

Canon

EOS 77D



Instruction Manual

Instruction manuals (PDF files) and software can be downloaded from the Canon website (p.4, 489).

www.canon.com/icpd

ENGLISH

Introduction

The EOS 77D is a digital single-lens reflex camera featuring a fine-detail CMOS sensor with approx. 24.2 effective megapixels, DIGIC 7, high-precision and high-speed 45-point AF (up to 45 cross-type AF points), maximum continuous shooting speed of approx. 6.0 shots/sec., Live View shooting, Full High-Definition (Full HD) movie shooting, and Wi-Fi/NFC/Bluetooth (wireless communication) function.

Before Starting to Shoot, Be Sure to Read the Following

To avoid botched pictures and accidents, first read the “Safety Precautions” (p.22-24) and “Handling Precautions” (p.25-27). Also, read this manual carefully to ensure that you use the camera correctly.

Refer to This Manual while Using the Camera to Further Familiarize Yourself with the Camera

While reading this manual, take a few test shots and see how they come out. You can then better understand the camera. Be sure to store this manual safely, too, so that you can refer to it again when necessary.

Testing the Camera Before Use and Liability

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

Copyrights

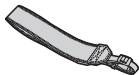
Copyright laws in your country may prohibit the use of your recorded images or copyrighted music and images with music on the memory card for anything other than private enjoyment. Also be aware that certain public performances, exhibitions, etc., may prohibit photography even for private enjoyment.

Item Check List

Before starting, check that all the following items are included with your camera. If anything is missing, contact your dealer.



Camera
(with eyecup and body cap)



Strap



**Battery Pack
LP-E17**
(with protective cover)



**Battery Charger
LC-E17E***

* Battery Charger LC-E17E comes with a power cord.

- **The camera does not come with the Software CD-ROM, an interface cable or HDMI cable.**
- The Instruction Manuals are listed on the next page.
- If you purchased a Lens Kit, check that the lenses are included.
- Be careful not to lose any of the above items.
- For items sold separately, see the System Map (p.440).



When you need Lens Instruction Manuals, download them from the Canon website (p.4).

The Lens Instruction Manuals (PDF) are for lenses sold individually. Note that when purchasing the Lens Kit, some of the accessories included with the lens may not match those listed in the Lens Instruction Manual.



Software can be downloaded from the Canon website (p.489) for your use.

Instruction Manuals



Quick Reference Guide

The booklet is the Quick Reference Guide.

More detailed Instruction Manuals (PDF files) can be downloaded from the Canon website.

Downloading and Viewing the Instruction Manuals (PDF Files)

1 Download the Instruction Manuals (PDF files).

- Connect to the Internet and access the following Canon website.

www.canon.com/icpd

- Select your country or region of residence and download the Instruction Manuals.

Instruction Manuals Available for Download

- Camera Instruction Manual
- Wi-Fi (Wireless Communication) Function Instruction Manual
- Lens Instruction Manuals
- Software Instruction Manuals

2 View the Instruction Manuals (PDF files).

- Double-click a downloaded Instruction Manual (PDF file) to open it.
- To view the Instruction Manuals (PDF files), Adobe Acrobat Reader DC or other Adobe PDF viewer (most recent version recommended) is required.
- Adobe Acrobat Reader DC can be downloaded for free from the Internet.
- To learn how to use PDF viewing software, refer to the software's Help section.



Software can be downloaded from the Canon website (p.489) for your use.

The Instruction Manuals (PDF files) can also be downloaded using the QR code.

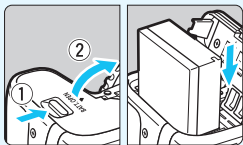


www.canon.com/icpd

- A software application is required to read out the QR code.
- Select your country or region of residence, then download the Instruction Manuals.
- The QR code can also be displayed under [**4: Manual/software URL**].

Quick Start Guide

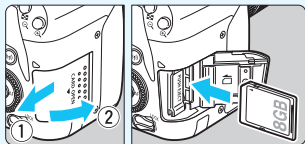
1



Insert the battery (p.40).

- Upon purchase, charge the battery to start using (p.38).

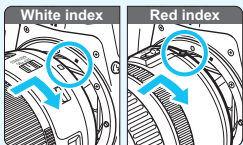
2



Insert the card (p.41).

- With the card's label facing toward the back of the camera, insert it into the card slot.

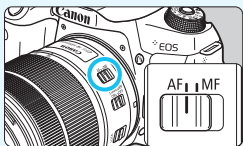
3



Attach the lens (p.51).

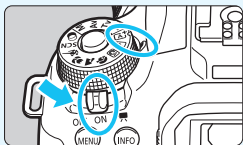
- Align the lens's white or red mount index with the camera's mount index of the same color to attach the lens.

4



Set the lens's focus mode switch to <AF> (p.51).

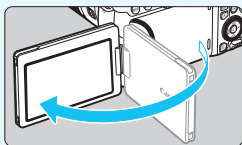
5



Set the power switch to <ON>, then set the Mode Dial to <[Camera Icon]+> (Scene Intelligent Auto) (p.84).

- Turn the Mode Dial while holding down the lock release button at the center.
- All the necessary camera settings will be set automatically.

6

**Flip out the LCD monitor** (p.44).

- When the LCD monitor displays the date/time/zone setting screen, see page 47.

7

**Focus on the subject** (p.54).

- Look through the viewfinder and aim the viewfinder center over the subject.
- Press the shutter button halfway, and the camera will focus on the subject.
- The built-in flash will be raised as necessary.

8

**Take the picture** (p.54).

- Press the shutter button completely to take the picture.

9

**Review the picture.**

- The image just captured will be displayed for approx. 2 sec. on the LCD monitor.
- To display the image again, press the <▶> button (p.121).
- To shoot while looking at the LCD monitor, see “Live View Shooting” (p.241).
- To view the images captured so far, see “Image Playback” (p.121).
- To delete images, see “Erasing Images” (p.375).

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 (p.74).**

- **SD/SDHC*/SDXC* memory cards**

* UHS-I cards supported.

Cards that Can Record Movies

When shooting movies, use a large-capacity card with a reading/writing speed class at least as high as shown in the following table.

Movie Recording Size (p.287)		Recording Formats	
		MOV	MP4
ALL-I*		UHS Speed Class 3 or faster	-
IPB (Standard)		-	SD Speed Class 10 or faster
	Other than above	-	SD Speed Class 6 or faster
IPB (Light)		-	SD Speed Class 4 or faster

* Image-recording quality that is automatically set for time-lapse movie shooting (p.296).

- If you use a slow-writing card when shooting 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.
- To check the card's reading/writing speed, refer to the card manufacturer's website.



In this manual, "card" refers to SD memory cards, SDHC memory cards, and SDXC memory cards.

* **The camera does not come with a card for recording photos/movies.** Please purchase it separately.

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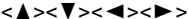

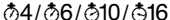
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Wi-Fi Function




- Wi-Fi (Wireless Communication) Function Instruction Manual

Conventions Used in this Manual

Icons in this Manual

-  : Indicates the Main Dial.
-  : Indicates the Quick Control Dial.
-  : Indicates the direction of the shift or move when the key on the Quick Control Dial is pressed.
-  : Indicates the Setting button.
-  : Indicates that each function remains active for approx. 4 sec., 6 sec., 10 sec., or 16 sec. after you let go of the button.

* In addition to the above, the icons and symbols used on the camera's buttons and displayed on the LCD monitor are also used in this manual when discussing relevant operations and functionality.

- MENU** : Indicates a function that can be changed by pressing the <MENU> button to change its settings.
- ☆ : This icon at the upper right of the page titles indicates that the function is available only in the Creative Zone modes (p.31).
- (p.***) : Reference page numbers for more information.
-  : Warning to prevent shooting problems.
-  : Supplemental information.
-  : Tips or advice for better shooting.
- ?
- : Troubleshooting advice.




Basic Assumptions and Sample Photos

- All operations described in this manual assume that the power switch is set to <ON> and the <LOCK> switch is set downward (Multi function lock released) (p.57).
- It is assumed that all the menu settings and Custom Functions are set to their defaults.
- The illustrations in this manual describe the camera attached with the EF-S18-135mm f/3.5-5.6 IS USM lens as an example.
- The sample photos displayed on the camera and used in this manual are only for illustrative purposes to show the effects more clearly.



















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
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
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Safety Precautions

The following precautions are provided to prevent harm or injury to yourself and others. Make sure to thoroughly understand and follow these precautions before using the product.

If you experience any malfunctions, problems, or damage to the product, contact the nearest Canon Service Center or the dealer from whom you purchased the product.



Warnings: Follow the warnings below. Otherwise, death or serious injuries may result.

- To prevent fire, excessive heat, chemical leakage, explosions, and electrical shock, follow the safeguards below:
 - Do not use any batteries, power sources, or accessories not specified in the Instruction Manual. Do not use any home-made or modified batteries, or the product if it is damaged.
 - Do not short-circuit, disassemble, or modify the battery. Do not apply heat or solder to the battery. Do not expose the battery to fire or water. Do not subject the battery to strong physical shock.
 - Do not insert the battery's plus and minus ends incorrectly.
 - Do not recharge the battery in temperatures outside the allowable charging (working) temperature range. Also, do not exceed the recharge time indicated in the Instruction Manual.
 - Do not insert any foreign metallic objects into the electrical contacts of the camera, accessories, connecting cables, etc.
- When disposing of a battery, insulate the electrical contacts with tape. Contact with other metallic objects or batteries may cause a fire or an explosion.
- If excessive heat, smoke, or fumes are emitted when recharging the battery, immediately unplug the battery charger from the power outlet to stop recharging. Otherwise, it may cause a fire, heat damage, or electrical shock.
- If the battery leaks, changes color, deforms, or emits smoke or fumes, remove it immediately. Be careful not to get burned in the process. It may cause a fire, electrical shock or burns if you keep using it.
- Prevent any battery leakage from contacting your eyes, skin, and clothing. It can cause blindness or skin problems. If the battery leakage comes in contact with your eyes, skin, or clothing, flush the affected area with lots of clean water without rubbing it. See a physician immediately.
- Do not leave any cords near a heat source. It can deform the cord or melt the insulation and cause a fire or electrical shock.
- Do not hold the camera in the same position for long periods of time. Even if the camera does not feel too hot, prolonged contact with the same body part may cause skin redness or blistering due to low-temperature contact burns. Using a tripod is recommended for people with circulation problems or very sensitive skin, or when using the camera in very hot places.
- Do not fire the flash at anyone driving a car or other vehicle. It may cause an accident.

- When the camera or accessories are not in use, make sure to remove the battery, and disconnect the power plug and connecting cables from the equipment before storing. This is to prevent electrical shock, excessive heat, fire, and corrosion.
- Do not use the equipment where there is flammable gas. This is to prevent an explosion or a fire.
- If you drop the equipment and the casing breaks open to expose the internal parts, do not touch the exposed internal parts. There is a possibility of an electrical shock.
- Do not disassemble or modify the equipment. High-voltage internal parts can cause electrical shock.
- Do not look at the sun or an extremely bright light source through the camera or lens. Doing so may damage your vision.
- Keep equipment out of the reach of children and infants, including when in use. Straps or cords may accidentally cause choking, electrical shock, or injury. Choking or injury may also occur if a child or infant accidentally swallows a camera part or accessory. If a child or infant swallows a part or accessory, consult a physician immediately.
- Do not use or store the equipment in dusty or humid places. Likewise, keep the battery away from metallic items and store it with its protective cover attached to prevent short-circuit. This is to prevent fire, excessive heat, electrical shock, and burns.
- Before using the camera inside an airplane or hospital, check if it is allowed. Electromagnetic waves emitted by the camera may interfere with the plane's instruments or the hospital's medical equipment.
- To prevent a fire and electrical shock, follow the safeguards below:
 - Always insert the power plug all the way in.
 - Do not handle a power plug with wet hands.
 - When unplugging a power plug, grasp and pull the plug instead of the cord.
 - Do not scratch, cut, or excessively bend the cord or put a heavy object on the cord. Also do not twist or tie the cords.
 - Do not connect too many power plugs to the same power outlet.
 - Do not use a cord whose wire is broken or insulation is damaged.
- Unplug the power plug periodically and clean off the dust around the power outlet with a dry cloth. If the surrounding is dusty, humid, or oily, the dust on the power outlet may become moist and short-circuit the outlet, causing a fire.
- Do not connect the battery directly to an electrical outlet or a car's cigarette lighter outlet. The battery may leak, generate excessive heat or explode, causing fire, burns, or injuries.
- A thorough explanation of how to use the product by an adult is required when the product is used by children. Supervise children while they are using the product. Incorrect usage may result in electrical shock or injury.
- Do not leave a lens or lens-attached camera in the sun without the lens cap attached. Otherwise, the lens may concentrate the sun's rays and cause a fire.
- Do not cover or wrap the product with a cloth when using it. Doing so may trap heat within and cause the casing to deform or catch fire.
- Be careful not to get the camera wet. If you drop the product in the water or if water or metal get inside the product, promptly remove the battery. This is to prevent fire, electrical shock, and burns.
- Do not use paint thinner, benzene, or other organic solvents to clean the product. Doing so may cause fire or a health hazard.



Cautions: Follow the cautions below. Otherwise, physical injury or property damage may result.

- Do not use or store the product in a high-temperature location such as inside a car under the hot sun. The product may become hot and cause burns. Doing so may also cause battery leakage or explosion, which will degrade the performance or shorten the life of the product.
- Do not carry the camera around when it is attached to a tripod. Doing so may cause an injury or an accident. Also make sure the tripod is sturdy enough to support the camera and lens.
- Do not leave the product in a low-temperature environment for an extended period of time. The product will become cold and may cause injury when touched.
- Do not fire the flash near the eyes. It may hurt the eyes.

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 you accidentally drop the camera into water, promptly consult the nearest Canon Service Center. 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 misoperation 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 the built-in flash or mirror operation with your finger, etc. Doing so may cause a malfunction.
- Use only a commercially-available blower to blow away dust when it adheres to the lens, viewfinder, reflex mirror, focusing screen, etc. 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, do not use the camera. This is to avoid damaging the camera. If there is condensation, remove the lens, card and battery from the camera, and wait until condensation has evaporated before using the camera.
- 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.
- If you repeat continuous shooting or perform Live View shooting or movie shooting for a prolonged period, the camera may become hot. This is not a malfunction.
- If there is a bright light source inside or outside the image area, ghosting may occur.

LCD Panel and LCD Monitor

- Although the LCD monitor is manufactured with very high precision technology with over 99.99% effective pixels, 0.01% or fewer of the pixels may be dead, and there may also be spots of black, red, or other colors. Dead pixels are not a malfunction. They do not affect the images recorded.
- If the LCD monitor 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 LCD monitor display may seem slightly slow in low temperatures, or look black in high temperatures. It will return to normal at room temperature.

Cards

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

- Do not drop, bend, or wet the card. Do not subject it to excessive force, physical shock, or vibration.
- Do not touch the card's electronic contacts with your fingers or anything metallic.
- Do not affix any stickers, etc., on the card.
- Do not store or use the card near anything that has a strong magnetic field, such as a TV set, 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.

Smudges adhering to the front of the sensor

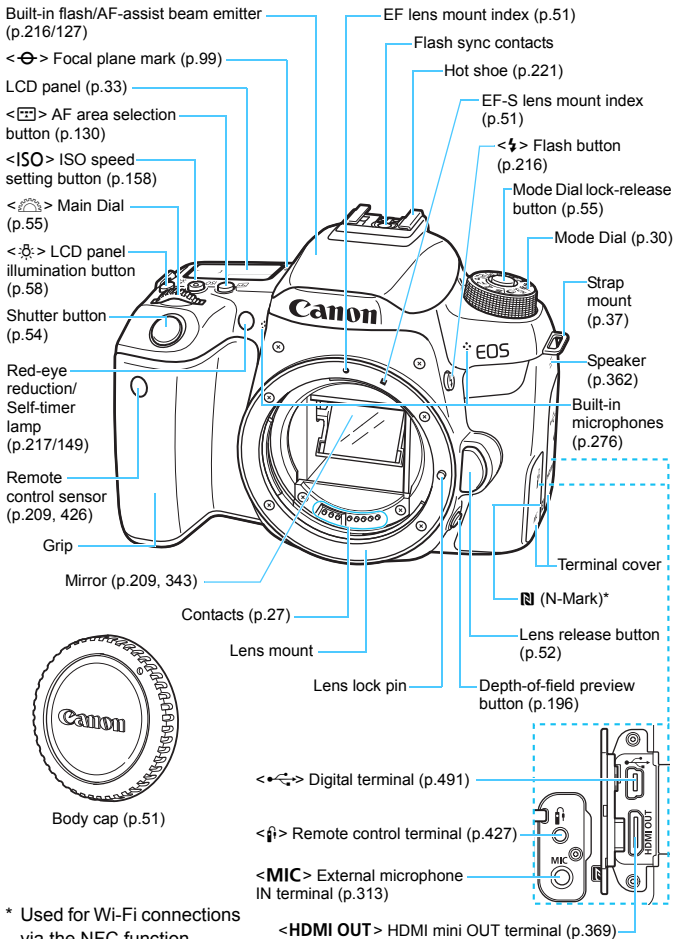
Besides dust entering the camera from outside, in rare cases, lubricant from the camera's internal parts may adhere to the front of the sensor. If smudges are visible on the images, having the sensor cleaned by a Canon Service Center is recommended.

Lens

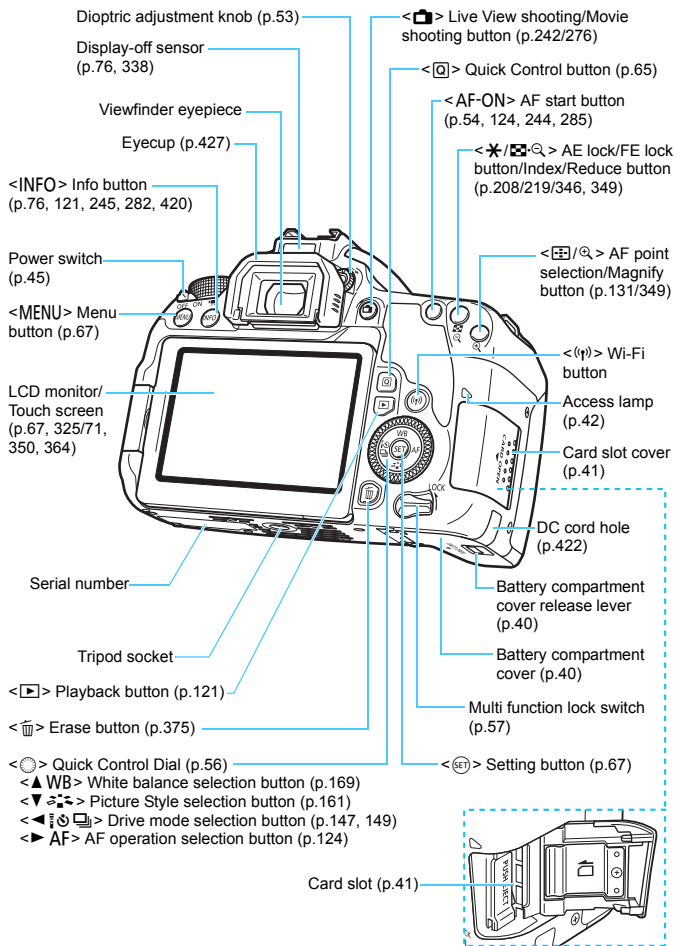
After detaching the lens from the camera, put down the lens with the rear end up and attach the rear lens cap to avoid scratching the lens surface and electrical contacts.



Nomenclature

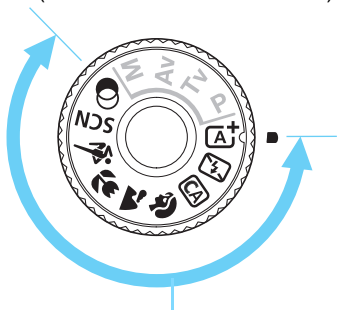


* Used for Wi-Fi connections via the NFC function.



Mode Dial

You can set the shooting mode. Turn the Mode Dial while holding down the Mode Dial center (Mode Dial lock release button).



Basic Zone

All you do is press the shutter button. The camera sets everything to suit the subject or scene for shooting.

A+ : **Scene Intelligent Auto**
(p.84)

Flash Off (p.89)

CA : **Creative Auto** (p.90)

Portrait (p.97)

Landscape (p.98)

Close-up (p.99)

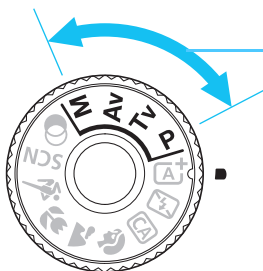
Sports (p.100)

SCN: Special scene (p.101)

	Group Photo (p.102)		Night Portrait (p.106)
	Kids (p.103)		Handheld Night Scene (p.107)
	Food (p.104)		HDR Backlight Control (p.108)
	Candlelight (p.105)		

Creative filters (p.111)

	Grainy B/W (p.113)		Miniature effect (p.114)
	Soft focus (p.113)		HDR art standard (p.114)
	Fish-eye effect (p.113)		HDR art vivid (p.114)
	Water painting effect (p.114)		HDR art bold (p.115)
	Toy camera effect (p.114)		HDR art embossed (p.115)



Creative Zone

These modes give you more control for shooting various subjects as desired.

P : Program AE (p.190)

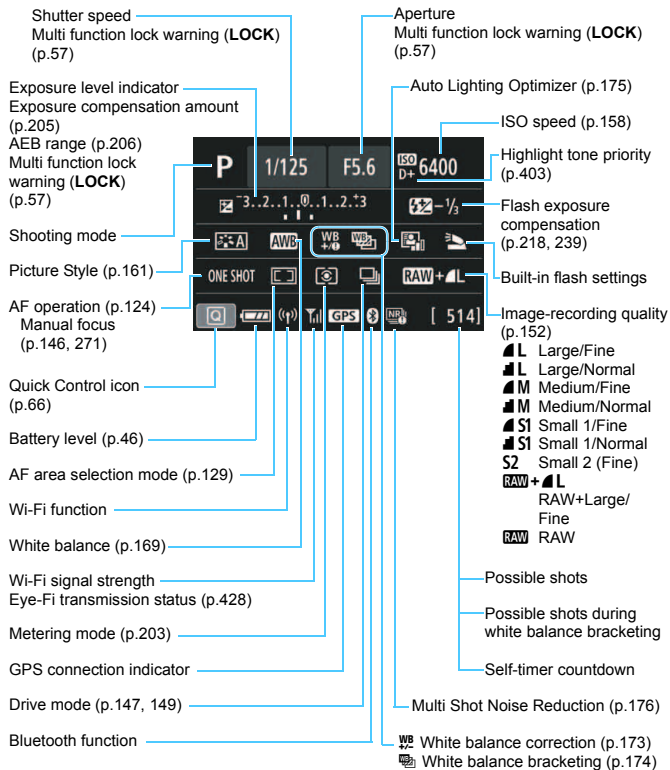
Tv : Shutter-priority AE (p.192)

Av : Aperture-priority AE (p.194)

M : Manual exposure (p.197)

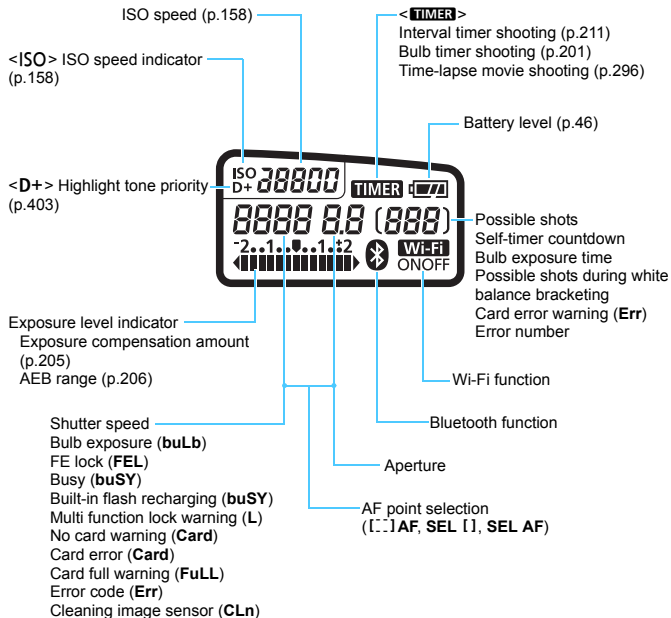
Quick Control Screen

(Example in the <P> mode with [: Shooting screen: Standard] set (p.65))



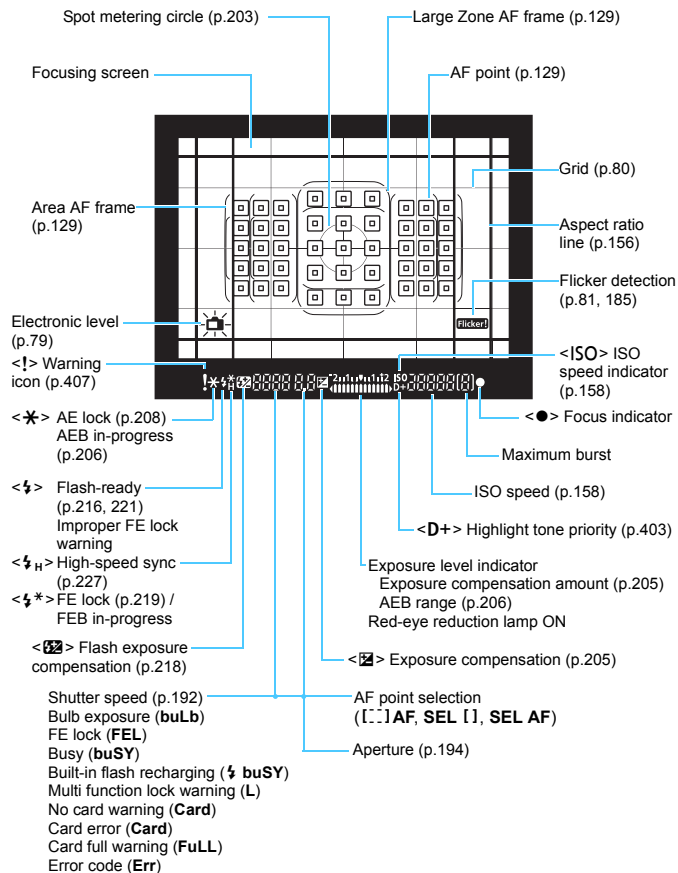
- The display will show only the settings currently applied.

LCD Panel



- The display will show only the settings currently applied.

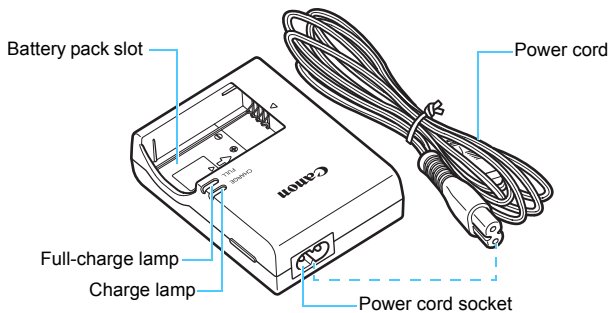
Viewfinder Information



- The display will show only the settings currently applied.

Battery Charger LC-E17E

Charger for Battery Pack LP-E17 (p.38).

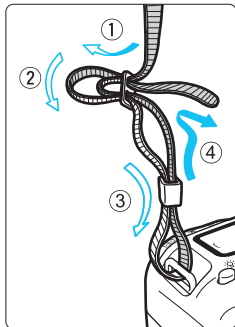




1

Getting Started and Basic Camera Operations

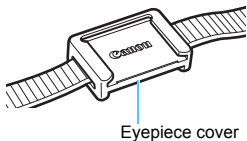
This chapter describes preparatory steps before you start shooting and the basic camera operations.



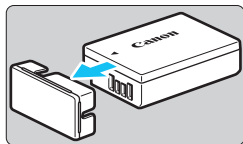
Attaching the Provided Strap

Pass the end of the strap through the camera's strap mount eyelet from the bottom. Then pass it through the strap's buckle as shown in the illustration. Pull the strap to take up any slack and make sure the strap will not loosen from the buckle.

- The eyepiece cover is also attached to the strap (p.427).

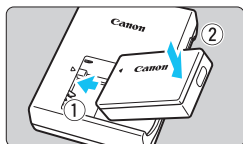


Charging the Battery



1 Remove the protective cover.

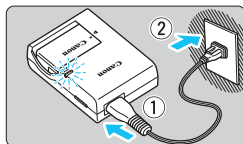
- Detach the protective cover provided with the battery.



2 Attach the battery.

- As shown in the illustration, attach the battery securely to the charger.
- To detach the battery, follow the above procedure in reverse.

LC-E17E



3 Recharge the battery.

- Connect the power cord to the charger and insert the plug into a power outlet.
- ▶ Recharging starts automatically and the charge lamp lights up in orange.
- ▶ When the battery is fully recharged, the full-charge lamp will light up in green.

- **It takes approx. 2 hours to fully recharge a completely exhausted battery at room temperature (23°C / 73°F).** The time required to recharge the battery will vary greatly depending on the ambient temperature and the battery's remaining capacity.
- For safety reasons, recharging in low temperatures (5°C - 10°C / 41°F - 50°F) will take longer (up to approx. 4 hr.).



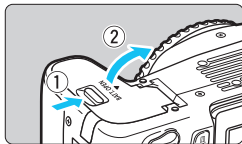
Tips for Using the Battery and Charger

- **Upon purchase, the battery is not fully charged.**
Charge the battery before use.
 - **Recharge the battery on the day before or on the day it is to be used.**
Even during storage, a charged battery will gradually drain and lose its capacity.
 - **After recharging the battery, detach 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 released, resulting in excess discharge and shorter battery life. Store the battery with the protective cover (provided) 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 (p.421) and purchase a new battery.
- After disconnecting the charger's power plug, do not touch the prongs for approx. 5 sec.
 - Do not charge any battery other than a Battery Pack LP-E17.
 - 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.

Installing and Removing the Battery

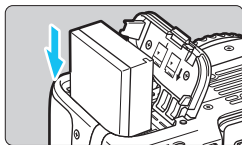
Load a fully charged Battery Pack LP-E17 into the camera. The camera's viewfinder becomes bright when a battery is installed, and darkens when the battery is removed. If the battery is not installed, the image in the viewfinder becomes blurred and you cannot perform focusing.

Installing the Battery



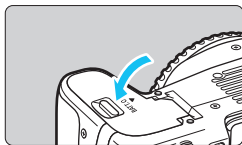
1 Open the cover.

- Slide the lever as shown by the arrows and open the cover.



2 Insert the battery.

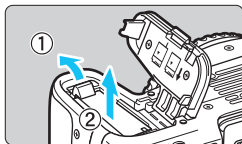
- Insert the end with the electrical contacts.
- Insert the battery until it locks in place.



3 Close the cover.

- Press the cover until it snaps shut.

Removing the Battery



Open the cover and remove the battery.

- Press the battery lock lever as shown by the arrow and remove the battery.
- To prevent short circuiting, be sure to attach the provided protective cover (p.38) to the battery.

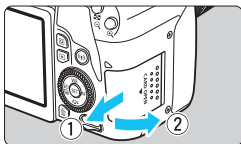
⚠ After opening the battery compartment cover, be careful not to forcefully swing it back further. Otherwise, the hinge may break.

Installing and Removing the Card

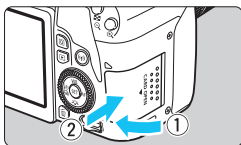
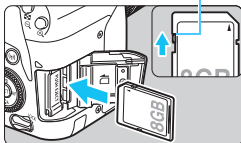
You can use an SD, SDHC, or SDXC memory card (sold separately) with the camera. SDHC and SDXC memory cards with UHS-I can also be used. The captured images are recorded onto the card.

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

Installing the Card



Write-protect switch



Possible shots

1 Open the cover.

- Slide the cover as shown by the arrows to open it.

2 Insert the card.

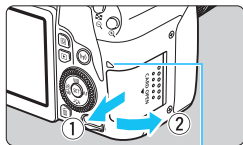
- As shown by the illustration, face the card's label side toward you and insert it until it clicks in place.

3 Close the cover.

- Close the cover and slide it in the direction shown by the arrows until it snaps shut.
- When you set the power switch to <ON>, the number of possible shots will be displayed on the LCD panel.

- The number of possible shots varies depending on the remaining capacity of the card, image-recording quality, ISO speed, etc.
- Setting [**1: Release shutter without card**] to [**Disable**] will prevent you from shooting without a card, forgetting to install it (p.324).

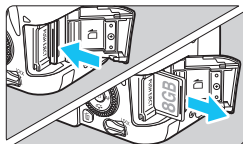
Removing the Card



Access lamp

1 Open the cover.

- Set the power switch to <OFF>.
- **Check that the access lamp is off, then open the cover.**
- If [**Recording...**] is displayed, close the cover.



2 Remove the card.

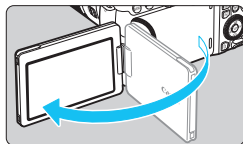
- Gently push in the card, then let it go to eject.
- Pull the card straight out, then close the cover.



