☆
- Subject to Detect ☆
- Eye Detection
- Switching Tracked Subjects ☆
- Tracking with a Button ☆
- Focus Mode ☆
- Manually Setting AF Points ☆
- Magnified View
- AF Shooting Tips
- Shooting Conditions That Make Focusing Difficult
- AF Range

AF Area

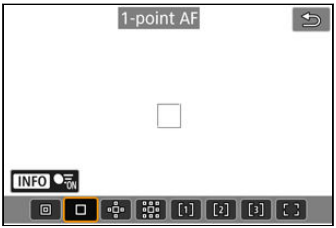
AF area operation is as follows. Screens shown here are displayed when you press the button assigned to [**AF area**] in [: **Customize buttons for shooting**].

: Spot AF



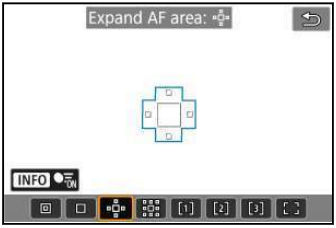
The camera focuses in a narrower area than 1-point AF.

: 1-point AF



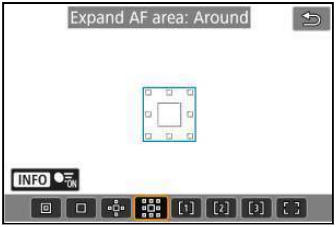
The camera focuses using a single AF point [].

⁘: Expand AF area: ⁘



Focuses using one AF point [□] and the AF area outlined here in blue. Effective for moving subjects, which are difficult to track with 1-point AF.
Focusing on your preferred subject is easier than with Flexible Zone AF.
When Servo AF is used, first you will focus using an AF point [□].

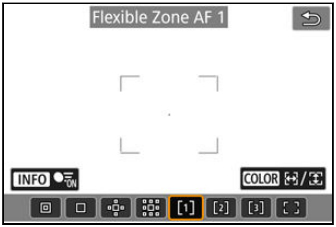
⁘: Expand AF area: Around



Focuses using one AF point [□] and the surrounding AF area outlined here in blue, which makes it easier to focus on moving subjects than with Expand AF area: ⁘.
When Servo AF is used, first you will focus using an AF point [□].

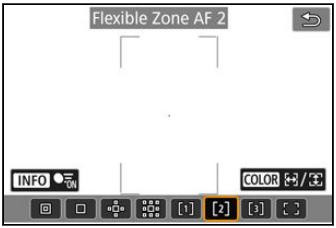
[1]: Flexible Zone AF 1

By default, a square Zone AF frame is set.



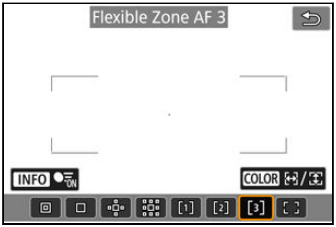
[2]: Flexible Zone AF 2

By default, a vertical rectangular Zone AF frame is set.



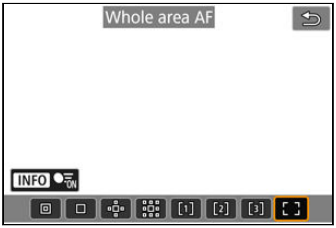
[3]: Flexible Zone AF 3

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 than Expand AF area, which makes focusing easier than with 1-point AF/Expand AF area 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), vehicles, subject motion, and subject distance.
Pressing the shutter button halfway displays [ ] over AF points in focus.

[ ]: Whole area AF



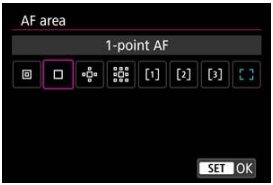
Uses auto selection AF in a whole-area AF frame to cover a larger area than Flexible Zone AF, which makes focusing easier than with 1-point AF/Expand AF area/Flexible Zone AF and effective for moving subjects.
Focusing areas are determined not only based on the nearest subject but also based on a variety of other conditions such as faces (of people or animals), vehicles, 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.**



Note

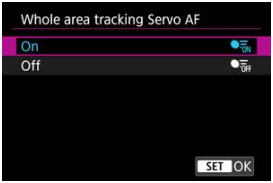
- You can also set the AF area by pressing < >, using the < > dial to select the AF area, then pressing < > < ◀ > < ▶ >.

Whole Area Tracking Servo AF

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.**

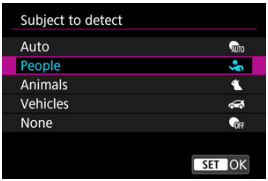


- **On**
  The AF area switches to whole-area AF to track subjects across the entire screen area while the shutter button is pressed halfway.

- **Off**
  Subjects are tracked only within AF points when the shutter button is pressed halfway or completely.

Subject to Detect

You can specify conditions for automatic selection of the main subject to track.
Selecting an option other than [**None**] will display a tracking frame [ ] for the main subject detected. The tracking frame will move to track subjects that start moving.
You can shoot with the subject's eyes in focus by setting [AF: **Eye detection**] to an option other than [**Disable**] ( ).



- **Auto**
  Automatic selection of the main subject to track from any people, animals, or vehicles in the scene.

- **People**
  Prioritizes the faces or heads of people as the main subjects to track.
  When a person's face or head can no longer 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, cats, birds, or horses) and people, with animal detection results given priority to determine 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.

- **Vehicles**
  Detects vehicles (sports cars and motorcycles, aircraft, and trains) and people, with vehicle detection results given priority to determine main subjects to track.
  For vehicles, the camera attempts to detect key details or the entire vehicle (or for trains, the front part), and a tracking frame is shown over any of these details detected.
  If key details or the entire vehicle cannot be detected, the camera may track other parts of the vehicle.
  Press the < INFO > button to enable or disable Spot detection for key details of vehicles.

- **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.
  - 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. Tracking frames may also appear for subjects other than people.
- The camera may not detect dogs, cats, birds, or horses, depending on the breed, color, shape, or posture. Tracking frames may also appear for similar-looking animals or non-animal subjects.
- The camera may not detect two- or four-wheeled vehicles, aircraft, or trains, depending on the type, color, shape, or orientation. Tracking frames may also appear for similar-looking vehicles or subjects that are not vehicles.

Note

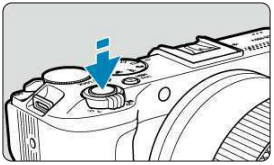
- When pressing the shutter button halfway for subject selection, you can choose the following subjects. In scenes without relevant subjects, the camera tracks other objects regardless of the [**Subject to detect**] setting.
  - **Auto**
    People, animals, vehicles
  - **People**
    People, animals, vehicles
    (Animals and vehicles are only detected while tracking is in progress.)
  - **Animals**
    Animals, people
  - **Vehicles**
    Vehicles, people
- In [AF: **Limit subject to detect**], you can limit the available detection setting options to your preferred options.
- If it seems difficult for the camera to detect your preferred subject when you are shooting people, animals, or vehicles with [Auto], it may be easier if you switch to the setting option specifically for that subject.
- 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.
- Gray display of tracking frames [ ] does not apply in movie recording.

2. Focus and shoot/record.



- 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 (only for One-Shot AF).
  An orange tracking frame indicates that the camera could not focus on 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 AF point.
- The active [ ] may cover part of the subject instead of the entire subject.
- The size of tracking frames varies depending on the subject.
- Even if you have manually selected an AF area, you can switch the AF area to [**Whole area AF**] and start AF with subject detection by pressing the button assigned to [**AF on detected subject**] in [: **Customize buttons for shooting**].

Caution

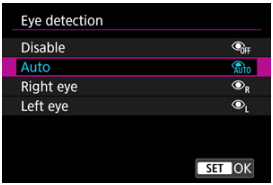
- Tapping the screen to focus will focus with [**One-Shot AF**], regardless of the AF operation setting.
- If the subject's face is significantly out of focus, face detection will not be possible. Adjust the focus manually ( ) so that the face can be detected, then perform AF.
- AF may not detect subjects 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.**



- **Disable**
  Eye detection is not performed.

- **Auto**
  The eye for AF operation is selected automatically after eye detection.

- **Right eye/Left eye**
  Gives priority to the selected eye for AF, after eye detection. If the eye on the side with priority is not detected, the other eye is used for AF.

3. Aim the camera at the subject.

- A tracking frame is displayed around their eye.
- To choose an eye to focus on when [AF: **AF area**] is set to [**Whole area AF**], either tap the screen or use < ✥ >. As you use < ✥ >, the tracking frame changes again to [ ].
- You can also tap the screen to choose an eye, when [AF: **AF area**] is set to [**Whole area AF**] or during tracking in progress.
- If your selected eye is not detected, an eye to focus on is selected automatically.

4. Take the picture.

Caution

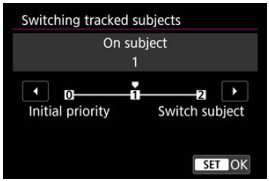
- Depending on the subject and shooting conditions, subject eyes may not be detected correctly, or a subject's left or right eye may not be prioritized correctly.
- Eyes are not detected when [AF: **Subject to detect**] is set to [**None**].

Note

- In [AF: **L/R eye detection**], you can limit the available detection setting options to your preferred options.

Switching Tracked Subjects

You can specify how easily the camera switches AF points to track subjects.



- **Initial priority**
  Tracks the subject initially determined for AF, to the extent possible.

- **On subject**
  Tracks the subject initially determined for AF, to the extent possible. Switches to other subjects if the camera can no longer determine if the tracked subject is the main subject.

- **Switch subject**
  Switches to track other subjects in response to shooting conditions.

Caution

Precautions when set to [Initial priority]

- The camera may not be able to continue tracking subjects under some subject conditions.
  - If subjects move vigorously
  - If subjects face a different direction or change their posture
  - If the tracking frame strays from subjects, or if subjects are hidden behind obstructions and you can no longer see them
- Subjects selected by touch operations are tracked to the extent possible, regardless of the [AF: **Subject to detect**] setting.

Note

- If you prefer to keep focusing on the main subject determined initially, consider using [**Initial priority**] or [**On subject**].
- If you prefer prompt switching to other subjects that the camera can focus on, based on how the shot is composed, consider using [**Switch subject**].

Tracking with a Button

You can press a button assigned to [**Start/stop whole area AF tracking**] and [**AF point selection**] in [: **Customize buttons for shooting**] to track subjects with a tracking frame [ ]. This example is based on assigning [**Start/stop whole area AF tracking**] to the < ISO > button and [**AF point selection**] to the < 3 > 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 Expand AF area: or Expand AF area: Around, adjacent AF points are also displayed.
- With Flexible Zone AF, the specified Zone AF frame is displayed.

2. Press the < ISO > 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 < ISO > button again.
- To choose a subject to focus on when multiple subjects can be detected, press the < 3 > 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 < ◀ > key.

Caution

- When set to [**MF**], AF points are hidden during basic information display, and an MF icon is displayed.

Manually Setting AF Points

You can manually set AF points by pressing the button assigned to [**AF point selection**] in [: **Customize buttons for shooting**]. This example is based on assigning the < 3 > button.

1. **Check the AF point.**

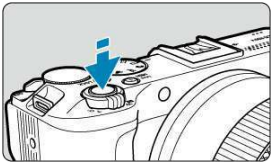
(1)

- An AF point (1) is displayed.

2. **Move the AF point.**

- Press the < 3 > button, then use the < ✥ > keys to move the AF point into position for focusing (but note that with some lenses, it may not move to the edge of the screen).
  You can also focus by tapping a position on the screen to move the AF point there.
- To center the AF point, press the < MENU > button.

3. Focus and shoot/record.



- 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 (only for One-Shot AF).
- If focus is not achieved, the AF point will turn orange.

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.
- Tapping the screen to focus will focus with [**One-Shot AF**], regardless of the AF operation setting.

Magnified View

To check the focus, you can magnify display by approx. 5× or 10× by tapping [🔍].

- Magnification is centered on the tracking frame when the tracking frame is white (as an active frame) after subject detection.
  Magnification is centered on the AF point (in the center of the screen) when subjects are detected and the tracking frame is gray, or when subjects cannot be detected.
- Autofocusing is performed in magnified view if you press the shutter button halfway.
- When set to Servo AF or AI Focus AF, pressing the shutter button halfway in magnified view reverts to the normal view for focusing.

Caution

- If focusing is difficult in the magnified view, return to the normal view and perform AF.
- If you perform AF in the normal view and then use the magnified view, accurate focus may not be achieved.
- AF speed differs between the normal view and magnified view.
- Preview AF and Movie Servo AF are not available in magnified view.
- With the magnified view, achieving focus becomes more difficult due to camera shake. Using a tripod is recommended.

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.
- With certain lenses, it may take more time to achieve focus with autofocus, or accurate focusing may not be achieved.

Shooting Conditions That Make Focusing Difficult

- Subject with low-contrast such as the blue sky, solid-color flat surfaces or 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.
- Soft focus effect is applied with a soft focus lens.
- 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 lens used and settings such as aspect ratio, movie recording size, and Movie digital IS.

Manual Focus

Setting MF Peaking (Outline Emphasis)

Focus Guide

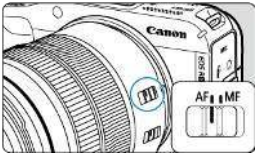
If focusing is not possible with autofocus, you can magnify the image and focus manually.

1. **Set the focus mode to < MF >.**

- **For RF lenses without a focus mode switch**
  Set [AF: **Focus mode**] to [**MF**].

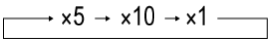
- **For RF lenses with a focus mode switch**

  Set the lens focus mode switch to < MF >.



2. Magnify the image.

- Tapping [🔍] changes the screen as follows.



3. Move the magnified area.

- Use the < ✥ > keys to move the magnified area into position for focusing.
- To center the magnified area, press the < MENU > button.

4. Focus manually.

- While looking at the magnified image, turn the lens focusing ring to focus.
- After focusing, tap [🔍] to return to the normal view.

Note

- In magnified view, the exposure is locked.
- Even when focusing manually, you can use Touch Shutter to shoot.

Setting MF Peaking (Outline Emphasis) ☆

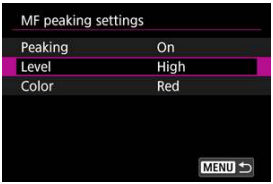
Edges of subjects in focus can be displayed in color to make focusing easier. You can set the outline color and adjust the sensitivity (level) of edge detection.

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 an option other than [].
- 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

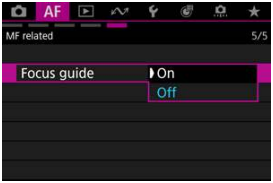
- Peaking display shown on the screen is not recorded in images.

Focus Guide

Setting [AF: **Focus guide**] to [**On**] provides a guide frame that shows which direction to adjust focus and the extent of adjustment needed.

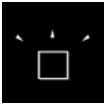
1. **Select [AF: Focus guide] (,).**

2. **Select [On].**

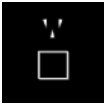


- To display the guide frame on the face of the person detected as the main subject, set [AF: **Subject to detect**] to an option other than [**None**]. You can also display the guide frame near the eyes of the person detected as the main subject by setting [AF: **Eye detection**] to an option other than [**Disable**].
- After pressing the button assigned to [**AF point selection**], you can use the < ✥ > keys to move the guide frame in the direction you press.
- To set the guide frame after moving it with < ✥ >, press < SET >.
- You can also move and set the guide frame by tapping the screen.
- To center the guide frame, tap [ ].

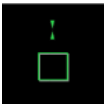
The guide frame indicates the current position in focus and adjustment amount as follows.



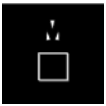
Much adjustment needed toward infinity



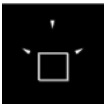
Slight adjustment needed toward infinity



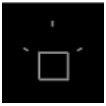
In focus



Slight adjustment needed toward close range



Much adjustment needed toward close range



Adjustment information not detected

Caution

- Under difficult shooting conditions for AF ( ), the guide frame may not be displayed correctly.
- Higher aperture values are more likely to prevent correct guide frame display.
- No AF points are displayed while the guide frame is displayed.
- The guide frame is not displayed in these situations.
  - When the focus mode is set to < AF > on the camera or lens
  - When display is magnified
  - When digital zoom is set
- The guide frame is not displayed correctly during shifting or tilting of TS-E lenses.

Note

- The camera's auto power off counter does not count time spent adjusting the focus with a lens's electronic focusing ring.

Registering People to Prioritize

- Registering Faces
- Changing or Removing the Priority of Registered People
- Enabling Detection of Registered People's Faces
- Clearing All Registered People
- Saving and Loading Registered Data

You can register people on the camera to have the camera attempt to detect their faces and prioritize focusing, brightness, and color tone for them when you shoot. To register a face, you can take a picture of someone, or you can use an image on the card.

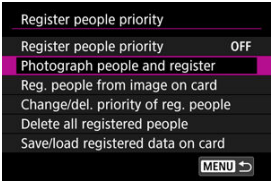
Caution

- The camera stores face images and related information registered using this feature. Delete all registered information before disposing of the camera or transferring ownership.
- When using this feature, be aware of the need to protect personal information and comply with privacy regulations, as by asking people for their consent before registering their information. Canon cannot be held liable for any personal information issues arising from use of this feature.

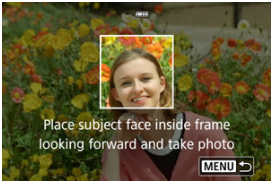
Registering people by taking their picture

1. **Select [AF: Register people priority] ( ).**

2. **Select [Photograph people and register].**

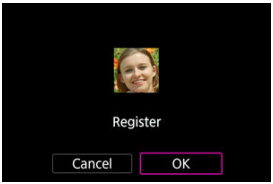


3. Aim the frame over the face of a person to register, then take their picture.



- Shoot under ample light with the subject facing you.
- Ask subjects to pose with a natural facial expression before you shoot.
- For best results, ask subjects to take off any hats, masks, sunglasses, or other coverings before you take their picture.
- It may improve detection accuracy to register faces immediately before you will shoot.
- Under these shooting conditions, detection may be less accurate, and it may not be possible to register faces.
  - Faces are too small, relative to the frame
  - Faces are partially shaded
  - Faces are partially hidden
  - Faces are displayed on a computer or smartphone screen

4. Select [OK].



- The image displayed may look different from how you composed the shot in step 3, but this will not affect detection accuracy.

Registering people from images on the card

JPEG or HEIF images can be used. Process any RAW images you will use into JPEGs before saving them to the card.

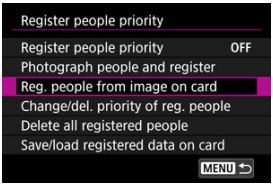
Caution

- With the following images, detection may be less accurate, and it may not be possible to register faces.
  - Faces are partially hidden
  - Faces are partially shaded
  - Faces are displayed on a computer or smartphone screen

Note

- For best results, make sure that faces in the images meet these guidelines.
  - Well lit and facing you
  - Not wearing any hats, masks, sunglasses, or other coverings
  - Natural facial expression
  - Faces are not too small or large relative to the screen

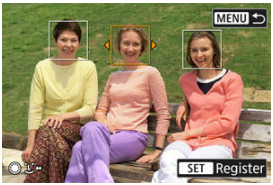
1. **Select [Reg. people from image on card].**



2. Switch to playback.

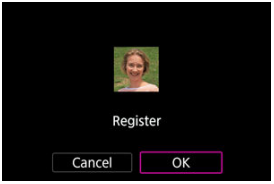
- Press < (SET) >.

3. Select a face.



- For pictures that show more than one person, you can use the < >< > dials or < ✥ > keys to move the orange frame over the face to register.
- Press < (SET) >.

4. Select [OK].



- After the following screen appears, you can register another person's face.

Display when registered faces are detected

A white frame with [👤] appears on any registered faces that are detected on the shooting screen. Note that [👤] is not displayed when One-Shot AF or Servo AF is used.

Caution

- Detection may be less accurate under these conditions.
  - Subjects are not directly facing you
  - Faces are too light or dark
  - Faces are too small or large relative to the screen
  - Subjects have a much different facial expression from the one in registered images
  - Subjects are moving too much
  - Faces are covered by a hat, mask, sunglasses, or other objects
  - Subject faces look much different from how they look in registered images
- Unregistered people may be mistakenly detected as registered people whom they resemble.
- If faces of registered people are not detected, or if detection is not accurate, try clearing the registered information and registering it again.

Note

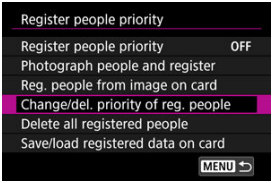
- When [AF: **Subject to detect**] is set to an option other than [**People**], priority is given to the subject specified in that setting.

Changing or Removing the Priority of Registered People

You can change detection priority by rearranging registered people. You can also remove registered people.

Changing detection priority

1. **Select [Change/del. priority of reg. people].**



2. **Select the face of a registered person.**

- Select with the < ◎ > dial or < ✥ > keys, then press < SET >.

3. **Change the priority.**

- Move with the < ◎ > dial or < ✥ > keys, then press < SET >.
- When finished changing priority, press the < MENU > button.

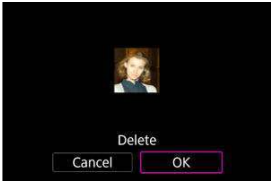
Removing registered people

1. **Select the face of a registered person.**

- Select with the < ◎ > dial or < ✥ > keys, then press < SET >.

2. **Press the < 🗑 > button.**

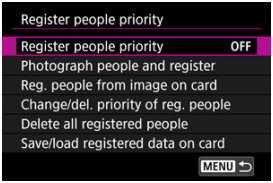
3. **Select [OK].**



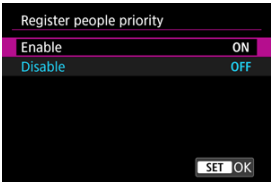
- Press the < MENU > button to exit.

Enabling Detection of Registered People's Faces

1. **Select [Register people priority].**



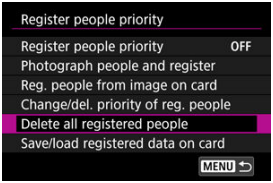
2. **Select [Enable].**



Clearing All Registered People

Delete all registered information before disposing of the camera or transferring ownership.

1. **Select [Delete all registered people].**



2. **Press <(SET)>.**

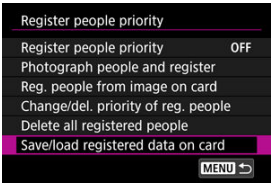
3. **Select [OK].**

- Press < SET >.

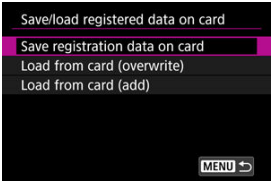
Saving and Loading Registered Data

Registered face data can be saved to a card. Registered data saved by a EOS R50 V camera can also be loaded from a card.

1. **Select [Save/load registered data on card].**



2. Select [Save registration data on card].



- Select [**Save registration data on card**] to save the camera's registered data to the card.
- To rename the registered data file before saving it, press the < INFO > button on the following screen.

- To load registered data from the card and overwrite existing data on the camera, select [**Load from card (overwrite)**]. Any existing registered data on the camera is deleted.
- To add registered data from the card to the camera, select [**Load from card (add)**]. No existing registered data on the camera is deleted.

  - Registered data is loaded starting from the person with the highest priority.
  - Once the camera is full of registered data, no more data is loaded.

Customizing AF Functions

[Servo AF characteristics] (in movie recording) ☆

[Customize AF operation]

[Customized controls] ☆

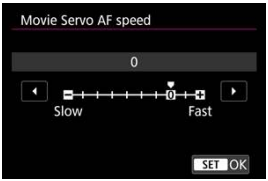
[MF related] ☆

You can configure AF functions in detail to suit your shooting style or subject.

[Servo AF characteristics] (in movie recording) ☆

Movie Servo AF speed

You can set the AF speed for Movie Servo AF. The function is enabled when using a lens supporting slow focus transition during movie recording*.



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.

*** Lenses supporting slow focus transition during movie recording**
USM and STM lenses released in and after 2009 are compatible. For details, refer to the Canon website ( ).

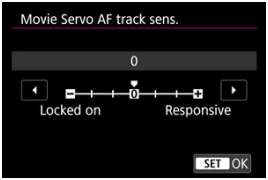
Caution

- With certain lenses, even if you adjust the AF speed, the speed may not change.

Movie Servo AF tracking sensitivity

You can adjust the tracking sensitivity (to one of seven levels), which affects responsiveness if the subject strays from the AF point during Movie Servo AF, as when interfering objects move across AF points or when you pan.

This function is available when [AF: **Movie Servo AF**] is set to [**Enable**].



- **Locked on: –3/–2/–1**

  With this setting, the camera is less likely to track a different subject if the subject strays from the AF point. The closer the setting is to the minus (–) symbol, the less the camera is inclined to track a different subject. It is effective when you want to prevent the AF points from rapidly tracking something that is not the intended subject during panning or when an obstacle cuts across the AF points.

- **Responsive: +1/+2/+3**

  This makes the camera more responsive when tracking a subject that covers the AF point. The closer the setting is to the plus (+) symbol, the more responsive the camera is. It is effective when you want to keep tracking a moving subject as its distance from the camera changes or to rapidly focus on another subject.

Note

- Operation when inactive is equivalent to when set to [**0**].

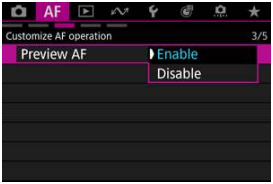
[Customize AF operation]

Preview AF

This function keeps subjects generally in focus. The camera is ready to focus immediately when you press the shutter button halfway.

1. **Select [AF: Preview AF] ( ).**

2. **Select [Enable].**



Caution

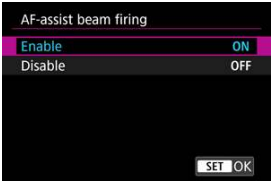
- Fewer shots are available when set to [**Enable**], because the lens is driven continuously and battery power is consumed.

AF-assist beam firing

You can enable or disable AF-assist beam firing of the camera or a Speedlite for EOS cameras.

1. **Select [AF: AF-assist beam firing] ( ).**

2. Select an option.



- **[ON] Enable**
  Enables firing of the AF-assist beam, when needed.

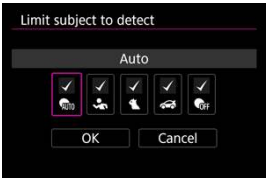
- **[OFF] Disable**
  Disables firing of the AF-assist beam. Set if you prefer not to fire the AF-assist beam.

Caution

- Speedlite AF-assist beam firing is disabled when the Speedlite's [AF: **AF-assist beam firing**] Custom Function is set to [**Disable**].

Limit subject to detect

You can limit the available setting options in [AF: **Subject to detect**] to your preferred options. Select an option to exclude and press < SET > to clear [✓]. Select [**OK**] to register the setting.



Caution

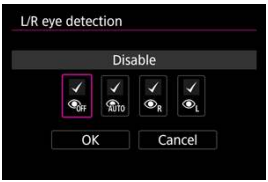
- The [✓] mark cannot be cleared from all items at the same time.

Note

- An asterisk to the right of [AF: **Limit subject to detect**] indicates that the default setting has been modified.

Left/right eye detection

You can limit the available setting options in [AF: **Eye detection**] to your preferred options. Select an option to exclude and press < SET > to clear [✓]. Select [**OK**] to register the setting.



Caution

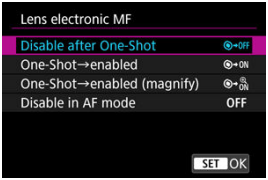
- The [✓] mark cannot be cleared from all items at the same time.

Note

- An asterisk to the right of [AF: **L/R eye detection**] indicates that the default setting has been modified.

Lens electronic MF

For lenses equipped with electronic manual focusing, you can specify how manual focus adjustment is used with One-Shot AF.



- **[⊙→OFF] Disable after One-Shot**
  After the AF operation, manual focusing adjustment is disabled.

- **[⊙→ON] One-Shot→enabled**
  You can manually adjust the focus after the AF operation if you keep holding down the shutter button halfway.

- **[⊙→Q ON] One-Shot→enabled (magnify)**
  You can manually adjust the focus after the AF operation if you keep holding down the shutter button halfway. You can magnify the area in focus and adjust the focus manually by turning the lens focusing ring.

- **[OFF] Disable in AF mode**
  Manual focus adjustment is disabled when the focus mode switch of the camera or lens is set to < AF >.

Caution

- With [**One-Shot→enabled (magnify)**], display may not be magnified even if you turn the lens focusing ring while pressing the shutter button halfway immediately after shooting. If so, you can magnify display by releasing the shutter button, waiting for [Q] display, then pressing the shutter button halfway as you turn the lens focusing ring.

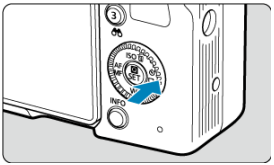
Note

- For details on your lens's manual focus specifications, refer to the Lens Instruction Manual.

Selecting the Drive Mode

Single and continuous drive modes are provided. You can select the drive mode suiting the scene or subject.

1. **Press the < ▶ > key (⏱6).**



- With an image displayed, press the < ▶ > key.

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.
  - [**Elec. 1st-curtain**]: max. approx. 12 shots/sec.
  - [**Electronic ES**]: max. approx. 15 shots/sec.

- **[□H] 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.
  - [**Elec. 1st-curtain**]: max. approx. 7.6 shots/sec.
  - [**Electronic ES**]: max. approx. 15 shots/sec.

- **[□L] 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.
  - [**Elec. 1st-curtain**]: 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. 12 shots/sec. continuous shooting speed when set to [**Elec. 1st-curtain**] under these conditions.
  - Room temperature (23°C/73°F)
  - Using any of the following power sources
    - Fully charged LP-E17 (note that continuous shooting speed may become slower when using batteries with weak recharge performance)
    - Household power outlet accessories (sold separately)
    - USB power adapters (sold separately)
  - Shutter speed: 1/1000 sec. or faster
  - Flicker reduction: None
- [⊡] and [⊡H] enable approx. 15 shots/sec. continuous shooting speed when set to [**Electronic ES**] under these conditions.
  - Shutter speed: 1/250 sec. or faster

  Note that the continuous shooting speed may be less than approx. 15 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
  - Zooming is performed
  - Manual focusing is performed
  - Servo AF changes the position in focus
- Continuous shooting speed with Servo AF may be slower depending on subject conditions or the lens used.
- Visit the Canon website for details on lenses supporting the maximum continuous shooting speed ( ).
- Continuous shooting will be slower under flickering light when set to [**Electronic ES**]. Also, the continuous shooting speed may be lower when [**Elec. 1st-curtain**] is set.
- 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 < ▶ > key (⏱6).**

- With an image displayed, press the < ▶ > key.

2. **Select the drive mode item.**

- Turn the < ◎ > dial to select the self-timer.

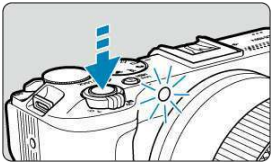
  ⏱10: Shoot in 10 sec.

  ⏱2: Shoot in 2 sec.

  ⏱C: Shoot continuously in 10 sec. for the specified number of shots*

  * Press the < INFO > button and use the < ◀ >< ▶ > keys to set the number of continuous shots.

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], the continuous shooting interval may be longer depending on image quality, use of external flash, and other shooting conditions.
- The self-timer lamp does not blink and the camera does not beep when [📷: **Silent shutter function**] is set to [**On**].

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.

Adjusting the Zone AF Frame Size

This section describes ways to customize AF operation. You can also use a combination of customized settings.

Adjusting the Zone AF Frame Size

You can resize the Zone AF frame displayed for Flexible Zone AF 1–3.

1. **Press < SET > during shooting screen display.**

2. **Select Flexible Zone AF 1, 2, or 3.**

3. Press the < COLOR > button.

4. Adjust the Zone AF frame size.

- Use the < ✥ > keys to adjust the Zone AF frame size, then press < (SET) >.
- To restore the default setting, press the < INFO > button.

Playback

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

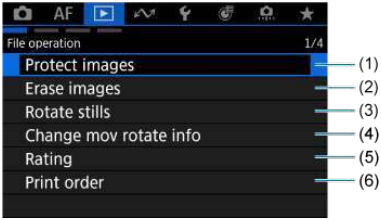
Caution

- Normal display or 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)
- Creative Assist
- 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
- AF Point Display
- Playback Grid
- Movie Play Count

Tab Menus: Playback

File operation



(1) Protect images

(2) Erase images

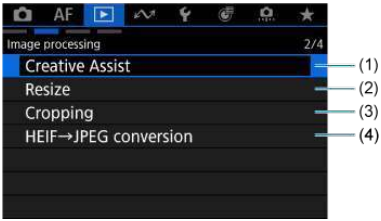
(3) Rotate stills

(4) Change mov rotate info

(5) Rating

(6) Print order

Image processing



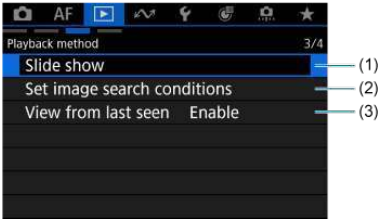
(1) Creative Assist

(2) Resize

(3) Cropping

(4) HEIF→JPEG conversion ☆

Playback method

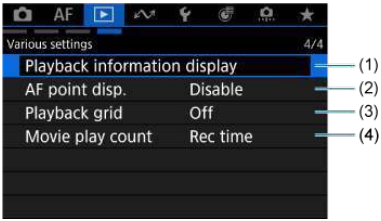


(1) Slide show

(2) Set image search conditions

(3) View from last seen

Various settings



(1) Playback information display

(2) AF point disp.

(3) Playback grid

(4) Movie play count

Image Playback

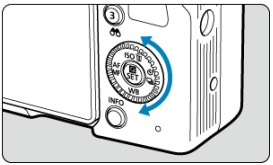
- Single-Image Display
- Shooting Information Display
- Touch Playback

Single-Image Display

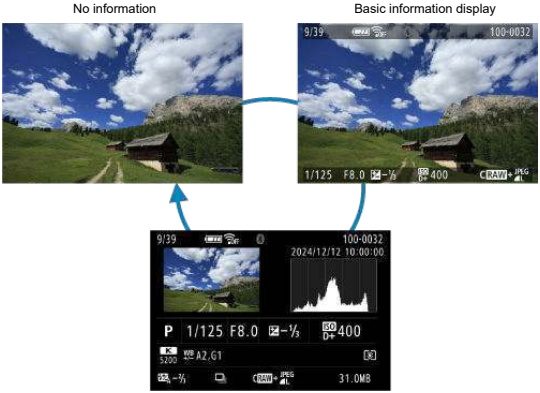
1. **Switch to playback.**

- Press the < ▶ > button.
- The last image captured or played back is displayed.

2. **Browse images.**



- Turn the < ◎ > dial to browse images. Movies and still photos are displayed one after another regardless of which was captured first.
- Press the < ▶ > button to play the most recent movie, or to display the still photo numbered with the highest file number and stored in the folder with the highest folder number.
- 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 [📷: **Still img 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.

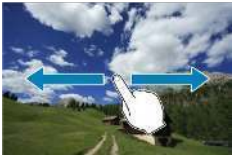
Shooting Information Display

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

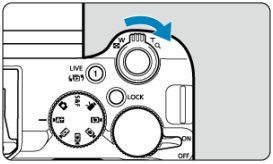
Magnified view

Note

- You can also magnify display by double-tapping with one finger.

Magnified Image Display

1. **Magnify the image.**

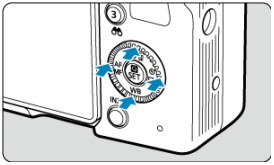


- During image playback, press the zoom lever toward < Q >.

(1)

- Display switches to a magnified view. The magnified area position (1) will be displayed in the lower right of the screen.
- Each press of the zoom lever toward < Q > magnifies the display.
- Pressing the zoom lever toward < ▦ > 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**] ( ).

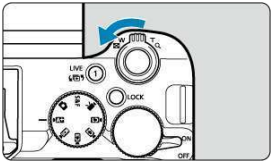
2. Scroll the image.



- 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.**



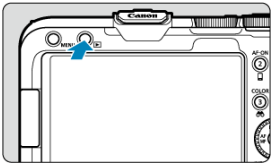
- During image playback, press the zoom lever toward < ▦ >.
- The 4-image index display will appear. The selected image is highlighted with an orange frame. Press the zoom lever further toward the < ▦ > side to switch the display as follows: 9 → 36 → 100 images. Press the zoom lever to the < 🔍 > side to switch the display as follows: 100 → 36 → 9 → 4 → 1 image.

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.

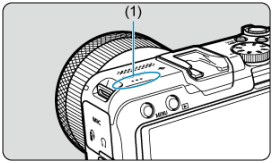
2. **Select a movie.**

- 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 the 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 the < ◀ > key down 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 the < ▶ > key down 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 ().
COLOR	Press the < COLOR > 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 < COLOR > 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**].
  You can compress the file and save it as a separate file when [ ] (2) is displayed.
- 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.
- Editing first and last scenes is not available for movies that were divided because they exceeded 4 GB.
- You cannot edit a movie when the camera is connected to a computer.
- Movies may not be compressed when the remaining battery capacity is low. Use of a fully charged battery or a household power outlet accessory (sold separately) is recommended.
- For extensive movie editing, consider using an optional household power outlet accessory.

4K Movie Frame Grab

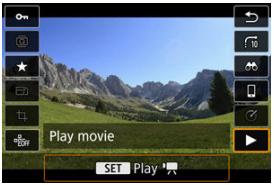
From 4K movies, you can select individual frames to save as JPEG or HEIF still images. This is referred to as “frame grabbing.”

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.**

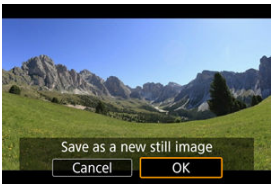
- The movie playback panel will appear.

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 < COLOR > 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 [**HDR PQ**].
- Check the destination folder and image file number.

8. Select the image to display.

- Select [**View original movie**] or [**View extracted still image**].

Caution

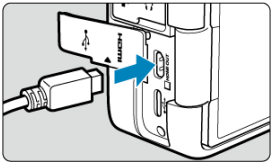
- Frame grabbing is not possible from the following 4K movies.
  - Movies recorded with other cameras
- Frame grabbing is not possible while the camera is connected to a computer.

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.

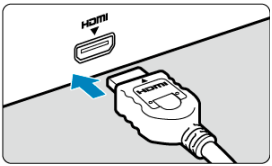
If the image does not appear on the TV screen, confirm that [: System frequency] is correctly set to [59.94Hz:NTSC] or [50.00Hz:PAL] (depending on the video system of your television).

1. **Connect the HDMI cable to the camera.**



- Insert the HDMI cable in the camera's < HDMI OUT > terminal.

2. **Connect the HDMI cable to the television.**

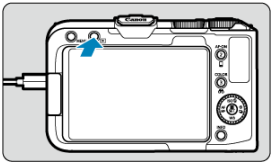


- Connect the HDMI cable to the television's HDMI IN port.

3. **Turn on the television and switch the television's video input to select the connected port.**

4. **Set the camera's power switch to < 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 OUT > terminal. Doing so may cause a malfunction.
- Certain televisions may not display the images due to incompatibility.
- Touch-screen operations are not supported while the camera is connected to a television.

Note

- It may take some time before images are displayed. To avoid delay, set [🔧: **HDMI resolution**] to an option other than [**Auto**] (). Note that if the card contains movies recorded with different settings, it may take some time before images are displayed.

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.

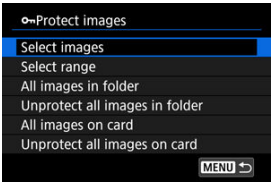
Note

- 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 [⊶] icon (1) at the top of the screen.
- To cancel protection and clear the [⊶] icon, press < SET > again.
- To protect another image, repeat steps 3 and 4.

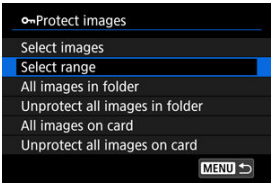
Note

- 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].**



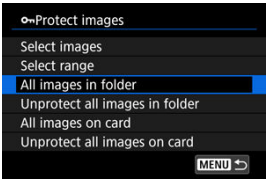
- Select [**Select range**] in [▶: **Protect images**].

2. **Specify the range of images.**

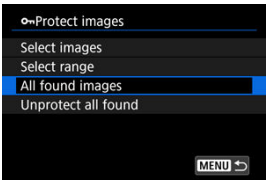
- Select the first image (start point).
- Next, select the last image (end point). The images in the specified range will be protected and the [⊶] icon will appear.
- To select another image to protect, repeat step 2.

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.**

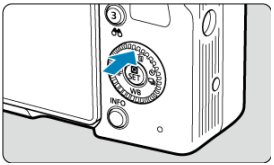
Erasing Images Individually

1. **Press the < ▶ > button.**

2. **Select the image to erase.**

   - 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

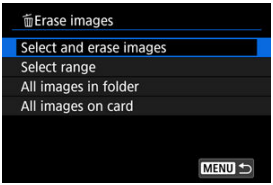
- Select an option.
- Series of images captured in [□], [□H], or [□] drive mode are erased when you select [**Erase scene including image**] during playback.

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.

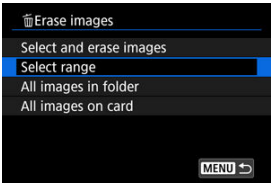
4. Erase the images.

- 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].**



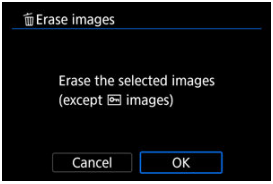
- Select [**Select range**] in [▶: **Erase images**].

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.**

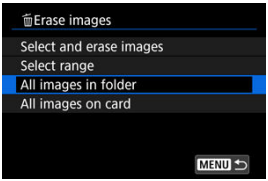
4. Erase the images.



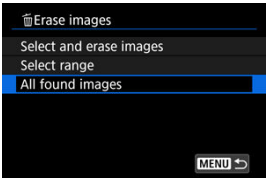
- Select [**OK**].

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

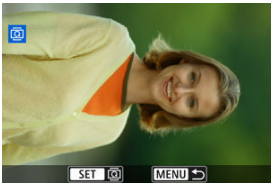
- To erase all the images including protected images, format the card ().

Rotating Still Photos

You can use this feature to rotate the displayed image to the desired orientation.

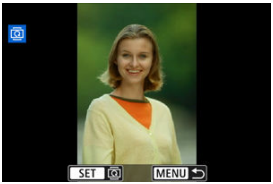
1. **Select [▶: Rotate stills] ( ).**

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

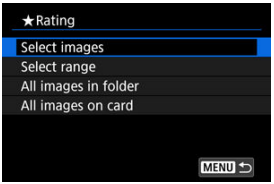
- Rating Individual Images
- Rating by Specifying the Range
- Rating All Images in a Folder or on a Card

You can rate images on a scale of 1–5 ([★]/[★★]/[★★★]/[★★★★]/[★★★★★]). This function is called rating.
* Rating images can help you organize them.

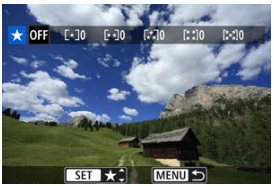
Rating Individual Images

1. **Select [▶: Rating] ( ).**

2. **Select [Select images].**



3. **Select the image to rate.**



- Turn the < > dial to select the image to be rated.

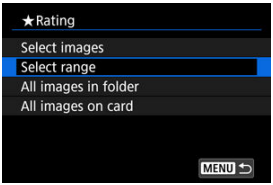
4. Rate the image.

- 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.

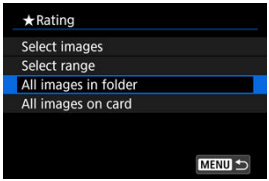
3. **Press the < MENU > button.**

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.

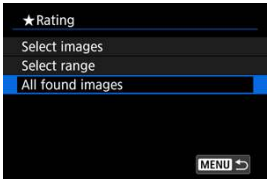
Rating All Images in a Folder or on a Card

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)

Print Options

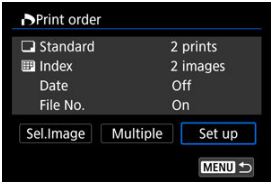
Selecting Images for Printing

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.)

Print Options

1. **Select [▶: Print order] ( ).**

2. **Select [Set up].**

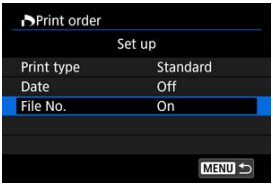


3. Set the options as desired.

- 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.



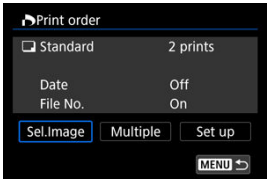
- Press the < MENU > button.
- Next, select [**Sel.Image**] or [**Multiple**] to specify the images to be printed.

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.

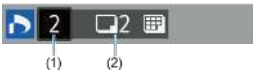
Selecting Images for Printing

Selecting images



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.

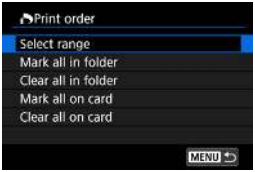
Index

(3) Checkmark
(4) Index icon

Press < SET > to add a checkmark [✓] to the box. The image will be included in the index print.

Selecting multiple images

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**].

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 < >, 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 < > and then using the < > dial.
- Press < > when the adjustment is finished.

- To reset the settings, press the < COLOR > button and select [**OK**] after a confirmation message is displayed.
- To confirm the effect, press the < AF-ON > button.

4. Select [OK] to save the image.

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. Note that resizing is not available for S2 images, RAW images, or frame-grab images from 4K movies.

1. **Select [▶: Resize] ( ).**

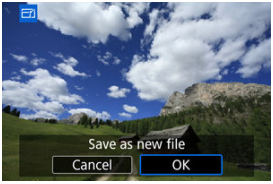
2. **Browse your images.**

- Turn the < ◎ > dial to select the image to resize.

3. **Select the desired image size.**

- Press < SET > 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**

  Operate the zoom lever 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 a preview of the cropped image.

- 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.
- AF point display information (⊡) and Dust Delete Data (⊡) will not be appended to the cropped images.

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.

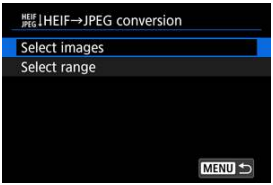
Note

- HEIF images that have been converted to JPEGs are labeled [JPEG].

Converting Individual Images

1. **Select [▶: HEIF→JPEG conversion] ( ).**

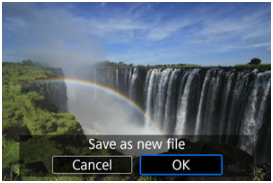
2. **Select [Select images].**



3. Select an image.

- Turn the < ◎ > dial to select the HEIF image, then press < SET >.
- To select other images, repeat step 3.
- Press the < MENU > button to convert to JPEG.

4. Save.



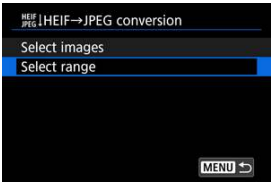
- Select [**OK**] to save the JPEG image.
- If there are other images for conversion, select [**Yes**].

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].**

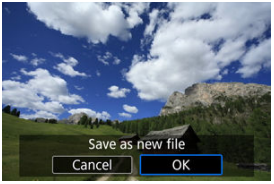


2. **Specify the range of images.**

- 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.

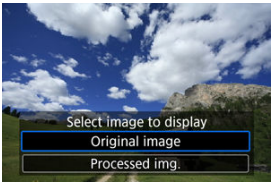
3. **Press the < MENU > button.**

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.
   - If you want to specify the images to be played back in the slide show, filter the images with [▶: **Set image search conditions**] ( ).

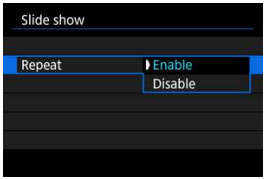
2. **Select [▶: Slide show] ( ).**

3. Set the playback as desired.

- Select [**Set up**].

Display time

Repeat



- Set the [**Display time**] and [**Repeat**] (repeated playback) 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.
- All movies are played first, followed by all still photos.

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] ( ).**

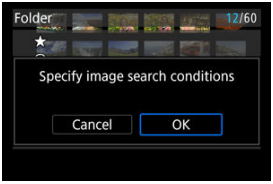
2. **Set the search conditions.**

(1)

- Turn the < > dial to select an option.
- Turn the < > dial 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 the < INFO > button, the checkmark [✓] will be removed (which cancels the search condition).
- After completing the settings, press < SET >.

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, < Q > cannot be pressed in step 2.
- For movies, searches apply to files in the XFVC folder. Searching does not apply to movie files in the DCIM folder.

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.

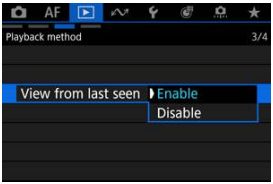
Clearing the Search Conditions

Access the screen in step 2, then press the < AF-ON > 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

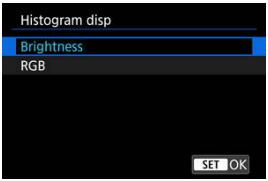
You can specify screens and accompanying information displayed during image playback.