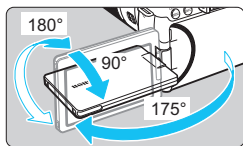
- **When the access lamp is lit or blinking, it indicates that images are being written to, read from, or erased from the card, or data is being transferred. Do not open the card slot cover during this time. Also, never do any of the following while the access lamp is lit or blinking. Otherwise, it can damage the image data, card, or camera.**
 - **Removing the card.**
 - **Removing the battery.**
 - **Shaking or banging the camera around.**
 - **Unplugging and connecting a power cord** (when household power outlet accessories (sold separately, p.422) are used).
- If the card already contains recorded images, the image number may not start from 0001 (p.329).
- If a card-related error message is displayed on the LCD monitor, 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 (p.74). 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 LCD Monitor

After you flip out the LCD monitor, you can set menu functions, use Live View shooting, shoot movies, or play back photos and movies. You can change the direction and angle of the LCD monitor.

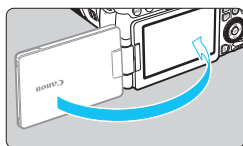


1 Flip out the LCD monitor.



2 Rotate the LCD monitor.

- When the LCD monitor is swung out, you can rotate it up, down, or over 180° to face the subject.
- The indicated angle is only approximate.



3 Face it toward you.

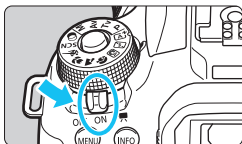
- Normally, use the camera with the LCD monitor facing you.

- ⚠ Be careful not to force and break the hinge when rotating the LCD monitor.
- When a cable is connected to a camera terminal, the rotation angle range of the flipped out LCD monitor will be limited.

- 📺 When not using the camera, close the LCD monitor with the screen facing inward. You can protect the screen.
- During Live View shooting or movie shooting, facing the LCD monitor toward the subject will display a mirror image on the screen (right/left reversed).

Turning on the Power

If you turn on the power switch and the date/time/zone setting screen appears, see page 47 to set the date/time/zone.



- < > : The camera turns on. You can shoot movies (p.276).
- < ON > : The camera turns on. You can shoot still photos.
- < OFF > : The camera is turned off and does not function. Set the power switch to this position when not using the camera.

Automatic Sensor Cleaning

- Whenever you set the power switch to < ON > or < OFF >, sensor cleaning will be performed automatically. (A small sound may be heard.) During the sensor cleaning, the LCD monitor will display < >.
- Even during the sensor cleaning, if you press the shutter button halfway (p.54), cleaning operation will be stopped, and you can take a picture immediately.
- If you repeatedly turn the power switch < ON >/< OFF > at a short interval, the < > icon may not be displayed. This is normal and not a malfunction.

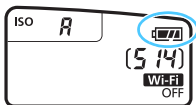
MENU Auto Power Off





To save battery power, if the camera is not operated for a prolonged period, the power will turn off automatically after the time set under [**2**: **Auto power off**] (p.325). To turn on the camera again, just press the shutter button halfway (p.54).

If you set the power switch to < OFF > while an image is being recorded to the card, [**Recording...**] will be displayed and the power will turn off after the recording finishes.

Battery Level Indicator

When the power is turned on, the battery level will be indicated in one of the four levels.




-  : Battery level is sufficient.
-  : Battery level is low, but the camera can still be used.
-  : Battery will be exhausted soon. (Blinks)
-  : Recharge the battery.

Number of Possible Shots with Viewfinder Shooting

Temperature	Room Temperature (23°C / 73°F)	Low Temperatures (0°C / 32°F)
No Flash	Approx. 820 shots	Approx. 770 shots
50% Flash Use	Approx. 600 shots	Approx. 550 shots

- The figures above are based on a fully-charged Battery Pack LP-E17, no Live View shooting, and CIPA (Camera & Imaging Products Association) testing standards.

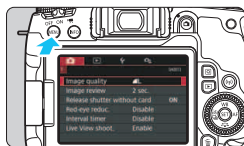


- Doing any of the following will exhaust the battery faster:
 - Pressing the shutter button halfway for a prolonged period.
 - Activating the AF frequently without taking a picture.
 - Using the lens's Image Stabilizer.
 - Using the LCD monitor frequently.
 - Using the Wi-Fi function.
- The number of possible shots may decrease depending on the actual shooting conditions.
- The lens operation is powered by the camera's battery. Certain lenses may exhaust the battery faster than others.
- For the number of possible shots with Live View shooting, see page 243.
- See [ **3: Battery info.**] to check the battery condition (p.421).

MENU Setting the Date, Time, and Zone

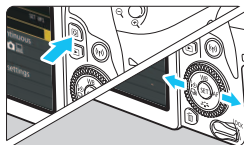
When you turn on the power for the first time or if the date/time/zone have been reset, the date/time/zone setting screen will appear. Follow the steps below to set the time zone first. Set the camera to the time zone in which you currently live so that, when you travel, you can simply change the setting to the correct time zone for your destination, and the camera will automatically adjust the date/time.

Note that the date/time appended to recorded images will be based on this date/time setting. Be sure to set the correct date/time.



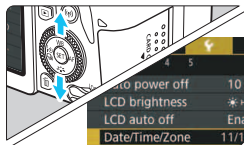
1 Display the menu screen.

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



2 Under the [F2] tab, select [Date/Time/Zone].

- Press the <Q> button and select the [F2] tab.
- Press the <◀> <▶> keys to select the [F2] tab.
- Press the <▲> <▼> keys to select [Date/Time/Zone], then press <SET>.

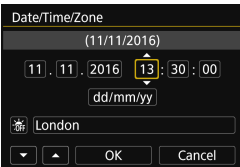
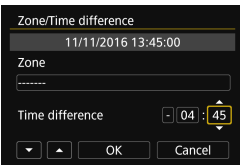
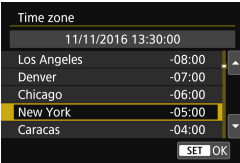
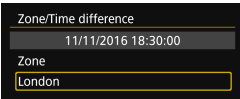


3 Set the time zone.

- [London] is set by default.
- Press the <◀> <▶> keys to select [Time zone], then press <SET>.



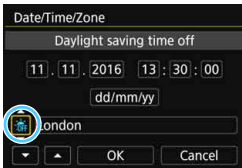
- For the menu function setting procedures, see pages 67-70.
- In step 3, the time displayed in [Time zone] is the time difference compared to Coordinated Universal Time (UTC).



- Press <SET> again.
- Press the <▲> <▼> keys to select the time zone, then press <SET>.
- If your desired time zone is not listed, press the <MENU> button, then proceed to the next step to set it (with the time difference from the Coordinated Universal Time, UTC).
- To set the time difference from UTC, press the <◀> <▶> keys to select a parameter (+/-/hour/minute) for [Time difference].
- Press <SET> so <□> is displayed.
- Press the <▲> <▼> keys to set it, then press <SET>. (Returns to <□>.)
- After entering the time zone or time difference, press the <◀> <▶> keys to select [OK], then press <SET>.

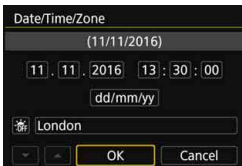
4 Set the date and time.

- Press the <◀> <▶> keys to select the number.
- Press <SET> so <□> is displayed.
- Press the <▲> <▼> keys to set it, then press <SET>. (Returns to <□>.)



5 Set the daylight saving time.

- Set it if necessary.
- Press the <◀> <▶> keys to select [☀].
- Press <SET> so ☀ is displayed.
- Press the <▲> <▼> keys to select [☀], then press <SET>.
- When the daylight saving time is set to [☀], the time set in step 4 will advance by 1 hour. If [☀] is set, the daylight saving time will be canceled and the time will go back by 1 hour.



6 Exit the setting.

- Press the <◀> <▶> keys to select [OK], then press <SET>.
- ▶ The date/time/zone and daylight saving time will be set and the menu will reappear.



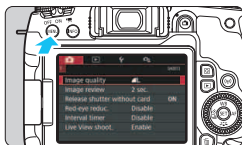
The date/time/zone settings may be reset in the following cases. If this happens, set the date/time/zone again.

- When the camera is stored without the battery.
- When the camera's battery becomes exhausted.
- When the camera is exposed to below freezing temperatures for a prolonged period.



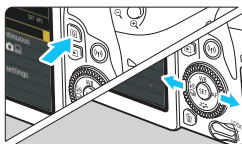
- The set time and date will start from when you select [OK] in step 6.
- Even if [🔒 2: Auto power off] is set to [4 min.] or less, the auto power off time will be approx. 6 min. when the [🔒 2: Date/Time/Zone] setting screen is displayed.
- After changing the time zone or time difference setting, check that the correct date and time are set.

MENU Selecting the Interface Language



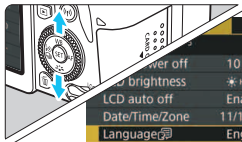
1 Display the menu screen.

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



2 Under the [F2] tab, select [Language].

- Press the <Q> button and select the [F2] tab.
- Press the <◀> <▶> keys to select the [F2] tab.
- Press the <▲> <▼> keys to select the [Language], then press <SET>.



3 Set the desired language.

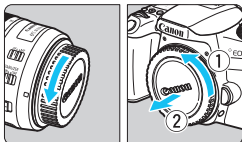
- Press the <▲> <▼> keys to select the language, then press <SET>.
- ▶ The interface language will change.



Attaching and Detaching a Lens

The camera is compatible with all Canon EF and EF-S lenses. **Note that you cannot use the EF-M lenses.**

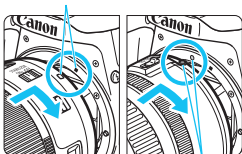
Attaching a Lens



1 Remove the caps.

- Remove the rear lens cap and the body cap by turning them as shown by the arrows.

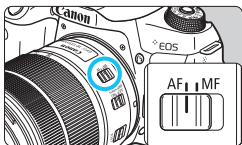
White index



2 Attach the lens.

- Align the lens's red or white index with the camera's index matching the same color. Turn the lens as shown by the arrow until it clicks in place.

Red index



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

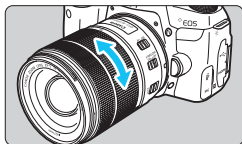
- <AF> stands for autofocus.
- <MF> stands for manual focus.

4 Remove the front lens cap.

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 dust on the body cap before attaching it.

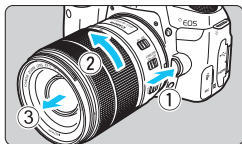
Zooming



Turn the zoom ring on the lens with your fingers.

- If you want to zoom, do it before focusing. Turning the zoom ring after achieving focus may throw off the focus.

Detaching the 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 detached lens.

- 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 autofocus, do not touch the rotating part.
- During viewfinder shooting or Live View shooting, if you use a TS-E lens (except the TS-E17mm f/4L or TS-E24mm f/3.5L II) and shift or tilt the lens or use an Extension Tube, the standard exposure may not be obtained or the exposure may be irregular.



Angle of View

Since the image area is smaller than the 35mm film format, the effective angle of view of an attached lens will be equivalent to that of a lens with approx. 1.6x of the focal length indicated.

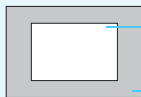
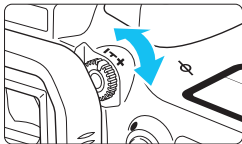


Image area (Approx.)
(22.3 x 14.9 mm /
0.88 x 0.59 in.)

35mm film format
(36 x 24 mm /
1.42 x 0.94 in.)

Basic Shooting Operations

Adjusting the Viewfinder Clarity



Turn the dioptic adjustment knob.

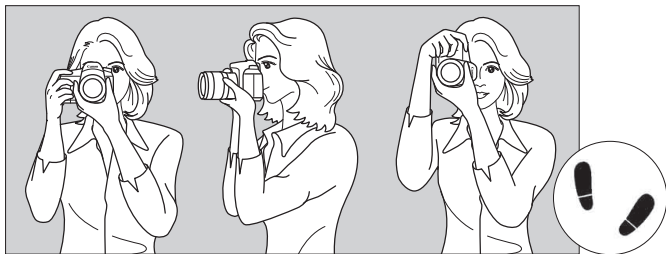
- Turn the knob left or right so that the AF points in the viewfinder look sharp.
- If the knob is difficult to turn, remove the eyecup (p.427).



If the camera's dioptic adjustment still cannot provide a sharp viewfinder image, using E-series Dioptic Adjustment Lenses (sold separately) is recommended.

Holding the Camera

To obtain sharp images, hold the camera still to minimize camera shake.



Horizontal shooting

Vertical shooting

1. Wrap your right hand around the camera grip firmly.
2. Hold the lens bottom with your left hand.
3. Rest your right index finger lightly on the shutter button.
4. Press your arms and elbows lightly against the front of your body.
5. To maintain a stable stance, place one foot slightly ahead of the other.
6. Press the camera against your face and look through the viewfinder.



To shoot while looking at the LCD monitor, see page 241.

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 autofocus and the automatic exposure system that sets the shutter speed and aperture.

The exposure setting (shutter speed and aperture) is displayed in the viewfinder and on the LCD panel (ⓘ4).



Pressing Completely

This releases the shutter and takes the picture.

Preventing Camera Shake

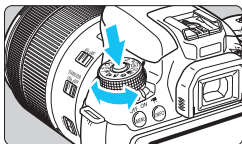
Hand-held camera movement during the moment of exposure is called camera shake. It can cause blurred pictures. To prevent camera shake, note the following:

- Hold and steady the camera as shown on the preceding page.
- Press the shutter button halfway to autofocus, then slowly press the shutter button completely.



- In Creative Zone modes, pressing the <AF-ON> button is the same as pressing the shutter button halfway.
- If you press the shutter button completely without pressing it halfway first, or if you press the shutter button halfway and then press it completely immediately, the camera will take a moment before it takes the picture.
- Even during menu display, image playback, or image recording, you can immediately go back to shooting-ready state by pressing the shutter button halfway.

Mode Dial

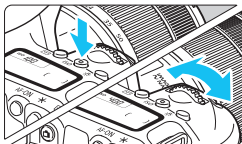



Turn the dial while holding down the lock release button at the center of the dial.




Use it to set the shooting mode.



Main Dial

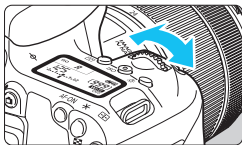



- (1) **After pressing a button, turn the <  > dial.**


After pressing a button such as <ISO> <▲ WB> <▼  > <◀  > <▶ AF>, turn the <  > dial to change the setting. For the <ISO> button, the function remains selected for approx. 6 sec. (Ⓜ6) after pressing the button.

When the timer ends or if you press the shutter button halfway, the camera will go back to shooting-ready state.

- Use this dial to select or set the ISO speed, white balance, Picture Style, drive mode, AF operation, AF point, etc.



- (2) **Turn only the <  > dial.**

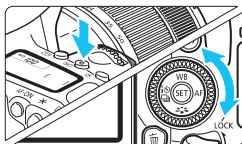
While looking at the viewfinder display or LCD panel, turn the <  > dial to change the setting.

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




The operations in (1) can be performed even when the <LOCK> switch is set upward (Multi function lock, p.57).

Quick Control Dial



- (1) **After pressing a button, turn the dial.**

After pressing a button such as <ISO> <▲ WB> <▼ &img alt="Picture Style icon" data-bbox="228 228 248 248"/> <◀ &img alt="AF-ON icon" data-bbox="268 228 288 248"/> <▶ AF>, turn the dial to change the setting. For the <ISO> button, the function remains selected for approx. 6 sec. () after pressing the button.

When the timer ends or if you press the shutter button halfway, the camera will go back to shooting-ready state.

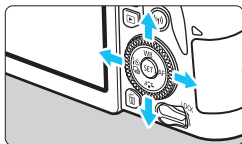
- Use this dial to select or set the ISO speed, white balance, Picture Style, drive mode, AF operation, AF point, etc.



- (2) **Turn only the dial.**


While looking at the viewfinder display or LCD panel, turn the dial to change the setting.

- Use this dial to set the exposure compensation amount, the aperture setting for manual exposures, etc.



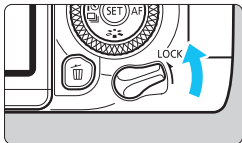
- (3) **After pressing a button, press the <▲>, <▼>, <◀>, or <▶> key.**

After pressing the <MENU> or <Q> button, press the <▲> <▼> or <◀> <▶> keys to set menus or Quick Control functions.

 The operations in (1) and (3) can be performed even when the <LOCK> switch is set upward (Multi function lock, p.57).

LOCK Multi Function Lock

With [**4**: Multi function lock] set and the <LOCK> switch set upward, you can prevent the settings from being changed by accidentally operating Main Dial or Quick Control Dial or by inadvertently tapping on the touch screen.

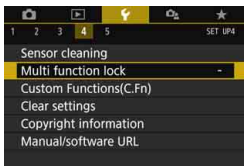


<LOCK> switch set downward:

Lock released

<LOCK> switch set upward:

Lock engaged



1 Select [Multi function lock].

- Under the [**4**] tab, select [**Multi function lock**], then press <SET>.



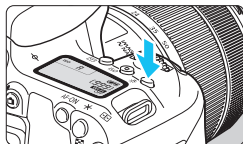
2 Add a checkmark [✓] to the camera control to be locked.




- Select a camera control and press <SET> to add a checkmark [✓].
- Select [**OK**].
- The selected camera controls will be locked when the multi function lock switch is set in the locked position.




- If the <LOCK> switch is set upward and you try to use one of the locked camera controls, <L> will be displayed in the viewfinder and on the LCD panel. On the Quick Control screen (p.58), [**LOCK**] will be displayed. During Live View shooting, [**LOCK**] will be displayed on the LCD monitor.
- By default, the <DISP> dial will be locked when the multi function lock switch is in the locked position.
- In Basic Zone modes, only [**Touch control**] is settable.

LCD Panel Illumination



You can illuminate the LCD panel by pressing the  button. Turn on () or off the LCD panel illumination by pressing the  button.

 During a bulb exposure, pressing the shutter button completely will turn off the LCD panel illumination.

Displaying the Quick Control Screen

After you press the **<INFO>** button a number of times, the Quick Control screen will appear. You can then check the current shooting function settings.

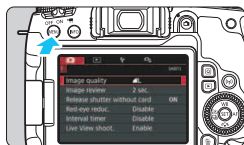
Pressing the **<Q>** button enables Quick Control of the shooting function settings (p.65).

Press the **<INFO>** button again to turn off the display.



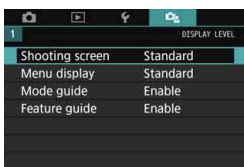
MENU Setting the Screen Display Level

You can set how information is displayed on the screen according to your preference. Change the settings as necessary.



1 Display the menu screen.

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

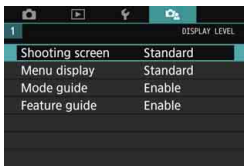


2 Select the [MENU] tab.

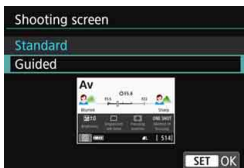
- Press the <Q> button and select the [MENU] tab.

Shooting Screen

You can select [**Standard**] or [**Guided**] (friendly display) for the Quick Control screen in viewfinder shooting. By default, it is set to [**Standard**].



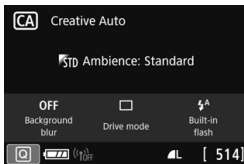
1 Select [Shooting screen].



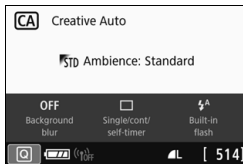
2 Select the display method.

● Sample Screens

<CA>: Standard



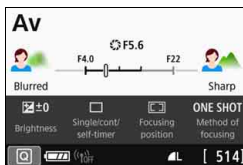
<CA>: Guided



<Av>: Standard



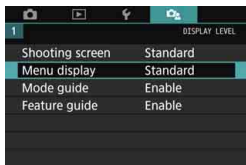
<Av>: Guided



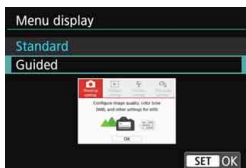
In Creative Zone modes, when **[Guided]** is set, only the functions particular to the set shooting mode are displayed on the Quick Control screen. Note that items that cannot be set from the Quick Control screen when **[Guided]** is selected can be set via the menu screen (p.68).

Menu Display

You can select the display method from [**Standard**] or [**Guided**]. If you set [**Guided**], main tab descriptions are provided when you press the <MENU> button. If you set [**Standard**], you proceed directly to the menu screen when you press the <MENU> button. By default, it is set to [**Standard**].

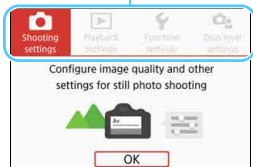


1 Select [**Menu display**].



2 Select the display method.

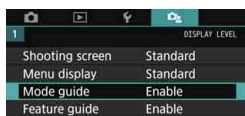
Main tabs



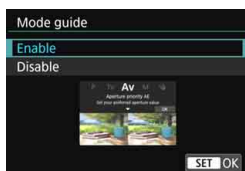
When [**Guided**] is set, the [**★ (My Menu)**] tab does not appear. To set My Menu (p.413), change the menu display level to [**Standard**].

Shooting Mode Guide

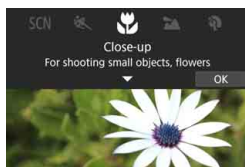
You can display the description of the shooting mode (mode guide) when switching the shooting mode during viewfinder shooting. By default, it is set to **[Enable]**.



1 Select **[Mode guide]**.

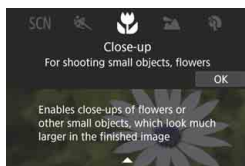


2 Select **[Enable]**.



3 Turn the Mode Dial.


▶ A description of the selected shooting mode will appear.



4 Press the **<▼>** key.

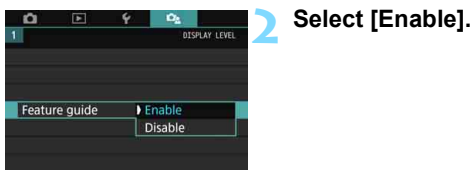
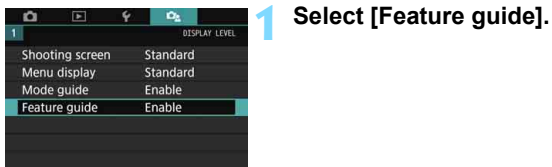
▶ The rest of the description will appear.

- When you press **<SET>**, the description will disappear and the Quick Control screen will appear.
- In the **<SCN>** and **<Q>** shooting modes, the shooting mode selection screen will appear.

 In step 3 and step 4, if you tap on **[OK]** or press the shutter button halfway, the description will disappear and the Quick Control screen will appear.

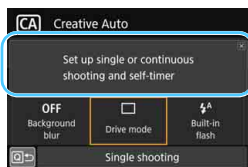
Feature Guide

When using Quick Control or setting menu items, you can display a brief description of functions and options (feature guide). By default, it is set to **[Enable]**.

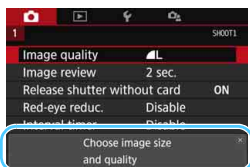


● Sample Screens

Quick Control screen



Menu screen



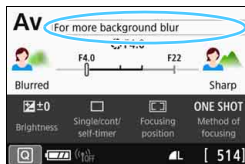
Feature guide

The description will disappear when you tap on it or proceed with the operation.

💡 Shooting Tips

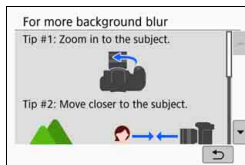
Shooting tips appear when [Shooting screen] is set to [Guided] (p.59) and the camera setting is in any of the following cases. In Basic Zone modes, shooting tips appear regardless of the [Shooting screen] setting.

- To further blur the background (with the lowest aperture value set in the <Av> mode).
- The image is likely to be overexposed.
- The image is likely to be underexposed.
- Camera shake is likely to occur (only in Basic Zone modes).



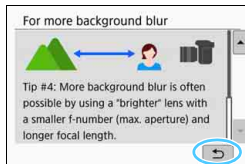
1 Tap on the area within the frame.

- ▶ The shooting tips will appear.
- You can also display the shooting tips by pressing the <🗑️> button.



2 Check the shooting tips.

- You can scroll up and down by tapping on the screen.
- You can also scroll by pressing the <▲> <▼> keys.

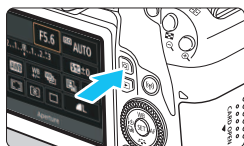


3 Tap on [↶].

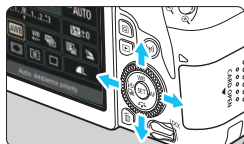
- ▶ Shooting tips will disappear, and the screen in step 1 will reappear.
- You can also hide the shooting tips by pressing <ⓈET> >.



Q Quick Control for Shooting Functions

You can directly select and set the shooting functions displayed on the LCD monitor with intuitive operations. This is called Quick Control.



- 1 **Press the <Q> button ().**
 - ▶ The Quick Control screen will appear.

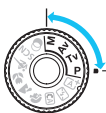


- 2 **Set the desired functions.**
 - Press the <▲> <▼> or <◀> <▶> keys to select a function.
 - ▶ The settings of the selected function and Feature guide (p.63) will appear.
 - Turn the <  > or <  > dial to change the setting.

Basic Zone modes



Creative Zone modes



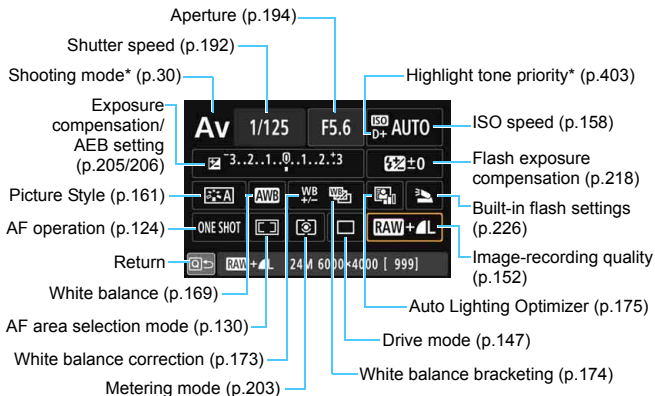
- 3 **Take the picture.**
 - Press the shutter button completely to take the picture.
 - ▶ The captured image will be displayed.



- For the functions settable in Basic Zone modes and their setting procedures, see page 117.
- In steps 1 and 2, you can also tap on the LCD monitor to perform the operation (p.71).

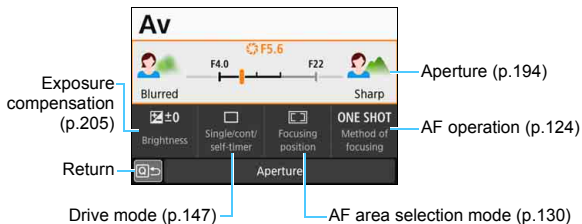
Sample Quick Control Screen

When [📷]: Shooting screen: Standard] is Set



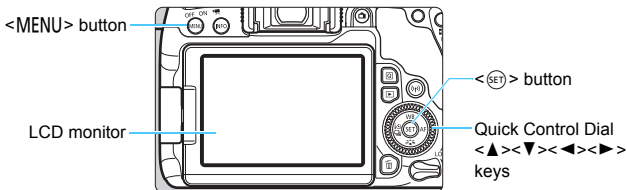
* These functions cannot be set with Quick Control.

When [📷]: Shooting screen: Guided] is Set



MENU Menu Operations and Configurations

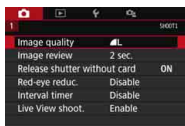
You can configure various settings with the menus such as the image-recording quality, date/time, etc.



Menu Screen

The menu tabs and items displayed vary depending on the shooting mode.

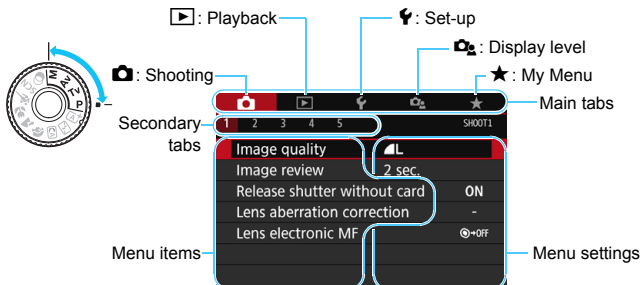
Basic Zone modes



Movie shooting

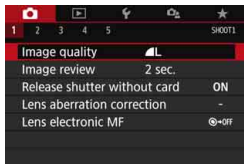


Creative Zone modes



Menu Setting Procedure

● When [📷 : Menu display: Standard] is Set

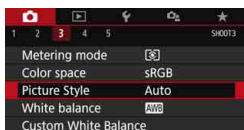


1 Display the menu screen.

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

2 Select a tab.

- Each time you press the <Q> button, the main tab (group of functions) will switch.
- Press the Quick Control Dial's <◀> <▶> keys to select a secondary tab.
- For example, in this manual, the [📷3] tab refers to the screen displayed when the 📷 (Shooting) tab's [3] is selected.



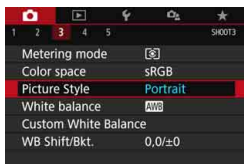
3 Select the desired item.

- Press the Quick Control Dial's <▲> <▼> keys to select the item, then press <SET>.



4 Select the setting.

- Press the Quick Control Dial's <▲> <▼> or <◀> <▶> keys to select the desired setting. (Some settings are selected with the <▲> and <▼> keys, and others are selected with the <◀> and <▶> keys.)
- The current setting is indicated in blue.



5 Set the setting.

- Press <SET> to set it.
- ▶ If you change the setting from the default, it will be indicated in blue (available only for the menu items under the [📷] tab).

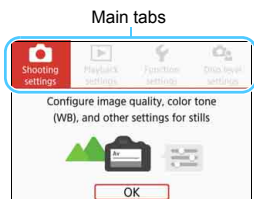
6 Exit the setting.

- Press the <MENU> button to exit the menu and return to shooting-ready state.



- In step 2, you can also turn the <MENU> dial to select a menu tab. In step 4, you can also turn the <MENU> dial to select certain settings.
- In steps 2 to 6, you can also tap on the LCD monitor to perform the operation (p.71).
- The description of menu functions hereafter assumes that you have pressed the <MENU> button to display the menu screen.
- To cancel the operation, press the <MENU> button.
- For details about each menu item, see page 442.

● When [MENU: Menu display: Guided] is Set



1 Display the main tabs.

- When you press the <MENU> button, the main tabs and a description of the selected tab will appear.

2 Select a main tab.

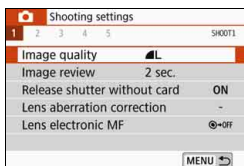
- Each time you press the Quick Control Dial's <◀> <▶> keys, the main tab (group of functions) will switch.

3 Display the menu screen.

- Press <SET> to display the menu screen.
- To return to the main tab screen, press the <MENU> button.



- In step 2, you can also use the <MENU> dial or the <Q> button.
- You can also go to the menu screen by tapping on [OK] in step 3.

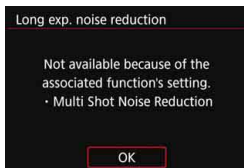
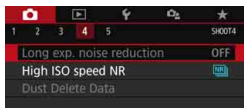


4 Select a secondary tab.

- Press the Quick Control Dial's <◀> <▶> keys to select a secondary tab.
- For example, in this manual, the [📷3] tab refers to the screen displayed when the 📷 (Shooting) tab's [3] is selected.
- The subsequent operations are the same as those for [📷 : Menu display: Standard]. See the steps on page 68, starting with step 3.
- To exit the setting, press the <MENU> button twice.

Dimmed Menu Items

Example: When [Multi Shot Noise Reduction] 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>.

If you cancel the overriding function's setting, the dimmed menu item will become settable.

⚠ You may not be able to see the overriding function for certain dimmed menu items.

📄 With [Clear all camera settings] under [🔧4: Clear settings], you can reset the menu functions to the default settings (p.335).

Operating the Camera with Touch Screen

You can operate the camera by tapping on the LCD monitor (touch-sensitive panel) with your fingers.

Tap

Sample Screen (Quick Control)




- Use your finger to tap on (touch briefly and then remove your finger from) the LCD monitor.
- By tapping, you can select menus, icons, etc., displayed on the LCD monitor.
- For example, when you tap on [Q], the Quick Control screen appears. By tapping on [Q↵], you can return to the preceding screen.



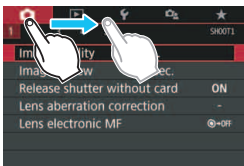
Operations possible by tapping on the screen

- Setting menu functions after pressing the <MENU> button
- Quick Control
- Setting functions after pressing the <ISO>, <WB>, <AF>, <WB>, <AF>, or <AF> button
- Touch AF and touch shutter in Live View shooting
- AF point selection in movie shooting
- Setting functions in Live View shooting and movie shooting
- Playback operations

 If [3: Beep] is set to [Touch off], the beep will not sound for touch operations (p.324).

Drag

Sample Screen (Menu screen)



- Slide your finger while touching the LCD monitor.

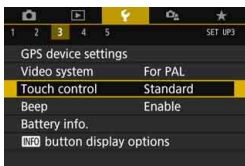
Sample Screen (Scale display)



Operations possible by dragging your finger on the screen

- Selecting a menu tab or item after pressing the <MENU> button
- Setting with scale display
- Quick Control
- Selecting AF points
- Setting functions in Live View shooting and movie shooting
- Playback operations

MENU Setting the Touch Control Response



1 Select [Touch control].

- Under the [**3**] tab, select [**Touch control**], then press < **SET** >.



2 Set the touch control response setting.

- Select the desired setting, then press < **SET** >.
- [**Standard**] is the normal setting.
- [**Sensitive**] provides a more reactive touch screen response than [**Standard**]. Try using both settings and select the one you prefer.
- To disable touch operations, select [**Disable**].