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

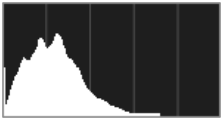


The histograms show signal levels across the tonal range. Brightness display (for checking the general exposure level and overall gradation) and RGB display (for checking saturation and gradation of red, green, and blue) are available. You can switch the histogram displayed by pressing the < INFO > button when [INFO] 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

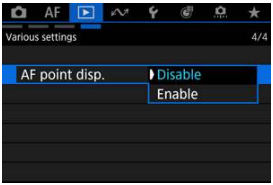
This histogram is a graph showing the distribution of each primary color's brightness level in the image (RGB or red, green, and blue), with the horizontal axis indicating the color's brightness level (darker on the left and brighter on the right) and the vertical axis indicating the pixel count at each 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.

AF Point Display

You can display the AF points that were used to focus, which will be outlined in red on the playback screen.

1. **Select [▶: AF point disp.] ( ).**

2. **Select [Enable].**

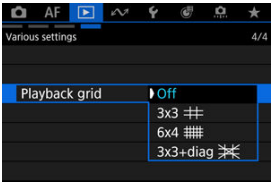


Playback Grid

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

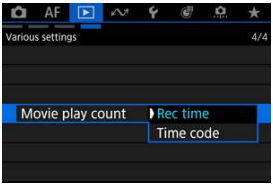
- When panoramic images are displayed, a single vertical and horizontal line are shown if [**Playback grid**] is set to an option other than [**Off**].

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 added to movie files, 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.

Communication Functions

This chapter describes how to send images, shoot remotely, and perform other operations using communication functions.

Caution

Important

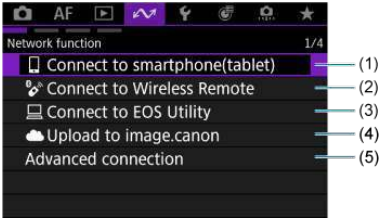
- Note that Canon cannot be held liable for any loss or damage caused by erroneous wireless communication settings when using the camera. In addition, Canon cannot be held liable for any other loss or damage caused by use of the camera.
  When using wireless communication functions, establish appropriate 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
- Connecting to EOS Utility
- Uploading Images to image.canon
- Advanced Connections
- USB (UVC/UAC) Streaming
- HDMI Streaming
- Camera Connect Streaming
- Live Switcher Mobile Streaming
- Basic Communication Settings
- Reconnecting via Wi-Fi/Bluetooth
- 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 Function Precautions
- Security
- Checking Network Settings

- Wireless Communication Status

Tab Menus: Communication Functions

Network function



(1) Connect to smartphone(tablet)

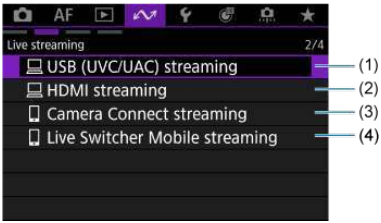
(2) Connect to Wireless Remote

(3) Connect to EOS Utility

(4) Upload to image.canon

(5) Advanced connection

Live streaming



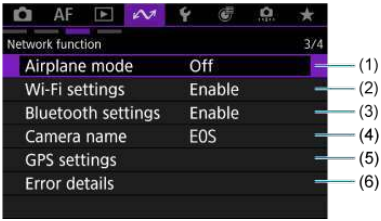
(1) USB (UVC/UAC) streaming

(2) HDMI streaming

(3) Camera Connect streaming

(4) Live Switcher Mobile streaming

Network function



(1) Airplane mode

(2) Wi-Fi settings

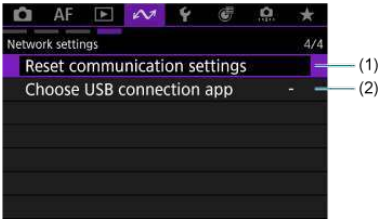
(3) Bluetooth settings

(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.
- The Wi-Fi connection will be terminated if you set the camera power to < OFF > or open the card/battery compartment cover.
- 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
- Editing/Deleting Devices for Connections
- Reconnecting Using Connection Information
- Automatic Image Transfer to a Smartphone as You Shoot
- Sending Images to a Smartphone from the Camera

You can do the following after pairing the camera with a smartphone.

- 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.

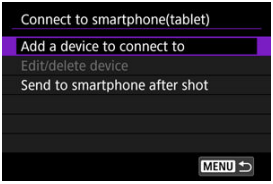
- Use the latest version of the smartphone OS.
- Camera Connect can be installed from Google Play or App Store. Google Play or App Store can also be accessed using the QR codes that appear when the camera is paired or connected via Wi-Fi to a smartphone.

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 manual may not match the actual user interface elements after camera firmware, Camera Connect, Android, or iOS updates.

1. **Select [: Connect to smartphone(tablet)] ( ).**

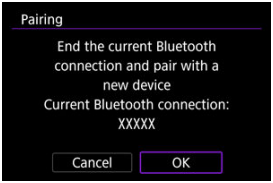
2. **Select [Add a device to connect to].**



- When automatically transferring images to a smartphone during shooting, set [**Send to smartphone after shot**] ( ).

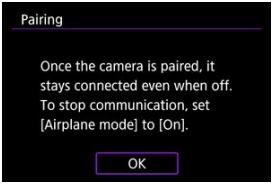
3. Select [OK].

- This screen is not displayed if [**Wi-Fi settings**] and [**Bluetooth settings**] are 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. Press < SET >.



5. 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.

6. Start Camera Connect.

- Following the instructions in the app, select the camera for pairing.

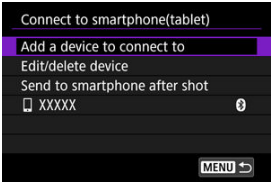
7. Establish a Bluetooth connection.

- When a message appears on the smartphone, use the smartphone as indicated.

- Press < (SET) >.

8. 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 battery level may be low the next time you want to use the camera, 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.

9. 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.

10. 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 ( ).

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.

- **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.

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 controller

- 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.

Updating camera firmware

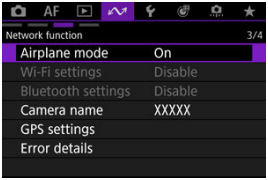
- Enables camera firmware updates.

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/Bluetooth when it is off, either set [: **Airplane mode**] to [**On**] or set [: **Bluetooth settings**] to [**Disable**].



Caution

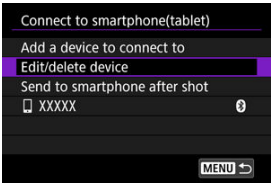
- This function can no longer be used if the wireless settings are reset or the smartphone connection information is erased.

Editing/Deleting Devices for Connections

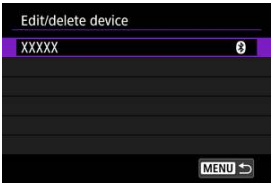
Before editing or deleting connection settings for other devices, end the Wi-Fi connection.

1. **Select [: Connect to smartphone(tablet)] ( ).**

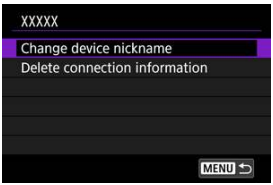
2. **Select [Edit/delete device].**



3. **Select the intended device.**



4. **Select an option.**



Changing device nicknames

You can change the nickname of devices the camera connects to.

Deleting connection information

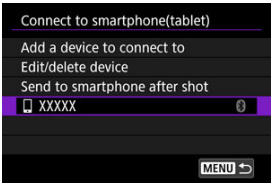
You can delete the connection information.

Reconnecting Using Connection Information

The configured connection information can be used to connect again.

1. **Select [: Connect to smartphone(tablet)] ( ).**

2. **Select the device for the connection.**



- Select the connection option in the list of past connections.

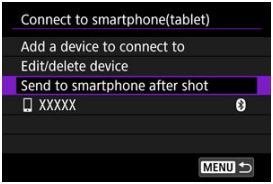
3. **Follow the on-screen instructions to connect the camera to the device.**

Automatic Image Transfer to a Smartphone as You Shoot

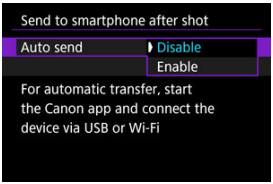
Your shots can be automatically sent to a smartphone. Before following these steps, make sure that the camera and smartphone Wi-Fi connection is terminated.

1. **Select [: Connect to smartphone(tablet)] ( ).**

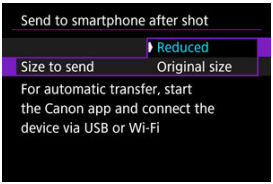
2. **Select [Send to smartphone after shot].**



3. **Set [Auto send] to [Enable].**



4. **Set [Size to send].**



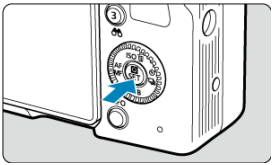
Sending Images to a Smartphone from the Camera

You can use the camera to send images to a smartphone connected via Wi-Fi.

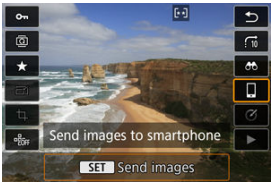
Displaying the menu screen

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.

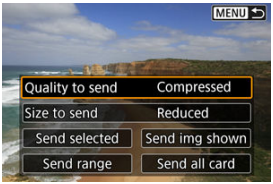
- Turn the < ◎ > dial to select images to send, then press < SET >.
- Images can be selected by touch from index display ( ).

5. Press < SET >.

- The menu is displayed.

Setting the quality to send

1. **Select [Quality to send].**



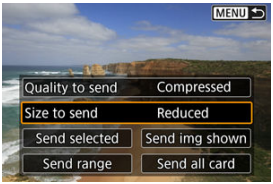
- You can select the image quality of the movies to send.

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].**



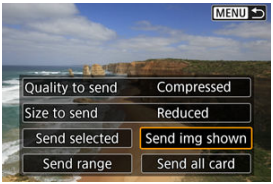
- Select the image size to send.

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

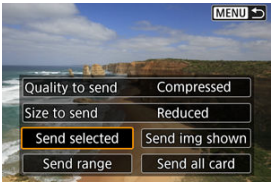
1. **Select [Send img shown].**



- Press < (SET) > with [**Send img shown**] selected to immediately send the image.

Selecting and sending images

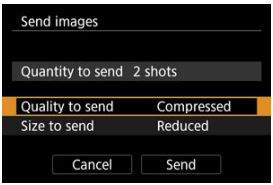
1. **Select [Send selected].**



2. **Select images to send.**

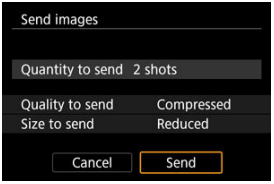
- Turn the < ◌ > dial to select images to send, then press < SET >.
- To switch to selecting images from 3-image display, press the zoom lever toward < ▦ >. To return to single-image display, press the zoom lever toward < 🔍 >.
- After selecting the images to send, press the < MENU > button.
- Select [**OK**] after a message is displayed.

3. **Select an option.**



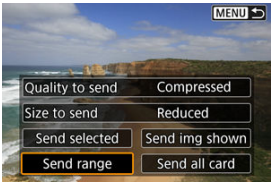
- You can change the [**Quality to send**] (⧉) and [**Size to send**] (⧉).

4. **Select [Send].**



Sending a selected range of images

1. **Select [Send range].**



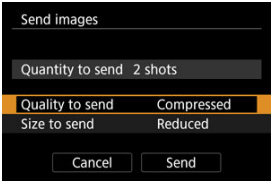
2. **Specify the range of images.**

- 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 shown in index display, press the zoom lever toward < 🔍 > or < ▦ >.

3. **Press the < MENU > button.**

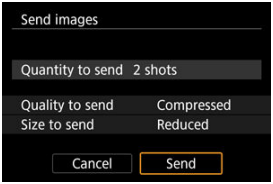
- Select [**OK**] if a message is displayed.

4. Select an option.



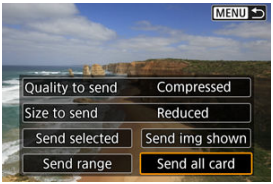
- You can change the [**Quality to send**] ( ) and [**Size to send**] ( ).

5. Select [Send].

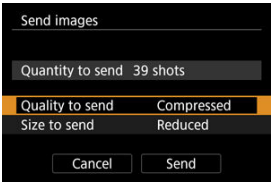


Sending all images on a card

1. **Select [Send all card].**

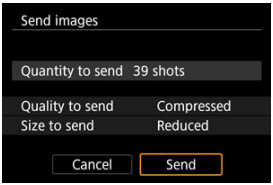


2. **Select an option.**



- You can change the [**Quality to send**] ( ) and [**Size to send**] ( ).

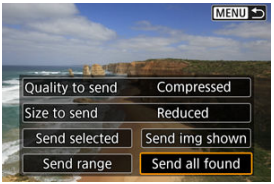
3. **Select [Send].**



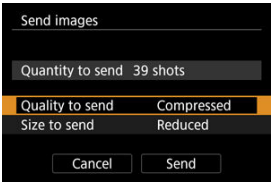
Sending images found by searching

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].**

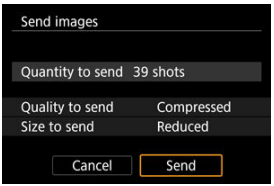


2. **Select an option.**



- 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

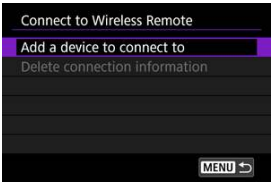
Deleting Connection Information

Reconnecting Using Connection Information

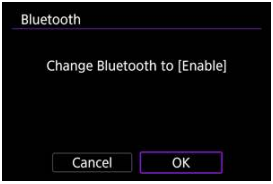
This camera can also be connected to Wireless Remote Control BR-E1 (sold separately,) via Bluetooth for remote control shooting.

1. **Select [: Connect to Wireless Remote] ( ).**

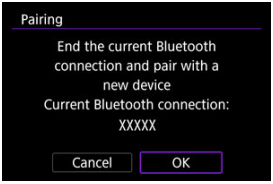
2. **Select [Add a device to connect to].**



3. Select [OK].



- This screen is not displayed if the Bluetooth setting 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 control 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 be deleted.

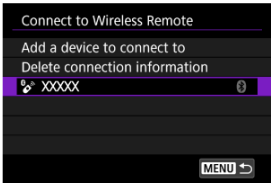
1. **Select [: Connect to Wireless Remote] ( ).**
2. **Select [Delete connection information].**

3. **Select [OK].**

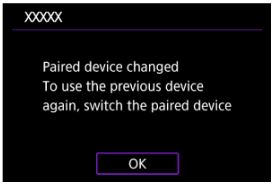
Reconnecting Using Connection Information

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 < >.**



Connecting to EOS Utility

- Operating the Camera Using EOS Utility
- Editing/Deleting Devices for Connections
- Reconnecting Using Connection Information

This section describes how to connect the camera to a computer via Wi-Fi and perform camera operations using EOS software or other dedicated software. Install the latest version of software on the computer before setting up a Wi-Fi connection ( ).
For computer operating instructions, refer to the computer user manual.

Operating the Camera Using EOS Utility

Using EOS Utility (EOS software), you can import images from the camera, control the camera, and perform other operations.

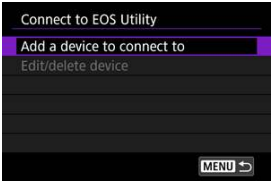
Steps on the camera (1)

1. **Select [: Connect to EOS Utility] ( ).**

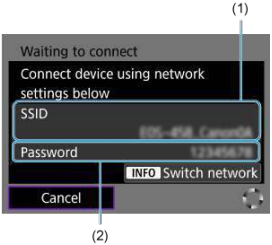
2. **Select [OK].**

- This screen is not displayed if the Wi-Fi setting is already set to [**Enable**].

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



4. Check the SSID (network name) and password.

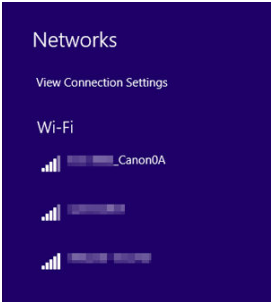


- Check the SSID (1) and Password (2) displayed on the camera screen.
- To switch networks, press the < INFO > button. For instructions on configuring communication functions, see Basic Communication Settings.

Steps on the computer (1)

5. **Select the SSID, then enter the password.**

Computer's screen (sample)

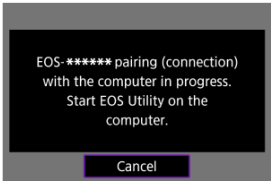


- On the computer's network setting screen, select the SSID checked in step 4 in Steps on the camera (1).
- For the password, enter the password checked in step 4 in Steps on the camera (1).

Steps on the camera (2)

6. **Select [OK].**

- The following message is displayed. "******" represents the last six digits of the MAC address of the camera to be connected.



Steps on the computer (2)

7. **Start EOS Utility.**

8. **In EOS Utility, click [Pairing over Wi-Fi/LAN].**

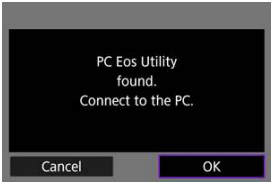
- If a firewall-related message is displayed, select [**Yes**].

9. **Click [Connect].**

- Select the camera to connect to, then click [**Connect**].

Steps on the camera (3)

10. **Establish a Wi-Fi connection.**

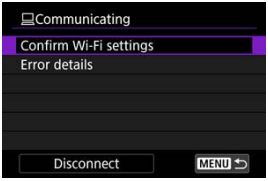


- Select [**OK**].
- The [**Communicating**] screen is displayed on the camera ( ).

The Wi-Fi connection to a computer is now complete.

- Operate the camera using EOS Utility on the computer.
- To reconnect via Wi-Fi, see Reconnecting via Wi-Fi/Bluetooth.

[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.

Caution

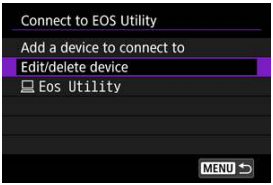
- If the Wi-Fi connection is terminated while recording a movie with remote shooting, the following will occur.
  - Any movie recording in progress in movie recording mode will continue.
  - Any movie recording in progress in still photo shooting mode will end.
- You cannot use the camera to shoot in still photo shooting mode when it is set to movie recording mode in EOS Utility.
- With a Wi-Fi connection to EOS Utility established, certain functions are unavailable.
- In remote shooting, the AF speed may become slower.
- Depending on the communication status, image display or shutter release timing may be delayed.
- In Remote Live View shooting, the rate of image transmission is slower compared to a connection via an interface cable. Therefore, moving subjects cannot be displayed smoothly.

Editing/Deleting Devices for Connections

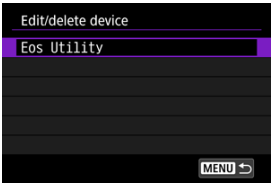
Before editing or deleting connection settings for other devices, end the Wi-Fi connection.

1. **Select [: Connect to EOS Utility] ( ).**

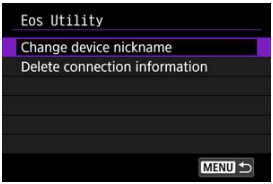
2. **Select [Edit/delete device].**



3. **Select the intended device.**



4. **Select an option.**



Changing device nicknames

You can change the nickname of devices the camera connects to.

Deleting connection information

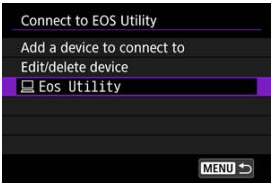
You can delete the connection information.

Reconnecting Using Connection Information

The configured connection information can be used to connect again.

1. **Select [: Connect to EOS Utility] ( ).**

2. **Select the device for the connection.**



- Select the connection option in the list of past connections.

3. **Follow the on-screen instructions to connect the camera to the device.**

Uploading Images to image.canon

Link the camera to image.canon to send images directly from the camera.

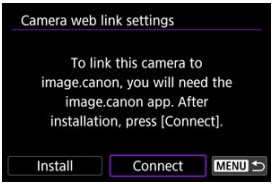
- A smartphone with a browser and internet connection is required.
- For instructions on how to use image.canon services and details on countries and regions where it is available, visit the image.canon site (https://image.canon/).
- Separate ISP connection and access point fees may apply.

1. **Select [: Upload to image.canon] ( ).**

2. **Select [OK].**

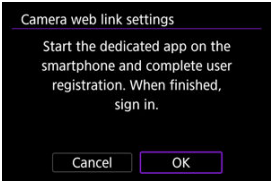
- This screen is not displayed if [: **Wi-Fi settings**] is already set to [**Enable**].

3. **Select [Connect].**



- If the dedicated app has not been installed, select [**Install**].

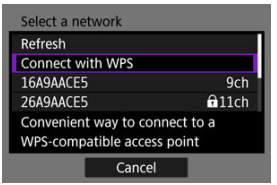
4. Select [OK].



5. Scan the QR code with the dedicated app.

- Select [**OK**].

6. Establish a Wi-Fi connection.

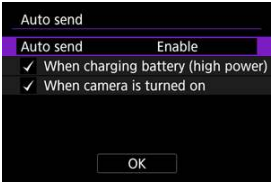


- For instructions on configuring communication functions, see Basic Communication Settings.

7. Confirm that the number is displayed in the dedicated app.

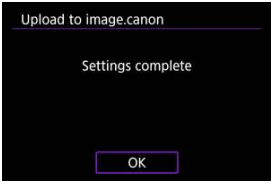
- Select [**OK**].

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 >.

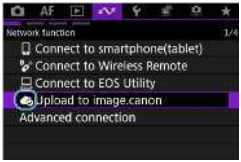
9. Complete the settings.



- The setting menu is displayed ( ).

Note

- The [ ] icon changes to [ ].



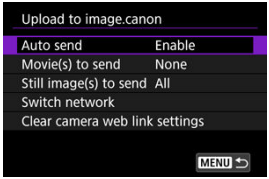
10. Check the dedicated app.

- 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.

- **Movie(s) to send**
  You can select the type of movies uploaded.

- **Still image(s) to send**
  You can select the type of still photos 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.

Advanced Connections

Connecting to a Smartphone or Tablet

Using Camera Control API (CCAPI)

Connecting to a Smartphone or Tablet

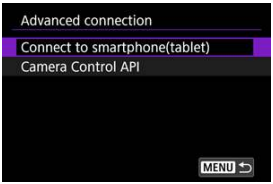
You can establish a direct Wi-Fi connection with a smartphone and use Camera Connect to control the camera.

1. **Select [: Advanced connection] ( ).**

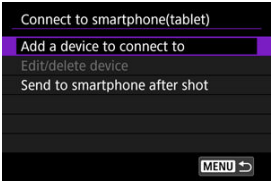
2. **Select [OK].**

- This screen is not displayed if the Wi-Fi setting is already set to [**Enable**].

3. **Select [Connect to smartphone(tablet)].**



4. Select [Add a device to connect to].

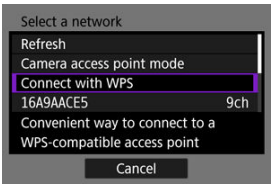


- When automatically transferring images to a smartphone during shooting, set [**Send to smartphone after shot**] ( ).

5. Start searching for access points.

- To start searching if Camera Connect is already installed on the smartphone, press < >.
- 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 < > to start searching.

6. Establish a Wi-Fi connection.



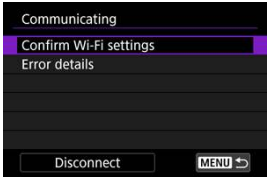
- For instructions on configuring communication functions, see Basic Communication Settings.

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.

- **Error details**
  After any Wi-Fi connection errors, you can check the error details ( ).

- **Disconnect**
  Terminates the Wi-Fi connection.

Using Camera Control API (CCAPI)

Before using an application or other product applying the Camera Control API (CCAPI),* prepare the camera for CCAPI control by connecting it to the smartphone, tablet, or computer you will use.

* Camera Control API is an HTTP-based application programming interface for controlling Canon cameras over a network.

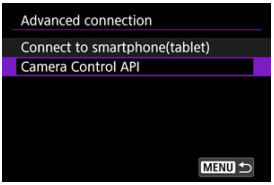
Accessing the setting screen

1. **Select [: Advanced connection] ( ).**

2. **Select [OK].**

- This screen is not displayed if the Wi-Fi setting is already set to [**Enable**].

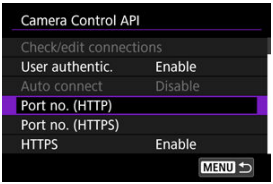
3. **Select [Camera Control API].**



- Enter the camera name after the camera displays [**Register a nickname to identify the camera. This nickname will be used for Wi-Fi and Bluetooth connections.**].

Setting a port number

1. **Select an option.**



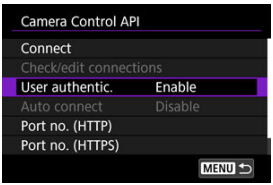
- **Port no. (HTTP)**
  The HTTP port number can be changed as needed.

- **Port no. (HTTPS)**
  The HTTPS port number can be changed as needed.