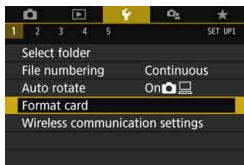
⚠ Cautions for Touch Control Operations

- Since the LCD monitor is not pressure sensitive, do not use any sharp objects, such as your fingernail or a ballpoint pen, for touch operations.
- Do not use wet fingers for touch operations.
- If the LCD monitor has any moisture or if your fingers are wet, the touch screen may not respond or malfunction may occur. In such a case, turn off the power and wipe off the moisture with a cloth.
- Attaching any commercially-available protective sheet or sticker on the LCD monitor may degrade the touch operation response.
- If you quickly perform touch operation when [**Sensitive**] is set, the touch operation response may be slower.

MENU Formatting the Card

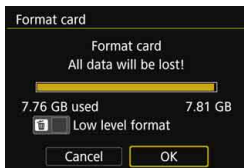
If the card is new or was previously formatted by another camera or computer, format the card with this camera.

! 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.



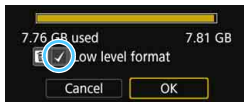
1 Select [Format card].

- Under the [**1**] tab, select [**Format card**], then press **<SET>**.



2 Format the card.

- Select [**OK**], then press **<SET>**.
- ▶ The card will be formatted.
- ▶ When the formatting is complete, the menu will reappear.
- For low-level formatting, press the **<✔>** button to add a checkmark **<✔>** to [**Low level format**], then select [**OK**].



- 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.

**Execute [Format card] in the following cases:**

- The card is new.
- The card was formatted by a different camera or a computer.
- The card is full of images or data.
- A card-related error is displayed (p.467).

Low-level Formatting

- Perform low-level formatting if the card's recording 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 slightly longer than normal formatting.
- You can stop the low-level formatting by selecting **[Cancel]**. Even in this case, normal formatting will complete and you can use the card as usual.

● Card's file formats

SD/SDHC cards will be formatted in FAT32. SDXC cards will be formatted in exFAT.

When shooting a movie with a card formatted in exFAT, the movie will be recorded in a single file (instead of being split into multiple files) even if it exceeds 4 GB. (The movie file will exceed 4 GB.)



- If you format an SDXC card with this camera and then insert it into another camera, an error may be displayed and the card may become unusable. Certain computer operating systems or card readers may not recognize a card formatted in exFAT.
- When the card is formatted or data is erased, only the file management information is changed. The actual data is not completely erased. Be aware of this when selling or discarding the card. When discarding the card, perform low-level formatting or destroy the card physically to prevent personal data from being leaked.
- **Before using a new Eye-Fi card, the software on the card must be installed on your computer. Then format the card with the camera.**

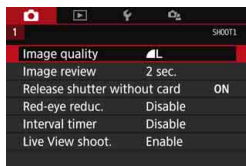
Switching the LCD Monitor Display

The LCD monitor can display the Quick Control screen, menu screen, captured images, etc.



- When you turn on the power, the Quick Control screen will appear. You can then check the current shooting function settings.
- When your eye is near the viewfinder, the display-off sensor (p.29, 338) will turn off the LCD monitor to prevent glare. When your eye leaves the viewfinder, the LCD monitor will turn on again.
- By pressing the <INFO> button, you can switch the LCD monitor screen as follows: Display the electronic level, display the Quick Control screen, and turn off the LCD monitor screen (p.420).

Menu Functions



- Appears when you press the <MENU> button. Press the button again to return to the previous screen.

Captured Image



- Appears when you press the <▶> button. Press the button again to return to the previous screen.



- Under [**F2: LCD auto off**], you can prevent the LCD monitor from turning off automatically (p.338).
- Even when the menu screen or captured image is displayed, pressing the shutter button will enable you to shoot immediately.

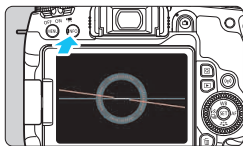


- If you look through the viewfinder eyepiece while wearing sunglasses, the LCD monitor may not turn off automatically. If this occurs, press the <INFO> button to turn off the LCD monitor.
- Nearby fluorescent lighting may cause the LCD monitor to turn off. If this occurs, take the camera away from the fluorescent lighting.

MENU Displaying the Electronic Level

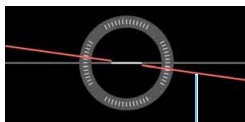
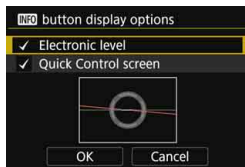
You can display the electronic level on the LCD monitor and in the viewfinder to help you correct the camera tilt. Note that you can check only the horizontal tilt and not the forward/backward tilt.

Displaying the Electronic Level on the LCD Monitor



1 Press the <INFO> button.

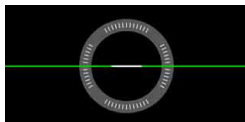
- Each time you press the <INFO> button, the screen display will change.
- Display the electronic level.
- If the electronic level does not appear, set [43: INFO button display options] so that the electronic level can be displayed (p.420).



Horizontal level

2 Check the camera's tilt.

- The horizontal tilt is displayed in 1° increments. The tilt scale is marked in 5° increments.
- When the red line turns green, it indicates that the tilt is almost corrected.

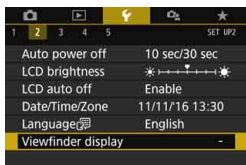


- Even when the tilt is almost corrected, there may be a margin of error of approx. $\pm 1^\circ$.
- If the camera is very tilted, the electronic level's margin of error will be larger.

During Live View shooting and before movie shooting, you can also display the electronic level as described above (except with $\text{L} + \text{Tracking}$).

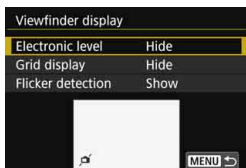
Displaying the Electronic Level in the Viewfinder

A simple electronic level using a camera icon can be displayed in the viewfinder. Since this indicator is displayed during shooting, you can take the picture while checking the camera tilt.



1 Select [Viewfinder display].

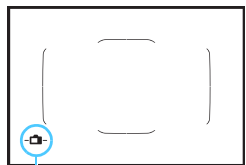
- Under the [**⚡2**] tab, select [**Viewfinder display**], then press **<SET>**.



2 Select [Electronic level].



3 Select [Show].



Electronic level

4 Press the shutter button halfway.

- The electronic level will appear at the position shown in the illustration.

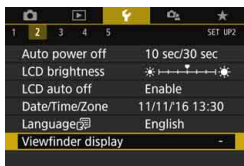


- This level also works with vertical shooting.

Even when the tilt is almost corrected, there may be a margin of error of approx. $\pm 1^\circ$.

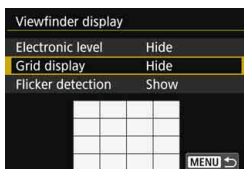
MENU Displaying the Grid

You can display a grid in the viewfinder to help you check the camera tilt or compose the shot.



1 Select [Viewfinder display].

- Under the [2] tab, select [Viewfinder display], then press <SET>.

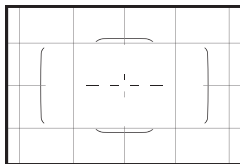



2 Select [Grid display].



3 Select [Show].

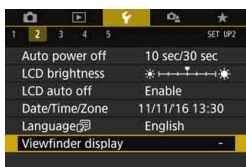
- ▶ When you exit the menu, the grid will appear in the viewfinder.



 You can display a grid on the LCD monitor during Live View shooting and before you start shooting a movie (p.255, 317).

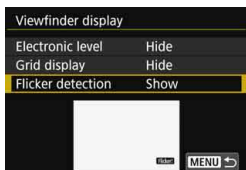
MENU Displaying the Flicker Detection ☆

If you set this function, < **Flicker!** > will appear in the viewfinder when the camera detects flicker caused by the blinking of the light source. By default, flicker detection is set to [Show].

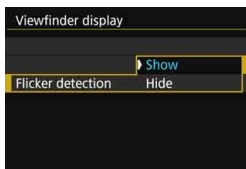


1 Select [Viewfinder display].

- Under the [2] tab, select [Viewfinder display], then press < SET >.



2 Select [Flicker detection].



3 Select [Show].



If you set [**5: Anti-flicker shoot.**] to [Enable], you can shoot with reduced unevenness of exposure caused by the flicker (p.185).

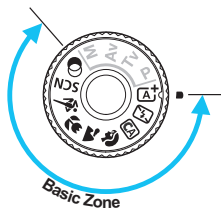


2

Basic Shooting and Image Playback

This chapter describes how to use the Basic Zone modes on the Mode Dial for best results and how to play back images.

With Basic Zone modes, all you do is point and shoot, and the camera sets everything automatically (p.118, 430). Also, because advanced shooting function settings cannot be changed, you can enjoy shooting photographs without worrying about botched pictures due to misoperation.



Before Shooting in the <SCN> or <A+> Mode

When the LCD monitor is turned off, press the <Q> button or <INFO> button (p.101, 111, 420) to check which shooting mode is set before shooting.

- * <SCN>: Special scene
- * <A+> : Creative filters

[A⁺] Fully Automatic Shooting (Scene Intelligent Auto) ■

<[A⁺]> is a fully automatic mode. The camera analyzes the scene and sets the optimum settings automatically. It can also adjust focus automatically on either the still or moving subject by detecting the motion of the subject (p.87).



1 Set the Mode Dial to <[A⁺]>.

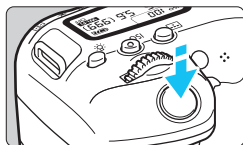
- Turn the Mode Dial while holding down the lock release button at the center.

Area AF frame



2 Aim the Area AF frame over the subject.

- All the AF points will be used to focus, and the camera will focus on the closest object.
- Aiming the center of the Area AF frame over the subject will make focusing easier.




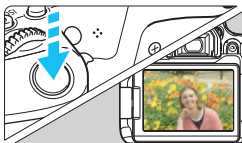
3 Focus on the subject.

- Press the shutter button halfway. The lens elements will shift to focus.
- ▶ When achieving focus, the AF point that has achieved focus will be displayed. At the same time, the beeper will sound and the focus indicator **<●>** in the viewfinder will light up.
- ▶ In low light, the AF point(s) will light up briefly in red.
- ▶ If necessary, the built-in flash will be raised automatically.



Focus indicator

 If a description of the shooting mode appears in step 1, press **<[SET]>** to hide it (p.62).



4 Take the picture.

- Press the shutter button completely to take the picture.
- ▶ The captured image will be displayed for approx. 2 sec. on the LCD monitor.
- When you finish shooting, push down the built-in flash with your fingers.



The **A⁺** mode makes the colors look more impressive in nature, outdoor, and sunset scenes. If you do not obtain the desired color tones, change the mode to a Creative Zone mode and select a Picture Style other than **A⁺**, then shoot again (p.161).



FAQ

- **The focus indicator <●> blinks and focus is not achieved.**
 - Aim the Area AF frame over an area with good contrast, then press the shutter button halfway (p.54).
 - If you are too close to the subject, move away and shoot again.
 - Change the AF area selection mode and shoot again (p.129). The default setting is Automatic selection AF.
- **When focus is achieved, the AF points do not light up in red.**
The AF points light up in red only when focus is achieved in low light or with a dark subject.
- **Multiple AF points light up simultaneously.**
Focus has been achieved at all those points. You can take the picture as long as an AF point covering the target subject is lighting up.

- **The beeper continues to beep softly. (The focus indicator <●> does not light up.)**



It indicates that the camera is focusing continuously on a moving subject. (The focus indicator <●> does not light up.) You can take sharp pictures of a moving subject.

Note that focus lock (p.87) will not work in this case.

- **Pressing the shutter button halfway does not focus on the subject.**

If the focus mode switch of the lens is set to <MF> (manual focus), set it to <AF> (autofocus).

- **The flash fired even if it was daylight.**

For a backlit subject, the flash may fire to help lighten the subject's dark areas. If you do not want the flash to fire, use the Quick Control to set [Built-in flash firing] to [> (p.117) or set the <> (Flash Off) mode and shoot (p.89).

- **The built-in flash fired and the picture came out extremely bright.**

Move further away from the subject and shoot. When shooting with flash, if the subject is too close to the camera, the picture may come out extremely bright (overexposure).

- **In low light, the built-in flash fired a series of flashes.**

Pressing the shutter button halfway may trigger the built-in flash to fire a series of flashes to assist autofocusing. This is called the AF-assist beam. Its effective range is approx. 4 meters / 13.1 feet. The built-in flash will make a sound when firing continuously. This is normal and not a malfunction.

- **When flash was used, the bottom part of the picture came out unnaturally dark.**

The shadow of the lens barrel was captured in the picture because the subject was too close to the camera. Move further away from the subject and shoot. If a hood is attached to the lens, remove it before taking the flash picture.

[A⁺] Full Auto Techniques (Scene Intelligent Auto) ■

Recomposing the Shot



Depending on the scene, positioning the subject toward the left or right to include a balanced background will result in a picture with better perspective. In the **<[A⁺>** mode, pressing the shutter button halfway to focus on a still subject will lock the focus on that subject. Recompose the shot while keeping the shutter button pressed halfway, and then press the shutter button completely to take the picture. This is called “focus lock”. Focus lock is also possible in other Basic Zone modes (except **<[S]>** **<SCN: [S]>**).

Shooting a Moving Subject



In the **<[A⁺>** mode, if the subject moves (distance to camera changes) during or after focusing, AI Servo AF will take effect to focus on the subject continuously. (The beeper will continue beeping softly.) As long as you keep the Area AF frame positioned over the subject while pressing the shutter button halfway, focusing will be continuous. At the decisive moment, press the shutter button completely to take the picture.

Live View Shooting

You can shoot while viewing the image on the LCD monitor. This is called "Live View shooting". For details, see page 241.



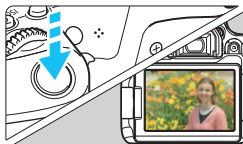
1 Display the Live View image on the LCD monitor.

- Press the button.
- ▶ The Live View image will appear on the LCD monitor.



2 Focus on the subject.

- Press the shutter button halfway to focus.
- ▶ When focus is achieved, the AF point will turn green and the beeper will sound.



3 Take the picture.

- Press the shutter button completely.
- ▶ The picture is taken and the captured image is displayed on the LCD monitor.
- ▶ When the playback display ends, the camera will return to Live View shooting automatically.
- Press the button to exit the Live View shooting.

You can also rotate the LCD monitor for different angles (p.44).



Normal angle




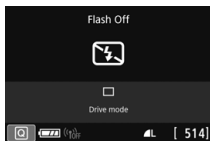
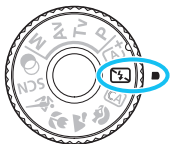
Low angle



High angle

Shooting When You Cannot Use Flash

The camera analyzes the scene and sets the optimum settings automatically. In places where flash photography is prohibited such as in a museum or an aquarium, use the <> (Flash Off) mode.



Shooting Tips

- **Prevent camera shake if the numeric display (shutter speed) in the viewfinder blinks.**
Under low light when camera shake is prone to occur, the viewfinder's shutter speed display will blink. Hold the camera steady or use a tripod. When using a zoom lens, use the wide-angle end to reduce blur caused by camera shake even with handheld shooting.
- **Take portraits without flash.**
In low-light conditions, tell the subject to keep still until the picture is taken. Any movement by the subject during shooting may result in the subject being blurred in the picture.

CA Creative Auto Shooting

In the <CA> mode, you can set the following functions for shooting: (1) Ambience-based shots, (2) Background blur, (3) Drive mode, and (4) Built-in flash firing. The default settings are the same as the <A+> mode.

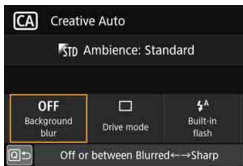
* CA stands for Creative Auto.



1 Set the Mode Dial to <CA>.



2 Press the <Q> button (10).
▶ The Quick Control screen will appear.

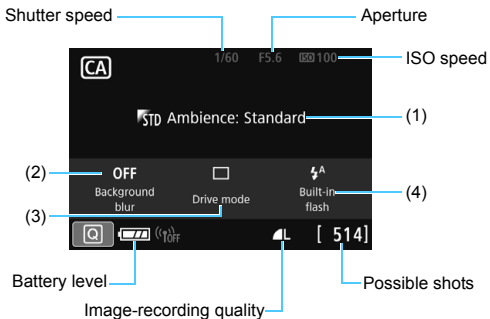


3 Set the desired functions.

- Press the <▲> <▼> or <◀> <▶> keys to select a function.
- ▶ The settings of the selected function and Feature guide (p.63) will appear.
- For the setting procedure and details on each function, see pages 91-96.




4 Take the picture.

- Press the shutter button completely to take the picture.

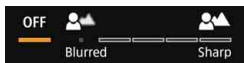


If you set (1) or (2) when the camera is set for Live View shooting, you can see the effect on the screen before you start shooting.

(1) Ambience-based shots




You can select and shoot with the ambience you want to convey in your images. Turn the  or  dial to select the ambience. You can also select it from a list by pressing . For details, see page 94.

(2) Background blur




- If [**OFF**] is set, the degree of background blur will change depending on the brightness.
- If it is set to any setting other than [**OFF**], you can adjust the background blur regardless of the brightness.
- If you turn the < > or < > dial to move the cursor to the right, the background will look sharper.
- Turning the < > or < > dial to move the cursor to the left will blur the subject's background. Note that depending on the lens's maximum aperture (smallest f/number), certain slider adjustments may not be selectable (indicated by •).
- When operating the < > or < > dial during Live View shooting, [**Simulating blur**] will be displayed on the LCD monitor. You can see the degree of front and background blur in contrast with the subject that is focused on during setting operation (while [**Simulating blur**] is being displayed).
- If you want to blur the background, see “Shooting Portraits” on page 97.
- Depending on the lens used and shooting conditions, the background may not look so blurred.
- This function cannot be set if you use flash. If < > has been set and you set background blur, < > will be set automatically.

If [**Simulating blur**] is enabled during Live View shooting, the image displayed with < **Exp.SIM** > (p.245) blinking may have more noise than the actual image being recorded, or it may look dark.

(3) Drive mode: Use the  or  dial to make the selection. You can also select it from a list by pressing .

 **Single shooting:**

Shoot one image at a time.

 **High-speed continuous shooting:**

While you hold down the shutter button completely, shots will be taken continuously. You can shoot up to approx. 6.0 shots per second.

 **Low-speed continuous shooting:**

While you hold down the shutter button completely, shots will be taken continuously. You can shoot up to approx. 3.0 shots per second.



 **Self-timer: 10 sec./remote control:**




The picture is taken 10 seconds after you press the shutter button. A remote controller can also be used.


 **Self-timer: 2 sec.:**


The picture is taken 2 seconds after you press the shutter button.

 **Self-timer: Continuous:**

Press the  >  keys to set the number of multiple shots (2 to 10) to be taken with the self-timer. 10 seconds after you press the shutter button, the set number of multiple shots will be taken.



(4) Built-in flash firing: Turn the  or  dial to select the desired setting. You can also select it from a list by pressing .

 **Auto built-in flash:** The flash fires automatically as necessary.

 **Built-in flash on** : The flash fires at all times.

 **Built-in flash off** : The flash is disabled.



- When using the self-timer, see the  notes on page 149.
- When using , see “Shooting When You Cannot Use Flash” on page 89.

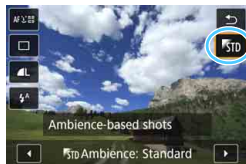
Shooting with Ambience Selection

Ambience	Ambience Effect
[STD] Ambience: Standard	No setting
[V] Vivid	Low / Standard / Strong
[S] Soft	Low / Standard / Strong
[W] Warm	Low / Standard / Strong
[I] Intense	Low / Standard / Strong
[C] Cool	Low / Standard / Strong
[B] Brighter	Low / Medium / High
[D] Darker	Low / Medium / High
[M] Monochrome	Blue / B/W / Sepia



1 Display the Live View image.

- Press the <[Live View icon]> button to display the Live View image.



2 With Quick Control, select the desired ambience.

- Press the <[Q]> button (10).
- Press the <▲> <▼> keys to select [STD Ambience: Standard]. [Ambience-based shots] will appear on the screen.
- Press the <◀> <▶> keys to select the desired ambience.
- ▶ The LCD monitor will display how the image will look with the selected ambience.



3 Set the ambience effect.

- Press the <▲> <▼> keys to select the effect so that [Effect] appears at the bottom of the screen.
- Press the <◀> <▶> keys to select the desired effect.

4 Take the picture.

- Press the shutter button completely to take the picture.
- To return to viewfinder shooting, press the <📷> button to exit Live View shooting. Then press the shutter button completely to take the picture.
- If you change the shooting mode or set the power switch to <OFF>, the setting will revert back to [STD Ambience: Standard].



- The Live View image shown with the ambience setting applied will not look exactly the same as the captured image.
- The ambience effect may be reduced in flash photography.
- In bright outdoors, the Live View image you see on the LCD monitor may not have exactly the same brightness or ambience as with the actual captured image. Set [🔧2: LCD brightness] to 4, and look at the Live View image, preventing the outside light from affecting the image viewing.



If you do not want the Live View image to be displayed when setting this function, start the operation from step 2.

Ambience Settings

STD Ambience: Standard

This provides standard image characteristics.

V Vivid

The subject looks crisp, sharp and vivid. Effective to make the picture look more impressive than with [**STD Ambience: Standard**].

S Soft

The subject is less defined, giving the picture a softer and daintier look. Good for portraits, pets, flowers, etc.

W Warm

The subject is less defined with a warmer color cast, giving the picture a warmer and gentler look. Good for portraits, pets, and other subjects to which you want to give a warm look.

I Intense

While the overall brightness is slightly lowered, the subject is emphasized for a more intense feeling in the picture. Effective to make the human or living subject stand out more.

C Cool

The overall brightness is slightly lowered with a cooler color cast in the picture. Effective to make a subject in the shade look more calm and impressive.

B Brighter

The picture looks brighter.


D Darker

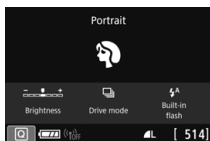
The picture looks darker.

M Monochrome

The picture becomes monochrome. You can select the monochrome color to be blue, black and white, or sepia.

Shooting Portraits

The  (Portrait) mode blurs the background to make the human subject stand out. It also makes skin tones and hair look softer.



Shooting Tips

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

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


- **Use a telephoto lens.**

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


- **Focus on the face.**

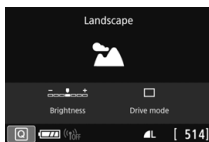
Check that the AF point covering the face lights up. For close-ups of the face, focus on the eyes.



The default setting is  (Low-speed continuous shooting). If you keep holding down the shutter button, you can shoot continuously (max. approx. 3.0 shots/sec.) to capture changes in the subject's facial expression and pose.

Shooting Landscapes

Use the <  > (Landscape) mode for wide scenery or to have everything in focus from near to far. For vivid blues and greens, and very sharp and crisp images.




Shooting Tips

- **With a zoom lens, use the wide-angle end.**

When using a zoom lens, set the lens to the wide-angle end to make the objects near and far in focus. It also adds breadth to landscapes.


- **Shooting night scenes.**

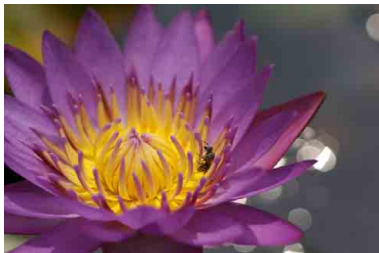
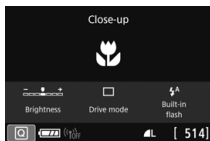
The <  > mode is also good for night scenes because it disables the built-in flash. When shooting night scenes, use a tripod to prevent camera shake.



- The built-in flash will not fire even in backlit or low-light conditions.
- If you are using an external Speedlite, the Speedlite will fire.

Shooting Close-ups

When you want to shoot flowers or small things up close, use the  (Close-up) mode. To make small things appear much larger, use a macro lens (sold separately).





Shooting Tips

- **Use a simple background.**

A simple background makes small objects such as flowers stand out better.

- **Move in as close as possible to the subject.**


Check the lens for its minimum focusing distance. Some lenses have indications such as **<0.39m/1.3ft>** on them. The lens minimum focusing distance is measured from the  (focal plane) mark on the top of the camera to the subject. If you are too close to the subject, the focus indicator  will blink.

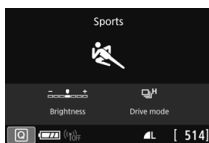
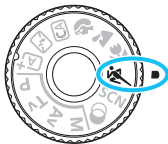
If the built-in flash is fired and the bottom part of the picture comes out unnaturally dark, move away a little from the subject and try again.

- **With a zoom lens, use the telephoto end.**

If you have a zoom lens, using the telephoto end will make the subject look larger.

Shooting Moving Subjects

Use the < > (Sports) mode to shoot a moving subject, such as a running person or a moving vehicle.




Shooting Tips

- **Use a telephoto lens.**

Use of a telephoto lens is recommended for shooting from a distance.

- **Track the subject with the Area AF frame.**

Press the shutter button halfway to start autofocusing in Area AF frame. During autofocusing, the beeper will continue beeping softly. If focus cannot be achieved, the focus indicator <●> will blink. The default setting is < > (High-speed continuous shooting*). At the decisive moment, press the shutter button completely to take the picture. If you keep holding down the shutter button, you can shoot continuously while maintaining autofocusing to capture changes in the subject's movement.

* Viewfinder shooting: max. approx. 6.0 shots/sec., Live View shooting: max. approx. 4.5 shots/sec.

- The built-in flash will not fire even in backlit or low-light conditions.
- Under low light where camera shake tends to occur, the viewfinder's shutter speed display on the bottom left will blink. Hold the camera steady and shoot.
- If you are using an external Speedlite, the Speedlite will fire.

SCN: Special Scene Mode

The camera will automatically choose the appropriate settings when you select a shooting mode for your subject or scene.



1 Set the Mode Dial to <SCN>.



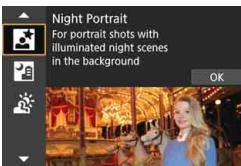
2 Press the <Q> button (10).

▶ The Quick Control screen will appear.



3 Select a shooting mode.

- Select [Choose scene], then press <SET>.







- Press the <▲> <▼> keys to select the desired shooting mode, then press <SET>.




- You can also select by turning the <◀> or <▶> dial.




If [Mode guide] is set to [Enable], press <SET> after step 1 to go to the shooting mode selection screen.

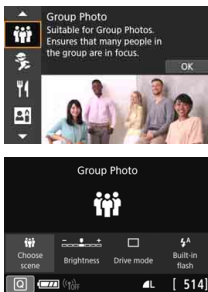
Available Shooting Modes in the <SCN> Mode

Shooting Mode	Page
 Group Photo	p.102
 Kids	p.103
 Food	p.104
 Candlelight	p.105

Shooting Mode	Page
 Night Portrait	p.106
 Handheld Night Scene	p.107
 HDR Backlight Control	p.108

Shooting Group Photos

Use the  (Group Photo) mode to shoot group photos. You can take a picture in which both the people in the front and people in the back are all in focus.




Shooting Tips

- **Use a wide-angle lens.**

When using a zoom lens, use the wide-angle end to make it easy to get all the people in the group in focus at once, from the front row to the back. Also, if you place a little distance between the camera and the subjects (so that the subjects' entire bodies are in the shot), the focus range increases.


- **Use continuous shooting.**

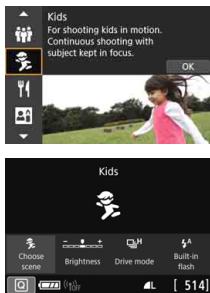
It is recommended to use continuous shooting to shoot multiple photos in case some people close their eyes.

 See the cautions on page 109.




- When shooting indoors or in low-light, hold the camera steady or use a tripod to prevent camera shake.
- You can adjust the image brightness with **[Brightness]**.

Photographing Children

When you want to continuously focus on and photograph children running around, use  (Kids). Skin tones will look healthy.

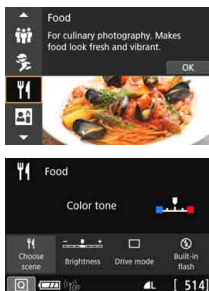


Shooting Tips

- **Track the subject with the Area AF frame.**
Press the shutter button halfway to start autofocusing in Area AF frame. During autofocusing, the beeper will continue beeping softly. If focus cannot be achieved, the focus indicator  will blink.
- **Shoot continuously.**
The default setting is  (High-speed continuous shooting*). At the decisive moment, press the shutter button completely to take the picture. If you keep holding down the shutter button, you can shoot continuously while maintaining autofocusing to capture changes in the subject's facial expression and movement.
* Viewfinder shooting: max. approx. 6.0 shots/sec., Live View shooting: max. approx. 4.5 shots/sec.
-  While the flash is recharging, “buSY” is displayed in the viewfinder and on the LCD panel, and a picture cannot be taken. Take the picture after this display turns off.
- See the cautions on page 109.

🍴 Shooting Food

When shooting food, use <🍴> (Food). The photo will look bright and appetizing. Also, depending on the light source, the reddish tinge will be suppressed in the pictures taken under tungsten lights, etc.



💡 Shooting Tips

● Change the color tone.


You can change [Color tone]. To increase the food's reddish tinge, set it toward [Warm]. Set it toward [Cool] if it looks too red.

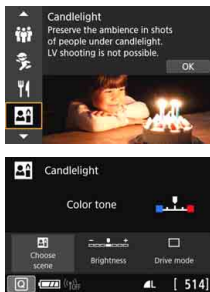
● Avoid using flash.

If you use flash, the light may reflect off the dish or food and results in unnatural shadows. Therefore, <📷> (Built-in flash off) is set by default. Try to prevent camera shake when shooting in low-light locations.

- Since this mode lets you shoot the food in appetizing color tones, human subjects may be photographed with an unsuitable skin tone.
- The warm color cast of subjects may fade.
- When multiple light sources are included on the screen, the warm color cast of the picture may not be reduced.
- If you use flash, the [Color tone] setting will switch to the standard.

Shooting Candlelight Portraits


When photographing a human subject lit in candlelight, use  (Candlelight). The atmosphere of candlelight is reflected in the color tones of the picture.

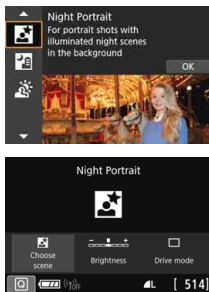


Shooting Tips

- **Use the center AF point to focus.**
Aim the center AF point in the viewfinder over the subject, then shoot.
 - **Prevent camera shake if the numeric display (shutter speed) in the viewfinder blinks.**
Under low light where camera shake is prone to occur, the viewfinder's shutter speed display will blink. Hold the camera steady or use a tripod. When using a zoom lens, you can reduce blur caused by camera shake by setting the lens to the wide-angle end, even with handheld shooting.
 - **Change the color tone.**
You can change [Color tone]. To increase the candlelight's reddish tinge, set it toward [Warm]. Set it toward [Cool] if it looks too red.
- Live View shooting is not possible.
 - Flash photography is not possible. In low light, the AF-assist beam may be emitted (p.127).

Shooting Night Portraits (With a Tripod)

To photograph people at night and obtain a natural-looking night scene in the background, use the  (Night Portrait) mode. Using a tripod is recommended.



Shooting Tips

- **Use a wide-angle lens and a tripod.**



When using a zoom lens, use the wide-angle end to obtain a wide night view. Also, since camera shake is prone to occur with handheld shooting, use a tripod.

- **Check the subject's brightness.**

Under low light, the built-in flash will fire automatically to obtain a good exposure of the subject.

Note that it is recommended to play back the captured image on location to check the image brightness. If the subject looks dark, move nearer and shoot again.


- **Also shoot in other shooting modes.**

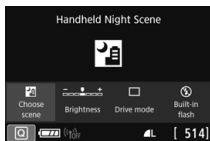
Since camera shake is prone to occur with night shots, shooting also with  and  is recommended.



- Tell the subject to keep still even after the flash fires.
- If you use the self-timer together with flash, the self-timer lamp will light up briefly after the picture is taken.
- See the cautions on page 109.

Shooting Night Scenes (Handheld)

Using a tripod when shooting a night scene gives the best results. However, the  (Handheld Night Scene) mode enables you to shoot night scenes even while handholding the camera. In this shooting mode, four shots are taken consecutively for each picture, and the resulting one image with reduced camera shake is recorded.





Shooting Tips

- **Hold the camera firmly.**

During shooting, hold the camera firmly and steadily. In this mode, four shots are aligned and merged into a single image. However, if there is significant misalignment in any of the four shots due to camera shake, they may not align properly in the final image.


- **For shots including people, fire the flash.**

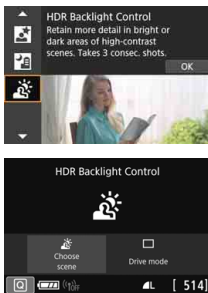
If you want to include people in the night scene shot, press the  button to set  (Built-in flash on). To take a nice portrait, the first shot will use flash. Tell the subject not to move until all four consecutive shots are taken.



- Compared to other shooting modes, the shooting range will be smaller.
- See the cautions on pages 109-110.

Shooting Backlit Scenes

When shooting a scene having both the bright and dark areas, use the  (HDR Backlight Control) mode. When you take one picture in this mode, three consecutive shots are taken at different exposures. This results in one image, with a wide tonal range, that has minimized the clipped shadows caused by backlighting.




Shooting Tips

● Hold the camera firmly.

During shooting, hold the camera firmly and steadily. In this mode, three shots are aligned and merged into a single image. However, if there is significant misalignment in any of the three shots due to camera shake, they may not align properly in the final image.

- Compared to other shooting modes, the shooting range will be smaller.
- Flash photography is not possible. In low light, the AF-assist beam may be emitted (p.127).
- See the cautions on page 110.

 HDR stands for High Dynamic Range.



Cautions for Group Photo

- Since distortion correction is applied, the camera records an image range narrower than the one seen through the viewfinder. (The image periphery is slightly trimmed and the resolution looks slightly lowered.) Also, during Live View shooting, the angle of view changes slightly.

Cautions for Kids

- During Live View shooting, if flash is fired in continuous shooting, the continuous shooting speed will decrease. Even if the flash is not fired for subsequent shots, shooting will still be performed with the decreased continuous shooting speed.




Cautions for Night Portrait and Handheld Night Scene

- During Live View shooting, achieving focus may be difficult with point sources of light, such as may be found in a night scene. In such a case, set the lens's focus mode switch to <MF> and focus manually.
- The Live View image displayed will not look exactly the same as the actual captured image.

Cautions for Night Portrait

- During Live View shooting, achieving focus may be difficult when the face of the subject looks dark. In such a case, set the lens's focus mode switch to <MF> and focus manually.

Cautions for Handheld Night Scene and HDR Backlight Control

- You cannot select **RAW** +  or **RAW**. If **RAW** +  or **RAW** is set, the image will be recorded in  quality.
- If you shoot a moving subject, the subject's movement may leave afterimages, or the surrounding area of the subject may become dark.
- The image alignment may not function properly with repetitive patterns (lattice, stripes, etc.), flat or single-tone images, or images significantly misaligned due to camera shake.
- It takes some time to record images to the card since they are merged after shooting. During the image processing, **"buSY"** will be displayed in the viewfinder and on the LCD panel, and you cannot take another picture until the processing is complete.


Cautions for Handheld Night Scene

- In flash photography, if the subject is too close to the camera, the picture may come out significantly bright (overexposure).
- In flash photography, if you shoot a night scene with few lights, the shots may not align correctly. This may result in a blurry picture.
- In flash photography, if the human subject is close to the background that is also illuminated by the flash, the shots may not align correctly. This may result in a blurry picture. Unnatural shadows and unsuitable colors may also appear.
- Flash coverage angle with an external Speedlite:
 - When using a Speedlite with automatic flash coverage setting, the zoom position will be fixed to the wide (wide-angle) end, regardless of the lens's zoom position.
 - When using a Speedlite requiring manual flash coverage setting, set the flash head to the normal position.

Cautions for HDR Backlight Control

- Note that the image may not be rendered with a smooth gradation and may look irregular or have significant noise.
- HDR Backlight Control may not be effective for excessively backlit scenes or extremely high-contrast scenes.
- When shooting subjects that are sufficiently bright as they are, for example for normally lit scenes, the image may look unnatural due to the HDR effect.

Shooting with Creative Filter Effects

In the <> (Creative filter) mode, you can apply one of ten filter effects (Grainy B/W*, Soft focus*, Fish-eye effect*, Water painting effect*, Toy camera effect*, Miniature effect*, HDR art standard, HDR art vivid, HDR art bold, and HDR art embossed) for shooting. When the camera is set for Live View shooting, you can see the effect on the screen before you start shooting. The camera saves only the image with the Creative filter applied.


For the effects marked with an asterisk, you can also take a picture without a Creative filter, then apply the effect afterward and save it as a new image (p.392).

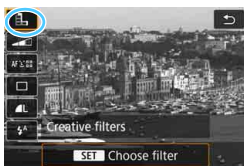


1 Set the Mode Dial to <>.









2 Display the Live View image.


- Press the <> button to display the Live View image.

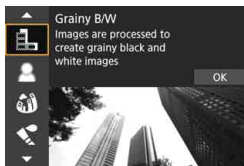


3 Select [Creative filters] with Quick Control.

- Press the <> button (10).
- Press the < > < > keys to select [] on the upper left of the screen, then press < >.



If you do not want the Live View image to be displayed when setting functions, press the < > button after step 1 and select [Choose filter].



4 Select a shooting mode.

- Press the <▲> <▼> keys to select a shooting mode, then press <SET>.
- ▶ The image will be displayed with the effects of the filter applied.

Available Shooting Modes in the Mode

Shooting Mode		Page
	Grainy B/W	p.113
	Soft focus	p.113
	Fish-eye effect	p.113
	Water painting effect	p.114
	Toy camera effect	p.114

Shooting Mode		Page
	Miniature effect	p.114
	HDR art standard	p.114
	HDR art vivid	p.114
	HDR art bold	p.115
	HDR art embossed	p.115



5 Adjust the effect.

- Press the <Q> button and select the icon below [**Creative filters**] (except for , , , and).
- Press the <◀> <▶> keys to adjust the filter effect, then press <SET>.

6 Take the picture.

- Press the shutter button completely to take the picture.
- To return to viewfinder shooting, press the <📷> button to exit Live View shooting. Then press the shutter button completely to take the picture.



- You cannot select **RAW** + **L** or **RAW**. If **RAW** + **L** or **RAW** is set, the image will be recorded in **L** quality.
- When **<[]>**, **<[]>**, **<[]>**, **<[]>**, **<[]>**, or **<[]>** is set, continuous shooting cannot be set.
- Dust Delete Data (p.341) will not be appended to images shot with Fish-eye effect applied.
- **<[]>** is set to **<[]>** (Flash Off) by default. Try to prevent camera shake when shooting in low-light conditions.



During Live View Shooting

- With Grainy B/W, the grainy effect displayed on the LCD monitor will look different from the grainy effect recorded in the picture.
- With the Soft focus and Miniature effects, the blurred effect displayed on the LCD monitor may look different from the blurred effect recorded in the picture.
- The histogram is not displayed.
- Magnified view is not possible.
- In Creative Zone modes, you can set some Creative filters with Quick Control (p.251).

Creative Filter Characteristics

Grainy B/W

Creates a grainy black-and-white photo. You can change the black-and-white effect by adjusting the contrast.


Soft focus

Gives the image a soft look. You can change the degree of softness by adjusting the blur.

Fish-eye effect

Gives the effect of a fish-eye lens. The image will have a barrel-type distortion.

Depending on the level of this filter effect, the area trimmed along the periphery of the image changes. Also, since this filter expands the center part of the image, the resolution at the center may decrease depending on the number of recorded pixels. Check the image on the screen when setting this filter. The AF point will be fixed to the one at the center.

-  **Water painting effect**

Makes the photo look like a watercolor painting with soft colors. You can control the color density by adjusting the filter effect. Note that night scenes or dark scenes may not be rendered with a smooth gradation and may look irregular or have significant noise.

-  **Toy camera effect**

Darkens the photo's corners and applies a unique color tone that makes it look as if it was shot by a toy camera. You can change the color cast by adjusting the color tone.

-  **Miniature effect**

Creates a diorama effect.

If you want the image center to look sharp, take the picture without changing any setting.

To move the area that looks sharp (miniature effect frame) in Live View shooting, see "Adjusting Miniature Effect" (p.116). The AF method will be Live 1-point AF. Positioning the miniature effect frame over the AF point before shooting is recommended.






During viewfinder shooting, aim the center AF point over the subject and shoot.

-  **HDR art standard**

Clipped highlights and shadows will be reduced. The low contrast and flat gradation create a painting-like effect. The subject outlines will have bright (or dark) edges.

-  **HDR art vivid**

The colors are more saturated than with **[HDR art standard]**, and the low contrast and flat gradation create a graphic art effect.

 For < > < > < > < >, clipped highlights and shadows will be reduced for a high dynamic range of tones even with high-contrast scenes. **Three images of different exposures are captured continuously for each shot and merged into a single image.** See the cautions on page 115.

-  **HDR art bold**

The colors are the most saturated, making the subject pop out, and the picture looks like an oil painting.

-  **HDR art embossed**

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

Cautions for < > HDR Art Standard, < > HDR Art Vivid, < > HDR Art Bold, and < > HDR Art Embossed

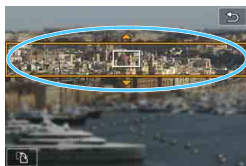
- Compared to other shooting modes, the shooting range will be smaller.
- The Live View image displayed with the filter applied will not look exactly the same as the actual captured image.
- If you shoot a moving subject, the subject's movement may leave afterimages, or the surrounding area of the subject may become dark.
- The image alignment may not function properly with repetitive patterns (lattice, stripes, etc.), flat or single-tone images, or images significantly misaligned due to camera shake.
- If you are handholding the camera, try to prevent camera shake when shooting.
- The color gradation of the sky or white walls may not be reproduced correctly. Irregular exposure, irregular colors, or noise may appear.
- Shooting under fluorescent or LED lighting may result in unnatural color reproduction of the illuminated areas.
- It takes some time to record images to the card since they are merged after shooting. During the image processing, "buSY" will be displayed in the viewfinder and on the LCD panel, and you cannot take another picture until the processing is complete.
- Flash photography is not possible. In low light, the AF-assist beam may be emitted (p.127).

Adjusting Miniature Effect



1 Move the AF point.

- Move the AF point to where you want to focus on.
- ▶ If the AF point is not fully covered by the miniature effect frame, the [AF] icon on the bottom right of the screen will blink. In the next step, adjust the position of the miniature effect frame so that it covers the AF point.



2 Move the miniature effect frame.

- Press the <Q> button (or tap the [AF] icon on the bottom right of the screen). The miniature effect frame will turn orange and can be moved.
- Press the <INFO> button (or tap the [INFO] icon on the bottom left of the screen) to switch between the miniature effect frame's vertical and horizontal orientations.
- Press <SET> to set the position of the miniature effect frame.
- Press <▲> <▼> or <◀> <▶> to move the AF point or miniature effect frame. Press the <⏏> button to return the AF point or miniature effect frame to the screen center.

3 Take the picture.

Q Quick Control

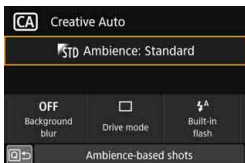
In Basic Zone modes, press the <Q> button to display the Quick Control screen. You can set the items shown in the tables on pages 118-119.

1 Set the Mode Dial to a Basic Zone mode.

2 Press the <Q> button (◻10).

▶ The Quick Control screen will appear.

Example: <CA>

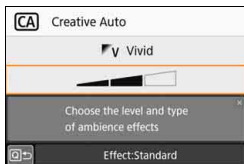
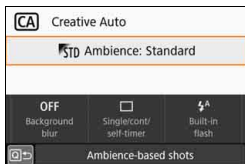


3 Set the desired functions.

- Press the <▲> <▼> or <◀> <▶> keys to select a function. (This step is not necessary in the [📷] mode.)
- ▶ The settings of the selected function and Feature guide (p.63) will appear.
- Turn the <⚙️> or <🕒> dial to change the setting.
- You can also select from a list by selecting a function and pressing <SET>.

- When [📷 : Shooting screen: Guided] is set, a screen such as the following will appear.

Example: <CA>



Settable Functions in Basic Zone Modes

●: Default setting* ○: User selectable □: Not selectable

Function								
Drive mode (p.147)	□: Single shooting	●	●	●	○	●	●	○
	H: High-speed continuous shooting	○	○	○	○	○	○	●
	L: Low-speed continuous shooting	○	○	○	●	○	○	○
	10sec.	○	○	○	○	○	○	○
	2sec.	○	○	○	○	○	○	○
	C: Continuous shooting	○	○	○	○	○	○	○
Built-in flash firing	A: Automatic firing	●	□	●	●	□	●	□
	Flash on (Fires at all times)	○	□	○	○	□	○	□
	Flash off	○	●	○	○	●	○	●
Ambience-based shots (p.94)		□	□	○	□	□	□	□
Background blur (p.92)		□	□	○	□	□	□	□
Brightness (p.120)		□	□	□	○	○	○	○

Function		SCN						
Drive mode (p.147)	□: Single shooting	●	○	●	●	●	●	●
	H: High-speed continuous shooting	○	●	○	○	○	○	○
	L: Low-speed continuous shooting	○	○	○	○	○	○	○
	10sec.	○	○	○	○	○	○	○
	2sec.	○	○	○	○	○	○	○
	C: Continuous shooting	○	○	○	○	○	○	○
Built-in flash firing	A: Automatic firing	●	●	□	□	●	□	□
	Flash on (Fires at all times)	○	○	○	□	□	○	□
	Flash off	○	○	●	●	□	●	●
Brightness (p.120)		○	○	○	○	○	○	□
Color tone (p.104, 105)		□	□	○	○	□	□	□

* If you change the shooting mode or set the power switch to <OFF>, all the functions will revert to the default settings (except the self-timer).

●: Default setting* ○: User selectable □: Not selectable

Function						
Drive mode (p.147)	□: Single shooting	●	●	●	●	●
	H: High-speed continuous shooting					
	: Low-speed continuous shooting					
	: 10sec.	○	○	○	○	○
	: 2sec.	○	○	○	○	○
	C: Continuous shooting	○	○	○	○	○
Built-in flash firing	A: Automatic firing	●	●	●	●	●
	: Flash on (Fires at all times)	○	○	○	○	○
	: Flash off	○	○	○	○	○
Adjustment of effects (p.111)		○	○	○	○	○

Function						
Drive mode (p.147)	□: Single shooting	●	●	●	●	●
	H: High-speed continuous shooting		○	○	○	○
	: Low-speed continuous shooting		○	○	○	○
	: 10sec.	○	○	○	○	○
	: 2sec.	○	○	○	○	○
	C: Continuous shooting	○	○	○	○	○
Built-in flash firing	A: Automatic firing	○				
	: Flash on (Fires at all times)	○				
	: Flash off	●	●	●	●	●
Adjustment of effects (p.111)						

* If you change the shooting mode or set the power switch to <OFF>, all the functions will revert to the default settings (except the self-timer).

Adjusting the Brightness

In Basic Zone modes, when a mode other than <A+>, <Tv>, <CA>, <SCN: 1>, or <O> is set, you can adjust the brightness for shooting. You can adjust both the brightness and darkness across 3-step ranges with 0 being the standard.

1 Set the Mode Dial to <P>, <A>, <Tv>, <Av>, or <SCN>.

- When <SCN> is set, set to <iii>, <1>, <2>, <3>, <4>, or <5>.



2 Display the Live View image.

- Press the <LIVE VIEW> button to display the Live View image (except <Av>).



3 With Quick Control, select the desired brightness.

- Press the <Q> button (10).
- Press the <▲> <▼> keys to select [Brightness], then press the <◀> <▶> keys to select the desired brightness.
- ▶ The image with the selected brightness adjustment applied will appear.

4 Take the picture.

- Press the shutter button completely to take the picture.
- To return to viewfinder shooting, press the <LIVE VIEW> button to exit Live View shooting. Then press the shutter button completely to take the picture.
- If you change the shooting mode or set the power switch to <OFF>, the setting will revert to [0] (standard).

If you do not want the Live View image to be displayed when setting functions, start the operation from step 3.

▶ Image Playback

The easiest way to play back images is described below. For more details on the playback procedure, see page 345.



1 Play back the image.

- Press the <▶> button.
- ▶ The last image captured or played back will appear.



2 Select an image.

- To play back images starting with the last image captured, turn the <◂> dial counterclockwise. To play back images starting with the first captured image, turn the <◂> dial clockwise.
- Each time you press the <INFO> button, the display will change.



No information



Basic information display



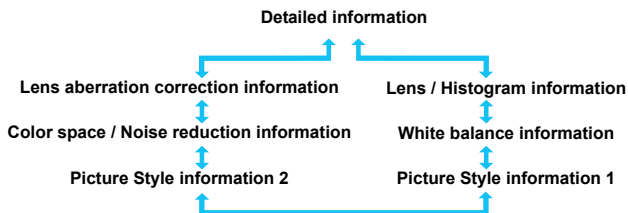
Shooting information display

3 Exit the image playback.

- Press the <▶> button to exit the image playback and return to shooting-ready state.

Shooting Information Display

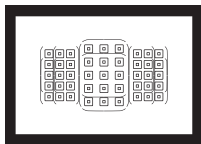
With the shooting information screen displayed (p.121), you can press the <▲> <▼> keys to change the shooting information displayed at the screen bottom as follows. For details, see pages 386-387.



- The information displayed varies depending on the shooting mode and settings.
- If you use GPS Receiver GP-E2 to record GPS information for the image, the “GPS information” screen will also appear.

3

Setting the AF and Drive Modes



The AF points in the viewfinder are arranged to make AF shooting suitable for a wide variety of subjects and scenes.

You can also select the AF operation and drive mode that best match the shooting conditions and subject.

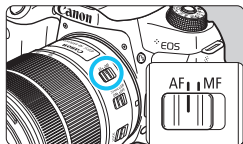
- The ☆ icon at the upper right of the page title indicates that the function is available only in Creative Zone modes (p.31).
- In Basic Zone modes, the AF operation is set automatically.



<AF> stands for autofocus. <MF> stands for manual focus.

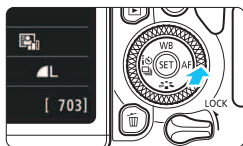
AF: Changing the Autofocus Operation [☆]

You can select the AF (autofocus) operation characteristics to suit the shooting conditions or subject. In Basic Zone modes, the optimum AF operation is set automatically for the respective shooting mode.



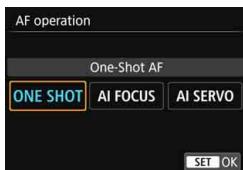
1 Set the lens's focus mode switch to <AF>.

2 Turn the Mode Dial to a Creative Zone mode.



3 Press the <▶ AF> button.

▶ [AF operation] will appear.




4 Select the AF operation.

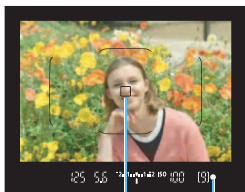
- Press the <◀> <▶> keys to select the desired AF operation, then press <SET>.

5 Focus on the subject.

- Aim the AF point over the subject and press the shutter button halfway. The camera will then autofocus in the selected AF operation.

 In Creative Zone modes, you can also press the <AF-ON> button to autofocus.

One-Shot AF for Still Subjects



AF point
Focus indicator

Suited for still subjects. When you press the shutter button halfway, the camera will focus only once.

- The AF point that achieves focus is displayed, and the focus indicator <●> in the viewfinder will also light up.
 - With evaluative metering, the exposure setting will be set at the same time focus is achieved.
- While you hold down the shutter button halfway, the focus will be locked. You can then recompose the shot if desired.




- If focus cannot be achieved, the focus indicator <●> in the viewfinder will blink. If this occurs, the picture cannot be taken even if the shutter button is pressed completely. Recompose the shot or see “Subjects Difficult to Focus on” (p.145) and try to focus again.
- If [**3: Beep**] is set to [**Disable**], the beeper will not sound when focus is achieved.
- After achieving focus with One-Shot AF, you can lock the focus on a subject and recompose the shot. This is called “focus lock”. This is useful when you want to focus on a peripheral subject not covered by the Area AF frame.
- When a lens equipped with an electronic manual focusing function is used, see page 128.

AI Servo AF for Moving Subjects

This AF operation is suited for moving subjects when the focusing distance keeps changing. While you hold down the shutter button halfway, the camera will keep focusing on the subject continuously.


- The exposure is set at the moment the picture is taken.
- When the AF area selection mode (p.129) is set to Automatic selection AF, focus tracking will continue as long as the Area AF frame covers the subject.

 With AI Servo AF, the beeper will not sound even when focus is achieved. Also, the focus indicator <●> in the viewfinder will not light up.

AI Focus AF for Switching the AF Operation Automatically

AI Focus AF switches the AF operation from One-Shot AF to AI Servo AF automatically if a still subject starts moving.

- After the subject is focused in One-Shot AF, if the subject starts moving, the camera will detect the movement, change the AF operation automatically to AI Servo AF, and start tracking the moving subject.




 When focus is achieved with AI Focus AF with the Servo operation active, the beeper will continue beeping softly. However, the focus indicator <●> in the viewfinder will not light up. Note that focus will not be locked in this case.


AF Points Lighting Up in Red

By default, the AF points light up in red when focus is achieved in low-light conditions or on a dark subject. In Creative Zone modes, you can set whether to have the AF points light up in red when focus is achieved (p.406).

AF-Assist Beam with the Built-in Flash

Under low-light conditions, when you press the shutter button halfway, the built-in flash may fire a brief burst of flashes. This illuminates the subject to help autofocusing.

- 
 ● AF-assist beam will not be emitted from the built-in flash in , , , or <SCN:  > modes, or when [Built-in flash firing] is set to in , , , , , <SCN: - The AF-assist beam will not be emitted with AI Servo AF operation.
- The built-in flash makes a sound when firing continuously. This is normal and not a malfunction.

- 
 ● The effective range of the AF-assist beam emitted by the built-in flash is approx. 4 meters / 13.1 feet.
- In Creative Zone modes, when you raise the built-in flash with the button, the AF-assist beam will be emitted as necessary. Note that depending on the setting for [5: AF-assist beam firing] under [4: Custom Functions (C.Fn)], AF-assist beam will not be emitted (p.404).

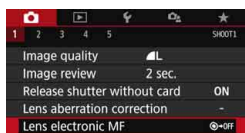
MENU Setting Lens Electronic MF

With the following USM and STM lenses equipped with electronic manual focusing function, you can set whether to use electronic manual focusing in One-Shot AF mode. The default setting is **[Disable after One-Shot AF]**.

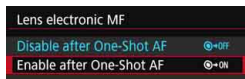
EF-S18-135mm f/3.5-5.6 IS USM	EF300mm f/2.8L USM	EF1200mm f/5.6L USM
EF50mm f/1.0L USM	EF400mm f/2.8L USM	EF28-80mm f/2.8-4L USM
EF85mm f/1.2L USM	EF400mm f/2.8L II USM	EF70-300mm f/4-5.6 IS II USM
EF85mm f/1.2L II USM	EF500mm f/4.5L USM	
EF200mm f/1.8L USM	EF600mm f/4L USM	

EF-S24mm f/2.8 STM	EF-S18-55mm f/4-5.6 IS STM	EF40mm f/2.8 STM
EF-S10-18mm f/4.5-5.6 IS STM	EF-S18-135mm f/3.5-5.6 IS STM	EF50mm f/1.8 STM
EF-S18-55mm f/3.5-5.6 IS STM	EF-S55-250mm f/4-5.6 IS STM	EF24-105mm f/3.5-5.6 IS STM

* As of the product's release date.

**1 Select [Lens electronic MF].**

- Under the [1] tab, select **[Lens electronic MF]**, then press <SET>.

**2 Set the desired setting.**

- Select the setting, then press <SET>.

- Disable after One-Shot AF**


Manual focus adjustment after the AF operation is disabled.

- Enable after One-Shot AF**

You can manually adjust the focus after the AF operation if you keep holding down the shutter button halfway.

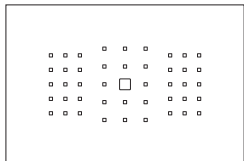
Selecting the AF Area and AF Point

The camera has 45 AF points for autofocus. You can select the AF area selection mode and AF point(s) suiting the scene or subject.

 Depending on the lens used, the number of usable AF points, AF point patterns, Area AF frame shape, etc. vary. For details, see “Lenses and Usable AF Points” on page 137.

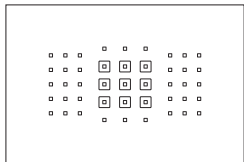
AF Area Selection Mode

You can select one of four AF area selection modes. For the selection procedure, see the next page.



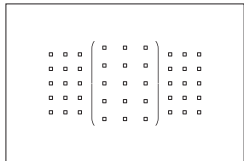
Single-point AF (Manual selection)

Select one AF point to focus.



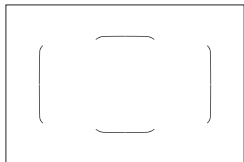
Zone AF (Manual selection of zone)

One of nine focusing zones is used to focus.



Large Zone AF (Manual selection of zone)

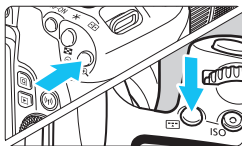
One of three focusing zones (left, center, and right) is used to focus.







Automatic selection AF

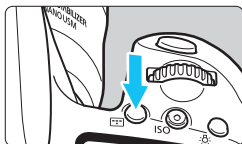
The Area AF frame (entire AF area) is used to focus.


Selecting the AF Area Selection Mode




1 Press the  or  button (ⓘ6).





- Look through the viewfinder and press the  or  button.



2 Press the  button.

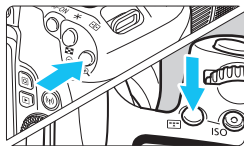
- Each time you press the  button, the AF area selection mode changes.

- In the **<SCN: 田>** and **<Ⓢ: 田 田 田>** modes, you cannot select the AF area. Single-point AF (fixed at center) is applied for shooting.
- In Basic Zone modes, if you change the shooting mode or set the power switch to **<OFF>**, the setting will revert to the default.

 In Creative Zone modes, if you set **[6: AF area selection method]** under **[4: Custom Functions(C.Fn)]** to **[1: 田 → Main Dial]**, you can select the AF area selection mode by pressing the  or  button, then turning the  dial (p.404).

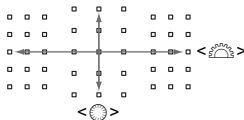
Selecting the AF Point Manually

You can manually select the AF point or zone.



1 Press the or button (6).

- ▶ The AF points will be displayed in the viewfinder.
- In the Zone AF mode or Large Zone AF mode, the selected zone will be displayed.





2 Select an AF point.

- You can select an AF point in horizontal direction with the dial or vertical direction with the dial.
- If you press , the center AF point (or center zone) will be selected.
- In the Zone AF mode, turning the or dial will change the zone in a looping sequence.
- You can also select an AF point or zone in horizontal direction with the keys or vertical direction with the keys.



- When you hold down the button and turn the dial, you can select an AF point in vertical direction.
- When you press the or button, the LCD panel displays the following:
 - Zone AF, Large Zone AF, and Automatic selection AF: **AF**
 - Single-point AF: **SEL []** (Center)/**SEL AF** (Off-center)

AF Point Display Indications

Pressing the  or  button lights up the AF points that are cross-type AF points for high-precision autofocusing. The blinking AF points are horizontal-line or vertical-line sensitive. For details, see pages 136-140.

AF Area Selection Modes

Single-point AF (Manual selection)



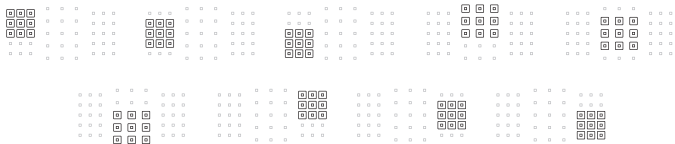
Select one AF point <□> to be used for focusing.

Zone AF (Manual selection of zone)

The AF area is divided into nine focusing zones for focusing. Since all the AF points in the selected zone are used for Automatic selection AF, it is superior to Single-point AF in tracking the subject, and it is also effective for moving subjects.

However, since it is inclined to focus on the nearest subject, focusing on a specific target may be more difficult.

The AF point(s) achieving focus is displayed as <□>.



Large Zone AF (Manual selection of zone)

The AF area is divided into three focusing zones (left, center, and right) for focusing. Since the focusing area is larger than with Zone AF and all the AF points in the selected zone are used for Automatic selection AF, it is superior to Single-point AF in tracking the subject, and it is also effective for moving subjects.

However, since it is inclined to focus on the nearest subject, focusing on a specific target may be more difficult.

The AF point(s) achieving focus is displayed as <□>.

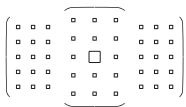


Automatic selection AF


The Area AF frame (entire AF area) is used to focus. The AF point(s) achieving focus is displayed as <□>.



With One-Shot AF, pressing the shutter button halfway will display the AF point(s) <□> that achieved focus. If multiple AF points are displayed, it means they all have achieved focus. This mode tends to focus on the nearest subject.



With AI Servo AF, the manually-selected (p.131) AF point <□> is used first to achieve focus. The AF point(s) achieving focus is displayed as <□>.

-  When AI Servo AF mode is set for Zone AF, Large Zone AF, or Automatic selection AF, the active AF point <□> will keep switching to track the subject. However, under certain shooting conditions (such as when the subject is small), it may not be able to track the subject.
- If a peripheral AF point or a wide-angle or telephoto lens is used, achieving focus may be difficult with an EOS-dedicated, external Speedlite's AF-assist beam. In such a case, use the center AF point or an AF point close to the center.
- When the AF point(s) light up, part or all of the viewfinder may light up in red. This is a characteristic of AF point display.
- In low temperatures, the AF point's display may be difficult to see. This is a characteristic of AF point display. Also, the tracking response may become slower.

AF Using Color Tracking

By default, AF will be performed based on color tracking.

However, in the <[AF-ON]>, <[AF-ON]>, <SCN: [AF-ON] [AF-ON] [AF-ON]> and <[AF-ON]: [AF-ON] [AF-ON]> modes, AF will not be performed based on color tracking. When the AF area selection mode is set to Zone AF, Large Zone AF, or Automatic selection AF, focus is achieved as follows:

- **In One-Shot AF Mode**

Focusing on a still human subject in the AF area is made easier.

- **In AI Servo AF Mode**

Focusing on a human subject in the AF area is made easier. If no skin tones can be detected, the nearest subject will be focused on. Once focus is achieved, AF points are automatically selected so that the camera continues to focus on the color of the area it focused on first.

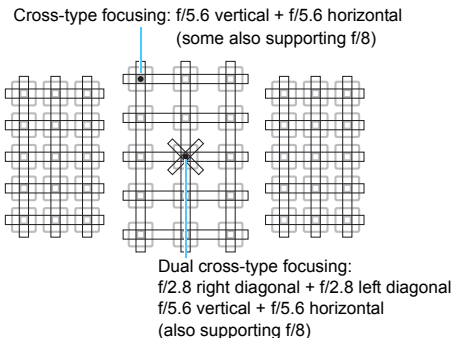
* In [7: Auto AF pt sel.:Color Tracking] under [4: Custom Functions(C.Fn)], you can set whether to perform AF by tracking colors. If [1:Disable] is set, focus is achieved based only on AF information (p.405).



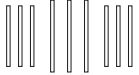
AF Sensor

The camera's AF sensor has 45 AF points. The illustration below shows the AF sensor pattern corresponding to each AF point. When using lenses with a maximum aperture of $f/2.8$ or faster, high-precision AF is possible at the viewfinder center.

Depending on the lens used, the number of usable AF points, AF point patterns, Area AF frame shape, etc. vary. For details, see "Lenses and Usable AF Points" on page 137.

Diagram



	This focusing sensor is geared to obtain higher precision focusing for lenses with a maximum aperture of $f/2.8$ or faster. A diagonal cross pattern makes it easier to focus on the subjects that may be difficult to focus. It is provided at the center AF point.
	These focusing sensors are geared for lenses with a maximum aperture of $f/5.6$ or faster (and some supporting $f/8$). Since they have a horizontal pattern, they can detect vertical lines. They cover all 45 AF points.
	These focusing sensors are geared for lenses with a maximum aperture of $f/5.6$ or faster (and some supporting $f/8$). Since they have a vertical pattern, they can detect horizontal lines. They cover all 45 AF points.

Lenses and Usable AF Points



- Although the camera has 45 AF points, **the number of usable AF points, AF point patterns, Area AF frame shape, etc. vary depending on the lens used. The lenses are thereby classified into eight groups from A to H.**
- Using a lens in Groups E to H will have fewer usable AF points.
- **Lens groups are listed on pages 141-144. Check which group your lens belongs to.**
- The number of available AF points varies depending on aspect ratio settings (p.156).



- When you press the or button, the AF points at the position indicated by the mark will blink. (The / AF points will stay lit.) Regarding lighting up or blinking of the AF points, see page 132.
- For the latest “Lens Group Designations” information, check with the Canon website, etc.
- Some lenses may not be available in certain countries or regions.

Group A

Autofocusing with 45 points is possible. All the AF area selection modes are selectable.



- : Dual cross-type AF point. Subject tracking performance is superior and the focusing precision is higher than with other AF points.
- : Cross-type AF point. Subject tracking performance is superior and high-precision focusing is achieved.

Group B

Autofocusing with 45 points is possible. All the AF area selection modes are selectable.



- : Cross-type AF point. Subject tracking performance is superior and high-precision focusing is achieved.

Group C

Autofocusing with 45 points is possible. All the AF area selection modes are selectable.



- : Cross-type AF point. Subject tracking performance is superior and high-precision focusing is achieved.
- : AF points sensitive to horizontal lines.

Group D

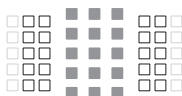
Autofocusing with 45 points is possible. All the AF area selection modes are selectable.



- : Cross-type AF point. Subject tracking performance is superior and high-precision focusing is achieved.
- : AF points sensitive to horizontal lines.

Group E

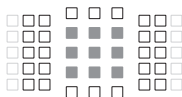
Autofocusing with the 35 points is possible. (Not possible with all 45 AF points.) All the AF area selection modes are selectable. During automatic AF point selection, the outer frame marking the AF area (Area AF frame) will be different from 45-point Automatic selection AF.