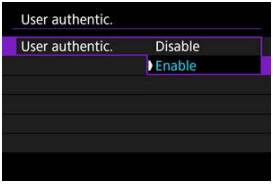
- **HTTPS**
  Set to [**Disable**] when using HTTP.

Configuring user authentication

1. **Select [User authentic.].**

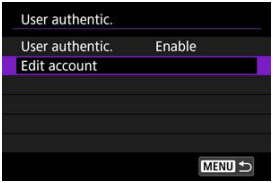


2. Select use of user authentication.



- If you have selected [**Enable**], enter the [**User name**] and [**Password**] in [**Edit account**].

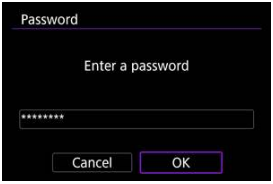
3. Select [Edit account].



4. Set the user name.

- Press < SET > to access the virtual keyboard ( ), then enter the user name.
- After input, select [**OK**].

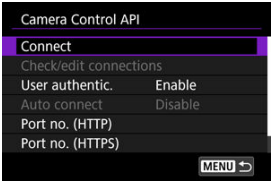
5. **Set the password.**



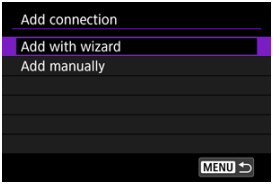
- Press < SET > to access the virtual keyboard ( ), then enter the password.
- After input, select [**OK**].

Configuring the connection

1. **Select [Connect].**

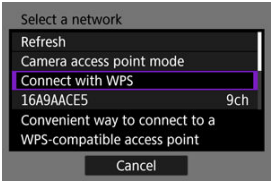


2. **Select [Add with wizard].**



- To configure connection details, select [**Add manually**].

3. Establish a Wi-Fi connection.

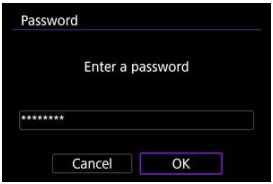


- Connect to an access point via Wi-Fi. For instructions on configuring communication functions, see Basic Communication Settings.

4. Set the user name.

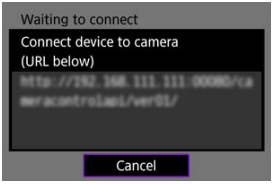
- Press < SET > to access the virtual keyboard ( ), then enter the user name.
- Select [**OK**] to go to the next screen.

5. Set the password.

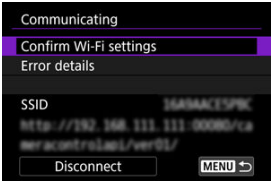


- Press < SET > to access the virtual keyboard ( ), then enter the password.
- Select [**OK**] to go to the next screen.

6. Establish a Wi-Fi connection.



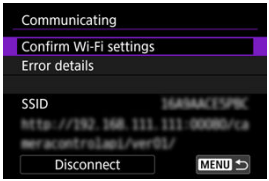
- When the screen above appears on the camera, use the smartphone, computer, or other device to access the indicated URL from the application developed for camera control.



- Display of the screen above on the camera indicates that a connection has been established.
- To end the connection, select [**Disconnect**].

[Communicating] screen

The following operations are available from the [**Communicating**] screen.



- **Confirm Wi-Fi settings**
  You can check setting details.

- **Error details**
  After any Wi-Fi connection errors, you can check the error details ( ).

- **Disconnect**
  Terminates the connection.

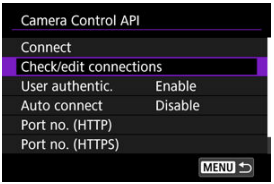
Changing settings

You can change the settings when the camera is not connected.

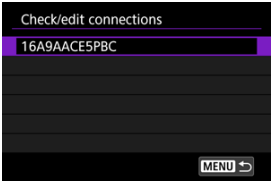
Check/edit connections

Check or edit connection settings.

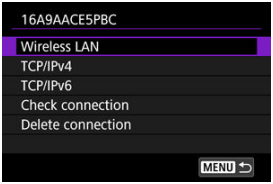
1. **Select [Check/edit connections].**



2. Select the intended device.



3. Select items to check or change.



- **Wireless LAN (or Wired)**
  When wireless LAN settings have been configured, you can change the SSID (network name) and details such as the connection method, security, and type of encryption.

- **TCP/IPv4**
  You can change the TCP/IPv4 settings.

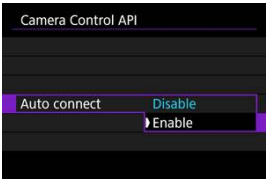
- **TCP/IPv6**
  You can change the TCP/IPv6 settings.

- **Check connection**
  You can review connection settings.

- **Delete connection**
  You can clear the connection settings.

Auto connect

Selecting [**Enable**] will automatically establish a connection the next time the camera starts up after you turn it off.



USB (UVC/UAC) Streaming

Enabling Power Over USB

Setting the Streaming Size

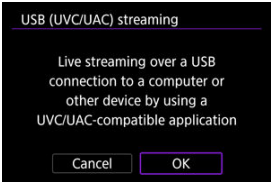
Setting Up AF for Close-Up Demos

Select this option if you will use UVC/UAC-compatible applications over a USB connection to a computer or other device.

1. **Switch to movie recording ( ).**

2. **Select [: USB (UVC/UAC) streaming] ( ).**

3. **Select [OK].**



4. **Connect the camera to the other device with a USB cable.**

- Connect the camera to the device with a USB cable after this message appears.

5. Start the application on the device.

- Check video input on the connected device.
- [**LIVE**] is displayed on the shooting screen while video is displayed by the application.

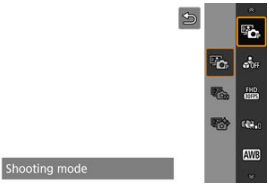
Caution

- Consider using power over USB or a household power outlet accessory (sold separately) when using the camera over extended periods.
- 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.
- The camera will become warmer during streaming. Use the stand or a tripod, or take other measures to avoid handheld recording. Once the camera becomes hot, [⚠] appears on the screen as a warning.
- 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.
- Audio output is LPCM/16bit/2CH (channels 1 and 2), even with [📷: **Audio format**] set to [**LPCM/24bit/4CH**].

Enabling Power Over USB

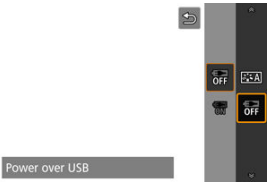
By enabling power over USB, you can power the camera from a computer or other device. Complete this setting after connecting the devices via USB.

1. **Tap [Q] on the shooting screen.**



- The menu is displayed.

2. **Select [Power over USB].**



3. **Select [On].**

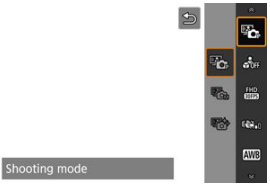
Caution

- Cannot be set while [**LIVE**] is displayed on the shooting screen.
- [**On**] is not available with [**Movie rec. size**] set to [ ] or [ ].
- Connect to a device that conforms to USB Power Delivery specifications and has an output of at least 1.5 A at 5V DC.
- Use a USB cable that conforms to USB Power Delivery specifications. We recommend using a genuine Canon product (Interface Cable IFC-100U).
- The remaining battery level may decline when power is supplied to the camera. To avoid running out of battery power, use a fully charged battery.

Setting the Streaming Size

You can set the streaming size. Complete this setting after connecting the devices via USB.

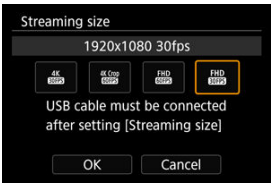
1. **Tap [Q] on the shooting screen.**



- The menu is displayed.

2. **Select [Streaming size].**

3. **Select [ ].**



- The menu is displayed.
- Select [**Streaming size**].

4. Change the setting as needed.

- Select [**OK**], and after a message is displayed, disconnect the USB cable and redo the [: **USB (UVC/UAC) streaming**] setting ( ).

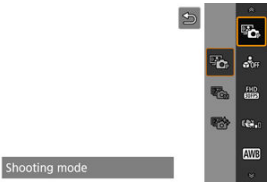
Caution

- Cannot be set while streaming is in progress.
- [ ] and [ ] are not available with [**Power over USB**] set to [**On**] or with [**Shooting mode**] set to [**Smooth skin movie**].

Setting Up AF for Close-Up Demos

With [**AF for close-up demos**] set to [**On**], the camera focuses on nearby subjects, which enables you to shoot with any face in front of the camera in focus. In this case, the tracking frame is not displayed. Complete this setting after connecting the devices via USB.

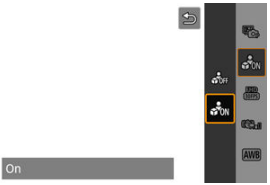
1. **Tap [Q] on the shooting screen.**



- The menu is displayed.

2. **Select [AF for close-up demos].**

3. **Select [On].**



Caution

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

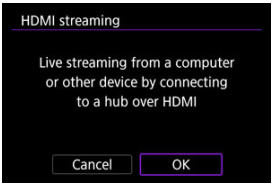
HDMI Streaming

Select this option if you will stream over an HDMI connection with an HDMI-compatible device.

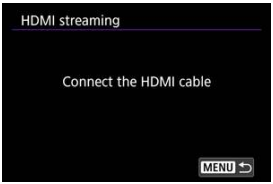
1. **Switch to movie recording ( ).**

2. **Select [: HDMI streaming] ( ).**

3. **Select [OK].**



4. **Connect the camera to the other device with a HDMI cable.**



5. **Start the application on the device.**

- Check video input on the connected device.

Caution

- Audio output is LPCM/16bit/2CH (channels 1 and 2), even with [📷: **Audio format**] set to [**LPCM/24bit/4CH**].
- Consider using power over USB or a household power outlet accessory (sold separately) when using the camera over extended periods.
- The remaining battery level may decline when power is supplied to the camera. To avoid running out of battery power, use a fully charged battery.
- 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.
- The camera will become warmer during streaming. Use the stand or a tripod, or take other measures to avoid handheld recording. Once the camera becomes hot, [⚠] appears on the screen as a warning.
- 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.

Camera Connect Streaming

- Pairing with a Smartphone via Bluetooth
- Setting Up Streaming
- Editing/Deleting Devices for Connections
- Reconnecting Using Connection Information

Select this option if you will stream with Camera Connect on a paired smartphone.
Check the streaming requirements and terms of service in advance on the streaming site.

Pairing with a Smartphone via Bluetooth

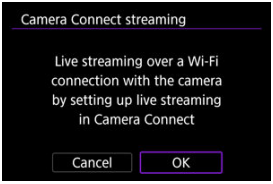
1. **Switch to movie recording ( ).**

2. **Select [: Camera Connect streaming] ( ).**

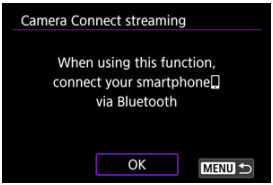
3. **Select [OK].**

- This screen is not displayed if the Wi-Fi setting is already set to [**Enable**].

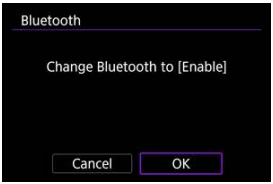
4. **Select [OK].**



5. **Press <SET>.**

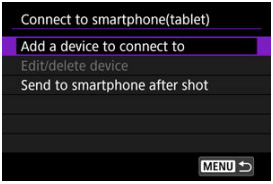


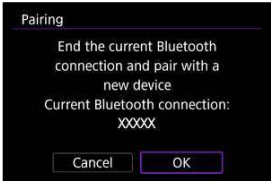
6. **Select [OK].**



- This screen is not displayed if the Bluetooth setting is already set to [**Enable**].

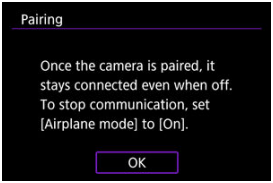
7. Select [Add a device to connect to].





- A message is displayed if the camera is already paired with another device. Select [**OK**] to end the current Bluetooth connection.

8. Press < SET >.



9. 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.

10. Start Camera Connect.

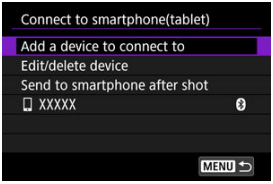
- Following the instructions in the app, select the camera for pairing.

11. Establish a Bluetooth connection.

- Press < SET >.

12. Complete the connection process.

- Press < SET >.
- When a message appears on the smartphone, use the smartphone as indicated.

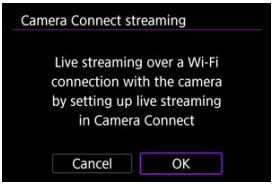


- The name of the connected device is displayed.
- Press the < MENU > button.

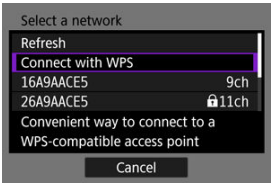
Setting Up Streaming

1. **Select [: Camera Connect streaming] ( ).**

2. **Select [OK].**

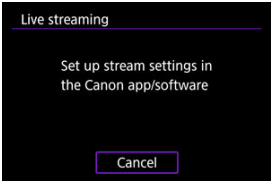


3. **Set up the communication functions.**



- 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.

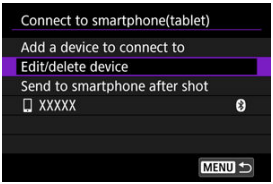
Caution

- Consider using power over USB or a household power outlet accessory (sold separately) when using the camera over extended periods.
- 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 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. Once the camera becomes hot, [⚠] appears on the screen as a warning.
- 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 Function Precautions.

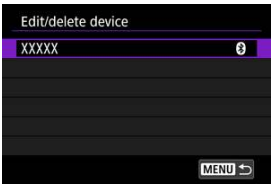
Editing/Deleting Devices for Connections

1. **Select [: Connect to smartphone(tablet)] ( ).**

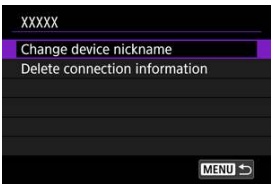
2. **Select [Edit/delete device].**



3. **Select the device to connect.**



4. **Select an option.**



Changing device nicknames

You can change the nickname of devices the camera connects to.

Deleting connection information

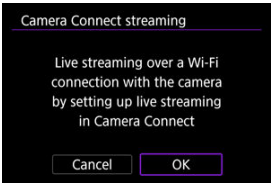
You can delete the connection information.

Reconnecting Using Connection Information

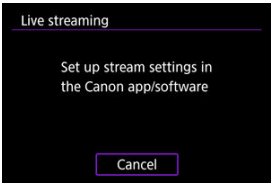
The configured connection information can be used to connect again.

1. **Select [: Camera Connect streaming] ( ).**

2. **Select [OK].**



3. **Complete the streaming settings in Camera Connect.**



Live Switcher Mobile Streaming

- Connecting the Camera and Smartphone via Wi-Fi
- Editing/Deleting Devices for Connections
- Reconnecting Using Connection Information

Select this option if you will stream with Live Switcher Mobile on a smartphone over a Wi-Fi connection.
Check the streaming requirements and terms of service in advance on the streaming site.

Connecting the Camera and Smartphone via Wi-Fi

1. **Switch to movie recording ( ).**

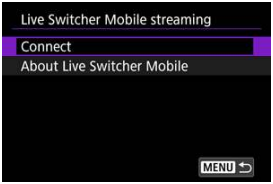
2. **Select [: Live Switcher Mobile streaming] ( ).**

3. **Select [OK].**

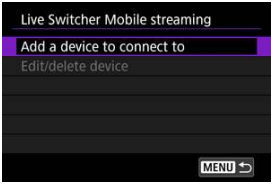
- This screen is not displayed if the network setting is already set to [**Enable**].

4. **Select [OK].**

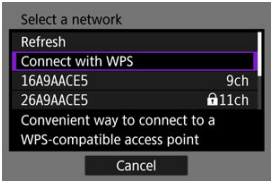
5. **Select [Connect].**



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

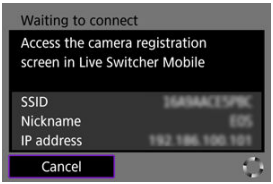


7. **Set up the communication functions.**



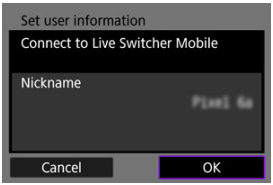
- For instructions on configuring communication functions, see Basic Communication Settings.
- This screen is not displayed if the camera is already connected to the smartphone.

8. **Check the SSID.**



- In Live Switcher Mobile, select the camera for the connection.

9. **Select [OK].**



10. **Complete the Live Switcher Mobile streaming settings.**

Caution

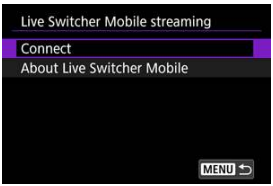
- Consider using power over USB or a household power outlet accessory (sold separately) when using the camera over extended periods.
- The remaining battery level may decline when power is supplied to the camera. To avoid running out of battery power, use a fully charged battery.
- Video and audio may be noisy during streaming, depending on the communication environment. Test streaming in advance and check the video and audio quality.
- Try the following if 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.
- The camera will become warmer during streaming. Use the stand or a tripod, or take other measures to avoid handheld recording. Once the camera becomes hot, [⚠] appears on the screen as a warning.
- No image is recorded to the card during streaming (but a card must be in the camera).
- Note that Canon is in no way responsible for third-party services.
- 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 Function Precautions.

Editing/Deleting Devices for Connections

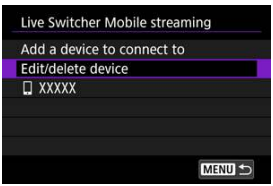
1. **Select [: Live Switcher Mobile streaming] ( ).**

2. **Select [OK].**

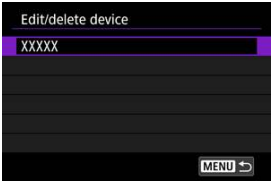
3. **Select [Connect].**



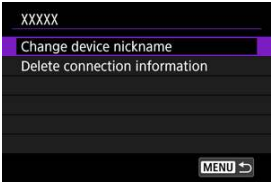
4. **Select [Edit/delete device].**



5. **Select the device to connect.**



6. **Select an option.**



Changing device nicknames

You can change the nickname of devices the camera connects to.

Deleting connection information

You can delete the connection information.

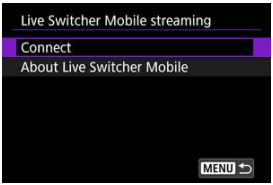
Reconnecting Using Connection Information

The configured connection information can be used to connect again.

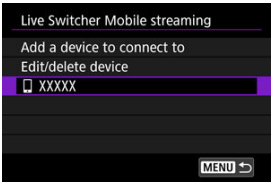
1. **Select [: Live Switcher Mobile streaming] ( ).**

2. **Select [OK].**

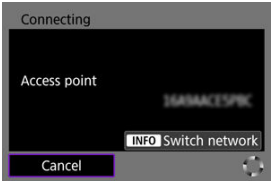
3. **Select [Connect].**



4. **Select the device.**



5. Check the access point.



- To switch networks, press the < INFO > button. For instructions on configuring communication functions, see Basic Communication Settings.

6. Start Live Switcher Mobile.

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

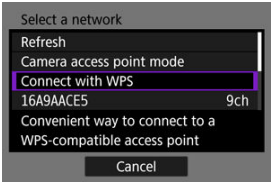
- If MAC address filtering is used on networks you will join, add the camera's MAC address to the access point. The MAC address can be checked on the [**MAC address**] screen ( ).

Connecting via WPS (PBC Mode)

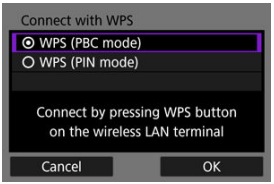
Instructions in this section are continued from Checking the Type of Access Point.
This is a connection method used with access points compatible with WPS. In pushbutton connection mode (PBC mode), the camera and access point can be connected simply by pressing the WPS button on the access point.

- 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.**

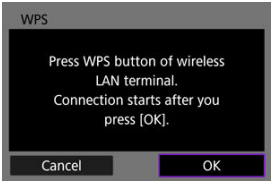


2. **Select [WPS (PBC mode)].**



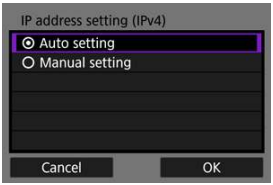
- Select [**OK**].

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.



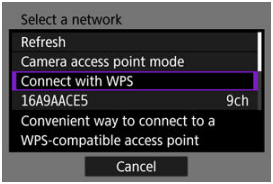
- Go to Setting the IP Address.

Connecting via WPS (PIN Mode)

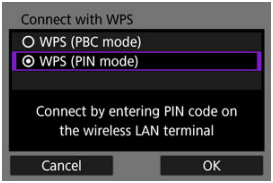
Instructions in this section are continued from Checking the Type of Access Point.
This is a connection method used with access points compatible with WPS. In PIN code connection mode (PIN mode), an 8-digit identification number indicated on the camera is entered on the access point to establish a connection.

- 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.**

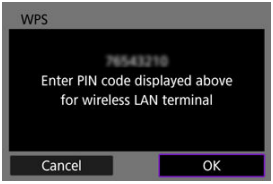


2. **Select [WPS (PIN mode)].**



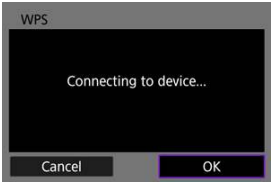
- Select [**OK**].

3. Enter the PIN code.



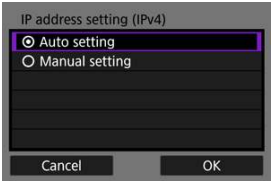
- On the access point, enter the 8-digit PIN code displayed on the camera screen.
- For instructions on entering PIN codes on the access point, refer to the access point user manual.
- After entering the PIN code, select [**OK**] on the camera.

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.



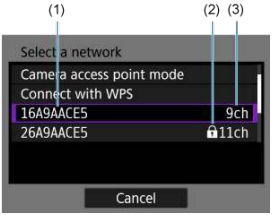
- Go to Setting the IP Address.

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

- Use the < ▲ >< ▼ > keys to select the access point to connect to in the list of access points.

Note

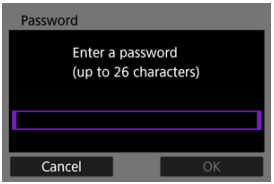
[Refresh]

- To display [**Refresh**], scroll down the screen in step 1.
- Select [**Refresh**] to search for access points again.

Entering the access point encryption key

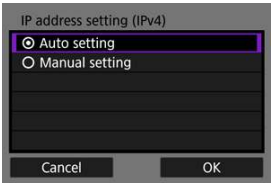
- Enter the encryption key (password) set on the access point. For details on the encryption key that has been set, refer to the access point's user manual.
- If the [**IP address set.**] screen is displayed, go to Setting the IP Address.

2. 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.

3. Set the IP address.



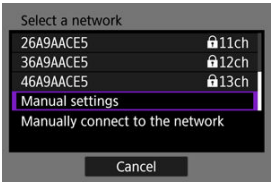
- Go to Setting the IP Address.

Connecting Manually by Specifying Networks

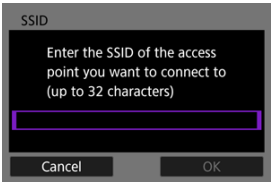
Instructions in this section are continued from Checking the Type of Access Point.
Connect to an access point by entering its SSID (or ESS-ID).

Entering the SSID

1. **Select [Manual settings] on the [Select a network] screen.**



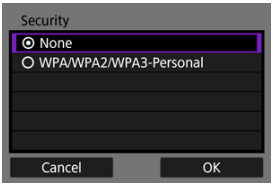
2. **Enter the SSID (network name).**



- Press < SET > to access the virtual keyboard ( ), then enter the encryption key.
- Select [**OK**].

Setting the access point authentication method

3. **Select the type of security.**

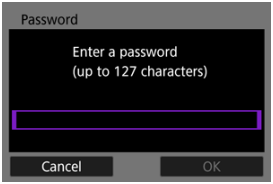


- Select an option and then [**OK**] to go to the next screen.

Entering the access point encryption key

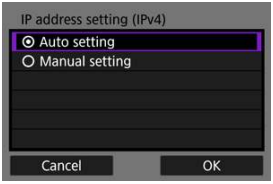
- Enter the encryption key (password) set on the access point. For details on the encryption key that has been set, refer to the access point's user manual.
- If the [**IP address set.**] screen is displayed, go to Setting the IP Address.

4. **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.

5. Set the IP address.



- Go to Setting the IP Address.

Connecting in Camera Access Point Mode

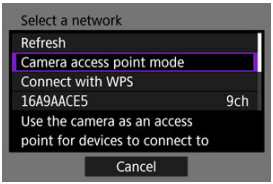
Camera access point mode is a connection method for directly connecting the camera and other devices via Wi-Fi without using an access point. Two connection methods are available, as follows.