- : Cross-type AF point. Subject tracking performance is superior and high-precision focusing is achieved.
- : AF points sensitive to horizontal lines.
- : Disabled AF points (not displayed).

Group F

Autofocusing with the 35 points is possible. (Not possible with all 45 AF points.) All the AF area selection modes are selectable. During automatic AF point selection, the outer frame marking the AF area (Area AF frame) will be different from 45-point Automatic selection AF.



- : Cross-type AF point. Subject tracking performance is superior and high-precision focusing is achieved.
- : AF points sensitive to vertical lines (AF points in the horizontal array at the top and bottom) or horizontal lines (AF points in a vertical array on the left and right).
- : Disabled AF points (not displayed).

Group G

Autofocusing with 27 points is possible. (Not possible with all 45 AF points.) Large Zone AF (manual selection of zone) cannot be selected in AF area selection mode. During automatic AF point selection, the outer frame marking the AF area (Area AF frame) will be different from 45-point Automatic selection AF.



- : Cross-type AF point. Subject tracking performance is superior and high-precision focusing is achieved.
- : AF points sensitive to horizontal lines.
- : Disabled AF points (not displayed).

Group H

Autofocusing is possible only with the center AF point.



- : Cross-type AF point. Subject tracking performance is superior and high-precision focusing is achieved.
- : Disabled AF points (not displayed).

- If the maximum aperture is slower than $f/5.6$ (greater than $f/5.6$ but not exceeding $f/8$), focus may not be achieved with AF when shooting low-contrast or low-light subjects.
- If the maximum aperture is slower than $f/8$ (greater than $f/8$), AF is not possible during viewfinder shooting.

Lens Group Designations (As of the product's release date)


EF-S24mm f/2.8 STM	A	EF40mm f/2.8 STM	A
EF-S60mm f/2.8 Macro USM	B	EF50mm f/1.0L USM	A
EF-S10-18mm f/4.5-5.6 IS STM	D	EF50mm f/1.2L USM	A
EF-S10-22mm f/3.5-4.5 USM	B	EF50mm f/1.4 USM	A
EF-S15-85mm f/3.5-5.6 IS USM	B	EF50mm f/1.8	A
EF-S17-55mm f/2.8 IS USM	A	EF50mm f/1.8 II	A
EF-S17-85mm f/4-5.6 IS USM	B	EF50mm f/1.8 STM	A
EF-S18-55mm f/3.5-5.6	C	EF50mm f/2.5 Compact Macro	B
EF-S18-55mm f/3.5-5.6 USM	C	EF50mm f/2.5 Compact Macro + LIFE SIZE Converter	B
EF-S18-55mm f/3.5-5.6 II	C	EF85mm f/1.2L USM	A
EF-S18-55mm f/3.5-5.6 II USM	C	EF85mm f/1.2L II USM	A
EF-S18-55mm f/3.5-5.6 III	B	EF85mm f/1.8 USM	A
EF-S18-55mm f/3.5-5.6 IS	C	EF100mm f/2 USM	A
EF-S18-55mm f/3.5-5.6 IS II	B	EF100mm f/2.8 Macro	B
EF-S18-55mm f/3.5-5.6 IS STM	B	EF100mm f/2.8 Macro USM	E
EF-S18-55mm f/4-5.6 IS STM	D	EF100mm f/2.8L Macro IS USM	B
EF-S18-135mm f/3.5-5.6 IS	B	EF135mm f/2L USM	A
EF-S18-135mm f/3.5-5.6 IS USM	B	EF135mm f/2L USM + Extender EF1.4x I/II/III	A
EF-S18-135mm f/3.5-5.6 IS STM	B	EF135mm f/2L USM + Extender EF2x I/II/III	B
EF-S18-200mm f/3.5-5.6 IS	B	EF135mm f/2.8 (Softfocus)	A
EF-S55-250mm f/4-5.6 IS	B	EF180mm f/3.5L Macro USM	B
EF-S55-250mm f/4-5.6 IS II	B	EF180mm f/3.5L Macro USM + Extender EF1.4x I/II/III	F
EF-S55-250mm f/4-5.6 IS STM	B	EF200mm f/1.8L USM	A
EF14mm f/2.8L USM	A	EF200mm f/1.8L USM + Extender EF1.4x I/II/III	A*
EF14mm f/2.8L II USM	A	EF200mm f/1.8L USM + Extender EF2x I/II/III	B*
EF15mm f/2.8 Fisheye	A	EF200mm f/2L IS USM	A
EF20mm f/2.8 USM	A	EF200mm f/2L IS USM + Extender EF1.4x I/II/III	A
EF24mm f/1.4L USM	A	EF200mm f/2L IS USM + Extender EF2x I/II/III	B
EF24mm f/1.4L II USM	A	EF200mm f/2.8L USM	A
EF24mm f/2.8	A	EF200mm f/2.8L USM + Extender EF1.4x I/II/III	B
EF24mm f/2.8 IS USM	A	EF200mm f/2L IS USM	A
EF28mm f/1.8 USM	A	EF200mm f/2L IS USM + Extender EF2x I/II/III	B
EF28mm f/2.8	A	EF200mm f/2.8L USM	A
EF28mm f/2.8 IS USM	A	EF200mm f/2.8L USM + Extender EF1.4x I/II/III	B
EF35mm f/1.4L USM	A		
EF35mm f/1.4L II USM	A		
EF35mm f/2	A		
EF35mm f/2 IS USM	A		

EF200mm f/2.8L USM + Extender EF2x I/II/III	B	EF400mm f/2.8L IS USM + Extender EF2x I/II/III	B
EF200mm f/2.8L II USM	A	EF400mm f/2.8L IS II USM	A
EF200mm f/2.8L II USM + Extender EF1.4x I/II/III	B	EF400mm f/2.8L IS II USM + Extender EF1.4x I/II/III	B
EF200mm f/2.8L II USM + Extender EF2x I/II/III	B	EF400mm f/2.8L IS II USM + Extender EF2x I/II/III	B
EF300mm f/2.8L USM	A	EF400mm f/4 DO IS USM	B
EF300mm f/2.8L USM + Extender EF1.4x I/II/III	B*	EF400mm f/4 DO IS USM + Extender EF1.4x I/II/III	B
EF300mm f/2.8L USM + Extender EF2x I/II/III	B*	EF400mm f/4 DO IS USM + Extender EF2x I/II/III	H (f/8)
EF300mm f/2.8L IS USM	A	EF400mm f/4 DO IS II USM	B
EF300mm f/2.8L IS USM + Extender EF1.4x I/II/III	B	EF400mm f/4 DO IS II USM + Extender EF1.4x I/II/III	B
EF300mm f/2.8L IS USM + Extender EF2x I/II/III	B	EF400mm f/4 DO IS II USM + Extender EF2x I/II/III	H (f/8)
EF300mm f/2.8L IS II USM	A	EF400mm f/5.6L USM	B
EF300mm f/2.8L IS II USM + Extender EF1.4x I/II/III	B	EF400mm f/5.6L USM + Extender EF1.4x I/II/III	H (f/8)
EF300mm f/2.8L IS II USM + Extender EF2x I/II/III	B	EF500mm f/4L IS USM	B
EF300mm f/4L USM	B	EF500mm f/4L IS USM + Extender EF1.4x I/II/III	B
EF300mm f/4L USM + Extender EF1.4x I/II/III	B	EF500mm f/4L IS USM + Extender EF2x I/II/III	H (f/8)
EF300mm f/4L USM + Extender EF2x I/II/III	H (f/8)	EF500mm f/4L IS II USM	B
EF300mm f/4L IS USM	B	EF500mm f/4L IS II USM + Extender EF1.4x I/II/III	B
EF300mm f/4L IS USM + Extender EF1.4x I/II/III	B	EF500mm f/4L IS II USM + Extender EF2x I/II/III	H (f/8)
EF300mm f/4L IS USM + Extender EF2x I/II/III	H (f/8)	EF500mm f/4.5L USM	B
EF400mm f/2.8L USM	A	EF500mm f/4.5L USM + Extender EF1.4x I/II/III	H (f/8)*
EF400mm f/2.8L USM + Extender EF1.4x I/II/III	B*	EF600mm f/4L USM	B
EF400mm f/2.8L USM + Extender EF2x I/II/III	B*	EF600mm f/4L USM + Extender EF1.4x I/II/III	B*
EF400mm f/2.8L II USM	A	EF600mm f/4L USM + Extender EF2x I/II/III	H (f/8)*
EF400mm f/2.8L II USM + Extender EF1.4x I/II/III	B*	EF600mm f/4L IS USM	B
EF400mm f/2.8L II USM + Extender EF2x I/II/III	B*	EF600mm f/4L IS USM + Extender EF1.4x I/II/III	B
EF400mm f/2.8L IS USM	A	EF600mm f/4L IS USM + Extender EF2x I/II/III	H (f/8)
EF400mm f/2.8L IS USM + Extender EF1.4x I/II/III	B	EF600mm f/4L IS II USM	B
		EF600mm f/4L IS II USM + Extender EF1.4x I/II/III	B

EF600mm f/4L IS II USM + Extender EF2x I/II/III	H (f/8)	EF28-105mm f/3.5-4.5 USM	B
EF800mm f/5.6L IS USM	E	EF28-105mm f/3.5-4.5 II USM	B
EF800mm f/5.6L IS USM + Extender EF1.4x I/II/III	H (f/8)	EF28-105mm f/4-5.6	F
EF1200mm f/5.6L USM	E	EF28-105mm f/4-5.6 USM	F
EF1200mm f/5.6L USM + Extender EF1.4x I/II/III	H (f/8)*	EF28-135mm f/3.5-5.6 IS USM	B
EF8-15mm f/4L Fisheye USM	B	EF28-200mm f/3.5-5.6	B
EF11-24mm f/4L USM	C	EF28-200mm f/3.5-5.6 USM	B
EF16-35mm f/2.8L USM	A	EF28-300mm f/3.5-5.6L IS USM	B
EF16-35mm f/2.8L II USM	A	EF35-70mm f/3.5-4.5	E
EF16-35mm f/2.8L III USM	A	EF35-70mm f/3.5-4.5A	E
EF16-35mm f/4L IS USM	B	EF35-80mm f/4-5.6	F
EF17-35mm f/2.8L USM	A	EF35-80mm f/4-5.6 PZ	E
EF17-40mm f/4L USM	B	EF35-80mm f/4-5.6 USM	F
EF20-35mm f/2.8L	A	EF35-80mm f/4-5.6 II	E
EF20-35mm f/3.5-4.5 USM	C	EF35-80mm f/4-5.6 III	F
EF22-55mm f/4-5.6 USM	F	EF35-105mm f/3.5-4.5	B
EF24-70mm f/2.8L USM	A	EF35-105mm f/4.5-5.6	H
EF24-70mm f/2.8L II USM	A	EF35-105mm f/4.5-5.6 USM	H
EF24-70mm f/4L IS USM	B	EF35-135mm f/3.5-4.5	B
EF24-85mm f/3.5-4.5 USM	D	EF35-135mm f/4-5.6 USM	C
EF24-105mm f/3.5-5.6 IS STM	B	EF35-350mm f/3.5-5.6L USM	D
EF24-105mm f/4L IS USM	B	EF38-76mm f/4.5-5.6	E
EF24-105mm f/4L IS II USM	B	EF50-200mm f/3.5-4.5	B
EF28-70mm f/2.8L USM	A	EF50-200mm f/3.5-4.5L	B
EF28-70mm f/3.5-4.5	E	EF55-200mm f/4.5-5.6 USM	D
EF28-70mm f/3.5-4.5 II	E	EF55-200mm f/4.5-5.6 II USM	D
EF28-80mm f/2.8-4L USM	B	EF70-200mm f/2.8L USM	A
EF28-80mm f/3.5-5.6	E	EF70-200mm f/2.8L USM + Extender EF1.4x I/II/III	B**
EF28-80mm f/3.5-5.6 USM	E	EF70-200mm f/2.8L USM + Extender EF2x I/II/III	B**
EF28-80mm f/3.5-5.6 II	E	EF70-200mm f/2.8L IS USM	A
EF28-80mm f/3.5-5.6 II USM	E	EF70-200mm f/2.8L IS USM + Extender EF1.4x I/II/III	B
EF28-80mm f/3.5-5.6 III USM	E	EF70-200mm f/2.8L IS USM + Extender EF2x I/II/III	B
EF28-80mm f/3.5-5.6 IV USM	E	EF70-200mm f/2.8L IS II USM	A
EF28-90mm f/4-5.6	B	EF70-200mm f/2.8L IS II USM + Extender EF1.4x I/II/III	B
EF28-90mm f/4-5.6 USM	B	EF70-200mm f/2.8L IS II USM + Extender EF2x I/II/III	B
EF28-90mm f/4-5.6 II	B	EF70-200mm f/4L USM	B
EF28-90mm f/4-5.6 II USM	B		
EF28-90mm f/4-5.6 III	B		

EF70-200mm f/4L USM + Extender EF1.4x I/II/III	B	EF100-200mm f/4.5A	B
EF70-200mm f/4L USM + Extender EF2x I/II/III	H (f/8)	EF100-300mm f/4.5-5.6 USM	C
EF70-200mm f/4L IS USM	B	EF100-300mm f/5.6	B
EF70-200mm f/4L IS USM + Extender EF1.4x I/II/III	B	EF100-300mm f/5.6L	B
EF70-200mm f/4L IS USM + Extender EF2x I/II/III	H (f/8)	EF100-400mm f/4.5-5.6L IS USM	B
EF70-210mm f/3.5-4.5 USM	B	EF100-400mm f/4.5-5.6L IS USM + Extender EF1.4x I/II/III	H (f/8)
EF70-210mm f/4	B	EF100-400mm f/4.5-5.6L IS II USM	B
EF70-300mm f/4-5.6 IS USM	B	EF100-400mm f/4.5-5.6L IS II USM + Extender EF1.4x III	H (f/8)
EF70-300mm f/4-5.6 IS II USM	B	EF100-400mm f/4.5-5.6L IS II USM + Extender EF1.4x III	G (f/8)
EF70-300mm f/4-5.6L IS USM	B	EF200-400mm f/4L IS USM Extender 1.4x	B
EF70-300mm f/4.5-5.6 DO IS USM	B	EF200-400mm f/4L IS USM Extender 1.4x: With built-in Ext. 1.4x	B
EF75-300mm f/4-5.6	B	EF200-400mm f/4L IS USM Extender 1.4x + Extender EF1.4x I/II/III	B
EF75-300mm f/4-5.6 USM	C	EF200-400mm f/4L IS USM Extender 1.4x: With built-in Ext. 1.4x + Extender EF1.4x I/II/III	H (f/8)
EF75-300mm f/4-5.6 II	B	EF200-400mm f/4L IS USM Extender 1.4x + Extender EF2x I/II	H (f/8)
EF75-300mm f/4-5.6 II USM	B	EF200-400mm f/4L IS USM Extender 1.4x + Extender EF2x III	G (f/8)
EF75-300mm f/4-5.6 III	B	TS-E17mm f/4L	B
EF75-300mm f/4-5.6 III USM	B	TS-E24mm f/3.5L	B
EF75-300mm f/4-5.6 IS USM	B	TS-E24mm f/3.5L II	B
EF80-200mm f/2.8L	A	TS-E45mm f/2.8	A
EF80-200mm f/4.5-5.6	D	TS-E90mm f/2.8	A
EF80-200mm f/4.5-5.6 USM	E		
EF80-200mm f/4.5-5.6 II	E		
EF90-300mm f/4.5-5.6	D		
EF90-300mm f/4.5-5.6 USM	D		

- If Extender EF2x (I/II/III) is attached to the EF180mm f/3.5L Macro USM lens, AF is not possible.
- When using a lens and Extender EF1.4x III/EF2x III in a combination marked with an asterisk (*) or a lens and extender in a combination marked with two asterisks (**), precise focus may not be achieved with AF. In such a case, refer to the Instruction Manual of the lens or extender used.

 If you use a TS-E lens, manual focusing will be required. The lens group designation of TS-E lenses applies only when you do not use the tilt or shift function.

Subjects Difficult to Focus on

Autofocus may fail to achieve focus (focus indicator <●> in the viewfinder blinks) with special subjects such as the following:

- Subjects with very low contrast
(Example: Blue skies, solid-color flat surfaces, etc.)
- Subjects in very low light
- Strongly backlit or reflective subjects
(Example: Cars with highly reflective bodies, etc.)
- Near and distant subjects framed close to an AF point
(Example: Animals in cages, etc.)
- Subjects such as dots of light framed close to an AF point
(Example: Night scenes, etc.)
- Subjects with repetitive patterns
(Example: Skyscraper windows, computer keyboards, etc.)
- Subjects with finer patterns than an AF point
(Example: Faces or flowers as small as or smaller than an AF point, etc.)

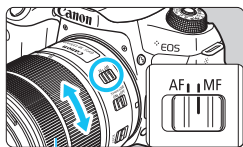
In such cases, focus in either of the following two ways.

- (1) With One-Shot AF, focus on an object at the same distance as the subject and lock the focus, then recompose the shot (p.87).
- (2) Set the lens's focus mode switch to <MF> and focus manually.



- Depending on the subject, focus may be achieved by slightly recomposing the shot and performing AF operation again.
- For conditions that make focusing difficult with AF during Live View shooting or movie shooting, see page 266.

MF: Manual Focus




Focusing ring

1 Set the lens's focus mode switch to <MF>.

2 Focus on the subject.

- Focus by turning the lens focusing ring until the subject looks sharp in the viewfinder.

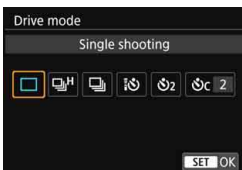
- 
- If you press the shutter button halfway during manual focusing, the AF point that achieved focus and the focus indicator <●> will light up in the viewfinder.
 - With Automatic selection AF, when the center AF point achieves focus, the focus indicator <●> will light up.

Selecting the Drive Mode

Single and continuous drive modes are provided.



- 1 Press the < i > button.**
▶ [Drive mode] will appear.



- 2 Select the drive mode.**
 - Press the < < > > keys to select the desired drive mode, then press < SET >.

: **Single shooting**

When you press the shutter button completely, only one shot will be taken.

H : **High-speed continuous shooting** (Max. approx. 6.0 shots/sec.)

When you press the shutter button completely, the camera will shoot continuously while you keep holding it down.

: **Low-speed continuous shooting** (Max. approx. 3.0 shots/sec.)





When you press the shutter button completely, the camera will shoot continuously while you keep holding it down.

: **10-sec. self-timer/remote control**

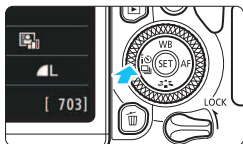
2 : **2-sec. self-timer**

C : **Self-timer: Continuous**

For self-timer shooting, see page 149. For remote control shooting, see page 423.

-  **H**: The approx. 6.0 shots/sec. maximum high-speed continuous shooting speed is achieved under the following conditions*: 1/500 sec. or faster shutter speed, maximum aperture (varies depending on the lens), flicker reduction disabled, fully charged battery pack, and at room temperature (23°C / 73°F). The continuous shooting speed may become slower depending on the shutter speed, aperture, subject conditions, brightness, lens, flash use, temperature, power source, remaining battery level, etc.
 - * With the AF mode set to One-Shot AF and the Image Stabilizer turned off when using the following lenses: EF300mm f/4L IS USM, EF28-135mm f/3.5-5.6 IS USM, EF75-300mm f/4-5.6 IS USM, EF100-400mm f/4.5-5.6L IS USM.
- The continuous shooting speed may become slower if the remaining battery level is low or if you shoot under low-light conditions.
- In AI Servo AF operation, the continuous shooting speed may become slightly slower depending on the subject conditions and the lens used.
- If you set [ **5: Anti-flicker shoot.**] to [**Enable**] (p.185) and shoot under a flickering light source, the continuous shooting speed may decrease, the shooting interval may become irregular, or the release time lag may become longer.
- When internal memory becomes full during continuous shooting, the continuous shooting speed may drop off because shooting will be temporarily disabled.
- If you select [**Smartphone**] in [**Bluetooth function**] under [**1: Wireless communication settings**], or if pairing is not complete even if you select [**Remote**], < > will be changed to < > and remote shooting with Wireless Remote Control BR-E1 or Remote Controller RC-6 will not be possible.

Using the Self-timer



1 Press the <⏪⏩⏸⏹> button.

- ▶ [Drive mode] will appear.

2 Select the self-timer.

- Press the <⏪> <⏩> keys to select the self-timer, then press <SET>.

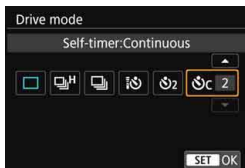
⏸: 10-sec. self-timer

The remote controller can also be used (p.423).

⏸₂: 2-sec. self-timer (p.93)

⏸_C: 10-sec. self-timer plus continuous shots

Press the <▲> <▼> keys to set the number of multiple shots (2 to 10) to be taken with the self-timer.



3 Take the picture.

- Look through the viewfinder, focus on the subject, then press the shutter button completely.
- ▶ You can check the self-timer operation with the self-timer lamp, beeper, and countdown display (in seconds) on the LCD panel.
- ▶ 2 sec. before the picture is taken, the self-timer lamp will light up and the beeper will sound faster.



- With <⏸_C>, the interval between the multiple shots may be prolonged depending on the shooting functions settings such as the image-recording quality or flash.
- If you do not look through the viewfinder when you press the shutter button, attach the eyepiece cover (p.427). If stray light enters the viewfinder when the picture is taken, it may throw off the exposure.



- After taking self-timer shots, playing back the image (p.121) to check focus and exposure is recommended.
- When using the self-timer to shoot yourself, use focus lock (p.87) on an object at the same distance as where you will stand.
- To cancel the self-timer after it starts, either tap on the LCD monitor or press the <⏪⏩⏸⏹> button.



4

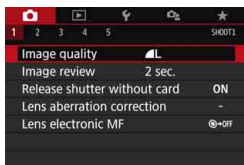
Image Settings

This chapter describes image-related function settings: Image-recording quality, aspect ratio, ISO speed, Picture Style, white balance, Auto Lighting Optimizer, noise reduction, lens aberration correction, anti-flicker shooting, and other functions.

- The ☆ icon at the upper right of the page title indicates that the function is available only in Creative Zone modes (p.31).

MENU Setting the Image-Recording Quality

You can select the pixel count and its image quality. Nine image-recording quality settings are provided: **L**, **L**, **M**, **M**, **S1**, **S1**, **S2**, **RAW + L**, **RAW**.

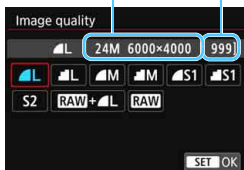


1 Select the image-recording quality.

- Under the [📷 1] tab, select [Image quality], then press <SET>.
- [Image quality] will appear.

Pixels recorded (pixel count)

Possible shots



2 Set the image-recording quality.

- The respective quality's pixel count and number of possible shots will be displayed to help you select the desired quality. Then press <SET>.

The image size [****x****] and number of possible shots [****] displayed on the image-recording quality setting screen always apply to the [3:2] setting regardless of the [📷 5: Aspect ratio] setting (p.156).

Guide to Image-recording Quality Settings

(Approx.)

Image Quality			Pixels Recorded	File Size (MB)	Possible Shots	Maximum Burst
L	High quality	JPEG	24M	7.6	950	190 (Full)
				3.9	1840	Full (Full)
M	Medium quality		11M	4.1	1790	Full (Full)
				2.0	3480	Full (Full)
S1	Low quality		5.9M	2.6	2730	Full (Full)
				1.3	5260	Full (Full)
S2		3.8M	1.8	3810	Full (Full)	
RAW + L	High quality	24M	29.4+7.6	170	19 (23)	
RAW			29.4	210	21 (27)	

* The file size, possible shots, and maximum burst are based on Canon's testing standards (3:2 aspect ratio, ISO 100 and Standard Picture Style) using an 8 GB card. **These figures will vary depending on the subject, card brand, aspect ratio, ISO speed, Picture Style, Custom Functions, and other settings.**

* Figures in parentheses for the maximum burst apply to H high-speed continuous shooting. Figures in parentheses apply to an UHS-I class 16 GB card based on Canon's testing standards.

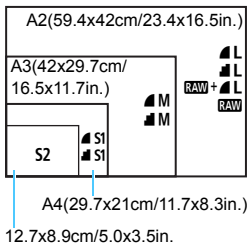
- "Full" indicates that shooting is possible until the card becomes full with the listed conditions.

Even if you use a UHS-I class card, the maximum burst indicator will not change. The maximum burst in parentheses in the table will apply instead.

? FAQ

- I want to select the image-recording quality matching the paper size for printing.

Paper size



Refer to the diagram on the left when choosing the image-recording quality. If you want to crop the image, selecting a higher quality (more pixels) such as **L**, **L**, **RAW** + **L**, or **RAW** is recommended. **S2** is suitable for playing back the image with a digital photo frame.

- What's the difference between **L** and **L**?

These settings indicate the different levels of image quality caused by different compression rates. The **L** setting produces a higher image quality with the same number of pixels. Although **L** produces a slightly lower image quality, this allows more images to be saved on the card. **S2** will be in **L** (Fine) quality.

- I was able to take more shots than the number of possible shots indicated.

Depending on the shooting conditions, you may be able to take more shots than is indicated. On the contrary, it may also be fewer than indicated. The number of possible shots displayed is only approximate.

- Does the camera display the maximum burst?

The maximum burst is displayed on the viewfinder's right side. Since it is only a single-digit indicator **0 - 9**, any number higher than 8 will be displayed only as "**9**". Note that this number will also be displayed even when no card is installed in the camera. Be careful not to shoot without a card in the camera.

- When should I use **RAW**?

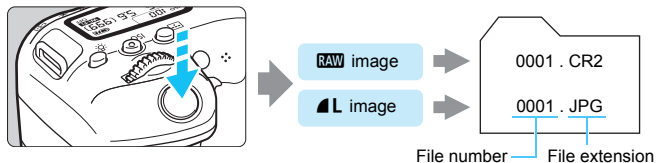
RAW images must be processed on a computer. For details, see "**RAW**" and "**RAW** + **L**" on the next page.

RAW

RAW is the raw image data before it is made into **L** or other images. **RAW** images cannot be viewed on a computer without the use of software, such as Digital Photo Professional (EOS software, p.488). However, you can perform various adjustments on them that are impossible with other image types such as **L**. **RAW** is effective when you want to precisely adjust the image yourself or shoot an important subject.

RAW + L

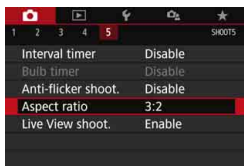
RAW + L records a **RAW** image and a **L** image with a single shot. The two images are saved to the card simultaneously. The two images will be saved in the same folder with the same file numbers (file extension .JPG for JPEG and .CR2 for RAW). **L** images can be viewed or printed even with a computer that does not have EOS software installed.

**RAW Image Processing Software**

- To display RAW images on a computer, using Digital Photo Professional (DPP, EOS software) is recommended (p.488).
- Previous versions of DPP Ver.4.x cannot process RAW images taken with 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. (The previous version will be overwritten.) Note that DPP Ver.3.x or earlier cannot process RAW images taken with this camera.
- Commercially-available software may not be able to display RAW images taken with this camera. For compatibility information, contact the software manufacturer.

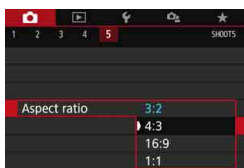
MENU Changing the Image's Aspect Ratio ☆

You can change the image's aspect ratio. [3:2] is set by default. When [4:3], [16:9], or [1:1] is set, frame lines indicating the image area will be displayed in the viewfinder. During Live View shooting, the image appears with the surrounding area masked in black on the LCD monitor.



1 Select the aspect ratio.

- Under the [**5**] tab, select [**Aspect ratio**], then press <SET>.



2 Set the aspect ratio.

- Select an aspect ratio, then press <SET>.

● **JPEG images**

The images will be saved with the set aspect ratio.

● **RAW images**

The images will always be saved with the [3:2] aspect ratio. The selected aspect ratio information is added to the RAW image file. When you process the RAW image with Digital Photo Professional (EOS software), this allows you to generate an image with the same aspect ratio set for shooting. In the case of the [4:3], [16:9], and [1:1] aspect ratios, the lines to indicate the aspect ratio will appear during image playback, but they are not actually drawn on the captured image.

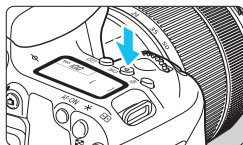
The table below shows the aspect ratio and the number of recorded pixels for each image-recording quality.

Image Quality	Aspect Ratio and Pixel Count (Approx.)			
	3:2	4:3	16:9	1:1
L/RAW	6000x4000 (24.0 megapixels)	5328x4000* (21.3 megapixels)	6000x3368* (20.2 megapixels)	4000x4000 (16.0 megapixels)
M	3984x2656 (10.6 megapixels)	3552x2664 (9.5 megapixels)	3984x2240* (8.9 megapixels)	2656x2656 (7.1 megapixels)
S1	2976x1984 (5.9 megapixels)	2656x1992 (5.3 megapixels)	2976x1680* (5.0 megapixels)	1984x1984 (3.9 megapixels)
S2	2400x1600 (3.8 megapixels)	2112x1600* (3.4 megapixels)	2400x1344* (3.2 megapixels)	1600x1600 (2.6 megapixels)

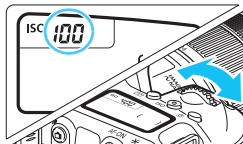
- The items marked with an asterisk do not exactly match the indicated aspect ratio.
- The image area displayed for the asterisked aspect ratio may be slightly different from the actual image area. Check the captured images on the LCD monitor during shooting.

ISO: Setting the ISO Speed for Still Photos ☆

Set the ISO speed (image sensor's sensitivity to light) to suit the ambient light level. In Basic Zone modes, the ISO speed is set automatically. Regarding the ISO speed during movie shooting, see pages 278 and 281.

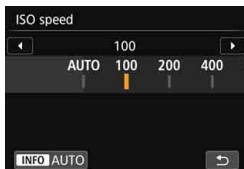


1 Press the <ISO> button (6).



2 Set the ISO speed.

- While looking at the LCD panel or in the viewfinder, turn the <ISO> or <ISO> dial.
- ISO speed can be set within ISO 100 - ISO 25600.
- “A” indicates ISO Auto. The ISO speed will be set automatically (p.159).
- When the screen shown on the left is displayed, you can press the <INFO> button to set it to “AUTO”.



ISO Speed Guide

ISO Speed	Shooting Situation (No flash)	Flash Range
ISO 100 - ISO 400	Sunny outdoors	The higher the ISO speed, the farther the effective flash range will be (p.216).
ISO 400 - ISO 1600	Overcast skies or evening time	
ISO 1600 - ISO 25600, H	Dark indoors or night	

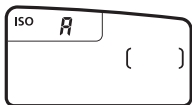
* High ISO speeds will result in grainier images.

- You can also set with [**2**: **ISO speed**].
- Under [**4**: **Custom Functions (C.Fn)**], if [**2**: **ISO expansion**] is set to [**1**: **On**], “H” (equivalent to ISO 51200) can also be selected (p.402).



- Under [**4: Custom Functions (C.Fn)**], if [**4: Highlight tone priority**] is set to [**1: Enable**], ISO 100 and “H” (equivalent to ISO 51200) cannot be selected (p.403).
- Shooting in high temperatures may result in images that look grainier. Long exposures can also cause irregular colors in the image.
- When you shoot at high ISO speeds, noise (such as dots of light and banding) may become noticeable.
- If you use a high ISO speed and flash to shoot a close subject, overexposure may result.
- 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.
- As “H” (equivalent to ISO 51200) is an expanded ISO speed setting, noise (dots of light, banding, etc.) and irregular colors will be more noticeable, and the resolution will be lower compared to the standard setting.

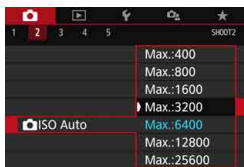
Automatic ISO speed setting: ISO [AUTO]



- If the ISO speed is set to “A” (Auto), the actual ISO speed setting will be displayed when you press the shutter button halfway.
- When “A” (Auto) is set, the ISO speed is indicated in whole-stop increments. However, the ISO speed is actually set in finer increments. Therefore, in the image’s shooting information (p.385), you may find an ISO speed such as ISO 125 or ISO 640 displayed as the ISO speed.

MENU Setting the Maximum ISO Speed for [AUTO] [★]

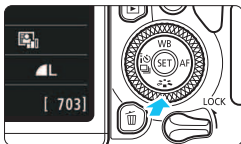
For ISO Auto, you can set the maximum ISO speed limit within ISO 400 - ISO 25600.



Under the [**2**] tab, select [**ISO Auto**], then press < **SET** >. Select the ISO speed, then press < **SET** >.

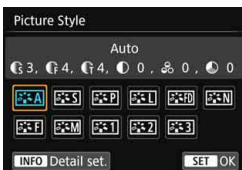
Selecting a Picture Style ☆

Just by selecting a preset Picture Style, you can obtain image characteristics effectively matching your photographic expression or the subject.





1 Press the <▼ > button.

- ▶ The Picture Style selection screen will appear.



2 Select a Picture Style.


- Select a Picture Style, then press <SET>.
- ▶ The Picture Style will be set.

 You can also set the Picture Style with [ 3: Picture Style].

Picture Style Characteristics

Auto

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

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

Standard

The image looks vivid, sharp, and crisp. This is a general-purpose Picture Style suitable for most scenes.