Connecting with Easy connection

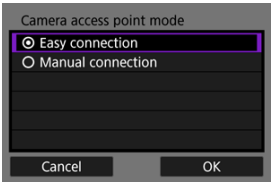
Network settings for camera access point mode are configured automatically.

- 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.**

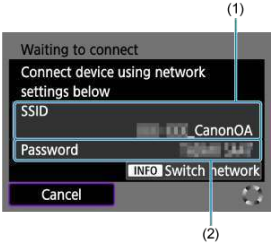


2. **Select [Easy connection].**



- Select [**OK**].

3. Use the other device to connect to the camera.



(1) SSID (network name)

(2) Encryption key (password)

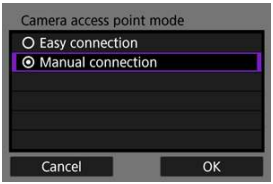
- In other device's Wi-Fi settings, select the SSID (network name) shown on the camera screen, then enter the password.

4. Complete the connection settings based on the device to connect to.

Connecting with Manual connection

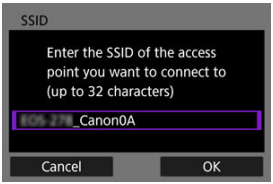
Network settings for camera access point mode are configured manually. Set [**SSID**], [**Channel setting**], and [**Encryption settings**] on each screen displayed.

1. **Select [Manual connection].**



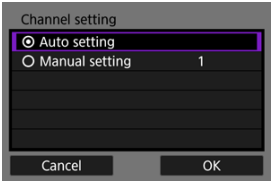
- Select [**OK**].

2. **Enter the SSID (network name).**



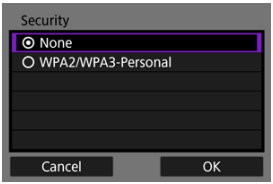
- Press < SET > to access the virtual keyboard ( ), then enter the SSID. After input, press the < MENU > button.
- Select [**OK**].

3. Select a channel setting option.



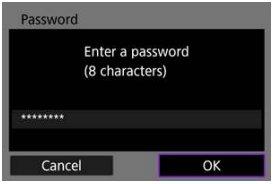
- To specify the settings manually, select [**Manual setting**], then turn the < > dial.
- Select [**OK**] to go to the next screen.

4. Select the type of security.



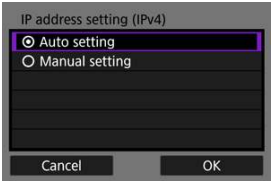
- Select [**OK**] to go to the next screen.
- If you have selected [**None**], the [**IP address setting (IPv4)**] screen is displayed ( ).
- The same type of security must be set on both the other device and the camera. See Authentication and data encryption methods for details on types of authentication and encryption.

5. Enter the password.



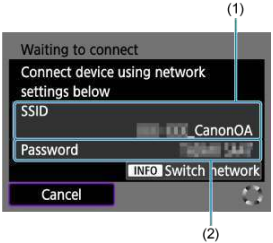
- Press < SET > to access the virtual keyboard ( ), then enter the password.

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.

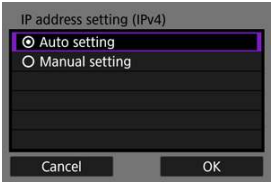
Setting the IP Address

Select a method of setting the IP address, and then set the IP address on the camera. When IPv6 is used, the camera only connects via IPv6. IPv4 connections are disabled.

Setting the IP address automatically

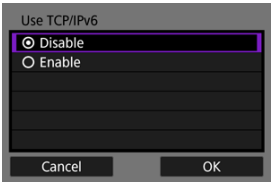
Set up the IP address settings automatically.

1. **Select [Auto setting].**



- Select [**OK**].
- If an error is displayed for [**Auto setting**], set the IP address manually ( ).

2. **Select an IPv6 option.**



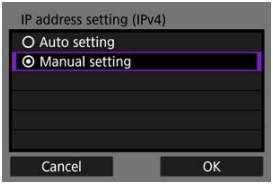
- Select an option and then [**OK**] to go to the next screen.
- Select [**Enable**] to use IPv6.

3. **Complete the connection settings based on the device to connect to.**

Setting the IP address manually

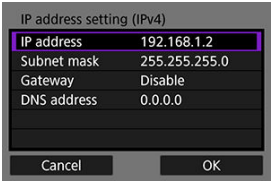
Set up the IP address settings manually. Note that the items displayed vary depending on the communication function.

1. **Select [Manual setting].**

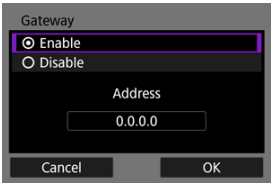


- Select [**OK**] to go to the next screen.

2. **Select an option to configure.**

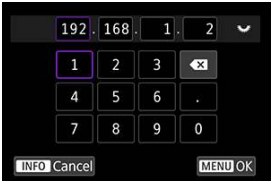


- The items displayed vary depending on the communication function.
- Select an option to access the screen for numerical input.



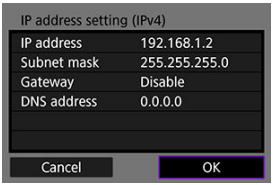
- To use a gateway, select [**Enable**], then select [**Address**].

3. Enter the number.



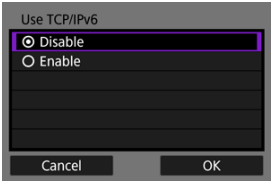
- Turn the < ⟲ > dial to switch to other input fields at the top of the screen, and press the < ◀ >< ▶ > keys to select numbers to enter. Press < SET > to enter the selected number.
- To delete the last number entered, select the [⌫] button.
- To set the entered numbers and return to the screen for step 2, press the < MENU > button.

4. Select [OK].



- When you have completed setting the necessary items, select [**OK**]. The next screen is displayed.
- 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. Select an IPv6 option.



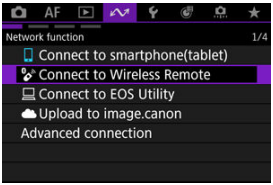
- Select an option and then [**OK**] to go to the next screen.
- Select [**Enable**] to use IPv6.

6. Complete the connection settings based on the device to connect to.

Reconnecting via Wi-Fi/Bluetooth

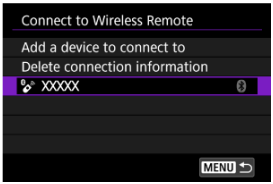
Connection settings for devices you have connected to via Wi-Fi or Bluetooth are retained on the camera. You can use these settings to reconnect to the same device.

1. **Select an option.**



- End any current connections if a message is displayed indicating that communication is in progress or being established with another device.

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.

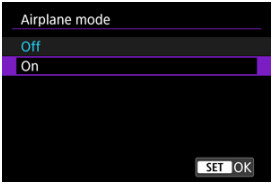
3. **Follow the on-screen instructions and connect the camera to the device.**

Airplane Mode

You can temporarily disable Wi-Fi and Bluetooth functions.

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

2. **Set to [On].**



- [ ] is displayed on the screen.

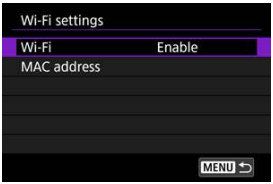
Note

- [ ] 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.

Caution

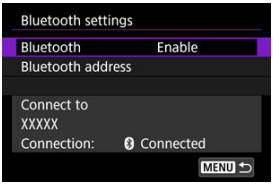
Transferring movies

- Each movie file is large, and transferring large files over Wi-Fi may take some time. Referring to Wireless Communication Function 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, then select [OK].**

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.

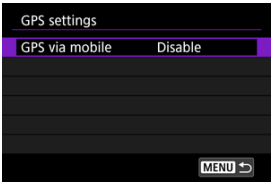
1. **On the smartphone, activate location services.**

2. **Establish a Bluetooth connection.**

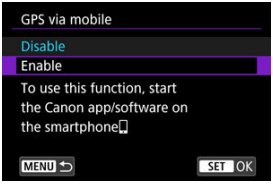
   - Start Camera Connect and pair the camera and smartphone via Bluetooth.

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
161							
171	172	173					

Note

- In case of errors, [**Err****] is displayed to the right of [: **Error details**]. It disappears when the camera's power is set to < OFF >.

11: Connection target not found

- **In the case of [Connect to smartphone(tablet)], is the app running?**
  - Establish a connection using the app ( ).
- **In the case of [Connect to EOS Utility], is EOS Utility running?**
  - Start EOS Utility and try to connect again ( ).
- **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 an access point that encrypts communication is used.
    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.

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.

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 encryption keys do not match when an access point that encrypts communication is used. 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 the specifications for details on the type of encryption available on the camera ( ).
- **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's power switch 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 codes 121–126 occurred while the camera was connected to a web service.**
  - Try accessing the web service over Wi-Fi again.

130: The server is currently busy Please wait a moment and try again

- **The web service is temporarily overloaded.**
  - Try accessing the web service over Wi-Fi again later.

131: Try again

- **An error occurred in the web service Wi-Fi connection.**
  - Try accessing the web service over Wi-Fi again.

132: Error detected on server Try again later

- **The web service is currently offline for maintenance.**
  - Try accessing the web service over Wi-Fi again later.

133: Cannot log in to Web service

- **An error occurred during the web service login.**
  - Check the web service setting.
  - Try accessing the web service over Wi-Fi again later.

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 web service setting.

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.

161: An error has occurred

- **A streaming error has occurred.**
  - Check the streaming settings.
  - Try streaming again.

171: An error has occurred

- **A streaming error has occurred with Live Switcher Mobile.**
  - Check the Live Switcher Mobile streaming settings.
  - Try using Live Switcher Mobile again.

172: An error has occurred

- **A streaming error has occurred with Live Switcher Mobile.**
  - Check the Live Switcher Mobile streaming settings.
  - Try using Live Switcher Mobile again.

173: An error has occurred

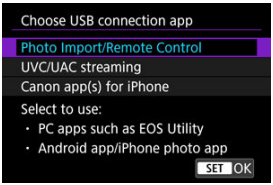
- **A streaming error has occurred with Live Switcher Mobile.**
  - Check the Live Switcher Mobile streaming settings.
  - Try using Live Switcher Mobile again.

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 EOS Utility after connecting to a computer, or if you will use Android apps or the iOS version of Photos.

- **UVC/UAC streaming**
  Select if you will use UVC/UAC-compatible applications after connecting to a computer.
  After selecting [**UVC/UAC streaming**], use the interface cable to connect to the computer, then start the application.
  Audio output is LPCM/16bit/2CH (channels 1 and 2), even with [: **Audio format**] set to [**LPCM/24bit/4CH**].

- **Canon app(s) for iPhone**
  Select if you will use an iOS app.
  For details on the cables required to connect the camera to smartphones, visit the Canon website ( ).

Caution

- Consider using power over USB or a household power outlet accessory (sold separately) when using the camera over extended periods for [**UVC/UAC streaming**].
- You can set the streaming size when [**UVC/UAC streaming**] is selected ( ).

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].**

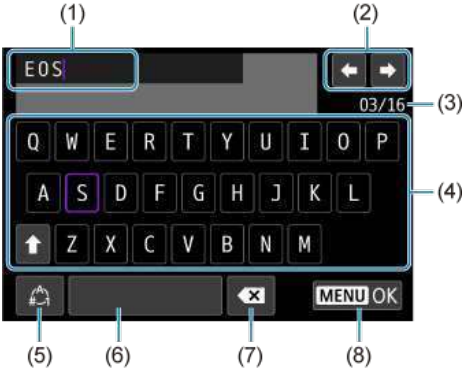
Caution

- 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 the < ✥ > keys to move within (2) and (4)–(7).
- Press < SET > to confirm input or when switching input modes.

Wireless Communication Function 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

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

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

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

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

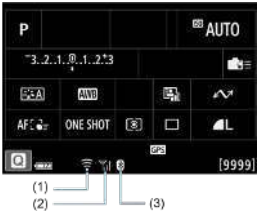
In macOS, open the [**Terminal**] application, enter ifconfig -a, and press the <Return> key.
The IP address assigned to the computer is indicated in the [**enX**] item (X: number) next to [**inet**], in the format "***.***.***.***".
For information about the [**Terminal**] application, refer to the 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 Manual IP Address Setup.
Example: 192.168.1.**10**

Wireless Communication Status

Wireless communication status can be checked on the screen.

Quick Control screen



Information display screen during playback

(1) Wi-Fi function
(2) Wireless signal strength
(3) Bluetooth function

Communication Status		Screen	
		Wi-Fi Function	Wireless Signal Strength
Not Connected	Wi-Fi: Disable	OFF	Not displayed
	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

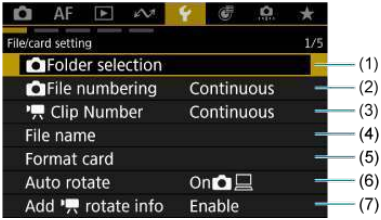
Set-up

This chapter describes menu settings on the set-up [🔧] tab.
☆ to the right of titles indicates functions only available in advanced modes.

- Tab Menus: Set-up
- Folder Settings
- Still Photo File Numbering
- Movie Clip Numbering
- File Naming
- Card Formatting
- Auto Rotate
- Adding Orientation Information to Movies
- Date/Time/Zone
- Language
- System Frequency
- Feature Guide
- Beeps
- Volume
- Audio Monitor
- Screen Brightness
- UI Magnification
- HDMI Resolution
- Power Saving
- Resetting the Camera ☆
- Custom Recording Mode (C1–C3) ☆
- Battery Information
- Copyright Information ☆
- Other Information

Tab Menus: Set-up

File/card setting



(1) Folder selection

(2) File numbering

(3) Clip Number

(4) File name

(5) Format card

(6) Auto rotate

(7) Add rotate info

Country/Area/Guidance/Audio settings

(1) Date/Time/Zone

(2) Language

(3) System frequency

(4) Feature guide

(5) Beep

(6) Volume

(7) Audio monitor

Customize display/Various settings

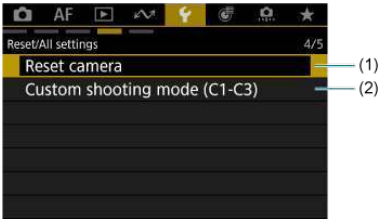
(1) Screen brightness

(2) UI magnification

(3) HDMI resolution

(4) Power saving

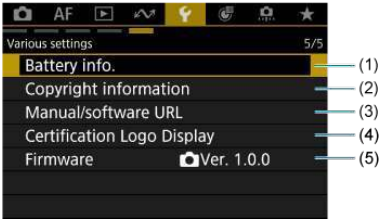
Reset/All settings



(1) Reset camera ☆

(2) Custom shooting mode (C1-C3) ☆

Various settings



(1) Battery info.

(2) Copyright information ☆

(3) Manual/software URL

(4) Certification Logo Display ☆

(5) Firmware

Folder Settings

Creating a Folder

Renaming Folders

Selecting a Folder

You can create or select the folder for saving still photos. You can also rename folders.

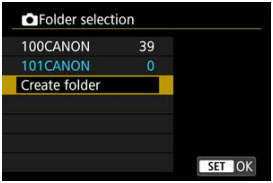
Note

- Movie files are saved in the following folder (with **** indicating the reel number).
  - XF-HEVC S or XF-AVC S movie files (.MP4): REEL_**** folder in the XFVC folder (up to 999 files)
- When a new card is loaded, the folder created is named with the reel number set in the [**Reel Number**] setting for [**Movies**] in [: **File name**]. Folders cannot be created or renamed.

Creating a Folder

1. **Select [: Folder selection] ( ).**

2. **Select [Create folder].**

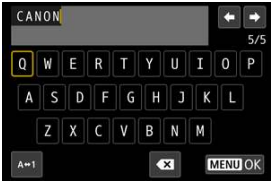


3. **Select [OK].**

- To rename the folder, select [**Change folder name**].

Renaming Folders

1. **Enter letters and numbers of your choice.**



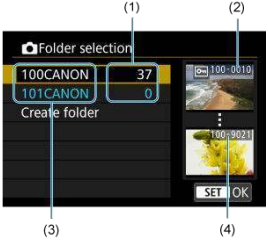
- You can enter five characters.
- By selecting [A↔1], you can change the input mode.
- Select [⌫] to delete a character.

- Use the < ◌ > dial or < ✥ > to select a character, then press < SET > to enter it.

2. **Exit the setting.**

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

Still Photo File Numbering

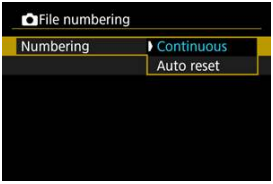
- Continuous
- Auto Reset
- Manual Reset

Captured still photos saved in a folder are assigned a file number from 0001 to 9999. You can change how the image files are numbered.

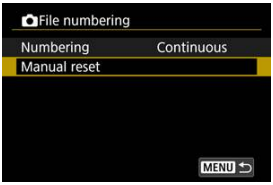
(Example)
IMG_0001.JPG
(1)
(1) File number

1. **Select [: File numbering] ( ).**

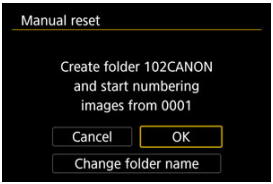
2. Set the item.



- 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

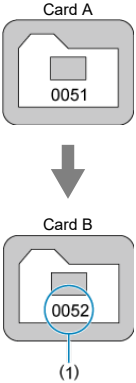
- If the file number in folder 999 reaches 9999, shooting will not be possible even if the card still has free space. After a message requesting you to replace the card is displayed, switch to a new card.

Continuous

For continuous file numbering regardless of switching cards or creating folders

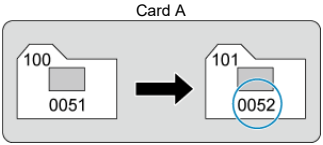
Even after you replace the card or create a new folder, the file numbering continues in sequence up to 9999. This is useful when you want to save images numbered anywhere between 0001 to 9999 on multiple cards or in multiple folders into one folder on a computer. If the replacement card or existing folder 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

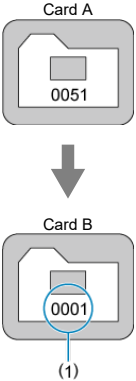


Auto Reset

For restarting file numbering from 0001 after switching cards or creating folders

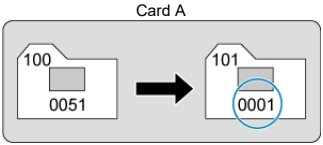
When you replace the card or create a folder, the file numbering restarts from 0001 for the new images saved. This is useful if you want to organize images by cards or folders.
If the replacement card or existing folder already contains images recorded previously, the file numbering of the new images 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.

Movie Clip Numbering

Continuous

Auto Reset

Recorded movies saved in a folder are assigned a clip number from 001 to 999. You can change how clips are numbered.

(Example)

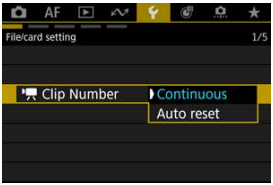
A_0001C001Ayymmdd_hhmmssXX_CANON

(1)

(1) Clip number

1. **Select [: Clip Number] ( ).**

2. **Set the item.**



- Select [**Continuous**] or [**Auto reset**].

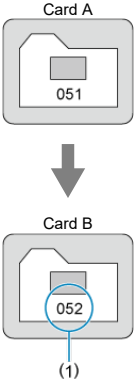
Note

- The XFVC folder holds up to 999 files. You can check the number of movie files by referring to [▶: **Set image search conditions**] ( ). If a card already has 999 files, either delete existing movies or use a different card.

Continuous

For continuous file numbering regardless of switching cards

Clip numbering is continuous up to 999, even if you replace a card. This is useful when movies numbered between 001 to 999 on multiple cards will be saved in a single folder on a computer, for example.
Note that numbering may continue after the number of any existing movies on new cards. If you prefer continuous movie numbering, consider using a newly formatted card each time.

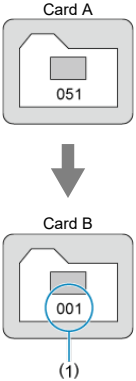


(1) Next sequential clip number

Auto Reset

For restarting clip numbering from 001 after switching cards

Clip numbering is reset to 001 if you replace a card. This is useful if you want to organize movies by cards.
Note that numbering may continue after the number of any existing movies on new cards. If you want to save images with the file numbering starting from 001, use a newly formatted card each time.



(1) Clip numbering is reset

File Naming

Registering/Changing Still Photo File Names

Movie File Name Settings

Registering/Changing Still Photo File Names

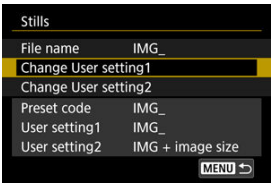
File names consist of four alphanumeric characters followed by a four-digit file number ( ) and file extension. You can change the first four alphanumeric characters, which by default are unique for each camera and set when the camera is shipped.
User setting 1 enables you to register four characters of your choice. User setting 2 adds three initial, registered characters of your choice to a fourth character representing the image size that is added automatically after you shoot.

(Example)
IMG_0001.JPG

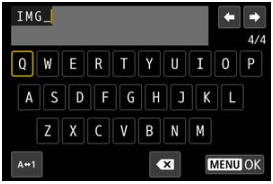
1. **Select [: File name] ( ).**

2. **Select [Stills].**

3. **Select [Change User setting*].**



4. Enter letters and numbers of your choice.



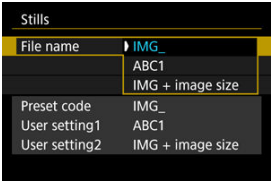
- Enter four characters for User setting 1 or three for User setting 2.
- By selecting [A↔1], you can change the input mode.
- Select [⌫] to delete a character.

- Use the < ⌒ > or < ◯ > dial or < ✥ > to select a character, then press < SET > to enter it.

5. Exit the setting.

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

6. Select a registered file name.



- Select [**File name**], then choose a registered file name.

Caution

- An underscore ("_") cannot be used as the first character.

Note

Notes on [User setting2]

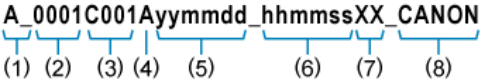
- Shooting after you have selected "*** + image size" (as registered to User setting 2) will add a character representing the current image size to your file name as the fourth character. Meanings of added characters are as follows.
  "***L": L, L, RAW, or HEIF
  "***M": M or M
  "***S": S1 or S1
  "***T": S2
  "***C": CRAW
  The automatically added fourth character enables you to determine image sizes without opening the files after transferring them to a computer. Based on file extensions, you can also distinguish RAW, JPEG, and HEIF images.

Movie File Name Settings

You can set how movie files (clips) are named.

Movie file name structure

(Example)



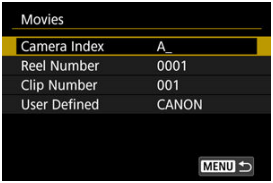
	Item	Description
(1)	Camera index	Two letters in the range A–Z. An underscore (_) can also be used as the second character. Identifies the camera used.
(2)	Reel number	A 4-digit number from 0001 to 9999. A different number is automatically assigned to identify the card used. You can set the default value. Advances by one when the first recording on a new card* is made. * Newly purchased or formatted card
(3)	Clip number	A 3-digit number from 001 to 999 preceded by C, as in C001–C999. After C999, D is used at the beginning. Automatically assigned to each clip (movie file). You can set the default value.
(4)	Codec identifier	“A” (as in AVC) is automatically set for H.264 main movies and “H” for HEVC.
(5)	Recording date	Year, month, and day, set automatically based on when recording began.
(6)	Recording time	Hour, minute, and second, set automatically based on when recording began.
(7)	Random component	Two characters, from A to Z and 0 to 9, randomly set for each clip (movie file).
(8)	User-defined field	Five characters, from A to Z and 0 to 9. Default: CANON.

Configuring movie file names

1. **Select [: File name] ( ).**

2. **Select [Movies].**

3. **Configure movie file name settings.**



- **Camera index**
  Enter two characters of your choice.

- Set defaults for [**Reel Number**] and [**Clip Number**] as needed.

- **User defined**

  Enter letters or numbers of your choice.

  - You can enter five characters.
  - By selecting [A↔1], you can change the input mode.
  - Select [⌫] to delete a character.

  - Use the < ⚙ > or < ◎ > dial or < ✥ > to select a character, then press < SET > to enter it.

Card Formatting

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

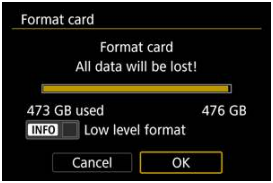
Caution

- **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.**

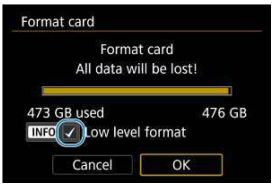
---

1. **Select [: Format card] ( ).**

2. **Format the card.**



- Select [**OK**].



- For low-level formatting, press the < INFO > 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.

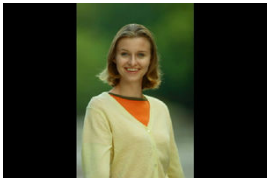
Caution

- 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.

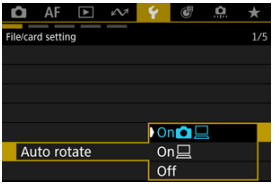
Auto Rotate



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

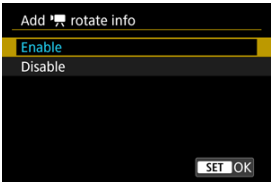
- If a picture is taken while the camera is aimed up or down, automatic rotation to the proper orientation for viewing may not be performed correctly.
- If images are not rotated automatically on a computer, try using EOS software.

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.

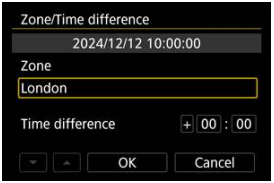
Date/Time/Zone

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.

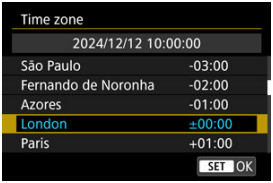
1. **Select [: Date/Time/Zone] ( ).**

2. **Set the time zone.**

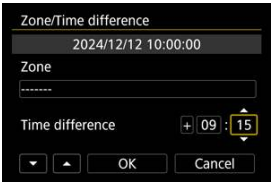
- Use the < > keys to select [**Time zone**] and then press < >.



- Press < >.

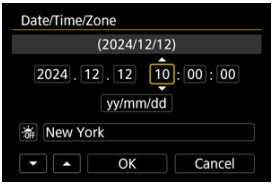


- Use the < ▲ >< ▼ > keys to select the zone and then press < (SET) >.
- If your time zone is not listed, press the < MENU > button, then set the difference from UTC in [**Time difference**].



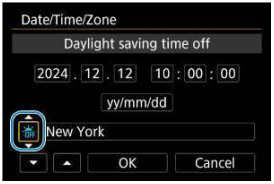
- Use the < ◀ >< ▶ > keys to select a [**Time difference**] option (+–/hour/minute) and then press < (SET) >.
- Set with the < ▲ >< ▼ > keys and then press < (SET) >.
- After entering the time zone or time difference, select [**OK**].

3. Set the date and time.



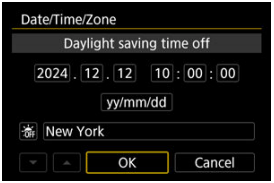
- Select an option with the < ◀ >< ▶ > keys and then press < (SET) >.
- Set with the < ▲ >< ▼ > keys and then press < (SET) >.

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] ( ).**

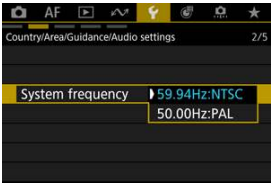
2. **Set the desired language.**

System Frequency

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

1. **Select [: System frequency] ( ).**

2. **Select an option.**



- **59.94Hz:NTSC**
  For areas where the TV system is NTSC (North America, Japan, South Korea, Mexico, etc.).

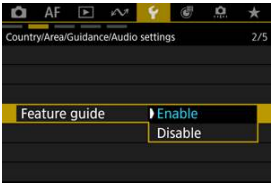
- **50.00Hz:PAL**
  For areas where the TV system is PAL (Europe, Russia, China, Australia, etc.).

Feature Guide

A brief description of functions and items can be displayed when you set the shooting mode or use Quick Control.

1. **Select [: Feature guide] ( ).**

2. **Select an option.**



Sample screen

(1) Feature guide

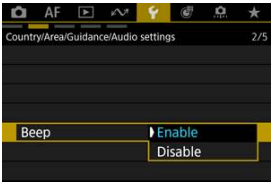
Note

- 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

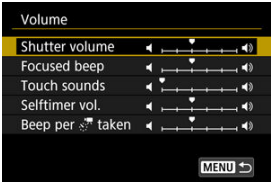
- By default, beeping volume for touch operations is set to [**0**] ( ).

Volume

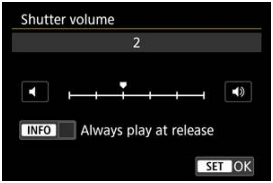
The volume of camera sounds is adjustable.

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

2. **Select an option.**



3. **Adjusting the volume**



- Adjust the volume with < ◀ >< ▶ > keys and then press < >.

Audio Monitor

Headphones

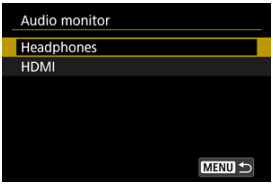
HDMI

Headphones

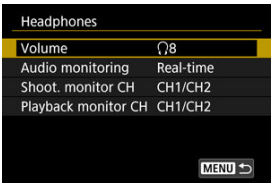
Adjusting the volume

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

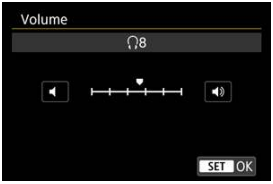
2. **Select [Headphones].**



3. **Select [Volume].**



4. **Adjust the volume.**



- Turn the < ◎ > dial to adjust the volume, then press < SET >.

Caution

- Make sure any headphone output plugs are fully inserted in the camera.

Note

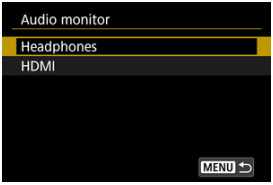
- You can check sound from the built-in microphone or an external microphone on headphones when [📷: **Sound recording**] is set to [**On**].

Audio Monitor

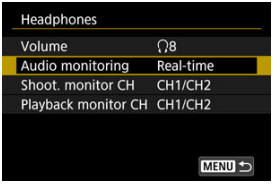
You can choose the audio during movie recording that is used for headphone output. To reduce noise in audio recording, configure [**Audio noise reduc.**] (✎).

1. **Select [🎥: Audio monitor] (✎).**

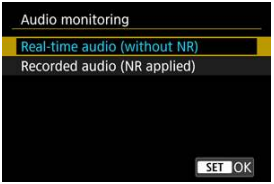
2. **Select [Headphones].**



3. **Select [Audio monitoring].**



4. **Select an option.**



- **Real-time audio (without NR)**
  Audio output without noise reduction.

- **Recorded audio (NR applied)**
  Audio output with noise reduction.

Caution

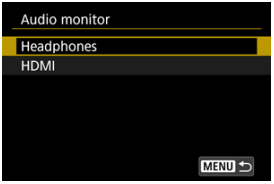
- Selecting [**Recorded audio (NR applied)**] results in audio output that is slightly out of sync with video. Audio in recorded movies is not delayed.

Selecting output channels for the headphone terminal

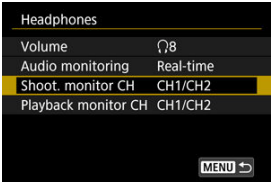
You can select the combination of channels for output from the headphone terminal during shooting or playback. This setting also applies to speaker output ( ).

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

2. **Select [Headphones].**

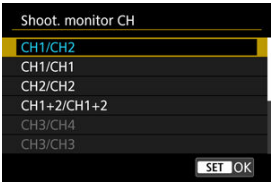


3. **Select [Shoot. monitor CH] or [Playback monitor CH].**

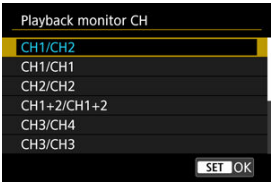


4. Select the combination of channels for audio output (L/R).

Shoot. monitor CH



Playback monitor CH



- CH1+2 indicates that the signal is a combination of channels 1 and 2. The same applies to CH1+3, CH3+4, and so on.

Caution

- There is no sound from channels 3 and 4 for [**Playback monitor CH**] when you shoot with [: **Audio format**] ( ) set to [**AAC/16bit/2CH**], because no sound is recorded for channels 3 and 4.

Note

- The audio recording level indicator ( ) on the movie recording screen shows channels selected in [**Shoot. monitor CH**].
- Items that include channels 3 or 4 are not available in [**Shoot. monitor CH**] with [: **Audio format**] ( ) set to [**AAC/16bit/2CH**].

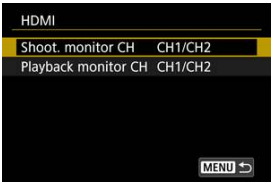
Selecting output channels for the HDMI output terminal

You can select the combination of channels for output from the HDMI output terminal during shooting or playback.

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

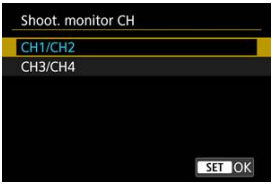
2. **Select [HDMI].**

3. **Select [Shoot. monitor CH] or [Playback monitor CH].**

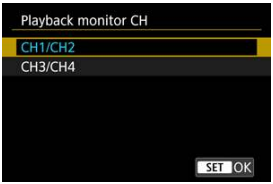


4. Select [CH1/CH2] or [CH3/CH4].

Shoot. monitor CH



Playback monitor CH



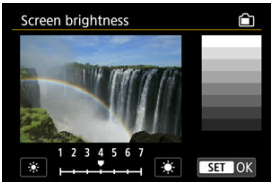
Caution

- No sound is produced when you play a movie recording with [: **Audio format**] ( ) set to [**AAC/16bit/2CH**] and [**Playback monitor CH**] set to [**CH3/CH4**].

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

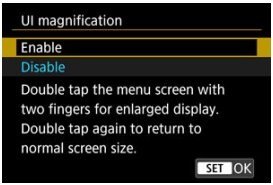
- To check the image's exposure, referring to the histogram is recommended ( ).

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.

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.

Note

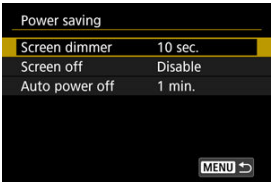
- If the card contains a mix of movies recorded with different settings, it may take some time before images are displayed.

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

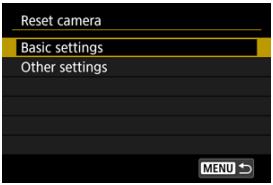
- [**Screen dimmer**] and [**Screen off**] apply while the shooting screen is displayed. These settings do not apply during menu display or image playback.
- The camera turns off during menu display or image playback after the time set in [**Screen dimmer**], [**Screen off**], and [**Auto power off**] elapses.
- To protect the screen, the screen turns off (although the camera itself remains on) if the camera is idle for approx. 30 min., 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 Recording Mode (C1–C3)

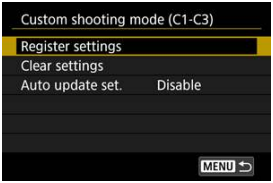
Automatic Update of Registered Settings

Canceling Registered Custom Recording Modes

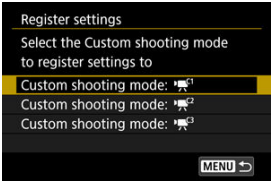
In < > mode, you can register current camera settings such as recording, menu, and Custom Function settings as Custom recording modes assigned to [**C1**] to [**C3**] modes.

1. **Select [: Custom shooting mode (C1-C3)] ( ).**

2. **Select [Register settings].**



3. Register the desired items.



- Select the Custom recording mode to register, then select [**OK**] on the [**Register settings**] screen.
- The current camera settings are registered to Custom recording mode C*.
- Depending on the menu items, setting options changed in other recording modes may not be carried over to the Custom recording mode settings.

Automatic Update of Registered Settings

If you change a setting while recording in a Custom recording 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.

Caution

- Registered settings are not updated automatically when connected via USB (UVC/UAC) ( ).

Canceling Registered Custom Recording 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.

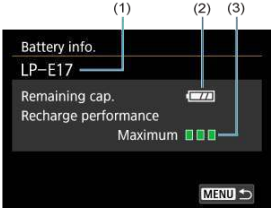
Note

- You can also change recording and menu settings in Custom recording 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 or household power source 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. If you use batteries that are not genuine Canon products, the camera's full performance may not be attained or malfunction may result.

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.**].

Note

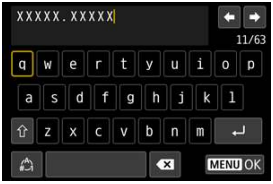
- You can also set or check copyright information with EOS Utility (EOS software,).

---

1. **Select [: Copyright information] ( ).**

2. **Select an option.**

3. Enter text.

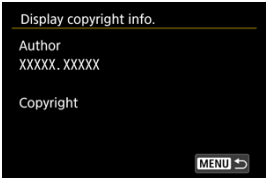


- Use the < ✥ > keys to select a character and then press < SET > to enter it.
- By selecting [#], you can change the input mode.
- Select [⌫] to delete a character.

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

Manual/software URL

To download instruction manuals, select [: **Manual/software URL**] ( ) 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.

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. 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
- Control Customization Details

Customized controls when shooting (movie recording)

(1) Customize buttons for shooting ☆

(2) Shutter btn function for movies

(3) Customize dials/control ring ☆

(4) Multi function lock

(5) Focus/control ring ☆

(6) Camera/ optical zoom speed ☆

(7) Lens optical zoom speed ☆

Customized controls when shooting (still photo shooting)

(1) Customize buttons for shooting ☆

(2) Customize dials/control ring ☆

(3) Touch Shutter

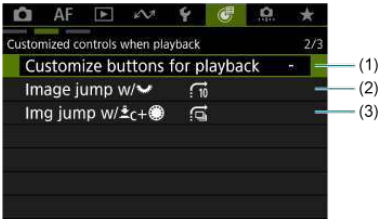
(4) Multi function lock

(5) Focus/control ring ☆

(6) Camera/ optical zoom speed ☆

(7) Lens optical zoom speed ☆

Customized controls when playback

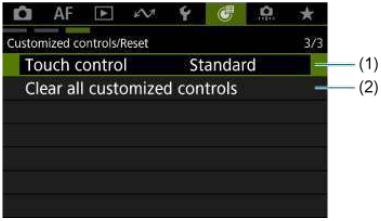


(1) Customize buttons for playback ☆

(2) Image jump w/

(3) Img jump w/ ☆

Customized controls/Reset

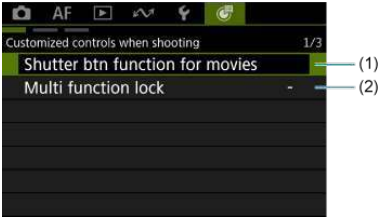


(1) Touch control

(2) Clear all customized controls ☆

In Basic Zone modes, the following screens are displayed.

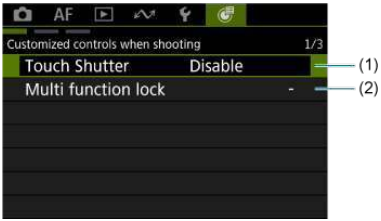
Customized controls when shooting (movie recording)



(1) Shutter btn function for movies

(2) Multi function lock

Customized controls when shooting (still photo shooting)



(1) Touch Shutter

(2) Multi function lock

Customized controls when playback

(1) Image jump w/

Customized controls

(1) Touch control

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.

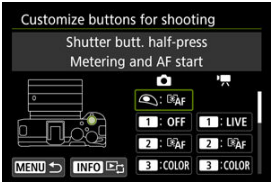
[Customized controls when shooting]

[Customize buttons for shooting]

You can assign common shooting 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 for shooting] ().**

2. **Select a camera control.**



- To switch to [: **Customize buttons for playback**] (), press the < INFO > button.

3. Select a function to assign.

- Press < SET > to set it.
- You can configure advanced settings for functions labeled with [INFO] in the lower left of the screen by pressing the < INFO > button.

Note

- [L-Fn]: “AF Stop” or “Lens Function” button on super telephoto lenses with Image Stabilizer.
- [ ]: “Menu direct” button on Speedlites.
- Only still photo shooting settings can be assigned to [ ] or [ ].
- To clear settings configured with [: **Customize buttons for shooting**], select [: **Clear all customized controls**].

Functions available for customization

AF

●: Default ○: Available for customization

	1	2	3	▲	◀	▶	▼	SET	L-Fn	
AF: Metering and AF start										
●*1	○	●	○	-	-	-	-	-	○	-
AF-OFF: AF stop										
-	○	○	○	-	-	-	-	-	●	-
: AF point selection										
-	○	○	○	○	○	○	○	○	○	-
: Direct AF point selection										
-	-	-	-	○	○	○	○	-	-	-
: Set AF point to center										
-	○	○	○	○	○	○	○	○	○	-
: Start/stop whole area AF tracking										
-	○	○	○	○	○	○	○	○	○	-
AF□: AF area										
-	○	○	○	○	○	○	○	○	○	-
: Direct select of sub to detect*1										
-	○	○	○	○	○	○	○	○	○	-
ONE SHOT SERVO: One-Shot AF ⇄ Servo AF*1										
-	○	○	○	○	○	○	○	○	○	-
AF: AF on detected subject*1										
-	○	○	○	-	-	-	-	-	○	-
AF: Eye Detection AF*1										
-	○	○	○	-	-	-	-	-	○	-
: Eye detection										
-	○	○	○	○	○	○	○	○	○	-
: Spot detection										
-	○	○	○	○	○	○	○	○	○	-

: Register people priority										
-	○	○	○	○	○	○	○	○	○	-
AF MF: Focus mode										
-	○	○	○	○	●	○	○	○	○	-
PEAK: Peaking										
-	○	○	○	○	○	○	○	○	○	-
: Focus guide										
-	○	○	○	○	○	○	○	○	○	-
: Drive mode*1										
-	○	○	○	○	○	●	○	○	○	-

* 1: Cannot be assigned as a function available in movie recording.

Exposure Compensation

●: Default ○: Available for customization

	1	2	3	▲	◀	▶	▼	SET	L-Fn	
AF-OFF: AE lock, AF stop										
-	○	○	○	-	-	-	-	-	○	-
: Metering start*1										
○	-	-	-	-	-	-	-	-	-	-
: AE lock										
-	○	○	○	-	-	-	-	-	○	-
: AE lock (while button pressed)*1										
○	-	-	-	-	-	-	-	-	-	-
AEL FEL: AE lock/FE lock*1										
-	○	○	○	-	-	-	-	-	○	-
: Expo comp (hold btn, turn)										
-	○	○	○	○	○	○	○	○	○	-
ISO: ISO speed										
-	○	○	○	●	○	○	○	○	○	-
ISO: Set ISO speed(hold btn,turn)										
-	○	○	○	○	○	○	○	○	○	-
: Flash firing*1										
-	○	○	○	○	○	○	○	○	○	-
ETTL↔M: **ETTL ⇄ M***1										
-	○	○	○	○	○	○	○	○	○	-
FEL: FE lock*1										
-	○	○	○	-	-	-	-	-	○	-

* 1: Cannot be assigned as a function available in movie recording.

Image

●: Default ○: Available for customization

	1	2	3	▲	◀	▶	▼	SET	L-Fn	
Silent shutter function*1										
-	○	○	○	○	○	○	○	○	○	-
Image quality*1										
-	○	○	○	○	○	○	○	○	○	-
RAW JPEG: One-touch image quality setting*1										
-	○	○	○	○	○	○	○	○	○	-
RAW JPEG H: One-touch image quality (hold)*1										
-	○	○	○	○	○	○	○	○	○	-
Still img aspect ratio*1										
-	○	○	○	○	○	○	○	○	○	-
Digital tele-conv*1										
-	○	○	○	○	○	○	○	○	○	-
Auto Lighting Optimizer										
-	○	○	○	○	○	○	○	○	○	-
Flicker detection*2*3										
-	○	○	○	○	○	○	○	○	○	-
WB: White balance selection										
-	○	○	○	○	○	○	●	○	○	-
Switch color temperature										
-	○	○	○	○	○	○	○	○	○	-
WB +/- WB correction										
-	○	○	○	○	○	○	○	○	○	-
COLOR: Color mode										
-	○	○	●	○	○	○	○	○	○	-

: Picture Style										
-	○	○	○	○	○	○	○	○	○	-
: Color filter										
-	○	○	○	○	○	○	○	○	○	-
: Select folder										
-	○	-	○	○	○	○	○	-	-	-

* 1: Cannot be assigned as a function available in movie recording.
* 2: Cannot be assigned as a function available in still photo shooting.
* 3: Not used in movie recording.

Movies

●: Default ○: Available for customization

	1	2	3	▲	◀	▶	▼	SET	L-Fn	
False color*2										
-	○	○	○	○	○	○	○	○	○	-
Zebra*2										
-	○	○	○	○	○	○	○	○	○	-
Movie recording*2										
-	○	○	○	-	-	-	-	○	○	-
SERVO AF: Pause Movie Servo AF*2										
-	○	○	○	○	○	○	○	○	○	-
Audio Status*2										
-	○	○	○	○	○	○	○	○	○	-
Subj. detect. AF*2										
-	○	○	○	○	○	○	○	○	○	-
Digital zoom*2										
-	○	○	○	○	○	○	○	○	○	-
CP: Custom Picture*2										
-	○	○	○	○	○	○	○	○	○	-
Digital IS*2										
-	○	○	○	○	○	○	○	○	○	-
Cinema view*2										
-	○	○	○	○	○	○	○	○	○	-
Movie self-timer*2										
-	○	○	○	○	○	●	○	○	○	-
Standby: Low res.*2										
-	○	○	○	○	○	○	○	○	○	-
LIVE: Live streaming*2										
-	●	○	○	○	○	○	○	○	○	-

* 2: Cannot be assigned as a function available in still photo shooting.

Operation

●: Default ○: Available for customization

	1	2	3	▲	◀	▶	▼	SET	L-Fn	
: Flash function settings*1										
-	○	○	○	○	○	○	○	○	○	●
Gr: Quick flash group control*1										
-	○	○	○	○	○	○	○	○	○	○
: Maximize screen brightness (temp)										
-	○	○	○	○	○	○	○	○	○	-
: Power off										
-	○	○	○	-	-	-	-	-	○	-
: Screen off										
-	○	○	○	○	○	○	○	○	○	-
: Switch focus/control ring										
-	○	○	○	○	○	○	○	○	○	-
: Depth-of-field preview*1										
-	○	○	○	○	○	○	○	○	○	-
Q: Quick Control screen										
-	○	○	○	○	○	○	○	●	○	-
: Magnify/Reduce										
-	○	○	○	○	○	○	○	○	○	-
: Image replay										
-	○	○	○	○	○	○	○	○	○	-
: Magnify images during playback										
-	○	○	○	○	○	○	○	○	○	-
MENU: Menu display										
-	○	○	○	○	○	○	○	○	○	-
: Touch Shutter*1										
-	○	○	○	○	○	○	○	○	○	-

FPS: Display frame rate setting*1										
-	○	○	○	○	○	○	○	○	○	-
: Wi-Fi/Bluetooth connection										
-	○	○	○	○	○	○	○	○	○	-
: Create folder*1										
-	○	○	○	○	○	○	○	○	○	-
OFF: No function (disabled)										
-	●*4	○	○	○	○	○	○	○	○	○*1

* 1: Cannot be assigned as a function available in movie recording.
* 4: Default in still photo shooting.

Shutter btn function for movies

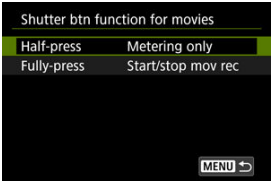
You can set the functions performed by pressing the shutter button halfway or completely during movie recording.

Caution

- In movie recording, the [: **Shutter btn function for movies**] setting overrides any function assigned to the shutter button in [: **Customize buttons for shooting**].

1. **Select [: Shutter btn function for movies] ( ).**

2. **Select an option.**



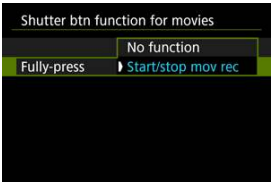
- **Half-press**
  Specify the function performed by pressing the shutter button halfway.

- **Fully-press**
  Specify the function performed by pressing the shutter button completely.

3. Select an option.

[Half-press] options

[Fully-press] options



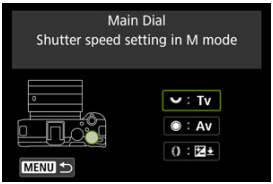
- With [**Fully-press**] set to [**Start/stop mov rec**], you can start/stop movie recording not only with the movie shooting button but also by pressing the shutter button completely, or by using a remote switch (sold separately).

Customize dials/control ring

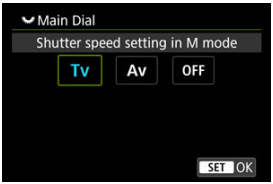
Frequently used functions can be assigned to the < > and < > dials and < > ring.

1. **Select [: Customize dials/control ring] ( ).**

2. **Select a camera control.**



3. **Select a function to assign.**



- Press < > to set it.

Note

- To clear settings configured with [: **Customize dials/control ring**], select [: **Clear all customized controls**].