Portrait

For nice skin tones. The image looks softer. Suited for close-up portraits.

By changing the **[Color tone]** (p.165), you can adjust the skin tone.

Landscape

For vivid blues and greens, and very sharp and crisp images.

Effective for impressive landscapes.

Fine Detail

Suited for detailed outline and fine texture description of the subject.

The colors will be slightly vivid.

Neutral

Geared for users who prefer to process images with their computer.

For natural colors and subdued images with modest brightness and color saturation.


Faithful


Geared for users who prefer to process images with their computer.

The color of a subject that is captured in ambient light at a color temperature of 5200K will be adjusted to match the subject's colorimetric color. For subdued images with modest brightness and color saturation.

Monochrome

Creates black-and-white images.

 Black-and-white images shot in JPEG cannot be turned into color. Be careful not to leave the **[Monochrome]** setting on when you want to shoot photos in color again.

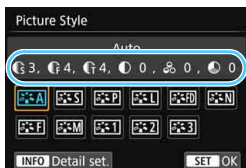
 You can set the camera to display **<!>** in the viewfinder for when **[Monochrome]** is set (p.407).

User Defined 1-3










You can register a basic style such as **[Portrait]**, **[Landscape]**, a Picture Style file, etc. and adjust it as desired (p.167). Any User Defined Picture Style that has not been set will have the same default settings as the **[Auto]** Picture Style.


Symbols

The Picture Style selection screen has icons for **[Strength]**, **[Fineness]**, or **[Threshold]** for **[Sharpness]** as well as **[Contrast]**, and other parameters. The numerals indicate the values for these parameters set for the respective Picture Style.



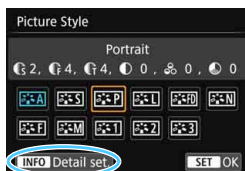
Symbols

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

 During movie shooting, “*” will be displayed for both **[Fineness]** and **[Threshold]** for **[Sharpness]**. **[Fineness]** and **[Threshold]** will not be applied to movies.

Customizing a Picture Style ☆

You can customize the Picture Styles. You can change or adjust the parameter settings of Picture Styles such as [Strength], [Fineness], or [Threshold] for [Sharpness] as well as [Contrast] and other parameters from the default settings. To see the resulting effects, take test shots. To customize [Monochrome], see page 166.



1 Press the <▼> button.

- ▶ The Picture Style selection screen will appear.

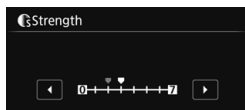
2 Select a Picture Style.

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



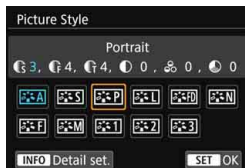
3 Select a parameter.

- Select the parameter (such as [Strength] of [Sharpness]) to be set, then press <SET>.
- See page 165 for settings and effects.









4 Set the parameter.

- Press the <◀> <▶> keys to adjust the effect of the parameter, then press <SET>.
- Press the <MENU> button to save the adjusted parameter settings. The Picture Style selection screen will reappear.
- ▶ The value of parameter settings different from the default will be displayed in blue.



Parameter 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 fineness of the outlines to be emphasized. The smaller the number, the finer the outlines that can be emphasized.

*2: Sets how much the outline is emphasized based on the difference in contrast between the subject and the surrounding area. 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.

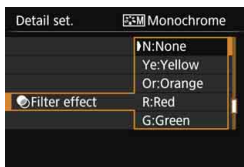


- For movie shooting, [**Fineness**] and [**Threshold**] for [**Sharpness**] cannot be set (not displayed).
- By selecting [**Default set.**] in step 3, you can revert the parameter settings of the respective Picture Style to their defaults.
- To shoot with the Picture Style you adjusted, first select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

Monochrome Adjustment

Besides the effects described on the preceding page such as **[Contrast]**, or **[Strength]**, **[Fineness]** and **[Threshold]** for **[Sharpness]**, you can also set **[Filter effect]** and **[Toning effect]**.

Filter effect

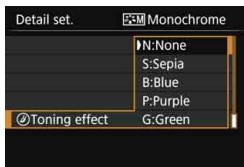


With a filter effect applied to a monochrome image, you can make white clouds or green trees stand out more.

Filter	Sample Effects
N: None	Normal black-and-white image with no filter effects.
Ye: Yellow	The blue sky will look more natural, and the 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.

Increasing the **[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 more impressive images. The following can be selected: **[N:None]**, **[S:Sepia]**, **[B:Blue]**, **[P:Purple]** or **[G:Green]**.

📷 Registering a Picture Style ☆

You can select a base Picture Style such as [Portrait] or [Landscape], adjust its parameters as desired and register it under [User Def. 1], [User Def. 2], or [User Def. 3]. Useful when you want to preset multiple Picture Styles with different settings.

You can also adjust the parameters of a Picture Style that is registered to the camera with EOS Utility (EOS software, p.488) here.

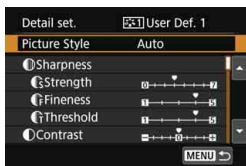
1 Press the <▼ 📷 > button.

- ▶ The Picture Style selection screen will appear.



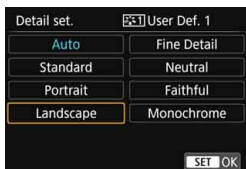
2 Select [User Def. *].

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



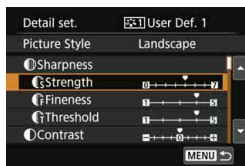
3 Press <SET>.

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



4 Select the base Picture Style.

- Select the base Picture Style, then press <SET>.
- To adjust the parameters of a Picture Style registered to the camera with EOS Utility (EOS software), select the Picture Style here.



5 Select a parameter.

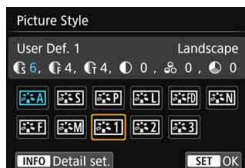
- Select the parameter (such as **[Strength]** of **[Sharpness]**) to be set, then press **<SET>**.



6 Set the parameter.

- Press the **<◀>** **<▶>** keys to adjust the effect of the parameter, then press **<SET>**.

For details, see “Customizing a Picture Style” (p.164-166).



- Press the **<MENU>** button to register the adjusted parameter settings. The Picture Style selection screen will then reappear.
- ▶ The base Picture Style will be indicated on the right of **[User Def. *]**.

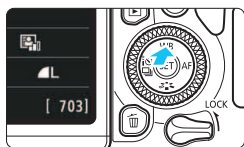
- ⚠
- If a Picture Style is already registered under **[User Def. *]**, changing the base Picture Style in step 4 will clear the parameter settings of the previously registered User Defined Picture Style.
 - If you perform **[Clear all camera settings]** under **[Y4: Clear settings]** (p.335), all the **[User Def. *]** styles and settings will revert to their defaults. Any Picture Style registered via EOS Utility (EOS software) will have only its modified parameters reverted to the default setting.

- 📄
- To shoot with a registered Picture Style, follow step 2 on page 161 to select **[User Def. *]**, then shoot.
 - Regarding the procedure to register a Picture Style file to the camera, refer to the EOS Utility Instruction Manual.

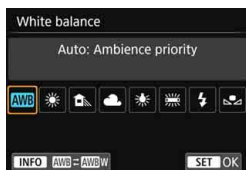
WB: Matching the Light Source ☆

White balance (WB) is for making the white areas look white. Normally, the Auto [AWB] (Ambience priority) or [AWB w] (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. (In the <P/P> mode, [AWB w] (White priority) is set.)



- 1 Press the <▲ WB> button.
▶ [White balance] will appear.



- 2 Select a white balance setting.
 - Select the desired setting, then press <SET>.
 - The “Approx. ****K” (K: Kelvin) displayed for the white balance settings <☀>, <🏠>, <☁>, <☀> or <⚡> is the respective color temperature to be set.



You can also set with [CAMERA 3: White balance].

White Balance

To the human eye, a white object looks white regardless of the type of lighting. With a digital camera, the white for color correction basis is decided depending on the color temperature of the illumination, and then the color is adjusted with software to make the white areas look white. With this function, pictures with natural color tones can be taken.

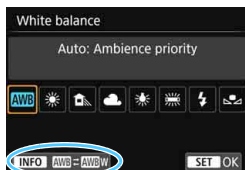
AWB Auto White Balance

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

If you want to match the Auto white balance of previous EOS camera models, select [**AWB**] (Ambience priority).

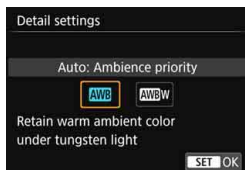
1 Press the <▲ WB> button.

- ▶ [**White balance**] will appear.



2 Select [**AWB**].

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



3 Select the desired item.

- Select [**Auto: Ambience priority**] or [**Auto: White priority**], then press <SET>.

AWB : Auto: Ambience priority

AWB w : Auto: White priority

⚠ Cautions for Setting [**AWB w**] (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 lessened.
- When using flash, the color tone will be the same as with [**AWB**] (Ambience priority).

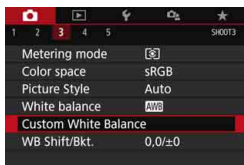
Custom White Balance

With custom white balance, you can 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.




1 Shoot a white object.

- Look through the viewfinder and aim the entire dotted line box (shown in the illustration) over a plain, white object.
- Focus manually and shoot with the standard exposure set for the white object.
- You can use any of the white balance settings.



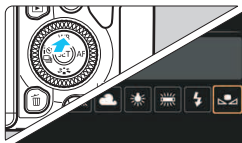
2 Select [Custom White Balance].

- Under the [ 3] tab, select [**Custom White Balance**], then press <SET>.
- ▶ The custom white balance selection screen will appear.




3 Import the white balance data.



- Select the image captured in step 1, then press <SET>.
- ▶ On the dialog screen that appears, select [**OK**], and the data will be imported.
- When the menu reappears, press the <MENU> button to exit the menu.



4 Select [(Custom)].

- Press the <▲ WB> button.
- Select [ (Custom)], then press <SET>.

- If the exposure obtained in step 1 differs greatly from the standard exposure, a correct white balance may not be obtained.
- In step 3, the following images cannot be selected: Images captured with the Picture Style set to **Monochrome** (p.162), images shot with a Creative filter, images processed with a Creative filter after shooting, cropped images, and images shot with another camera.

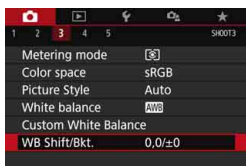
 The personal white balance registered with EOS Utility (EOS software, p.488) will be registered under []. If you perform step 3, the data for the registered personal white balance will be erased.

WB Adjusting the Color Tone for the Light Source ☆

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. Each color can be corrected to one of nine levels.

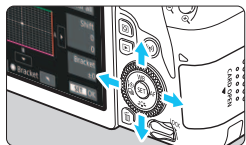
This function is for advanced users, particularly for those users who understand the use of color temperature conversion and color compensating filters and their effects.

White Balance Correction



1 Select [WB Shift/Bkt.].

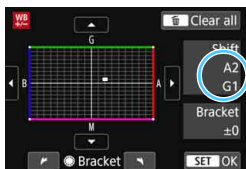
- Under the [3] tab, select [WB Shift/Bkt.], then press <SET>.
- ▶ The WB correction/WB bracketing screen will appear.



2 Set the white balance correction.

- Press the <▲> <▼> or <◀> <▶> keys to move the "■" mark to the appropriate position.
- B is for blue, A for amber, M for magenta, and G for green. The image's color balance will be adjusted toward the color in the direction of the move.
- On the right of the screen, "Shift" indicates the direction and correction amount, respectively.
- Pressing the <⏏> button will cancel all the [WB Shift/Bkt.] settings.
- Press <SET> to exit the setting and return to the menu.

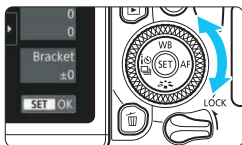
Sample setting: A2, G1



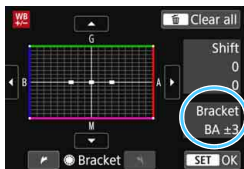
- You can set the camera to display <!> in the viewfinder and on the LCD monitor for when white balance correction is set (p.407).
- One level of the blue/amber correction is equivalent to approx. 5 mireds of a color temperature conversion filter. (Mired: Unit of measure for color temperature used to indicate values such as the density of a color temperature conversion filter.)

White Balance Auto Bracketing




With just one shot, three images with different color tones can be recorded simultaneously. Based on the color temperature of the current white balance setting, the image will be bracketed with a blue/amber bias and magenta/green bias. This function is called white balance bracketing (WB Bkt.). White balance bracketing is possible up to ± 3 levels in single-level increments.



B/A bias ± 3 levels



Set the white balance bracketing amount.

- In step 2 for “White Balance Correction”, when you turn the  dial, the “■” mark on the screen will change to “■■■” (3 points). Turning the dial clockwise sets the B/A bracketing, and turning it counterclockwise sets the M/G bracketing.
- ▶ On the right, “**Bracket**” indicates the bracketing direction and correction amount.
- Pressing the  button will cancel all the [WB Shift/Bkt.] settings.
- Press  to exit the setting and return to the menu.

Bracketing Sequence

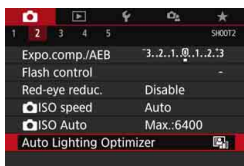
The images will be bracketed in the following sequence: 1. Standard white balance, 2. Blue (B) bias, and 3. Amber (A) bias, or 1. Standard white balance, 2. Magenta (M) bias, and 3. Green (G) bias.

- During white balance bracketing, the maximum burst will be lower and the number of possible shots will also decrease to approx. one-third the normal number.
- Since three images are recorded for one shot, it takes longer to record the image to the card.

- You can also set white balance correction and AEB together with white balance bracketing. If you set AEB in combination with white balance bracketing, a total of nine images will be recorded for a single shot.
- During Live View shooting, the white balance icon will blink.
- “**Bkt.**” stands for bracketing.

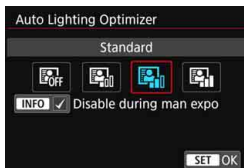
MENU Auto Correction of Brightness and Contrast ☆

If the image comes out dark or the contrast is low, the brightness and contrast can be corrected automatically. This function is called Auto Lighting Optimizer. The default setting is [Standard]. With JPEG images, the correction is applied when the image is captured. In Basic Zone modes, [Standard] is set automatically.



1 Select [Auto Lighting Optimizer].

- Under the [2] tab, select [Auto Lighting Optimizer], then press <SET>.



2 Select the setting.

- Select the desired setting, then press <SET>.

3 Take the picture.

- The image will be recorded with the brightness and contrast corrected as necessary.



- Under [4: Custom Functions (C.Fn)], if [4: Highlight tone priority] is set to [1: Enable], [Auto Lighting Optimizer] will be set automatically to [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].
- Depending on the shooting conditions, noise may increase.

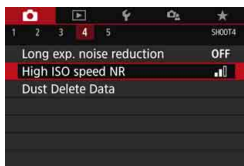


In step 2, if you press the <INFO> button and remove the checkmark [✓] for [Disable during man expo] setting, the Auto Lighting Optimizer can also be set in the <M> mode.

MENU Setting Noise Reduction ☆

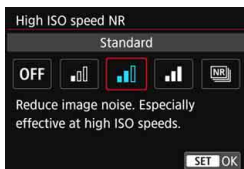
High ISO Speed Noise Reduction

This function reduces the noise generated in the image. Although noise reduction is applied at all ISO speeds, it is particularly effective 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. Change the setting to match the noise level.



1 Select [High ISO speed NR].

- Under the [CAMERA 4] tab, select [High ISO speed NR], then press <SET>.



2 Set the level.

- Select the desired noise reduction level, then press <SET>.


• [NR]: Multi Shot Noise Reduction

Applies the noise reduction with higher image quality than [High]. For a single photo, four shots are taken continuously and aligned and merged automatically into a single JPEG image.

If the image-recording quality is set to RAW or RAW + L, you cannot set [Multi Shot Noise Reduction].

3 Take the picture.

- The image will be recorded with noise reduction applied.

 You can set the camera to display <!> in the viewfinder for when Multi Shot Noise Reduction is set (p.407).

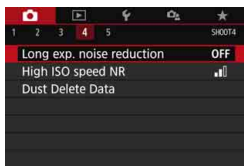


When [Multi Shot Noise Reduction] is Set

- If there is significant misalignment in the image due to camera shake, the noise reduction effect may become smaller.
- If you are handholding the camera, keep it steady to prevent camera shake. Using a tripod is recommended.
- If you shoot a moving subject, the moving subject may leave afterimages.
- The image alignment may not function properly with repetitive patterns (lattice, stripes, etc.) or flat, single-tone images.
- If the subject's brightness changes as the four consecutive shots are taken, irregular exposure in the image may result.
- After shooting, it may take some time to record an image to the card after performing noise reduction and merging the images. During the processing of the images, "buSY" will be displayed in the viewfinder and on the LCD panel, and you cannot take another picture until the processing is complete.
- You cannot use AEB and white balance bracketing.
- If [**4: Long exp. noise reduction**], AEB, or white balance bracketing is set, [Multi Shot Noise Reduction] cannot be set.
- The [Distortion] setting will be set automatically to [Disable].
- Flash photography is not possible. However, the AF-assist beam will be emitted according to the setting of [5: AF-assist beam firing] under [**4: Custom Functions(C.Fn)**].
- You cannot set [Multi Shot Noise Reduction] for bulb exposures.
- If you turn off the power, change the shooting mode to a Basic Zone mode, shoot a bulb exposure, or shoot a movie, the setting will automatically be changed to [Standard].
- [**4: Dust Delete Data**] cannot be set.

Long Exposure Noise Reduction

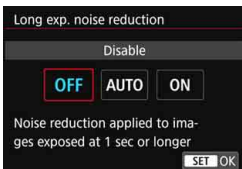
Noise reduction is possible with images exposed for 1 sec. or longer.



1

Select [Long exp. noise reduction].

- Under the [**4**] tab, select [Long exp. noise reduction], then press <SET>.



2 Set the desired setting.

- Select the desired setting, then press **< (SET) >**.

• [Auto]

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

• [Enable]

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

3 Take the picture.

- The image will be recorded with noise reduction applied.

- With **[Auto]** or **[Enable]** set, the noise reduction process after the picture is taken may take the same amount of time as that for the exposure. You cannot take another picture until the noise reduction process is complete.
- Images taken at ISO 1600 or higher may look grainier with the **[Enable]** setting than with the **[Disable]** or **[Auto]** setting.
- With **[Auto]** or **[Enable]** set, if a long exposure is shot with the Live View image displayed, “**BUSY**” will be displayed during the noise reduction process. The Live View display will not appear until the noise reduction is complete. (You cannot take another picture.)

MENU Correction of Lens Aberrations due to Optical Characteristics ☆

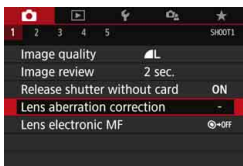
Peripheral light fall-off is a phenomenon that makes the image corners look darker due to the optical characteristics of the lens. Color fringing along subject outlines is called chromatic aberration. Image distortion due to optical characteristics of the lens is called distortion. And decreased image sharpness due to the aperture is called diffraction phenomenon. These lens aberrations can be corrected.

By default, **[Peripheral illum corr]**, **[Chromatic aberr corr]**, and **[Diffraction correction]** are set to **[Enable]**, and **[Distortion correction]** is set to **[Disable]**.

If the lens correction data is registered (saved) in the camera, peripheral illumination correction, chromatic aberration correction, and diffraction correction will be applied even in Basic Zone modes.

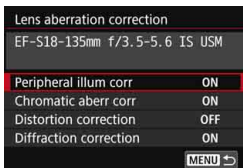
If the setting screen displays **[Correction data not available]** or the [] icon, it means that the correction data for the respective lens is not registered in the camera. See “Lens Correction Data” on page 183.

Peripheral Illumination Correction

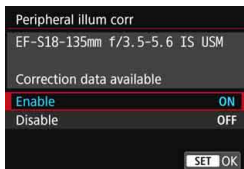


1 Select **[Lens aberration correction]**.

- Under the [] tab, select **[Lens aberration correction]**, then press **< (SET) >**.



2 Select **[Peripheral illum corr]**.




3 Select [Enable].

- Check that **[Correction data available]** is displayed for the attached lens.
- Select **[Enable]**, then press <SET>.

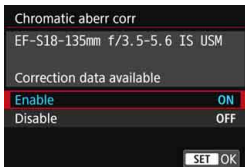
4 Take the picture.

- The image will be recorded with the peripheral illumination corrected.

- Depending on shooting conditions, noise may appear on the image periphery.
- The higher the ISO speed, the lower the correction amount will be.
- If you use the magnified view during Live View shooting, the peripheral illumination correction will not be reflected in the image displayed on the screen.

 The correction amount applied will be slightly lower than the maximum correction amount that can be applied with Digital Photo Professional (EOS software, p.488).

Chromatic Aberration Correction



1 Select [**Chromatic aberr corr**].

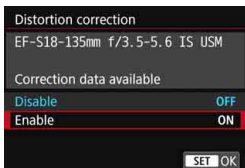
2 Select [**Enable**].

- Check that [**Correction data available**] is displayed for the attached lens.
- Select [**Enable**], then press <SET>.

3 Take the picture.

- The image will be recorded with the chromatic aberration corrected.

Distortion Correction



1 Select [**Distortion correction**].

2 Select [**Enable**].

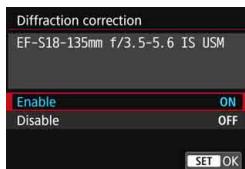
- Check that [**Correction data available**] is displayed for the attached lens.
- Select [**Enable**], then press <SET>.

3 Take the picture.

- The image will be recorded with the distortion corrected.

- ❗
- Since distortion correction is applied, the camera records an image range narrower than the one seen through the viewfinder. (The image periphery is slightly trimmed and the resolution looks slightly lowered.)
- Distortion correction will be reflected in the captured image, but it cannot be seen in the viewfinder during shooting.
- Distortion correction cannot be set during movie shooting or when Multi Shot Noise Reduction is set.
- Using distortion correction during Live View shooting will slightly affect the angle of view.
- When you magnify the image during Live View shooting, distortion correction is not applied to the image displayed. Therefore, magnifying the periphery of the image may display parts of the image that will not be recorded.
- Images with distortion correction applied will not have the Dust Delete Data (p.341) appended. Also, the AF point(s) will not be displayed (p.388) for image playback.

Diffraction Correction



1 Select [Diffraction correction].

2 Select [Enable].

- Select [Enable], then press < (SET) >.

3 Take the picture.

- The image will be recorded with the diffraction corrected.

- ❗
- Depending on shooting conditions, noise may be intensified together with the effects of correction.
- The higher the ISO speed, the lower the correction amount will be.
- Diffraction correction will not be applied to the Live View image.
- For movie shooting, [Diffraction correction] will not appear. (Correction is not possible.)

📄 With "Diffraction correction", degraded resolution due to the low-pass filter, etc. is corrected in addition to diffraction. Therefore, correction is effective even at an aperture close to the open aperture.

Lens Correction Data

The lens correction data for lens aberration corrections is registered (stored) in the camera. With **[Enable]** selected, the peripheral illumination correction, chromatic aberration correction, distortion correction, and diffraction correction will be applied automatically.

With EOS Utility (EOS software, p.488), you can check which lenses have their correction data registered in the camera. You can also register the correction data for unregistered lenses. For details, refer to the EOS Utility Instruction Manual.

For lenses incorporating the correction data, it is not necessary to register the correction data to the camera.



Cautions for Lens Correction

- Peripheral illumination correction, chromatic aberration correction, distortion correction, and diffraction correction cannot be applied to JPEG images already taken.
- When using a non-Canon lens, setting the corrections to **[Disable]** is recommended, even if **[Correction data available]** is displayed.
- The correction amount will be less (except for diffraction correction) if the lens used does not have distance information.

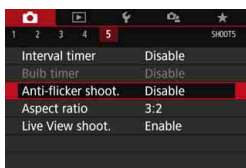


Notes for Lens Correction

- The effect of the lens aberration correction varies depending on the lens used and shooting conditions. Also, the effect may be difficult to discern depending on the lens used, shooting conditions, etc.
- If the effect of the correction is not visible, magnify the image after shooting and check it again.
- Corrections can be 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).
- In Basic Zone modes, peripheral illumination correction, chromatic aberration correction, and diffraction correction will be applied automatically. Distortion correction will be applied automatically only in the **<iii>** mode.

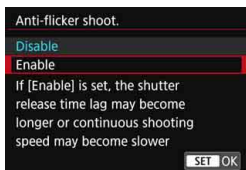
MENU Reducing Flicker ☆

If you shoot an image with a fast shutter speed under a light source such as fluorescent light, the blinking of the light source causes flicker and the image may be vertically unevenly exposed. If continuous shooting is used under these conditions, uneven exposures or colors across the images may result. When you use this feature during viewfinder shooting, the camera detects the flickering frequency of the light source and takes the picture when the flicker causes less effect on exposure or color tone.



1 Select [Anti-flicker shoot.].

- Under the [5] tab, select [Anti-flicker shoot.], then press <SET>.




2 Select [Enable].


3 Take the picture.

- The picture will be taken with reduced unevenness of exposure or color tone caused by the flicker.



- 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.
- This function does not work with mirror lockup shooting, Live View shooting or movie shooting.
- In the <P> or <Av> mode, if the shutter speed changes during continuous shooting or if you shoot multiple shots of the same scene at different shutter speeds, the color tone may be inconsistent. To avoid inconsistent color tones, use the <Tv> or <M> mode at a fixed shutter speed.
- The color tone of the captured images when [Anti-flicker shoot.] is set to [Enable] may look different from when [Disable] is set.
- 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.

- 
 - Under [**4: Custom Functions (C.Fn)**], if you set [**10: Mirror lockup**] to [**1: Enable**], the [**Anti-flicker shoot.**] setting will automatically switch to [**Disable**].
 - If the subject is against a dark background or if there is a bright light in the image, flicker may not be properly detected.
 - Under certain special types of lighting, the camera may not be able to reduce the effects of the flicker even when < **Flicker!** > is displayed in the viewfinder.
 - Depending on the light source, flicker may not be detected properly.
 - If you recompose a shot, < **Flicker!** > may appear and disappear intermittently.
 - Depending on the light sources or shooting conditions, the expected result may not be obtained even if you use this function.

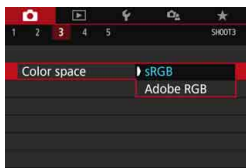
- 
 - Taking test shots in advance is recommended.
 - If < **Flicker!** > is not displayed in the viewfinder, set [**Flicker detection**] to [**Show**] under [**2: Viewfinder display**] (p.81). When you shoot with flicker reduction, < **Flicker!** > will light up. Under a light source that does not flicker or with no flicker detected, < **Flicker!** > will not be displayed.
 - If [**Flicker detection**] is set to [**Show**] and [**Anti-flicker shoot.**] is set to [**Disable**], metering under a flickering light source will cause < **Flicker!** > to blink in the viewfinder as a warning. Setting to [**Enable**] before shooting is recommended.
 - In Basic Zone modes, < **Flicker!** > will not be displayed, but the effects of flicker will be reduced when you shoot.
 - Flicker reduction also works with flash. However, the expected result may not be obtained for wireless flash photography.

MENU Setting the Color Reproduction Range ☆

The range of reproducible colors is called “color space”. With this camera, you can set the color space for captured images to sRGB or Adobe RGB. For normal shooting, sRGB is recommended. In Basic Zone modes, [sRGB] is set automatically.

1 Select [Color space].

- Under the [CAMERA 3] tab, select [Color space], then press <SET>.



2 Set the desired color space.

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

Adobe RGB

This color space is mainly used for commercial printing and other industrial uses. This setting is not recommended if you are not familiar with image processing, Adobe RGB, and Design rule for Camera File System 2.0 (Exif 2.21 or higher). The image will look very subdued in a sRGB computer environment and with printers not compliant to Design rule for Camera File System 2.0 (Exif 2.21 or higher). Post-processing of the image with computer software will therefore be required.

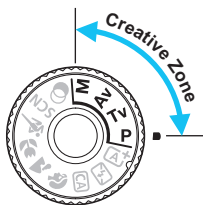


- If the still photo is shot in the Adobe RGB color space, the first character in the file name will be an underscore “_”.
- The ICC profile is not appended. For explanations about the ICC profile, refer to the Digital Photo Professional Instruction Manual.



5

Advanced Operations for Photographic Effects



In Creative Zone modes, you can change various settings of the camera as you desire to obtain a wide variety of shooting results, by selecting the shutter speed and/or aperture, adjusting the exposure as you prefer, etc.

- The ☆ icon at the upper right of the page title indicates that the function is available only in Creative Zone modes.
- After you press the shutter button halfway and let it go, the exposure settings will remain displayed in the viewfinder and on the LCD panel for approx. 4 sec. (ⓘ4) by the metering timer function.
- For the functions settable in each shooting mode, see page 436.



Set the <LOCK> switch downward.

P: Program AE

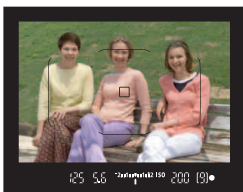
The camera automatically sets the shutter speed and aperture to suit the subject's brightness. This is called Program AE.

* <P> stands for Program.

* AE stands for Auto Exposure.



1 Set the Mode Dial to <P>.



2 Focus on the subject.

- Look through the viewfinder and aim the AF point over the subject. Then press the shutter button halfway.
- ▶ When focus is achieved, the focus indicator <●> on the viewfinder's bottom right will light up (in One-Shot AF mode).
- ▶ The shutter speed and aperture will be set automatically and displayed in the viewfinder and on the LCD panel.



3 Check the display.

- The standard exposure will be obtained as long as the shutter speed and aperture displays do not blink.



4 Take the picture.

- Compose the shot and press the shutter button completely.

If a description of the shooting mode appears in step 1, press <SET> to hide it (p.62).



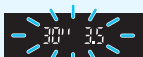
Shooting Tips

● Change the ISO speed. Use the built-in flash.

To match the subject and ambient lighting level, you can change the ISO speed (p.158) or use the built-in flash (p.216). In the <P> mode, the built-in flash will not fire automatically. Therefore, press the <⚡> (flash) button to raise the built-in flash when indoors or shooting in low light.

● Change the program using Program shift.

After pressing the shutter button halfway, turn the <☀> dial to change the shutter speed and aperture setting combination (program). Program shift is canceled automatically after the picture is taken. Program shift is not possible with flash.



- If the "30"" shutter speed and the lowest f/number blink, it indicates underexposure. Increase the ISO speed or use flash.
- If the "4000" shutter speed and the highest f/number blink, it indicates overexposure. Decrease the ISO speed.



Differences Between <P> and <A+> (Scene Intelligent Auto)

In the <A+> mode, many functions, such as the AF operation and metering mode, are set automatically to prevent spoiled shots. The functions you can set are limited. However, with <P> mode, only the shutter speed and aperture are set automatically. You can freely set the AF operation, metering mode, and other functions (p.430).

Tv: Conveying the Subject's Movement

You can either freeze the action or create motion blur with the **<Tv>** (Shutter-priority AE) mode on the Mode Dial.

* **<Tv>** stands for Time value.



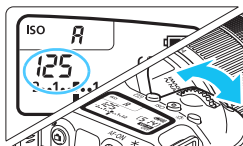
Blurred motion
(Slow shutter speed: 1/30 sec.)





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



1 Set the Mode Dial to **<Tv>**.



2 Set the desired shutter speed.

- While looking at the LCD panel or in the viewfinder, turn the  dial.
- See “Shooting Tips” on the next page for advice on setting the shutter speed.
- Turning the  dial clockwise sets a faster shutter speed, and turning it counterclockwise sets a slower one.



3 Take the picture.

- When you focus and press the shutter button completely, the picture will be taken at the set shutter speed.




Shutter Speed Display


The LCD monitor displays the shutter speed as a fraction. However, the LCD panel and the viewfinder display only the denominator. “0”5” indicates 0.5 sec. and “15”” is 15 sec.

Shooting Tips

- **To freeze the motion of a fast-moving subject**
Use a fast shutter speed such as 1/4000 sec. to 1/500 sec. according to the speed of the moving subject.
- **To blur a running child or animal and convey an impression of motion**
Use a medium shutter speed such as 1/250 sec. to 1/30 sec. Follow the moving subject through the viewfinder and press the shutter button to take the picture. If you use a telephoto lens, hold it steady to prevent camera shake.
- **To blur a flowing river or fountain**
Use a slow shutter speed of 1/30 sec. or slower. Use a tripod to prevent hand-held camera shake.
- **Set the shutter speed so that the aperture display does not blink.**

If you press the shutter button halfway and change the shutter speed with the aperture displayed, the aperture value will also change to maintain the same exposure (amount of light reaching the image sensor). In this operation, if the aperture value exceeds the adjustable range, it will blink to indicate that the standard exposure cannot be obtained.

If the exposure will be too dark, the maximum aperture (lowest f/ number) will blink. If this happens, turn the  dial counterclockwise to set a slower shutter speed or increase the ISO speed.

If the exposure will be too bright, the minimum aperture (highest f/ number) will blink. If this happens, turn the  dial clockwise to set a faster shutter speed or decrease the ISO speed.



Using the Built-in Flash

To obtain a correct flash exposure on the main subject, the flash output will be set automatically (autoflash) to match the automatically-set aperture. Note that the range of settable shutter speed will be limited within 1/200 sec. to 30 sec.

Av: Changing the Depth of Field

To blur the background or to make everything near and far look sharp, set the Mode Dial to <Av> (Aperture-priority AE) to adjust the depth of field (range of acceptable focus).

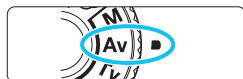
* <Av> stands for Aperture value (the size of the lens diaphragm opening).



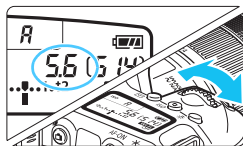
Blurred background
(With a low aperture f/number: f/5.6)



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



1 Set the Mode Dial to <Av>.



2 Set the desired aperture.

- While looking at the LCD panel or in the viewfinder, turn the <⚙️> dial.
- The higher the f/number, the wider the depth of field where sharper focus is obtained in both the foreground and background.
- Turning the <⚙️> dial clockwise sets a higher f/number (smaller aperture opening), and turning it counterclockwise sets a lower f/number (larger aperture opening).



3 Take the picture.

- When you focus and press the shutter button completely, the picture will be taken with the set aperture.



Aperture Value Display

The higher the f/number, the smaller the aperture opening will be. The f/number displayed will differ depending on the lens. If no lens is attached to the camera, "00" will be displayed for the aperture.



Shooting Tips

- **When using an aperture with a high f/number or shooting in low light scenes, note that camera shake can occur.**

A higher aperture f/number will make the shutter speed slower.

Under low light, the shutter speed can be as long as 30 sec. In such cases, increase the ISO speed and hold the camera steady or use a tripod.



- **The depth of field depends not only on the aperture, but also on the lens and on the subject distance.**

Since wide-angle lenses have a wide depth of field (range of acceptable focus in front of and behind the point of focus), you need not set a high aperture f/number to obtain a sharp picture from the foreground to the background. On the other hand, a telephoto lens has a narrow depth of field.

And the closer the subject, the narrower the depth of field. A farther subject will have a wider depth of field.

- **Set the aperture so that the shutter speed display does not blink.**

If you press the shutter button halfway and change the aperture with the shutter speed displayed, the shutter speed will also change to maintain the same exposure (amount of light reaching the image sensor). In this operation, if the shutter speed exceeds the adjustable range, it will blink to indicate that the standard exposure cannot be obtained.

If the picture will be too dark, the “30” (30 sec.) shutter speed display will blink. If this happens, turn the  dial counterclockwise to set a lower f/number or increase the ISO speed. If the picture will be too bright, the “4000” (1/4000 sec.) shutter speed display will blink. If this happens, turn the  dial clockwise to set a higher f/number or decrease the ISO speed.



⚡ Using the Built-in Flash

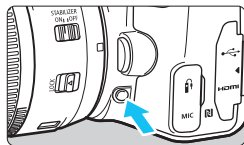
To obtain a correct flash exposure, the flash output will be automatically controlled (autoflash) to match the set aperture. The shutter speed will be set automatically within the range of 1/200 sec. - 30 sec. to match the brightness of the scene.

In low light, the main subject is exposed with the autoflash, and the background is exposed with a slow shutter speed set automatically. The picture comes out with the standard exposure for both the subject and background with a touch of the atmosphere (automatic slow-speed flash sync). If you are handholding the camera, keep it steady to prevent camera shake. Using a tripod is recommended to prevent camera shake.


To prevent a slow shutter speed, under [**2: Flash control**], set [**Flash sync. speed in Av mode**] to [**1/200-1/60sec. auto**] or [**1/200 sec. (fixed)**] (p.224).

Depth-of-Field Preview ☆

The aperture opening (diaphragm) changes only at the moment when the picture is taken. Otherwise, the aperture remains fully open. Therefore, when you look at the scene through the viewfinder or on the LCD monitor, the depth of field will look narrow.



Press the depth-of-field preview button to stop down the lens to the current aperture setting and check the depth of field (range of acceptable focus).

 While looking at the Live View image (p.242) and holding down the depth-of-field preview button, you can see how the range of acceptable focus will change as you adjust the aperture.

M: Manual Exposure

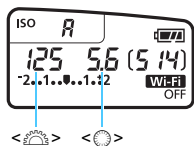
You can set both the shutter speed and aperture manually as desired. While referring to the exposure level indicator in the viewfinder, you can set the exposure as desired. This method is called manual exposure.

* <M> stands for Manual.







1 Set the Mode Dial to <M>.

2 Set the ISO speed (p.158).



3 Set the shutter speed and aperture.


- To set the shutter speed, turn the <  > dial.
- To set the aperture, turn the <  > dial.
- If it cannot be set, set the <LOCK> switch downward, then turn the <  > or <  > dial.

Standard exposure index







Exposure level mark

4 Focus on the subject.

- Press the shutter button halfway.
- ▶ The exposure setting will be displayed in the viewfinder and on the LCD panel.
- Check the exposure level mark <  > to see how far the current exposure level is from the standard exposure level.

5 Set the exposure and take the picture.


- Check the exposure level indicator and set the desired shutter speed and aperture.
- If the exposure level exceeds ± 2 stops from the standard exposure, the end of the exposure level indicator will display <  > or <  > in the viewfinder and on the LCD panel. (On the LCD monitor, if the exposure level exceeds ± 3 stops, <  > or <  > will be displayed.)



The set exposure setting will not be applied to movie shooting.

Exposure Compensation with ISO Auto

If the ISO speed is set to **A** (AUTO) for manual exposure shooting, you can set exposure compensation (p.205) as follows:

- [**2**: Expo.comp./AEB]
- [**SET**: Expo comp (hold btn, turn )] with [**14**: Custom Controls] under [**4**: Custom Functions(C.Fn)] (p.409)
- Quick Control (p.65)

- If ISO Auto is set, the ISO speed setting will change to obtain the standard exposure with the set shutter speed and aperture. Therefore, you may not obtain the desired exposure effect. In such a case, set the exposure compensation.
- If flash is used when ISO Auto is set, exposure compensation will not be applied even if an exposure compensation amount is set.

- Under [**2**: Auto Lighting Optimizer], if the checkmark [✓] for [**Disable during man expo**] is removed, Auto Lighting Optimizer can be set even in the <**M**> mode (p.175).
- When ISO Auto is set, you can press the <*****> button to lock the ISO speed.
- If you press the <*****> button and recompose the shot, you can see the exposure level difference on the exposure level indicator compared to when the <*****> button was pressed.
- If exposure compensation (p.205) was applied in <**P**>, <**Tv**>, or <**Av**> mode, the exposure compensation amount already set will still be maintained when the shooting mode is switched to <**M**> with ISO Auto set.

⚡ Using the Built-in Flash

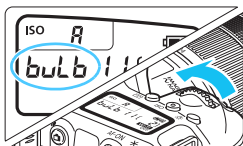
To obtain a correct flash exposure on the main subject, the flash output will be set automatically (autoflash) to match the manually-set aperture. Note that the range of settable shutter speed will be limited within 1/200 sec. to 30 sec or to bulb.

BULB: Long (Bulb) Exposures

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

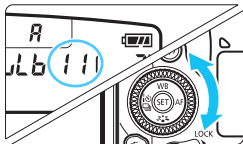


1 Set the Mode Dial to <M>.



2 Set to <BULB> (buLb).

- Turn the <☀> dial counterclockwise to set it.



3 Set the desired aperture.

- Turn the <☉> dial to set it.



Elapsed exposure time

4 Take the picture.

- The exposure will continue for as long as you keep the shutter button pressed completely.
- ▶ During shooting, the elapsed exposure time will be displayed on the LCD panel.



- 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.
- Since long bulb exposures produce more noise than usual, the image may look slightly grainy.
- If ISO Auto is set, the ISO speed will be ISO 400.
- When shooting bulb exposures without using the bulb timer, if you use both the self-timer and mirror lockup, keep pressing the shutter button completely (for self-timer delay time + bulb exposure time). If you let go of the shutter button during the self-timer countdown, there will be a shutter-release sound, but no picture will be taken. If you use the bulb timer under the same shooting conditions, you need not keep holding down the shutter button completely.

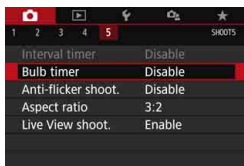


- You can reduce the noise due to long exposures by setting [**4: Long exp. noise reduction**] to [**Auto**] or [**Enable**] (p.177).
- For bulb exposures, using a tripod and bulb timer is recommended. You can also use mirror lockup (p.209) in combination.
- You can also shoot bulb exposures by using Remote Switch RS-60E3 (sold separately, p.201).
- You can also use Wireless Remote Control BR-E1 (sold separately, p.423) or Remote Controller RC-6 (sold separately, p.426) for bulb exposures. When you press the remote controller's release button (transmit button), the bulb exposure will start immediately or 2 sec. later. Press the button again to stop the bulb exposure.

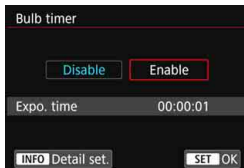
TIMER Bulb Timer ☆

You can preset the bulb exposure's exposure time. With the bulb timer, you need not keep holding down the shutter button during the bulb exposure. This reduces camera shake.

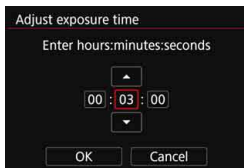
The bulb timer can be set only for <BULB> (bulb exposure). It cannot be set (or will not function) in any other mode.

**1 Select [Bulb timer].**

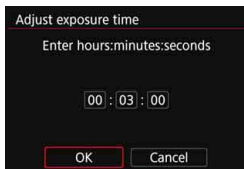
- Under the [**5**] tab, select [**Bulb timer**], then press <SET>.

**2 Select [Enable].**

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

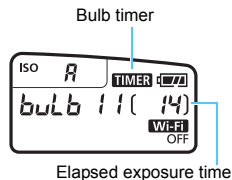
**3 Set the desired exposure time.**

- Select the hour, minute, or second.
- Press <SET> so <⏏> is displayed.
- Set the desired number, then press <SET>. (Returns to <□>.)



4 Select [OK].

- ▶ The set time will be displayed on the menu screen.
- ▶ When you exit the menu, <TIMER> will be displayed on the LCD panel.






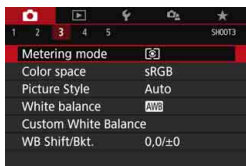
5 Take the picture.

- ▶ Press the shutter button completely, and the bulb exposure will start and continue until the set time elapses.
- During bulb timer shooting, <TIMER> will blink.
- To cancel the timer setting, set [Disable] in step 2.


- The <C> drive mode cannot be selected.
- While the bulb timer is operating, if you press the shutter button completely and release it, the bulb exposure will stop.
- If you keep pressing the shutter button completely after the exposure starts, the bulb exposure will continue even after the set exposure time elapses. (The bulb exposure will not stop automatically when the set exposure time elapses.)
- Doing any of the following will cancel the bulb timer (reverts to [Disable]): Set the power switch to <OFF>, switch to movie shooting, or change to a mode other than <BULB>.

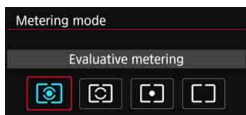
Changing the Metering Mode ☆

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. (In the <SCN:  > and <:  > modes, center-weighted average metering is set.)



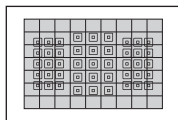
1 Select [Metering mode].

- Under the [3] tab, select [Metering mode], then press <SET>.



2 Set the metering mode.

- Select the desired metering mode, then press <SET>.



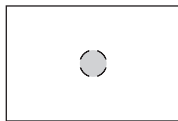
Evaluative metering

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 gray area in the left figure is approximately where the brightness is metered to obtain the standard exposure.



Spot metering

Effective when metering a specific part of the subject or scene. The gray area in the left figure is approximately where the brightness is metered to obtain the standard exposure. This metering mode is for advanced users.



☐ **Center-weighted average metering**

The metering is averaged for the entire scene with the screen center weighted more heavily. This metering mode is for advanced experts.

☑ With ☉ (Evaluative metering), the exposure setting will be locked when you press the shutter button halfway and focus is achieved. In the ☐ (Partial metering), ☑ (Spot metering), and ☐ (Center-weighted average metering) modes, the exposure is set at the moment the picture is taken. (Pressing the shutter button halfway does not lock the exposure.)

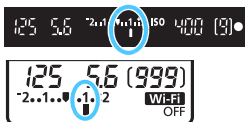
Setting the Desired Exposure Compensation ☆

Set exposure compensation if the exposure (without flash) does not come out as desired. This feature can be used in Creative Zone modes (except <M>). You can set the exposure compensation up to ±5 stops* in 1/3-stop increments.

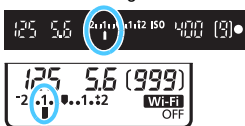
If the <M> mode and ISO Auto are both set, see page 198 to set the exposure compensation.

* In Live View shooting/movie shooting, or when [☑: Shooting screen] is set to [Guided], exposure compensation can be set up to ±3 stops.

Increased exposure
for a brighter image



Decreased exposure
for a darker image



1 Check the exposure level indicator.

- Press the shutter button halfway (☑4) and check the exposure level indicator.

2 Set the compensation amount.

- While looking at the viewfinder or LCD panel, turn the <☉> dial.
- If it cannot be set, set the <LOCK> switch downward, then turn the <☉> dial.
- ▶ For exposure compensation, the <☒> icon will be displayed in the viewfinder and on the LCD monitor.

3 Take the picture.

- To cancel the exposure compensation, set the compensation amount back to <☒>.

- If [☑2: Auto Lighting Optimizer] (p.175) is set to any setting other than [Disable], the image may still look bright even if a decreased exposure compensation for a darker image is set.
- The set exposure compensation level will not be applied to movie shooting.

- When you set the power switch to <OFF>, the exposure compensation setting will be canceled.
- After setting the exposure compensation amount, you can set the <LOCK> switch upward to prevent the exposure compensation amount from changing inadvertently.
- The exposure compensation amount displayed in the viewfinder and on the LCD panel goes up to only ±2 stops. If the exposure compensation amount exceeds ±2 stops, the end of the exposure level indicator will display <◀> or <▶>.
- If you want to set exposure compensation exceeding ±2 stops, setting it with [☑2: Expo.comp./AEB] (p.206) is recommended.

MENU Auto Exposure Bracketing ☆

This feature takes exposure compensation a step further by varying the exposure automatically in the range of ± 2 stops in 1/3-stop increments with three shots as shown below. You can then choose the best exposure. This is called AEB (Auto Exposure Bracketing).



Standard exposure



Darker exposure
(Decreased exposure)

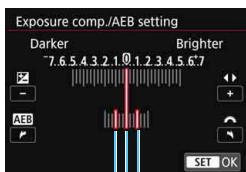


Brighter exposure
(Increased exposure)



1 Select [Expo.comp./AEB].

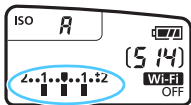
- Under the [CAMERA] tab, select [Expo.comp./AEB], then press <SET>.



2 Set the AEB range.

- Turn the <WHEEL> dial to set the AEB range.
- Press the <LEFT> <RIGHT> keys to set the exposure compensation amount. If AEB is combined with exposure compensation, AEB will be applied centering on level of exposure compensation.
- Press <SET> to set it.
- When you press the <MENU> button to exit the menu, the AEB range will be displayed on the LCD panel.

AEB range



3 Take the picture.

- Focus and press the shutter button completely. The three bracketed shots will be taken in this sequence: standard exposure, decreased exposure, and increased exposure.

Canceling AEB

- Follow steps 1 and 2 to turn off the AEB range display (set to 0).
- The AEB setting will also be canceled automatically if the power switch is set to <OFF>, flash recharging is complete, etc.



Shooting Tips

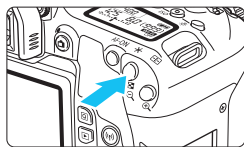
- **Using AEB with continuous shooting**
If you set the drive mode to <[H]> or <[P]> (p.147) and press the shutter button completely, the three bracketed shots will be taken consecutively in the sequence of standard exposure, decreased exposure, and increased exposure, and then the camera will automatically stop shooting.
 - **Using AEB with single shooting ([□])**
Press the shutter button three times to take the three bracketed shots. The three bracketed shots will be taken in the following sequence: standard exposure, decreased exposure, and increased exposure.
 - **Using AEB with the self-timer or a remote controller (sold separately)**
With the self-timer or a remote control shooting (<[T]> or <[2]>), you can take three consecutive shots after a 10-sec. or 2-sec. delay. With <[C]> (p.149) set, the number of consecutive shots will be three times the number set.
- During AEB, <[X]> and AEB range in the viewfinder will blink.
 - AEB cannot be used with flash, when [Multi Shot Noise Reduction] is set, for shooting with a Creative filter, or with bulb exposures.
 - If [2: Auto Lighting Optimizer] (p.175) is set to any setting other than [Disable], the effect of AEB may be reduced.

✳ Locking the Exposure ☆

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

1 Focus on the subject.

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



2 Press the <✳> button (ⓘ4).

- ▶ The <✳> icon lights up in the viewfinder to indicate that the exposure setting is locked (AE lock).
- Each time you press the <✳> button, the current exposure setting is locked.



3 Recompose and take the picture.

- When you are to take more pictures while maintaining the AE lock, keep holding down the <✳> button and press the shutter button to take another picture.

AE Lock Effects

Metering Mode (p.203)	AF Point Selection Method (p.131)	
	Automatic Selection	Manual Selection
*	AE lock is applied at the AF point that achieved focus.	AE lock is applied at the selected AF point.
	AE lock is applied at the center AF point.	

* When the lens's focus mode switch is set to <MF>, AE lock is implemented with the exposure weighting centered on the center AF point.

AE lock is not possible with bulb exposures.

Mirror Lockup to Reduce Camera Vibration Blur [☆]

You can use the mirror lockup function to prevent the disturbing mechanical vibrations (mirror shock) when shooting with super telephoto lenses or shooting close-ups (macro photography).

Mirror lockup is enabled by setting [10: Mirror lockup] to [1:Enable] in [4: Custom Functions (C.Fn)] (p.406).

1 Focus on the subject, then press the shutter button completely.

- ▶ The mirror will swing up.

2 Press the shutter button completely again.

- ▶ The picture is taken and the mirror goes back down.
- After taking the picture, set [10: Mirror lockup] to [0:Disable].



Shooting Tips

● Using the self-timer , with mirror lockup

When you press the shutter button completely, the mirror locks up. The picture will be then taken 10 sec. or 2 sec. later.


● Remote control shooting

Since you do not touch the camera when the picture is taken, remote control shooting together with mirror lockup can further reduce the camera vibration blur (p.423). With Wireless Remote Control BR-E1 (sold separately) or Remote Controller RC-6 (sold separately) set to a 2-sec. delay, press the release button (transmit button) to lock up the mirror, and the picture will be taken 2 sec. after the mirror lockup.



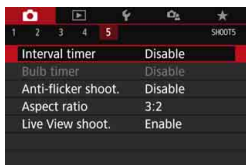
- Do not point the camera toward an intense light source, such as the sun or an intense artificial light source. Doing so may damage the image sensor or the camera's internal components.
- In very bright light, such as at the beach or a ski slope on a sunny day, take the picture promptly after mirror lockup is stabilized.
- When shooting with mirror lockup without using the bulb timer, if you use both the self-timer and bulb exposures, keep pressing the shutter button completely (for self-timer delay time + bulb exposure time). If you let go of the shutter button during the self-timer countdown, there will be a shutter-release sound, but no picture will be taken. If you use the bulb timer under the same shooting conditions, you need not keep holding down the shutter button completely.
- During mirror lockup, shooting function settings, menu operations, etc. are disabled.
- When you use flash, the red-eye reduction lamp will not light up (p.217).



- Even if you set the drive mode to H>, , or , the camera will still shoot in single shooting mode.
- When [4: High ISO speed NR] is set to [Multi Shot Noise Reduction], four consecutive shots will be taken for a single picture regardless of the [10: Mirror lockup] setting.
- If approx. 30 sec. elapse after the mirror has locked up, it will go back down automatically. Pressing the shutter button completely locks up the mirror again.
- When shooting with mirror lockup, using a tripod and Remote Switch RS-60E3 (sold separately, p.427) is recommended.

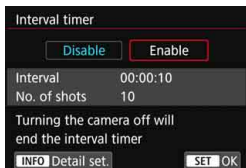
TIMER Interval Timer Shooting

With the interval timer, you can set the shooting interval and the number of shots. The camera will repeat taking one shot with the set interval until the set number of shots are taken.



1 Select [Interval timer].

- Under the [5] tab (the [1] tab in Basic Zone modes), select [Interval timer], then press <SET>.



2 Select [Enable].

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



3 Set the shooting interval and number of shots.

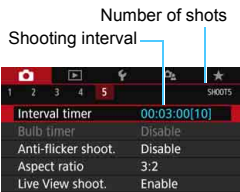
- Select the item to be set (hours: minutes: seconds / number of shots).
- Press <SET> so is displayed.
- Set the desired number, then press <SET>. (Returns to .)

• Interval

Settable in the range from [00:00:01] to [99:59:59].

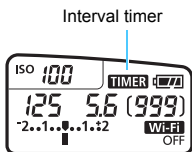
• Number of shots

Settable in the range from [01] to [99]. If you set [00], the camera will keep shooting an unlimited number of shots until you stop the interval timer shooting.



4 Select [OK].

- ▶ The interval timer settings will be displayed on the menu screen.
- ▶ When you exit the menu, **<TIMER>** will be displayed on the LCD panel.





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.

- Using a tripod is recommended.
- Taking test shots in advance is recommended.
- After the interval timer shooting starts, you can still press the shutter button completely to take a picture as usual. However, approx. 5 sec. before the next interval timer shooting, the shooting function settings, menu operation, image playback, and other operations will be suspended, and the camera will go back to shooting-ready state.
- If a picture is being taken or an image is being processed when the next shot is scheduled on the interval timer, the shot set for that time will be skipped. The camera will thereby shoot fewer shots than the number set for interval timer shooting.
- Auto power off operates with the interval timer after approx. 8 sec. of non-operation regardless of the [**2: Auto power off**] setting. The power will automatically turn on approx. 1 min. before the next shot.
- Interval timer shooting can also be combined with AEB and white balance bracketing.
- You can stop the interval timer shooting in progress by selecting [**Disable**] or turning the power switch to **<OFF>**.



- 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 the lens's focus mode switch is set to <AF>, the camera will not shoot when focus is not achieved. Setting it to <MF> and focusing manually before shooting is recommended.
- Live View shooting, movie shooting, bulb exposures, or mirror lockup cannot be performed with interval timer.
- If the shooting time is long, using the household power outlet accessories (sold separately, p.422) is recommended.
- If a shutter speed longer than the shooting interval, such as a long exposure, is set, the camera cannot shoot with the set interval. The camera will thereby shoot fewer still photos than the number set for interval timer shooting. Also, the number of shots may decrease when the shutter speed and the shooting interval are nearly the same.
- If the time it takes to record to the card exceeds the interval between shots due to the shooting functions set or card performance, some of the shots may not be taken with the set intervals.
- If you use flash with interval timer shooting, set an interval longer than the flash's recharging time. If the interval is too short, the flash may not fire.
- If the shooting interval is too short, the camera may not take a picture or may capture an image without autofocus.
- The interval timer will be canceled and reset to **[Disable]** if you do any of the following: Set the power switch to <OFF>, display the Live View shooting or movie shooting screen, set the camera for bulb exposures, or use EOS Utility (EOS software, p.488).
- After interval timer shooting starts, you cannot use remote control shooting (p.423) or remote-release shooting with an EOS-dedicated, external Speedlite.
- If your eye will not remain on the viewfinder eyepiece during interval timer shooting, attach the eyepiece cover (p.427). If stray light enters the viewfinder when the picture is taken, it may throw off the exposure.
- When **[Interval timer]** is set to **[Enable]**, **[Clean now **] or **[Clean manually]** under **[ 4: Sensor cleaning]** cannot be selected.



6

Flash Photography

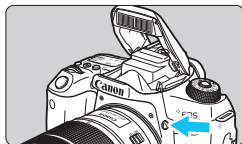
This chapter describes how to shoot with built-in flash and external Speedlites (EX-series, sold separately), how to set flash settings on the camera's menu screen, and how to use the built-in flash for wireless flash photography.



- Flash cannot be used in movie shooting. (It will not fire.)
- AEB cannot be used in flash photography.

⚡ Using the Built-in Flash

In indoor, low light, or backlit conditions in daylight, just raise the built-in flash and press the shutter button to easily take beautiful pictures. In the <P> mode, the shutter speed (1/60 sec. - 1/200 sec.) will be set automatically to prevent camera shake.



1 Press the <⚡> button.

- In Creative Zone modes, you can press the <⚡> button anytime to take flash pictures.
- While the flash is recharging, “buSY” is displayed in the viewfinder and on the LCD panel.



2 Press the shutter button halfway.

- In the bottom left of the viewfinder, check that the <⚡> icon is displayed.



3 Take the picture.

- When focus is achieved and you press the shutter button completely, the flash will fire at all times.

Effective Range of Built-in Flash

(Approx. in meters / feet)

ISO Speed (p.158)	EF-S18-135mm f/3.5-5.6 IS USM	
	Wide Angle	Telephoto
	f/3.5	f/5.6
ISO 100	1 - 3.4 / 3.3 - 11.2	1 - 2.1 / 3.3 - 6.9
ISO 400	1 - 6.9 / 3.3 - 22.6	1 - 4.3 / 3.3 - 14.1
ISO 1600	1.7 - 13.7 / 5.6 - 44.9	1.1 - 8.6 / 3.6 - 28.2
ISO 6400	3.4 - 27.4 / 11.2 - 89.9	2.1 - 17.1 / 6.9 - 56.1

* When a high ISO speed is set and focusing distance is long, appropriate exposure may not be obtained depending on the subject conditions, etc.

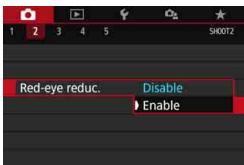


Shooting Tips

- **In bright light, decrease the ISO speed.**
If the exposure setting in the viewfinder blinks, decrease the ISO speed.
- **Detach the lens hood. Do not get too close to the subject.**
If the lens has a hood attached or you are too close to the subject, the bottom of the picture may look dark due to the obstructed flash light. For important shots, play back the image and check to make sure the picture does not look unnaturally dark at the bottom part.

MENU Red-eye Reduction

Using the red-eye reduction lamp before taking a flash picture can reduce red eye.



- Under the [**2**] tab (the [**1**] tab in Basic Zone modes), select [**Red-eye reduc.**], then press <SET>.
- Select [**Enable**], then press <SET>.
- For flash photography, when you press the shutter button halfway, the red-eye reduction lamp will light up. Then when you press the shutter button completely, the picture will be taken.

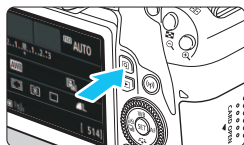


- The red-eye reduction feature is more effective when the subject looks at the red-eye reduction lamp, when the room is well lit, or when you are close to the subject.
- When you press the shutter button halfway, the scale display on the bottom of the viewfinder will gradually shrink toward the center to turn off. For best results, take the picture after this scale display disappears.
- The effectiveness of red-eye reduction varies depending on the individual subject.



⚡ Flash Exposure Compensation ☆

Set the flash exposure compensation if the brightness of the subject does not come out as desired (so you want to adjust the flash output) in flash photography. You can set the flash exposure compensation up to ± 2 stops in $1/3$ -stop increments.



1 Press the **<Q>** button (⓪10).

- ▶ The Quick Control screen will appear (p.65).



2 Select **[⚡]**.

- Press the **<▲>** **<▼>** or **<◀>** **<▶>** keys to select **[⚡*]**.
- ▶ **[Flash exposure comp.]** will be displayed at the bottom.



3 Set the compensation amount.

- If the exposure is too dark, turn the **<☀>** dial clockwise (for increased exposure).
If the exposure is too bright, turn the **<☀>** dial counterclockwise (for decreased exposure).

- ▶ When you press the shutter button halfway, the **<⚡>** icon will appear in the viewfinder.
- **After taking the picture, cancel the flash exposure compensation by setting it back to 0.**

- ⚠ If **[⓪2: Auto Lighting Optimizer]** (p.175) is set to any setting other than **[Disable]**, the image may still look bright even if a decreased flash exposure compensation is set.
- If flash exposure compensation is set with an external Speedlite (sold separately, p.221), you cannot set the flash exposure compensation with the camera (Quick Control or External flash function settings). If it is set with both the camera and external Speedlite, the Speedlite's setting overrides the camera's.

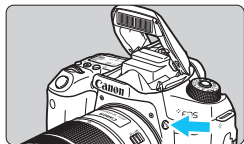


- The compensation amount will be retained even after you set the power switch to <OFF>.
- You can also set flash exposure compensation with [Built-in flash settings] in [📷2: Flash control] (p.226).

✳ Locking the Flash Exposure (FE lock) ✳

If the subject is on the side of the frame and you use flash, the subject may turn out to be too bright or dark depending on the background, etc. Use FE lock in such a case. After setting the flash output for the appropriate subject brightness, you can recompose (put the subject toward the side) and shoot. This feature can also be used with a Canon EX-series Speedlite.

* FE stands for Flash Exposure.

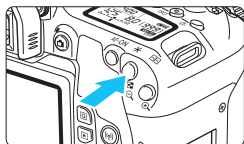


1 Press the <⚡> button.

- ▶ The built-in flash will be raised.
- Press the shutter button halfway and look in the viewfinder to check that the <⚡> icon is lit.



2 Focus on the subject.



3 Press the <✳> button (📷16).

- Aim the viewfinder center over the subject where you want to lock the flash exposure, then press the <✳> button.
- ▶ The flash will fire a preflash and the required flash output is calculated and retained in memory.
- ▶ In the viewfinder, "FEL" is displayed for a moment and <⚡*> will light up.



- Each time you press the <✳> button, a preflash is fired and the required flash output is calculated and retained in memory.



4 Take the picture.

- Compose the shot and press the shutter button completely.
- ▶ The flash is fired, and the picture is taken.

- If the subject is too far away and the captured image comes out dark, the <⚡> icon will blink. Move closer to the subject and repeat steps 2 to 4.
- FE lock is not possible during Live View shooting.

⚡ Using an External Speedlite

EOS-dedicated, EX-series Speedlites

Using an EX-series Speedlite (sold separately) makes flash photography easy.

For operation procedures, refer to the EX-series Speedlite's Instruction Manual. This camera is a Type-A camera that can use all the features of EX-series Speedlites.

To set the flash functions and flash Custom Functions on the camera's menu screen, see pages 223-228.





Shoe-mount Speedlites



Macro Lites



- With an EX-series Speedlite not compatible with the flash function settings (p.223), only **[Flash exp. comp]** and **[E-TTL II meter.]** can be set for **[External flash func. setting]**. (**[Shutter sync.]** can also be set with certain EX-series Speedlites.)
- If flash exposure compensation is set with the external Speedlite, the flash exposure compensation icon displayed on the camera's LCD monitor will change from  to  (when **[Q2: Shooting screen]** is set to **[Standard]**).

Canon Speedlites Other Than the EX-series

- **With an EZ/E/EG/ML/TL-series Speedlite set to A-TTL or TTL autoflash mode, the flash is fired at full output at all times.** Set the camera's shooting mode to <M> (manual exposure) or <Av> (aperture-priority AE) and adjust the aperture setting before shooting.
- When using a Speedlite that has manual flash mode, shoot in the manual flash mode.

Using Non-Canon Flash Units

Sync Speed

The camera can synchronize with compact, non-Canon flash units at 1/200 sec. or slower shutter speeds. Use a sync speed slower than 1/200 sec.

Be sure to test the flash unit beforehand to make sure it synchronizes properly with the camera.

Cautions for Live View Shooting

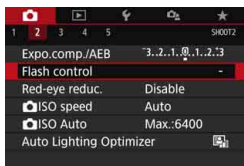
A non-Canon flash will not fire during Live View shooting.

- If the camera is used with a flash unit or flash accessory dedicated to another camera brand, the camera not only may not operate properly, but malfunction may result.
- Do not attach a high-voltage flash unit to the camera's hot shoe. It may not be fired.

MENU Setting the Flash Function ☆

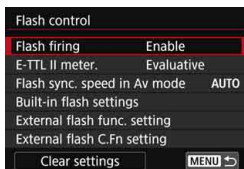
With the built-in flash or an EX-series, external Speedlite compatible with the flash function settings, you can use the camera's menu screen to set flash functions and the external Speedlite's Custom Functions.

If you use an external Speedlite, attach the Speedlite to the camera and turn on the Speedlite before setting the flash functions. For details on the external Speedlite's flash functions, refer to the Speedlite's instruction manual.



1 Select [Flash control].

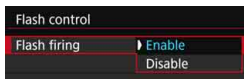
- Under the [CAMERA] tab, select [Flash control], then press <SET>.
- The Flash control screen will appear.



2 Select the desired item.

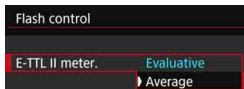
- Select the menu option to be set, then press <SET>.

Flash Firing



To enable flash photography, set [Enable]. To enable only the AF-assist beam to be emitted, set [Disable].

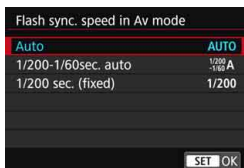
E-TTL II Flash Metering



For normal flash exposures, set it to [Evaluative]. If [Average] is set, the flash exposure will be averaged for the entire metered scene. Depending on the scene, flash exposure compensation may be necessary. This setting is for advanced users.

Even if [Flash firing] is set to [Disable], if focus is difficult to achieve in low light, the flash may still fire a series of flashes (AF-assist beam, p.127).