Functions available for dials

●: Default ○: Available for customization

Function			
Tv ⬇: Change shutter spd. (hold meter. btn)	-	-	○
Av ⬇: Change aperture (hold meter. btn)	-	-	○
ISO ⬇: Set ISO speed(while holding metering button)	-	-	○
⬇: Exposure comp. (hold meter. btn)	-	-	●
⬇: Flash exposure comp./output(while holding metering button)	-	-	○
AF□ ⬇: Select AF area(while holding metering button)	-	-	○
⬇: Picture Style(while holding metering button)	-	-	○
WB ⬇: White balance selection(while holding metering button)	-	-	○
K ⬇: Select color temperature(while holding metering button)	-	-	○
Tv: Change shutter speed	-	-	○
Av: Change aperture value	-	-	○
Tv: Shutter speed setting in M mode	●	○	-
Av: Aperture setting in M mode	○	●	-
ISO: Set ISO speed	-	○	○
: Exposure compensation	-	○	○
AF□: Select AF area	-	○	○
: Picture Style	-	○	○
WB: White balance selection	-	○	○
K: Select color temperature	-	○	○
OFF: No function (disabled)	○	○	○

Note

- [ ]: Control ring on RF lenses and mount adapters.

Touch Shutter

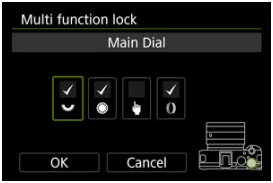
Touch Shutter can be specified. When set to [**Enable**], [OFF] display in the lower left of the shooting screen changes to [ ], and Touch Shutter is enabled.
For Touch Shutter instructions, see Shooting with the Touch Shutter.

Multi function lock

Specify camera controls to lock when the Multi-function lock is enabled. This can help prevent accidentally changing settings.

1. **Select [: Multi function lock] ( ).**

2. **Select camera controls to lock.**



- Select a camera control and press < > to display [✓].

3. **Select [OK].**

- Pressing the Multi-function lock button locks the selected [✓] camera controls.

Note

- An asterisk "*" to the right of [: **Multi function lock**] indicates that the default setting has been modified.

Focus/control ring

Menu-based switching of lens focus/control ring functionality.

Caution

- Available when using lenses that have a combination focusing ring/control ring but have no switch to switch between these feature.

- **FOCUS: Use as focus ring**
  The ring works as a focusing ring.

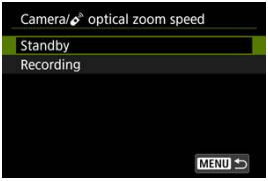
- **CONTROL: Use as control ring**
  The ring works as a control ring.

Note

- To restrict [AF: **Focus mode**] to [**AF**] when [**Use as control ring**] is selected, press the < COLOR > button and add a checkmark [✓] to [**Focus mode is AF when used as a control ring**].
- Switching is also possible from the Quick Control screen, when customized with [: **Customize Quick Controls**] ( ).

Camera/ optical zoom speed

You can set the optical zoom speed used when zooming with the zoom lever or a wireless remote control.
The zoom speed during shooting standby and during movie recording can be set separately.



- **Zoom speed**
  Set the zoom speed.
  Fast: Suitable for zooming during shooting standby.
  Slow: Suitable when you prefer slow zooming, such as during movie recording.

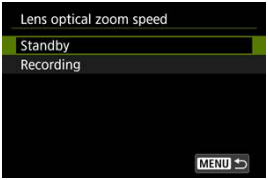
- **Speed level**
  Set a zoom speed level (relative to the zoom speed), to zoom faster or slower depending on how much you press the zooming control.
  Set the zoom speed in a range of 1–15 for [**Fast**] or [**Slow**].

Note

- Zoom speed with Wireless Remote Control BR-E1 (sold separately) corresponds to the [ ] setting.

Lens optical zoom speed

Available when using a power zoom lens.
Optical zooming is faster or slower depending on how much you turn the zoom ring.
The zoom speed during shooting standby and during movie recording can be set separately.



- **Zoom speed**

  Set the zoom speed.
  Fast: Suitable for zooming during shooting standby.
  Slow: Suitable when you prefer slow zooming, such as during movie recording.

- **Speed level**

  Set a zoom speed level (relative to the zoom speed), to zoom faster or slower depending on how much you turn the zoom ring.
  Set the speed level in a range of 1–15 for the zoom speeds [**Fast**] and [**Slow**].

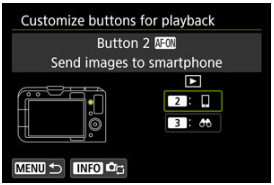
[Customized controls when playback]

Customize buttons for playback

You can assign common playback functions to camera buttons that are easy for you to use.

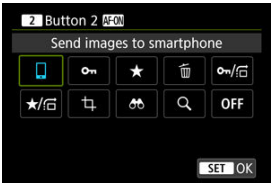
1. **Select [: Customize buttons for playback] ( ).**

2. **Select a camera control.**



- To switch to [: **Customize buttons for shooting**] ( ), press the < INFO > button.

3. **Select a function to assign.**



- Press < SET > to set it.
- You can configure advanced settings for functions labeled with [INFO] in the lower left of the screen by pressing the < INFO > button.

Note

- To clear settings configured with [: **Customize buttons for playback**], select [: **Clear all customized controls**].

Functions available for customization

●: Default ○: Available for customization

Function	2	3
: Protect	○	○
★: Rating	○	○
: Erase images	○	○
/: Protect (image jump w/ C+)	○	○
★/: Rating (image jump w/ C+)	○	○
: Cropping	○	○
: Image search	○	●
: Magnify/Reduce	○	○
: Send images to smartphone	●	○
OFF: No function (disabled)	○	○

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.

Img jump w/ ⚡C+◉

To set how the camera jumps through images, you can turn the < ◎ > dial while pressing the button assigned to [★/⧉] [⊶/⧉] on the playback screen in single-image display.

Note

- You can configure this function when assigning [★/⧉] or [⊶/⧉] to a button in [⏱: **Customize buttons for playback**] (✎).
- 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

- [**Sensitive**] makes the touch-screen panel more responsive than [**Standard**].
- To disable touch operations, select [**Disable**].

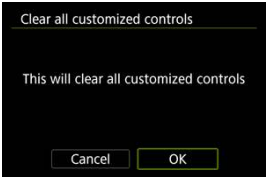
Caution

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.
- The camera may not respond as well if you quickly perform touch operation when [**Sensitive**] is set.

Clear all customized controls

Selecting [: **Clear all customized controls**] clears all control customization settings.



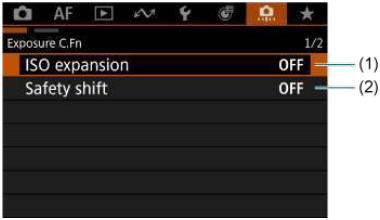
Custom Functions/My Menu

You can fine-tune camera functions and change the functionality of buttons and dials 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

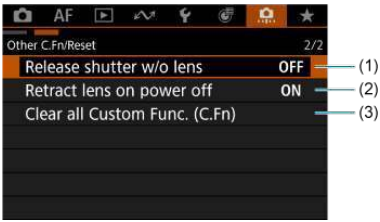
Exposure C.Fn



(1) ISO expansion

(2) Safety shift

Other C.Fn/Reset



(1) Release shutter w/o lens

(2) Retract lens on power off

(3) Clear all Custom Func. (C.Fn)

Selecting [: **Clear all Custom Func. (C.Fn)**] clears all Custom Function settings.

Custom Function Setting Items

Exposure C.Fn

Other C.Fn/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 C.Fn

ISO expansion

Makes “H” (equivalent to ISO 51200 in still photo shooting and ISO 25600 in movie recording) available as an ISO speed in manual selection. Note that “H” is not available with [📷: **Highlight tone priority**] set to [**Enable**] or [**Enhanced**].

- **OFF: Disable**
- **ON: Enable**

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**

Other C.Fn/Reset

Release shutter w/o lens

You can specify whether shooting still photos or movies is possible without a lens attached.

- **OFF: Disable**
- **ON: Enable**

Retract lens on power off

You can set whether to retract gear-type STM lenses (such as RF35mm F1.8 Macro IS STM) automatically when the camera's power switch is set to < OFF >.

- **ON: Enable**
- **OFF: Disable**

Caution

- With auto power off, the lens will not retract regardless of the setting.
- Before detaching the lens, make sure that it is retracted.

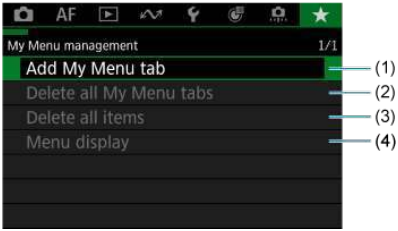
Note

- When [**Enable**] is set, this function takes effect regardless of the setting of the focus mode switch (AF or MF) on the camera or lens.

Clear all Custom Func. (C.Fn)

Selecting [: **Clear all Custom Func. (C.Fn)**] clears all Custom Functions settings.

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

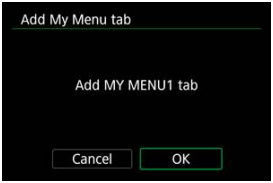
- Creating and Adding My Menu Tabs
- Registering Menu Items on My Menu Tabs
- My Menu Tab Settings
- Deleting All My Menu Tabs/Deleting All Items
- Menu Display Settings

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].**

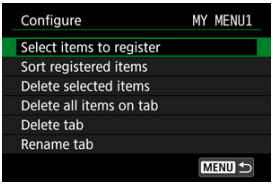


- You can create up to five My Menu tabs by repeating steps 1 and 2.

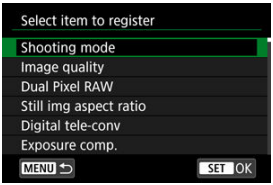
Registering Menu Items on My Menu Tabs

1. **Select [MY MENU*: Configure].**

2. **Select [Select items to register].**

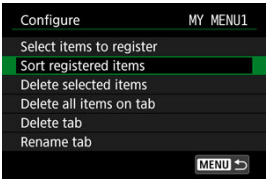


3. **Register the desired items.**



- 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].**

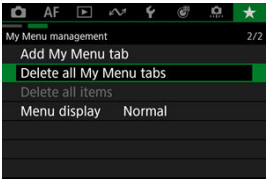
2. **Enter text.**

- Use the < ✥ > keys to select a character and then press < ⊛ > 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.

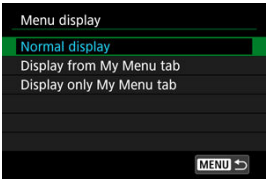
- **Delete all items**

  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
- Using a USB Power Adapter to Charge/Power the Camera
- 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 via Wi-Fi

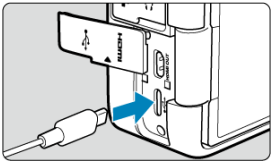
You can use EOS software to import images from the camera to a computer.

Connecting to a Computer with an Interface Cable

1. **Install EOS Utility ( ).**

2. **In [: Choose USB connection app], select [Photo Import/Remote Control] ( ).**

3. **Connect the camera to the computer.**



- Use an interface cable.
- Connect the other end to a USB port on the computer.

4. **Use EOS Utility to import the images.**

- Refer to the EOS Utility Instruction Manual.

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 using a card reader instead of EOS software to transfer images from the camera to a computer, copy the folders on the card (DCIM and XFVC) to the computer.

Connecting to a Computer via Wi-Fi

You can connect the camera to the computer via Wi-Fi and import images 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 or IFC-400U) 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.**

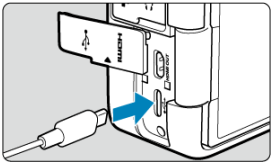
   - Android smartphones: Use Camera Connect to import images ( ).
   - iPhones: Start the Photos app, then import images from the card.

Using a USB Power Adapter to Charge/Power the Camera

Using USB Power Adapter PD-E2 (sold separately), you can charge Battery Pack LP-E17 without removing it from the camera. The camera can also be powered.

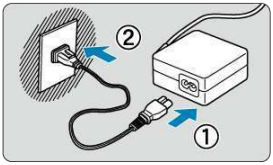
Charging

1. **Connect the USB power adapter.**

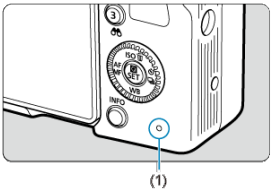


- With the camera power switch set to < OFF >, insert the USB power adapter plug fully into the digital terminal.

2. Connect the power cord.



- Connect the power cord to the USB power adapter and plug the other end into a power outlet.
- Charging begins, and the access lamp (1) is lit in green.



- When charging is finished, the access lamp turns off.

Supplying power

To power the camera without charging batteries, set the camera power switch to < ON >.
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, set the camera power switch to < OFF >.

Caution

- The camera cannot be powered unless a battery pack is in it.
- When batteries are depleted, the adapter charges them. In this case, power is not supplied to the camera.
- To protect the battery pack and keep it in optimal condition, do not charge it continuously for more than 24 hours.
- Charged batteries gradually lose their charge, even when they are not used.
- If the charging lamp fails to light up or a problem occurs during charging (shown by the access lamp blinking in green), 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.
- The charging time required and the amount charged vary depending on ambient temperature and remaining capacity.
- For safety, charging in low temperatures takes longer.
- The remaining battery level may decline when power is supplied to the camera. To avoid running out of battery power, use a fully charged battery.
- Before disconnecting USB power adapters, set the camera power switch to <OFF>.

Note

- You can also use USB Power Adapter PD-E1 (sold separately).

Troubleshooting Guide

- Power-related problems
- Shooting-related problems
- Problems with wireless features
- Operation problems
- Display problems
- Playback problems
- Computer connection 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's power plug from the power outlet, reattach the battery, wait a few minutes, and then reconnect the power plug to the power outlet. 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 power switch is set to < 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 green and a 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 green and a 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 battery compartment. The camera cannot be powered without a battery pack.
- 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 the power switch is set to < 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 still lights or blinks even when the power switch is set to < OFF >.

- If the power is turned off while an image is being recorded to the card, the access lamp 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

The lens cannot be attached.

- To attach EF or EF-S lenses, you will need a mount adapter. The camera cannot be used with EF-M lenses ( ).

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 (,).
- Shooting is not possible if the AF point turns orange when you attempt to focus. Press the shutter button halfway again to refocus automatically, or focus manually (,).

The card cannot be used.

- If a card error message is displayed, see Inserting/Removing the Battery and Card and Error Details.

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 ( ).
- With a lens equipped with an Image Stabilizer, set the Image Stabilizer switch to < ON >.
- 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 Preventing Camera Shake.

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, flickering light, shutter speed, aperture value, subject conditions, brightness, AF operation, type of lens, 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.

- The estimated maximum burst displayed 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.

High-speed display is not available during high-speed continuous shooting.

- Refer to the high-speed display requirements in High-Speed Display.

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.

- Set [: **ISO expansion**] to [**Enable**] ( ).
- Check the [**ISO speed**] setting in [: **ISO speed settings**].
- Expanded ISO speeds (H) are not available when [: **Highlight tone priority**] is set to [**Enable**] or [**Enhanced**], even with [: **ISO expansion**] set to [**Enable**].

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 to set the exposure compensation.

Not all the lens aberration correction options are displayed.

- With [**Digital Lens Optimizer**] set to [**Standard**] or [**High**], [**Chromatic aberr corr**] and [**Diffraction correction**] are not displayed, but they are both set to [**Enable**] for shooting.
- During movie recording, [**Digital Lens Optimizer**] or [**Diffraction correction**] are not displayed.

Using flash in [Av] or [P] mode lowers the shutter speed.

- Set [**Slow synchro**] in [: **Flash 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 [: **Flash 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.
- When using the 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 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 in movie 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 Estimated recording time, video bit rate, file size, and card performance requirements. 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 ( ).
- Movie recording stops automatically after reaching the maximum recording time per movie.

The ISO speed cannot be set for movie recording.

- ISO speed is set automatically in [ ]/[ ]/[ ]/[ ]/< >/< > recording mode. In [ ] 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.

- Set [: **ISO expansion**] to [**Enable**] ( ).
- 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 [ ] 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 S&F recording.

A time code is not added.

- No time code is added to HDMI video output ( ).

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.

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.

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 [: **Touch control**] is set to [**Standard**] or [**Sensitive**] ( ).

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 for shooting**] and [: **Customize dials/control 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 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, but it will return to normal at room temperature.

Playback problems

A red box is displayed on the image.

- [▶: **AF point disp.**] is set to [**Enable**] (🔗).

During image playback, the AF points are not displayed.

- AF points are not displayed when the following types of images are played back:
  - Cropped images.
  - Images from HDR shooting with [**Auto Image Align**] 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 ( ).

No picture appears on the television.

- Make sure [: **System frequency**] is set to [**59.94Hz:NTSC**] or [**50.00Hz: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, then import the images to the computer using EOS Utility (EOS software,).

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 ( ).

Computer connection problems

I cannot import images to a computer.

- Install EOS Utility (EOS software) on the computer ( ).
- Make sure the main EOS Utility window is displayed.
- If the camera is already connected via Wi-Fi, it cannot communicate with any computer connected with an interface cable.
- Check the version of the application.

Communication between the connected camera and computer does not work.

- When using EOS Utility (EOS software), set [: **Time-lapse movie**] to [**Disable**] ( ).

Problems with the multi-function shoe

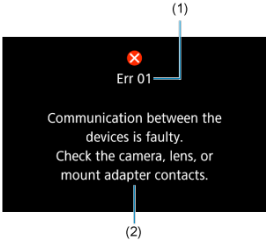
A message was displayed on the screen when I attached an accessory.

- 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.

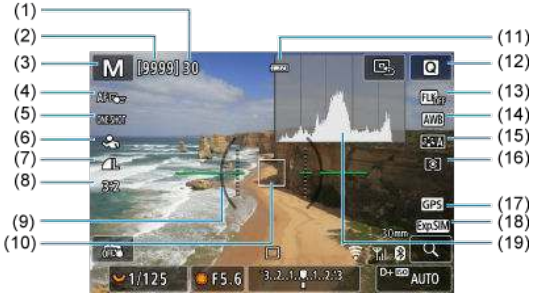
Information Display

- Still Photo Shooting Screen
- Movie Recording Screen
- Scene Icons
- 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)	Shooting mode
(4)	AF area
(5)	AF operation
(6)	Subject to detect
(7)	Image quality
(8)	Still image aspect ratio
(9)	Electronic level
(10)	AF point (1-point AF)
(11)	Battery level
(12)	Quick Control button
(13)	Anti-flicker shooting
(14)	White balance/White balance correction
(15)	Picture Style
(16)	Metering mode
(17)	GPS
(18)	Exposure simulation
(19)	Histogram (Brightness/RGB)

(20)	Drive mode
(21)	Touch Shutter
(22)	Shutter speed
(23)	Aperture value
(24)	Wi-Fi function
(25)	Wi-Fi signal strength
(26)	Bluetooth function
(27)	ISO speed
(28)	Highlight tone priority
(29)	Exposure compensation

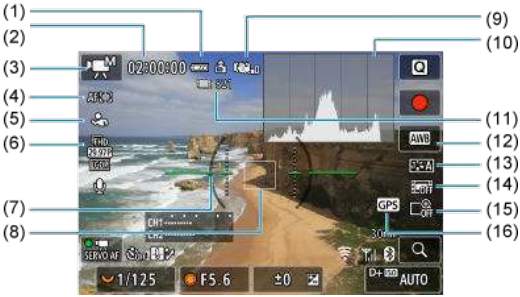
Note

- 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.

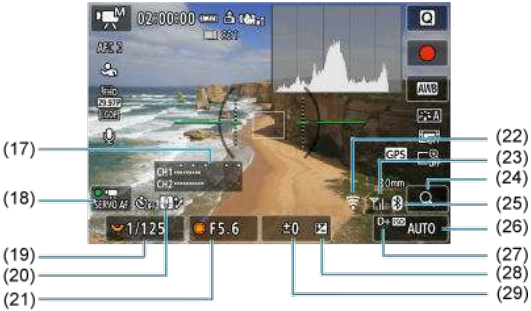
Movie Recording Screen

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)	Electronic level
(8)	AF point (1-point AF)
(9)	Image Stabilizer (IS mode)
(10)	Histogram (Brightness/RGB)
(11)	Number of movie files that can be recorded
(12)	White balance/White balance correction
(13)	Picture Style
(14)	Cinema view
(15)	Digital zoom
(16)	GPS



(17)	Audio recording level indicator
(18)	Movie Servo AF
(19)	Shutter speed
(20)	Overheat control
(21)	Aperture value
(22)	Wi-Fi function
(23)	Wi-Fi signal strength
(24)	Magnify button
(25)	Bluetooth function
(26)	ISO speed
(27)	Highlight tone priority
(28)	Exposure compensation
(29)	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 grid 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+ > or [A+] recording mode, the camera detects the type of scene and configures 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*2	
Bright							Gray
	Backlit						
Blue Sky Included							Light blue
	Backlit						
Sunset		*3				*3	Orange
Spotlight							Dark blue
Dark							
	With Tripod*1	*4*5	*3		*3		

* 1: Not displayed during movie recording.
* 2: Displayed when the attached lens has distance information. With an extension tube or close-up lens, the icon displayed may not match the actual scene.
* 3: Icons of scenes selected from those that can be detected are displayed.
* 4: 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.
* 5: Displayed with any of the following lenses.

- EF300mm f/2.8L IS II USM
- EF400mm f/2.8L IS II USM
- EF500mm f/4L IS II USM
- EF600mm f/4L IS II USM
- Image Stabilizer lenses released in and after 2012.

* Slower shutter speeds are used when the conditions in both *4 and *5 apply.

Note

- For certain scenes or shooting conditions, the icon displayed may not match the actual scene.

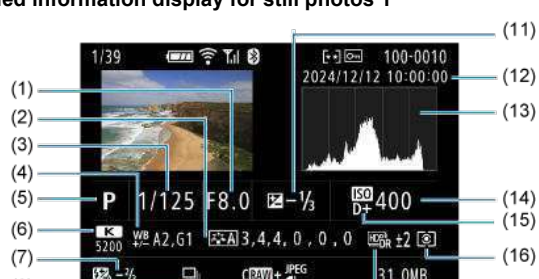
Basic information display for still photos

(1)	Bluetooth function
(2)	Wi-Fi signal strength
(3)	Wi-Fi function
(4)	Battery level
(5)	Current image no./Total images/No. of images found
(6)	Shutter speed
(7)	Aperture value
(8)	Exposure compensation amount
(9)	Rating
(10)	Image protection
(11)	Folder no.-File no.
(12)	Image quality/Edited image/Cropping/Frame Grab
(13)	ISO speed
(14)	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



(1)	Aperture value
(2)	Picture Style/Settings
(3)	Shutter speed
(4)	WB correction
(5)	Shooting mode/Frame Grab
(6)	White balance
(7)	Flash exposure compensation amount/Bounce
(8)	First image of scene
(9)	Image quality/Edited image/Cropping
(10)	HDR shooting
(11)	Exposure compensation amount
(12)	Shooting date and time
(13)	Histogram (Brightness/RGB)
(14)	ISO speed
(15)	Highlight tone priority
(16)	Metering mode
(17)	File size

* For simplicity, explanations are omitted for items also included in Basic information display for still photos, which are not shown here.
* 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.

* 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.

* [ ] 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.

* HEIF images that have been converted to JPEGs are labeled [JPEG].

Detailed information display for still photos 2

(1)	Auto Lighting Optimizer

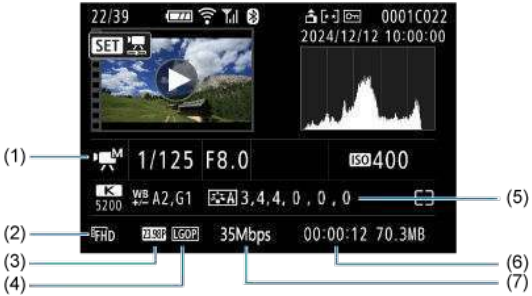
* For simplicity, explanations are omitted for items that are also included in Basic information display for still photos and Detailed information display for still photos 1, which are not shown here.

Basic information display for movies

(1)	Movie playback
(2)	Vertical information display for movies
(3)	Reel and clip numbers
(4)	Recording time/Time code

* For simplicity, explanations are omitted for items also included in Basic information display for still photos, which are not shown here.

Detailed information display for movies 1



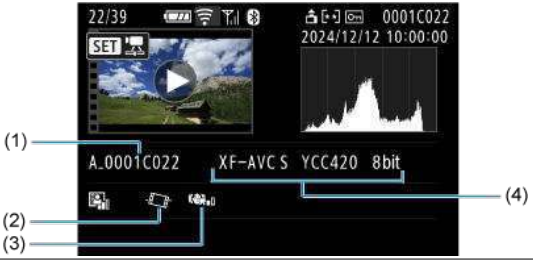
(1)	Movie recording mode
(2)	Movie recording size
(3)	Frame rate
(4)	Compression method
(5)	Picture Style (image characteristics/setting details)/Color filter/Custom Picture
(6)	Recording time/Time code
(7)	Bit rate

* For simplicity, explanations are omitted for items that are also included in Basic information display for still photos, Detailed information display for still photos 1, and Basic information display for movies, which are not shown here.

Note

- During movie playback, "*, *" is displayed for the [**Fineness**] and [**Threshold**] parameters of [**Sharpness**] in [**Picture Style**].

Detailed information display for movies 2



(1)	Movie file name
(2)	Movie auto level
(3)	Image Stabilizer (Movie digital IS)
(4)	Movie recording format

* For simplicity, explanations are omitted for items that are also included in Basic information display for still photos, Detailed information display for still photos 1, Basic information display for movies, and Detailed information display for movies 1, which are not shown here.

Specifications

Type

Type: Digital single-lens non-reflex AF/AE camera
Lens mount: Canon RF mount
Compatible lenses: Canon RF lens group (including RF-S lenses)
* Canon EF or EF-S lenses (excluding EF-M lenses) also compatible, using Mount Adapter EF-EOS R
Lens focal length: Approx. 1.6 times the focal length indicated on the lens

Image sensor

Type: APS-C CMOS sensor

Effective pixels*1*2	Max. approx. 24.2 megapixels
Total pixels*1	Approx. 25.5 megapixels
Screen size	Approx. 22.3×14.9 mm
Dual Pixel CMOS AF	Supported

* 1: Rounded to the nearest 100,000.
* 2: Using RF or EF lenses.
The effective pixel count may be lower with certain lenses and 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	
Movies*1	XF-HEVC S YCC422 10 bit XF-HEVC S YCC420 10 bit XF-AVC S YCC422 10 bit XF-AVC S YCC420 8 bit	.MP4

* 1: When a movie is recorded with [**Add CP File**: **On**] set when [**Custom Picture**] is set, a ".CPF" file will be created.

Recording media

Recording media

Single slot: SDXC/SDHC/SD memory card

* UHS-II/UHS-I/UHS speed class/SD speed class supported

Still photo recording

Recording pixel count

Image size		Resolution (Pixels)			
		Still photo aspect ratio			
		3:2	4:3	16:9	1:1
JPEG / HEIF	L	24.0 megapixels (6000×4000)	Approx. 21.3 megapixels*1 (5328×4000)	Approx. 20.2 megapixels*1 (6000×3368)	16.0 megapixels (4000×4000)
	M	Approx. 10.6 megapixels (3984×2656)	Approx. 9.5 megapixels (3552×2664)	Approx. 8.9 megapixels*1 (3984×2240)	Approx. 7.1 megapixels (2656×2656)
	S1	Approx. 5.9 megapixels (2976×1984)	Approx. 5.3 megapixels (2656×1992)	Approx. 5.0 megapixels*1 (2976×1680)	Approx. 3.9 megapixels (1984×1984)
	S2	Approx. 3.8 megapixels (2400×1600)	Approx. 3.4 megapixels*1 (2112×1600)	Approx. 3.2 megapixels*1 (2400×1344)	Approx. 2.6 megapixels (1600×1600)
RAW	RAW / C RAW	24.0 megapixels (6000×4000)			

* 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: Aspect ratios are slightly different for these image sizes.

Still photo file size / Number of shots available / Maximum burst for continuous shooting

Image quality		File size [Approx. MB]	Number of shots available [Approx.]*1	Maximum burst [Approx.]*1	
				Electronic 1st-curtain	Electronic shutter
JPEG*2	L	8.7	14040	140	95
	L	4.6	26460	140	95
	M	4.7	25740	140	95
	M	2.6	45600	140	95
	S1	3.1	39020	140	95
	S1	1.8	64490	140	95
	S2	1.8	65020	140	95
HEIF*3	L	9.0	13470	130	91
	L	6.8	17550	130	91
	M	5.2	22540	130	91
	M	4.1	28670	130	91
	S1	3.5	32870	130	91
	S1	2.9	40400	130	91
	S2	1.9	56440	130	91
RAW*2	RAW	27.0	4570	59	36
	CRAW	14.0	8920	120	79
RAW+JPEG*2	RAW+L	27.0 + 8.7	3440	36	27
	CRAW+L	14.0 + 8.7	5450	110	66
RAW+HEIF*3	RAW+L	29.9 + 9.0	3140	23	22
	CRAW+L	16.9 + 9.0	4730	49	47

* 1: Maximum burst applies to 128 GB UHS-II cards conforming to Canon testing standards.
* 2: When [**HDR shooting (PQ)**: **Disable**] is set.
* 3: When [**HDR shooting (PQ)**: **HDR PQ**] is set.
* Maximum burst as measured under conditions conforming to Canon testing standards (One-Shot AF mode, High-speed continuous shooting +, ISO 100, Standard Picture Style, and Room temperature: 23°C / 73°F).
* File size varies by shooting conditions (such as still photo aspect ratio, subject, ISO speed, Picture Style, and Custom Functions).
* Number of shots available and maximum burst varies depending on shooting conditions (including still photo aspect ratio, subject, memory card brand, ISO speed, Picture Style, and Custom Functions).

Movie recording

Movie recording format

Movie recording format	Video codec	Color sampling method	Bit depth	File extension
XF-HEVC S YCC422 10 bit	H.265 / HEVC	YCbCr 4:2:2	10 bits	MP4
XF-HEVC S YCC420 10 bit	H.265 / HEVC	YCbCr 4:2:0	10 bits	MP4
XF-AVC S YCC422 10 bit	H.264 / MPEG-4 AVC	YCbCr 4:2:2	10 bits	MP4
XF-AVC S YCC420 8 bit	H.264 / MPEG-4 AVC	YCbCr 4:2:0	8 bits	MP4

Movie recording size

Recording format	Compression method	Resolution	Frame rate						
			119.88	100.00	59.94	50.00	29.97	25.00	23.98
XF-HEVC S YCC422 10 bit XF-HEVC S YCC420 10 bit XF-AVC S YCC422 10 bit XF-AVC S YCC420 8 bit	Standard LGOP	4K					Yes	Yes	Yes
		4K Crop			Yes	Yes			
		Full HD	Yes*1*2	Yes*1*2	Yes	Yes	Yes	Yes	Yes

* 1: Sound will be recorded and movies will be played back at actual speed when set to other than S&F movie recording. When S&F movie recording is set, sound will not be recorded and movies will be played back at a maximum of 59.94 fps (NTSC) or 50.00 fps (PAL). Only exFAT-formatted cards can be used for recording (recording to FAT32-formatted cards is not possible).
* 2: Autofocusing is more difficult under low light or for low-contrast subjects. Autofocusing may not be possible in certain movie recording with the aperture value set for a small aperture. In this case, the following methods may enable autofocusing.
  - Set toward maximum aperture
  - Switch to a lens with a small f-number

Movie recording angle of view

Resolution	Recording angle of view (Approx. %)	
	Horizontal	Vertical
4K	100	84.4
4K Crop	64.0	54.0
Full HD	100	84.3

* The above values are based on the angle of view of still photo (JPEG/HEIF) being 100%.

Built-in microphone: Stereo microphones
External microphone (External microphone IN terminal): 3.5 mm diameter stereo mini jack (3-pin)
* Stereo Microphone DM-E100 is recommended if plug-in power will be used.

Estimated recording time, video bit rate, file size, and card performance requirements

4K

Recording format	Compres-sion method	Frame rate (fps)	Total recording time per card (approx.)			Video bit rate (Approx. Mbps)	File size (Approx. MB/min.)	Card perfor-mance require-ments
			64 GB	128 GB	512 GB			
XF-HEVC S YCC422 10 bit	Standard LGOP	29.97	1 hr. 3 min.	2 hr. 6 min.	8 hr. 24 min.	135	968	UHS Speed Class 3 or higher
		25.00						
		23.98						
XF-HEVC S YCC420 10 bit	Standard LGOP	29.97	1 hr. 25 min.	2 hr. 50 min.	11 hr. 20 min.	100	718	UHS Speed Class 3 or higher
		25.00						
		23.98						
XF-AVC S YCC422 10 bit	Standard LGOP	29.97	56 min.	1 hr. 53 min.	7 hr. 34 min.	150	1075	UHS Speed Class 3 or higher
		25.00						
		23.98						
XF-AVC S YCC420 8 bit	Standard LGOP	29.97	1 hr. 25 min.	2 hr. 50 min.	11 hr. 20 min.	100	718	UHS Speed Class 3 or higher
		25.00						
		23.98						

* Video bit rate indicates video only; audio and metadata are not included.
* When [**Audio format**: **AAC/16bit/2CH**] is set.
* Movie recording stops when the maximum recording time per movie is reached.

4K Crop

Recording format	Compres-sion method	Frame rate (fps)	Total recording time per card (approx.)			Video bit rate (Approx. Mbps)	File size (Approx. MB/min.)	Card perfor-mance require-ments
			64 GB	128 GB	512 GB			
XF-HEVC S YCC422 10 bit	Standard LGOP	59.94	37 min.	1 hr. 15 min.	5 hr. 3 min.	225	1612	Video Speed Class V60 or higher
		50.00						
XF-HEVC S YCC420 10 bit	Standard LGOP	59.94	56 min.	1 hr. 53 min.	7 hr. 34 min.	150	1075	UHS Speed Class 3 or higher
		50.00						
XF-AVC S YCC422 10 bit	Standard LGOP	59.94	34 min.	1 hr. 8 min.	4 hr. 32 min.	250	1791	Video Speed Class V60 or higher
		50.00						
XF-AVC S YCC420 8 bit	Standard LGOP	59.94	56 min.	1 hr. 53 min.	7 hr. 34 min.	150	1075	UHS Speed Class 3 or higher
		50.00						

* Video bit rate indicates video only; audio and metadata are not included.
* When [**Audio format**: **AAC/16bit/2CH**] is set.
* Movie recording stops when the maximum recording time per movie is reached.

Full HD

Recording format	Compres-sion method	Frame rate (fps)	Total recording time per card (approx.)			Video bit rate (Approx. Mbps)	File size (Approx. MB/min.)	Card perfor-mance require-ments
			64 GB	128 GB	512 GB			
XF-HEVC S YCC422 10 bit	Standard LGOP	119.88	1 hr. 25 min.	2 hr. 50 min.	11 hr. 20 min.	100	718	UHS Speed Class 3 or higher
		100.00						
		59.94	2 hr. 49 min.	5 hr. 39 min.	22 hr. 38 min.	50	360	SD Speed Class 10 or higher
		50.00						
		29.97						
		25.00						
		23.98						
XF-HEVC S YCC420 10 bit	Standard LGOP	119.88	2 hr. 1 min.	4 hr. 2 min.	16 hr. 11 min.	70	503	SD Speed Class 10 or higher
		100.00						
		59.94	4 hr. 2 min.	8 hr. 4 min.	32 hr. 15 min.	35	253	SD Speed Class 6 or higher
		50.00						
		29.97						
		25.00						
		23.98						
XF-AVC S YCC422 10 bit	Standard LGOP	119.88	1 hr. 25 min.	2 hr. 50 min.	11 hr. 20 min.	100	718	UHS Speed Class 3 or higher
		100.00						
		59.94	2 hr. 49 min.	5 hr. 39 min.	22 hr. 38 min.	50	360	SD Speed Class 10 or higher
		50.00						
		29.97						
		25.00						
		23.98						

XF-AVC S YCC420 8 bit	Standard LGOP	119.88	2 hr. 1 min.	4 hr. 2 min.	16 hr. 11 min.	70	503	SD Speed Class 10 or higher
		100.00						
		59.94	4 hr. 2 min.	8 hr. 4 min.	32 hr. 15 min.	35	253	SD Speed Class 6 or higher
		50.00						
		29.97						
		25.00						
		23.98						

* Video bit rate indicates video only; audio and metadata are not included.
* When [**Audio format**: **AAC/16bit/2CH**] is set.
* Movie recording stops when the maximum recording time per movie is reached.

Auto stopping of movie recording

Maximum recording time per recording

Normal movies

100.00 fps or more	Maximum: 1 hr.
59.94 fps or less	Maximum: 2 hr.

* Longest time available per recording.
* Except when movie recording stops due to overheating, the power supply used, errors, or other reasons.

S&F movies (NTSC)

▶ fps	fps	Rec time
59.94	120	Maximum: 1 hr.
	60 / 30 / 12 / 6 / 3 / 2 / 1	Maximum: 2 hr.
29.97	120	Maximum: 30 min.
	60	Maximum: 1 hr.
	30 / 12 / 6 / 3 / 2 / 1	Maximum: 2 hr.
23.98	120	Maximum: 24 min.
	60	Maximum: 48 min.
	30	Maximum: 1 hr. 36 min.
	12 / 6 / 3 / 2 / 1	Maximum: 2 hr.

S&F movies (PAL)

▶ fps	fps	Rec time
50.00	100	Maximum: 1 hr.
	50 / 25 / 12 / 6 / 3 / 2 / 1	Maximum: 2 hr.
25.00	100	Maximum: 30 min.
	50	Maximum: 1 hr.
	25 / 12 / 6 / 3 / 2 / 1	Maximum: 2 hr.

* Longest time available per recording.
* Except when movie recording stops due to overheating, the power supply used, errors, or other reasons.

Autofocus (AF)

Focusing method: Dual Pixel CMOS AF

Focusing brightness range
Still photo shooting: EV –5.0 to 20
(with an f/1.2 lens,* center AF point, One-Shot AF at room temperature, and ISO 100)
* Except RF lenses with a Defocus Smoothing (DS) coating
Movie recording
4K 30p: EV –2.5 to 20
Full HD 30p: EV –3.0 to 20
(with an f/1.2 lens,* center AF point, One-Shot AF at room temperature, ISO 100, and 29.97 / 25.00 fps)
* Except RF lenses with a Defocus Smoothing (DS) coating

Focusing operation

	Still photo shooting	Movie recording
AF operation	One-Shot AF AI Focus AF Servo AF	One-Shot 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).
* [**AI Focus AF**] is automatically set when Basic Zone still photo shooting is set.

Focus mode: AF / MF
* Applies when an RF or RF-S lens without a focus mode switch is used.
* When lenses with a focus mode switch are used, the setting on the lens takes precedence.

Lens compatibility based on AF area: Refer to the Canon website ( ).

Number of AF area available for automatic selection

Focusing area		Horizontal: Approx. 100%, Vertical: Approx. 100%
Number of AF zones	Still photo	Max. 651 zones (31×21)
	Movie	Max. 527 zones (31×17)

* May vary depending on settings.

Selectable positions for AF point

Focusing area		Horizontal: Approx. 90%, Vertical: Approx. 100%
Numbers of positions	Still photo	Max. 4235 positions (77×55)
	Movie	Max. 3465 positions (77×45)

* When set to [1-point AF] and selected using the cross keys.
* Values for the selectable positions for AF points do not represent AF performance.

Screen

Type: TFT color LCD screen
Screen size: Approx. 7.5 cm (3.0-inch) (aspect ratio of 3:2)
Dot count: Approx. 1,040,000 dots
Angle of view: Approx. 150° 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 micro OUT 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	
Metering mode	Evaluative metering	Yes	Yes
	Partial metering	Yes * Approx. 5.8% in the center of the screen*2	
	Spot metering*1	Yes * Approx. 2.9% in the center of the screen*2	
	Center-weighted average	Yes	
Metering brightness range (at room temperature, ISO 100)		EV –2 to 20	EV 0 to 20

* 1: Multi-spot metering not available (not supported).
* 2: Values differ when set to Digital tele-converter.

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-stop increments)
Expanded ISO speeds*1	H (equivalent to ISO 51200)

* 1: Expanded ISO speeds available when C.Fn [**ISO expansion**: **Enable**] is set.
* When set to [**Highlight tone priority**], the available manual setting range is ISO 200–32000.
* Expanded ISO speeds are not available when [HDR **HDR Mode**] or [**HDR shooting (PQ)**: **HDR PQ**] is set.

Manual ISO speed setting range for still photos: Not supported

Auto maximum limit for still photos

Auto maximum limit	ISO 400 / 800 / 1600 / 6400 / 12800 / 25600 / 32000

ISO Auto details for still photos

Shooting mode		No flash	Using flash	
			Variable control of maximum ISO Auto limit for E-TTL when using a compatible lens	Variable control of maximum ISO Auto limit for E-TTL when using an incompatible lens
Creative	P / Tv / Av / M	ISO 100*1–32000*2	ISO 100*1–6400*2	ISO 100*1–1600*2
	B	ISO 400*3	ISO 400*3	
Basic	A+	ISO 100–6400	ISO 100–6400	ISO 100–1600
	Other than A+	Varies depending on shooting mode		

* 1: ISO 200 when set to [**Highlight tone priority**: **Enable**/**Enhanced**].
* 2: Varies depending on the [**Max for Auto**] settings.
* 3: If outside the setting range, changed to the value most close to ISO 400.

Variable control of maximum ISO Auto limit for E-TTL: Supported

ISO speed (recommended exposure index) in movie recording

manual ISO speed setting (when M mode is set)

	Custom Picture	ISO speed
Normal ISO speed	Off*1	ISO 100–12800
	Canon 709 / PQ / HLG / Canon Log 3*2	ISO 400–12800
	BT.709 Standard*2	ISO 160–12800
Expanded ISO speed	Off*3*4	H (equivalent to ISO 16000, 20000, or 25600)
	Canon 709 / PQ / HLG / Canon Log 3*2	L (equivalent to ISO 100, 125, 160, 200, 250, or 320) H (equivalent to ISO 16000, 20000, or 25600)
	BT.709 Standard*2	L (equivalent to ISO 100 or 125) H (equivalent to ISO 16000, 20000, or 25600)

* 1: The lower end of the ISO speed range starts from ISO 200 when [**Highlight tone priority**] is set.
* 2: [**Highlight tone priority**] cannot be set when Custom Picture is set.
* 3: Expanded ISO speeds are not available when [**HDR shooting (PQ)**: **HDR PQ**] is set.
* 4: Expanded ISO speeds are not available when [**Highlight tone priority**] is set.

automatic ISO speed setting (P / Tv / Av / C1 / C2 / C3 / S&F mode, and M mode with ISO Auto set)

	Custom Picture	ISO speed
Normal ISO speed	Off*1	ISO 100–12800
	Canon 709 / PQ / HLG / Canon Log 3*2	ISO 400–12800
	BT.709 Standard*2	ISO 160–12800
Expanded ISO speed	Off*3*4	H (equivalent to ISO 16000, 20000, or 25600)
	Canon 709 / PQ / HLG / Canon Log 3*2	
	BT.709 Standard*2	

* 1: The lower end of the ISO speed range starts from ISO 200 when [**Highlight tone priority**] is set.
* 2: [**Highlight tone priority**] cannot be set when Custom Picture is set.
* 3: Expanded ISO speeds are not available when [**HDR shooting (PQ)**: **HDR PQ**] is set.
* 4: Expanded ISO speeds are not available when [**Highlight tone priority**] is set.
* Maximum ISO speed when set automatically corresponds to the [**Max for Auto**] setting.

automatic ISO speed setting (when Basic (Movie) Zone is set)

Normal ISO speed: ISO 100–12800

* Expanded ISO speed is not available.

* [**Custom Picture**], [**Highlight tone priority**], and [**HDR shooting (PQ)**] cannot be set when Basic (Movie) Zone is set.

manual ISO speed setting range limit: Not supported

Maximum ISO Auto setting

Maximum ISO Auto	ISO 6400 / 12800 / H (equivalent to ISO 25600)*1

* 1: When C.Fn [**ISO expansion**: **Enable**] is set.

Maximum ISO auto setting for time-lapse movies

Maximum ISO Auto	ISO 400 / 800 / 1600 / 3200 / 6400 / 12800

Shutter

Still photo shooting

Type:
Electronically controlled focal-plane shutter
Rolling shutter, using the image sensor

Shutter mode

Shutter mode	Flash photography
Electronic 1st-curtain	Available
Electronic shutter	Disabled

Shutter speed

Shutter mode	Setting range
Electronic 1st-curtain	1/4000–30 sec., bulb
Electronic shutter	1/8000–30 sec., bulb

Flash sync speed

	EL/EX Speedlite	Non-Canon flash unit
Electronic 1st-curtain	1/250 sec.	1/250 sec.

Movie recording

Type: Rolling shutter, using the image sensor
Shutter speed: 1/4000–1/8 sec.
* The minimum value varies by shooting mode and frame rate.

Drive

Drive mode and continuous shooting speed

[Max. approx.]

Drive mode	AF operation	Electronic 1st-curtain	Electronic shutter
Single shooting		Yes	Yes
High-speed continuous shooting +	One-Shot AF AI Focus AF Servo AF	12 shots/sec.	15 shots/sec.
High-speed continuous shooting	One-Shot AF AI Focus AF Servo AF	7.6 shots/sec.	15 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 / 4K Crop movies recorded with the camera can be saved as approx. 8.3-megapixel (3840×2160) still photos (JPEG or HEIF).
* Still photos are saved as JPEGs from normal movies, and as HEIF images from HDR shooting (PQ) movies.
* In-camera resizing, cropping, and Creative Assist (during playback) is not supported for extracted still photos.
* The camera cannot frame grab still photos from movies recorded when [CP **function**: **On**] is set.

Print order (DPOF)

Compliant with DPOF Version 1.1

External interface

Digital terminal

Terminal type	USB Type-C™
Transmission	Equivalent to USB 10 Gbps (SuperSpeed Plus USB / USB 3.2 Gen 2)
Applications	For computer communication / smartphone communication USB battery charging / camera power supply

HDMI output terminal: HDMI terminal (Type D)
* Resolution switches automatically
External microphone IN terminal: 3.5 mm diameter stereo mini jack (3-pin)
Headphone terminal: 3.5 mm diameter stereo mini-jack
Remote control terminal: Remote Switch RS-60E3 (sold separately) supported

Power source

Battery

Compatible battery pack	LP-E17
Quantity used	1

USB battery charging and camera power supply: Using USB Power Adapter PD-E2/PD-E1
AC power source: AC Adapter AC-E6N and DC Coupler DR-E18

Number of shots available

Shooting method	Temperature	Available shots (approx.)	
		Power saving*1	Smooth*2
On-screen shooting	+23°C / 73°F	480	390

* 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 used with the multi-function shoe, because the camera powers the accessory.

Available operating time

Conditions of use			Temperature	Available operating time
Time available for bulb exposure			+23°C / 73°F	Approx. 3 hr.
Time available for Live View shooting			+23°C / 73°F	Approx. 3 hr. 10 min.
Time available for movie recording*1	4K	29.97 / 25.00 fps	+23°C / 73°F	Approx. 1 hr. 10 min.
			0°C / 32°F	Approx. 1 hr. 10 min.
	Full HD	29.97 / 25.00 fps	+23°C / 73°F	Approx. 2 hr. 20 min.
			0°C / 32°F	Approx. 2 hr. 10 min.
Time available for movie playback (normal playback)	4K	29.97 / 25.00 fps	+23°C / 73°F	Approx. 3 hr. 10 min.

* With a new, fully charged LP-E17
* 1: When [**Movie Servo AF**: **Disable**] is set.

Dimensions and weight

Dimensions

Exterior color	Dimensions
Black / White	(W) × (H) × (D)
	Approx. 119.3 × 73.7 × 45.2 mm / 4.70 × 2.90 × 1.78 in.

* Based on CIPA guidelines.

Weight

Exterior color	Measurement conditions	Weight
Black	Body (including battery and card)*1	Approx. 370 g / 13.05 oz.
	Body only	Approx. 323 g / 11.39 oz.
White	Body (including battery and card)*1	Approx. 373 g / 13.16 oz.
	Body only	Approx. 326 g / 11.50 oz.

* Not including body cap or shoe cover.
* 1: Based on CIPA guidelines.

Operating environment

Operating temperature: 0–40°C / 32–104°F
Operating humidity: 85% or less

Wi-Fi (wireless LAN)

Supported standards (equivalent to IEEE 802.11b/g/n/a/ac standards)

Wi-Fi standards (equivalent)	Transmission method	Maximum link speed	
		5 GHz band	2.4 GHz band
IEEE 802.11ac	OFDM modulation (CSMA / CA)	433 Mbps	
IEEE 802.11n		150 Mbps	72 Mbps
IEEE 802.11a		54 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

5 GHz band

Frequency	5180 to 5825 MHz
Channels	36 to 165 ch

* Specifications vary by country/region.

Authentication and data encryption methods

2.4 GHz band / 5 GHz band

Connection method	Authentication	Encryption
Camera access point	Open	Disable
	WPA2 / WPA3-Personal	AES
Infrastructure	Open	Disable
	WPA / WPA2 / WPA3-Personal	AES

Bluetooth

Standards compliance: Bluetooth Specification Version 5.1 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.
- If a problem occurs with a non-Canon lens attached to the camera, contact the respective lens manufacturer.

Trademarks and Licensing

- Trademarks
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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/