Flash Sync. Speed in Av Mode



You can set the flash-sync speed for flash photography in the aperture-priority AE <Av> mode.

- **AUTO : Auto**

The flash sync speed is set automatically within a range of 1/200 sec. to 30 sec. to suit the scene's brightness. High-speed sync is also possible.

- $\frac{1}{200}$
-1/60A : **1/200-1/60 sec. auto**

Prevents a slow shutter speed from being set in low-light conditions. It is effective for preventing subject blur and camera shake.

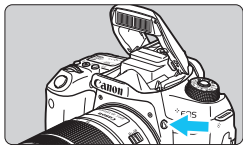
However, while the subject will be properly exposed with the flash, the background may come out dark.

- $\frac{1}{200}$: **1/200 sec. (fixed)**

The flash sync speed is fixed at 1/200 sec. This more effectively prevents subject blur and camera shake than with [**1/200-1/60sec. auto**]. However, in low light, the subject's background will come out darker than with [**1/200-1/60sec. auto**].

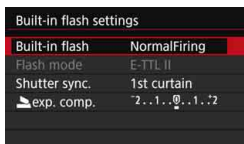
ⓘ If [**1/200-1/60sec. auto**] or [**1/200 sec. (fixed)**] is set, high-speed sync is not possible in the <Av> mode with the external Speedlite.

Displaying the Flash Function Setting Screen Directly



When you use the built-in flash or an external, EX-series Speedlite compatible with the flash function settings, you can press the $\leftarrow \text{⚡} \rightarrow$ button to directly display the **[Built-in flash settings]** or **[External flash func. setting]** screen without first displaying the menu screen.

● With built-in flash



Press the $\leftarrow \text{⚡} \rightarrow$ button twice.

- Press the button to raise the built-in flash.
- Press the button again to display the **[Built-in flash settings]** screen.
- If **[Flash firing]** is set to **[Disable]**, the **[CAMERA 2: Flash control]** screen will appear (p.223).

● With external Speedlite



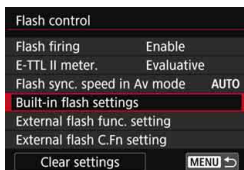
Press the $\leftarrow \text{⚡} \rightarrow$ button.

- With the external Speedlite turned on, press the $\leftarrow \text{⚡} \rightarrow$ button to display the **[External flash func. setting]** screen.

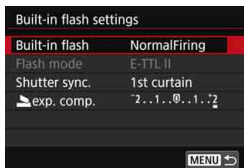
ⓘ When you press the $\leftarrow \text{⚡} \rightarrow$ button to display the flash function setting screen, you cannot set **[Flash firing]**, **[E-TTL II meter.]**, **[Flash sync. speed in Av mode]**, or **[External flash C.Fn setting]**. Set these functions with **[CAMERA 2: Flash control]** instead.

[Built-in flash settings] and [External flash func. setting]

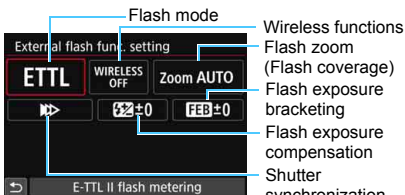
You can set the functions in the table below. The functions displayed under [External flash func. setting] vary depending on the Speedlite model.



- Select [Built-in flash settings] or [External flash func. setting].
- ▶ The flash function setting screen will be displayed. With [Built-in flash settings], only the highlighted functions can be selected and set.



[Built-in flash settings]



[External flash func. setting]

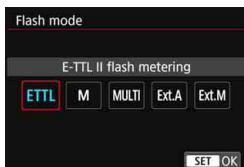
Main Functions for [Built-in flash settings] and [External flash func. settings]

Function	[Built-in flash settings]			[External flash func. setting]	Page
	Normal Firing	Easy Wireless (p.232)	Custom Wireless (p.235)		
Flash mode			○	○	227
Shutter synchronization	○			○	227
Flash exposure bracketing*				○	
Wireless functions			○	○	227
Flash exposure compensation	○	○	○	○	218
Flash ratio control			○	○	
Master flash firing				○	
Flash zoom*				○	

* For [Flash exposure bracketing] and [Flash zoom], refer to the instruction manual of a Speedlite compatible with the functions.

● Flash mode

When using an external Speedlite, you can select the flash mode to suit your desired photographic effects.



- [E-TTL II] is the standard mode of EX-series Speedlites for automatic flash photography.
- [Manual flash] is the mode for advanced users who want to set the [Flash output] (1/1 to 1/128) themselves.
- Regarding other flash modes, refer to the instruction manual of a Speedlite compatible with the respective flash mode.

● Shutter synchronization

Normally, set this to [First-curtain synchronization] so that the flash fires immediately after the exposure starts.

If [Second-curtain synchronization] is set, the flash will be fired right before the shutter closes. When this is combined with a slow shutter speed, you can create a trail of light such as from car headlights at night with a more natural feel. When second-curtain synchronization is set together with [E-TTL II], the flash will be fired twice in a row: once when you press the shutter button completely and once right before the end of the exposure. Also, if the shutter speed is 1/30 sec. or faster, first-curtain synchronization will be applied automatically.

If an external Speedlite is attached, you can also select [High-speed synchronization] (⚡_H). For details, refer to the Speedlite's instruction manual.

● Wireless functions

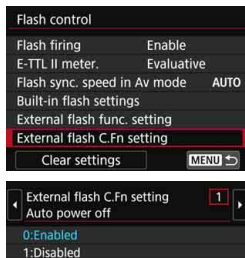
When performing the optical transmission wireless flash photography using the master function of the built-in flash, see "Using Wireless Flash" on page 229. When performing the wireless flash photography with radio or optical transmission using the master function of the external Speedlite, refer to the Speedlite's instruction manual.

● Flash exposure compensation

See "Flash Exposure Compensation" on page 218.

Setting the External Speedlite Custom Functions

The Custom Functions displayed under **[External flash C.Fn setting]** vary depending on the Speedlite model.



1 Display the Custom Function.

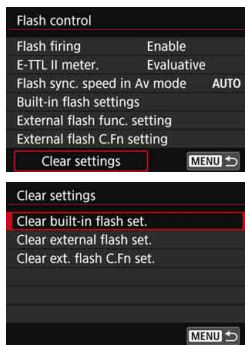
- With the camera ready to shoot with an external Speedlite, select **[External flash C.Fn setting]**, then press **< (SET) >**.

2 Set the Custom Function.

- Press the **< ◀ > ▶ >** keys to select the function number, then set the function. The procedure is the same as setting the camera's Custom Functions (p.400).

⚠ With an EX-series Speedlite, if the **[Flash metering mode]** Custom Function is set to **[TTL flash metering]** (autoflash), the Speedlite will always fire at full output.

Clear All Settings to Default



1 Select [Clear settings].

- Under the **[CAMERA 2: Flash control]** tab, select **[Clear settings]**, then press **< (SET) >**.

2 Select the settings to be cleared.

- Select **[Clear built-in flash set.]**, **[Clear external flash set.]**, or **[Clear ext. flash C.Fn set.]**, then press **< (SET) >**.
- When you select **[OK]**, the respective flash settings will be cleared.

📄 The Speedlite's Personal Function (P.Fn) cannot be set or canceled on the camera's **[Flash control]** screen. Set it directly on the Speedlite.

Wireless Flash Photography ☆

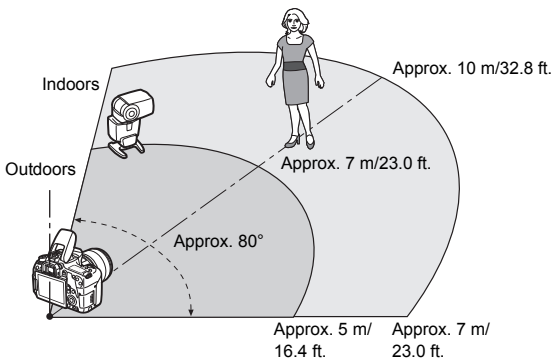
The camera's built-in flash can work as a master unit for Canon EX-series, external Speedlites equipped with a wireless slave feature. It can wirelessly trigger the Speedlite(s) to fire via optical transmission. Be sure to read the instructions and cautions about wireless flash photography (optical transmission) in the Speedlite's instruction manual.

Slave Unit Settings and Position

Regarding your Speedlite (hereafter slave unit), refer to its instruction manual and set it as follows. The settings other than the ones below for the slave unit's control are all set with the camera. Different models of Speedlite slave units can be used and controlled together.

- (1) Set the external Speedlite as a slave unit.
- (2) Set the Speedlite's transmission channel to the same channel as set on the camera.*¹
- (3) For flash ratio control (p.237), set the slave unit's firing group.
- (4) Position the camera and slave unit(s) within the range shown below.
- (5) Face the slave unit's wireless sensor toward the camera.*²

Example of Wireless Flash Set-up




- *1: If the slave Speedlite does not have a transmission channel setting function, the flash can work regardless of the camera's channel setting.
- *2: In small rooms, the slave unit may work even if its wireless sensor does not face the camera. The camera's wireless signals may be able to bounce off the walls and enable wireless photography.

When using an EX-series Speedlite with fixed light-emitting unit (flash head) and wireless sensor, take pictures while making sure it can fire.

- **Canceling the slave unit's auto power off**

To cancel the slave unit's auto power off, press the camera's <✳> button. If you are using manual flash firing, press the slave unit's test firing (PILOT) button to cancel the auto power off.

 The camera's master function cannot be used for wireless flash photography with radio transmission.

Wireless Flash Photography Configurations

The tables below show the possible configurations for wireless flash photography. Select the configuration suiting the subject, shooting conditions, the number of external Speedlites you use, etc.

	External Speedlite		Built-in Flash	Page	Setting	
	Quantity	A:B Flash Ratio			Wireless Functions	Firing Group
Fully Automatic (E-TTL II autoflash)	Single	-	-	p.232		All
	Single	-	Used	p.235	+	-
	Multiple	-	-	p.234		All
	Multiple	Set	-	p.237		(A:B)
	Multiple	-	Used	p.238	+	All and
	Multiple	Set	Used		+	(A:B)
	• Flash exposure compensation			p.239		
• FE lock						

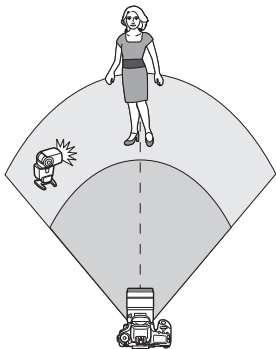
	External Speedlite		Built-in Flash	Page	Setting	
	Quantity	A:B Flash Ratio			Wireless Functions	Firing Group
Manual Flash	Single/ Multiple	-	-	p.240		All
	Multiple	Set	-			(A:B)
	Single/ Multiple	-	Used		+	All and
	Multiple	Set	Used		+	(A:B)

Even if you disable the built-in flash from firing, it will still fire in order to control the slave unit via optical transmission. The flash fired to control the slave unit may therefore appear in the picture depending on the shooting conditions.

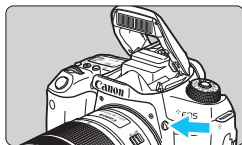
Easy Wireless Flash Photography ☆

The basics of easy, fully automatic wireless flash photography are described below.

Fully Automatic Shooting with One External Speedlite

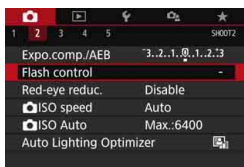


Steps 1 to 4 and 6 apply to all wireless flash photography. Therefore, these steps are omitted in other wireless flash setups described on the pages hereafter.



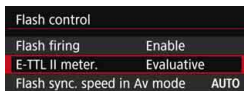
1 Press the <⚡> button to raise the built-in flash.

- For wireless flash photography, be sure to raise the built-in flash.



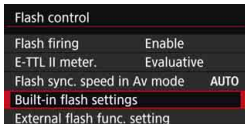
2 Select [Flash control].

- Under the [**2**] tab, select [Flash control], then press <SET>.



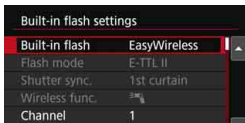
3 Select [Evaluative].

- For [E-TTL II meter.], select [Evaluative], then press <SET>.



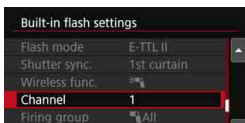
4 Select [Built-in flash settings].

- Select [**Built-in flash settings**], then press < (SET) >.



5 Select [EasyWireless].

- For [**Built-in flash**], select [**EasyWireless**], then press < (SET) >.

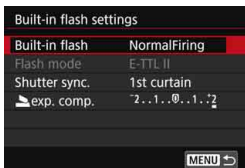


6 Set [Channel].

- Set the transmission channel (1-4) to the same one as the slave unit.

7 Take the picture.

- Set the camera and take the picture in the same way as with normal flash photography.



8 Exit the wireless flash photography.

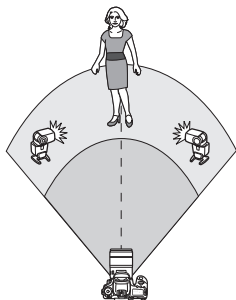
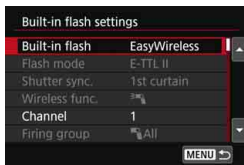
- For [**Built-in flash**], select [**NormalFiring**].



- Setting [**E-TTL II meter.**] to [**Evaluative**] is recommended.
- Even if the firing of the built-in flash is disabled when [**EasyWireless**] is set, it will still fire a small flash in order to control the slave unit. Depending on shooting conditions, the flash fired to control the slave unit may appear in the picture.
- Test flash firing function is not available with the slave unit.

Fully Automatic Shooting with Multiple External Speedlites

You can have multiple slave units fire as if they were a single Speedlite. This is convenient when you need a large flash output.



Basic settings:

Flash mode : E-TTL II

E-TTL II meter. : Evaluative

Built-in flash : EasyWireless

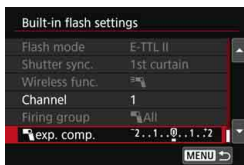
Channel : (Same as slave units)

All the slave units will be controlled to fire at the same output and obtain a standard exposure.

No matter which firing group (A, B, or C) the slave units belong to, they will all fire as one group.

Flash Exposure Compensation

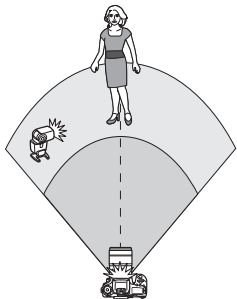
If the flash exposure looks too dark or too bright, you can set flash exposure compensation to adjust the slave units' flash output.



- Select [**exp. comp.**], then press <SET>.
- If the flash exposure is too dark, press the <▶> key to increase the flash output and make it brighter. If the flash exposure is too bright, press the <◀> key to decrease the flash output and make it darker.





Custom Wireless Flash Photography [☆]

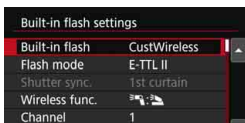
Fully Automatic Shooting with One External Speedlite and Built-in Flash




This is fully automatic wireless flash photography with one external Speedlite and the built-in flash.

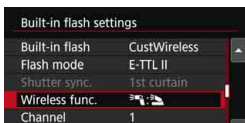
You can change the flash ratio between the external Speedlite and built-in flash to adjust how the shadows cast on the subject.

On the menu screens, the  and  icons indicate the external Speedlite, and the  and  icons indicate the built-in flash.






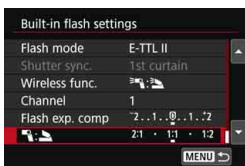
1 Select [CustWireless].

- Follow step 5 on page 233 to select [CustWireless], then press .





2 Select [Wireless func.].

- For [Wireless func.], select  : , then press .



3 Set the desired flash ratio and take the picture.

- Select  :  and set the flash ratio within 8:1 to 1:1. Setting a flash ratio to the right of 1:1 is not possible.

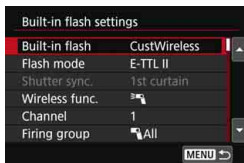


- If the built-in flash output is not enough, set a higher ISO speed (p.158).
- The 8:1 to 1:1 flash ratio is equivalent to 3:1 to 1:1 stops (1/2-stop increments) for the exposure level.

Fully Automatic Shooting with Multiple External Speedlites

Multiple Speedlite slave units can be fired as one flash unit or separated into slave groups for shooting with flash ratio control.

The basic settings are shown below. By changing the **[Firing group]** setting, you can shoot with various wireless flash setups with multiple Speedlites.



Basic settings:

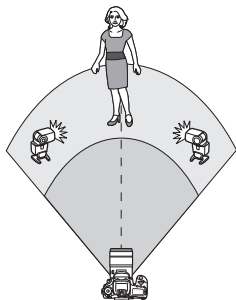
Flash mode : E-TTL II

E-TTL II meter. : Evaluative

Wireless func. : [Flash icon]

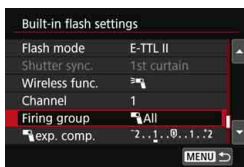
Channel : (Same as slave units)

[Flash icon] All] Firing multiple slave Speedlites as one flash unit



Effective when you need a large flash output. All the slave units will be controlled to fire at the same output and obtain a standard exposure.

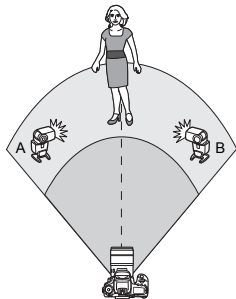
No matter which firing group (A, B, or C) the slave units belong to, they will all fire as one group.



1 Set **[Firing group]** to **[Flash icon] All**.

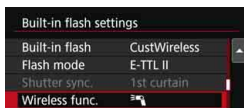
2 Take the picture.

[(A:B)] Firing multiple slave units in multiple groups




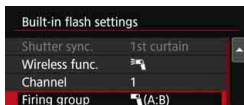
You can divide the slave units into groups A and B, and can change the flash ratio to obtain the desired lighting effect.

Refer to the Speedlite's instruction manual and set one slave unit to firing group A and the other to firing group B. Position the Speedlites as shown in the illustration.

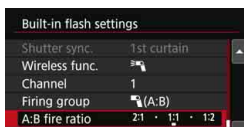


1 Select [**Wireless func.**].

- Follow step 2 on page 235 to select [, then press <SET>.






2 Set [**Firing group**] to [(A:B)].



3 Set the **A:B flash ratio** and shoot.

- Select [**A:B fire ratio**] and set the flash ratio.

 If [**Firing group**] is set to [ (A:B)], group C will not fire.

 The 8:1 to 1:1 to 1:8 flash ratio is equivalent to 3:1 to 1:1 to 1:3 stops (1/2-stop increments) for the exposure level.

Fully Automatic Shooting with the Built-in Flash and Multiple External Speedlites

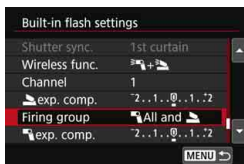
The built-in flash can also be added to the wireless flash photography described on pages 236-237.

The basic settings are shown below. By changing the **[Firing group]** setting, you can shoot with various wireless flash setups of multiple Speedlites complemented with the built-in flash.



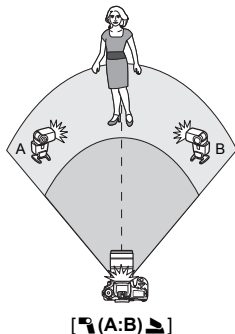
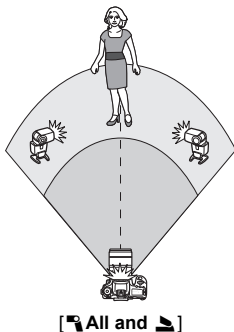
1 Basic settings:

- Flash mode : E-TTL II
- E-TTL II meter. : Evaluative
- Wireless func. : [Flash icon] + [Wireless icon]
- Channel : (Same as slave units)



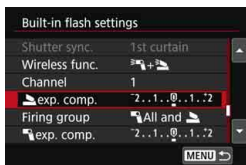
2 Select [Firing group].

- Select the firing group, then set the flash ratio, flash exposure compensation, and other necessary settings before shooting.



Flash Exposure Compensation

When **[Flash mode]** is set to **[E-TTL II]**, flash exposure compensation can be set. The flash exposure compensation settings (see below) that can be set vary depending on the **[Wireless func.]** and **[Firing group]** settings.



[Flash exposure comp.]

- The set amount of flash exposure compensation will be applied to the built-in flash and all the external Speedlites.

[exp. comp.]

- Flash exposure compensation is applied only to the built-in flash.

[exp. comp.]

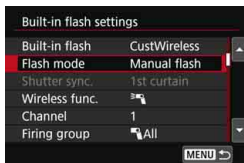
- The set amount of flash exposure compensation will be applied to all the external Speedlites.

FE lock

If **[Flash mode]** is set to **[E-TTL II]**, you can press the **< * >** button to perform FE lock.

Setting the Flash Output Manually for Wireless Flash Photography

When **[Flash mode]** is set to **[Manual flash]**, flash exposure can be set manually. The flash output settings that can be set (**[Flash output]**, **[Group A output]**, etc.) vary depending on the **[Wireless func.]** setting (see below).



[Wireless func.: All]

- **[Firing group: All]**

The manual flash output setting is applied to all the external Speedlites.

- **[Firing group: (A:B)]**

You can set the flash output separately for slave groups A and B.

[Wireless func.: All + Built-in]

- **[Firing group: All and Built-in]**

The flash output can be set separately for the external Speedlite(s) and built-in flash.

- **[Firing group: (A:B) Built-in]**

You can set the flash output separately for slave groups A and B. You can also set the flash output for the built-in flash.

7

Shooting with the LCD Monitor (Live View Shooting)

You can shoot while viewing the image on the camera's LCD monitor. This is called "Live View shooting".

- If you handhold the camera and shoot while viewing the LCD monitor, camera shake may cause blurred images. Using a tripod is recommended in such cases.





Remote Live View Shooting

With EOS Utility (EOS software, p.488) installed on your computer, you can connect the camera to the computer and shoot remotely while viewing the computer screen. For details, refer to the EOS Utility Instruction Manual.

Shooting with the LCD Monitor



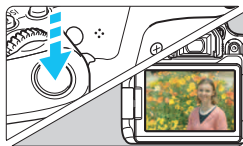
1 Display the Live View image.

- Press the  button.
- ▶ The Live View image will appear on the LCD monitor. In the  mode, the scene icon for the scene detected by the camera is displayed on the upper left of the screen (p.247).
- The Live View image will be displayed in the brightness level closely matching that of the actual image to be captured.






2 Focus on the subject.

- When you press the shutter button halfway, the camera will focus with the current AF method (p.259).
- You can also tap on the screen to select the face or subject (p.269).

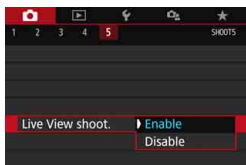


3 Take the picture.

- Press the shutter button completely.
- ▶ The picture is taken and the captured image is displayed on the LCD monitor.
- ▶ When the playback display ends, the camera will return to Live View shooting automatically.
- Press the  button to exit the Live View shooting.

-  ● The image's field of view is approx. 100% (with image-recording quality set to JPEG  and aspect ratio set to 3:2).
- In Creative Zone modes, you can check the depth of field by pressing the depth-of-field preview button.
- You can also use a remote controller (sold separately, p.423) for Live View shooting.

MENU Enabling Live View Shooting



Set [**5: Live View shoot.**] (the [**1**] tab in Basic Zone modes) to [**Enable**].

Number of Possible Shots with Live View Shooting











Temperature	Room Temperature (23°C / 73°F)	Low Temperatures (0°C / 32°F)
No Flash	Approx. 310 shots	Approx. 270 shots
50% Flash Use	Approx. 270 shots	Approx. 230 shots


- The figures above are based on a fully-charged Battery Pack LP-E17 and CIPA (Camera & Imaging Products Association) testing standards.
- With a fully-charged Battery Pack LP-E17, continuous Live View shooting is possible for approx. 2 hr. 25 min. at room temperature (23°C / 73°F).

Continuous Shooting Display

During Live View shooting, if you perform <[H]> high-speed continuous shooting with One-Shot AF, keep holding down the shutter button completely to display (play back) the captured images continuously. When the continuous shooting ends (shutter button is returned to halfway position), the Live View image will be displayed.

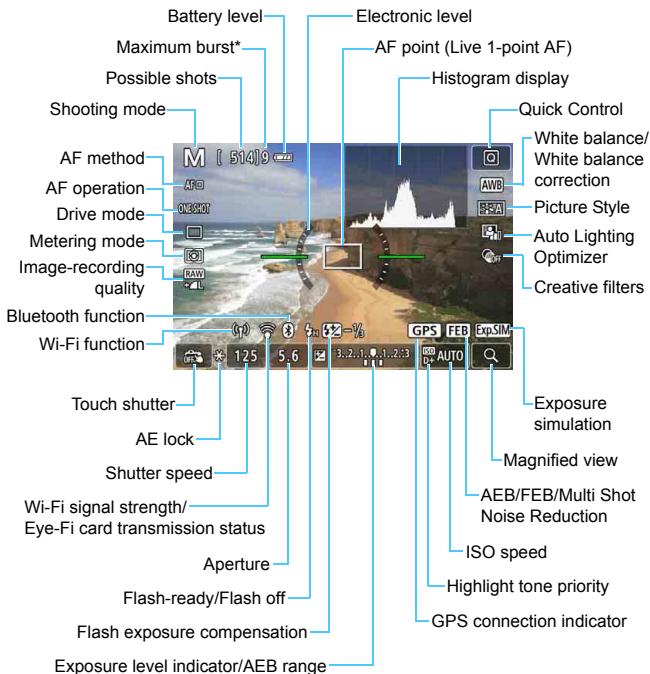
- Depending on the shooting conditions such as when shooting with flash or shooting long exposures, the captured images may not be displayed (played back) continuously.

-  ● In the <SCN:  > mode, Live View shooting is not possible.
- In the <SCN:  > mode, the angle of view changes slightly in Live View shooting because distortion correction is applied.
- In the <SCN:   > and < :     > modes, the image area will be smaller.
- For flash photography, the continuous shooting speed will become slower (max. approx. 2.0 shots/sec.).
- 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.
- **General Live View Shooting Cautions are on pages 273-274.**









-  ● You can also focus by pressing the <AF-ON> button.
- When flash is used, there will be two shutter sounds, but only one shot will be taken. Also, the time it takes to take the picture after you press the shutter button completely will be longer than with viewfinder shooting.
- If the camera is not operated for a prolonged period, the power will turn off automatically after the time set in [**2: Auto power off**] (p.325). If [**2: Auto power off**] is set to [**Disable**], Live View shooting will end automatically after 30 min. (Camera power remains on.)
- With the HDMI cable, you can display the Live View image on a TV set (p.369). Note that no sound will be output. If the picture does not appear on the TV screen, check if the [**3: Video system**] is correctly set to [**For NTSC**] or [**For PAL**] (depending on the video system of your TV set).


Information Display

- Each time you press the <INFO> button, the information display will change.



* The number will be displayed when the maximum burst decreases to nine or lower.

- 
- You can display the electronic level by pressing the <INFO> button (p.78). Note that if the AF method is set to [**L**+Tracking] or the camera is connected to a TV set with an HDMI cable, the electronic level cannot be displayed.
 - You can display the histogram by pressing the <INFO> button. However, the histogram is not displayed while pressing the shutter button completely.
 - When <Exp.SIM> is displayed in white, it indicates that the Live View image is displayed at the brightness level closely matching that of the actual image to be captured.
 - If <Exp.SIM> is blinking, it indicates that the Live View 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.
 - The <Exp.SIM> icon and histogram will be displayed in gray (for your reference) in the <SCN:   > modes, when Multi Shot Noise Reduction is set, when flash is used, or when bulb exposure is used. The histogram may not be properly displayed in low- or bright-light conditions.
 - The <Exp.SIM> icon will also be displayed in gray in the < :     > modes. The histogram will not be displayed.

 **Do not hold the camera in the same position for long periods of time.**

Even if the camera does not feel too hot, prolonged contact with the same body part may cause skin redness or blistering due to low-temperature contact burns. Using a tripod is recommended for people with circulation problems or very sensitive skin, or when using the camera in very hot places.

Scene Icons

In the $\langle \text{A}^+ \rangle$ shooting mode, the camera detects the scene type and sets everything automatically to suit the scene. The detected scene type is indicated on the upper left of the screen.

Background \ Subject	Portrait ^{*1}		Non-Portrait			Background Color
		Movement	Nature and Outdoor Scene	Movement	Close ^{*2}	
Bright						Gray
Backlit						
Blue Sky Included						Light blue
Backlit						
Sunset	*3				*3	Orange
Spotlight						Dark blue
Dark						
With Tripod		*3		*3		

*1: Displayed only when the AF method is set to $[\text{A}^+ \text{Tracking}]$. If another AF method is set, the “Non-portrait” icon will be displayed even if a person is detected.

*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: The icon of the scene selected from the detectable scenes will be displayed.

For certain scenes or shooting conditions, the icon displayed may not match the actual scene.

*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 lenses below:

- EF-S18-55mm f/3.5-5.6 IS II
- EF-S55-250mm f/4-5.6 IS II
- 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.

*4+*5: If the conditions in both *4 and *5 are met, the shutter speed will slow down.

Final Image Simulation

Final image simulation is a function that shows the Live View image with the effects of the current settings for Picture Style, white balance, and other shooting functions applied.

The Live View image will automatically reflect the function settings listed below. However, it may be slightly different from the resulting image.

Final Image Simulation During Live View Shooting

- Picture Style

- * Sharpness (Strength), contrast, color saturation, and color tone will be reflected.

- White balance

- White balance correction

- Ambience-based shots (in <CA> mode)

- Background blur (in <CA> mode)

- * You can check the effect only during the setting procedure (when [Simulating blur] is displayed).

- Color tone (in <F1> mode)

- Brightness

- Metering mode

- Exposure

- Depth of field (with depth-of-field preview button ON)

- Auto Lighting Optimizer

- Peripheral illumination correction

- Chromatic aberration correction

- Distortion correction

- Highlight tone priority

- Aspect ratio (Image area confirmation)

Shooting Function Settings

Function settings particular to Live View shooting are described here.

Quick Control

In Creative Zone modes, if you press the **<Q>** button with the image displayed on the LCD monitor, you can set **AF method**, AF operation, **Drive mode**, Metering mode, **Image quality**, White balance, Picture Style, Auto Lighting Optimizer, and Creative filters.

In Basic Zone modes, you can set the functions shown in the table on pages 118-119 (except background blur) as well as the functions in bold above.






1 Press the **<Q>** button ()




- ▶ The settable functions will be displayed.

2 Select a function and set it.

- Press the **<▲>** **<▼>** keys to select a function.
- ▶ The settings of the selected function and Feature guide (p.63) will appear on the screen.
- Press the **<◀>** **<▶>** keys to set the function.
- In the **<SCN>** and **<C>** modes, select the shooting mode box on the upper left of the screen, then press **<SET>** to select the shooting mode.
- To set Auto white balance, select [**AWB**], then press **<SET>**.
- To set the drive mode's **<C>** setting, WB correction/WB bracketing, Picture Style parameters, or Creative filter effects, press the **<INFO>** button.

3 Exit the setting.

- Press <  > or the <  > button to finalize the setting and return to Live View shooting.
- You can also select [] to return to Live View shooting.

- 
- In Creative Zone modes, you can set the ISO speed by pressing the <ISO> button.
 - When you set  (Partial metering) or  (Spot metering), a metering circle will be displayed at the center of the screen.

Shooting with Creative Filter Effects [☆]


While viewing the Live View image, you can apply one of seven filter effects (Grainy B/W, Soft focus, Fish-eye effect, Art bold effect, Water painting effect, Toy camera effect, and Miniature effect) for shooting. The camera saves only the image with the Creative filter applied. You can also take a picture without a Creative filter, then apply an effect afterward and save it as a new image (p.392).

- 1 Turn the Mode Dial to a Creative Zone mode.
- 2 Press the **<Q>** button (◻10).
 - ▶ The Quick Control screen will appear.
- 3 Select [**OFF**].
 - Press the **<▲>** **<▼>** keys to select [**OFF**] (Creative filter) on the right side of the screen.
- 4 Select a filter.
 - Press the **<◀>** **<▶>** keys to select a filter (p.253).
 - ▶ The image will be displayed with the effects of the filter applied.






5 Adjust the filter effect.

- Press the <INFO> button (except for )
- Press the <◀> <▶> keys to adjust the filter effect, then press <SET>.






6 Take the picture.

- ▶ The image is shot with the filter effect applied.

- When you set a Creative filter, single shooting will take effect even if the drive mode is set to <H> or <L>.
- You cannot shoot with Creative filters if the recording quality is RAW or RAW + L, or if AEB, white balance bracketing, or Multi Shot Noise Reduction is set.

 The histogram is not displayed when you shoot with Creative filters.

Creative Filter Characteristics

-  **Grainy B/W**
Creates a grainy black-and-white photo. You can change the black-and-white effect by adjusting the contrast.
-  **Soft focus**
Gives the image a soft look. You can change the degree of softness by adjusting the blur.
-  **Fish-eye effect**
Gives the effect of a fish-eye lens. The image will have a barrel-type distortion.
Depending on the level of this filter effect, the area trimmed along the periphery of the image changes. Also, since this filter expands the center part of the image, the resolution at the center may decrease depending on the number of recorded pixels. Check the image on the screen when setting this filter. The AF method will be Live 1-point AF (fixed at center).
-  **Art bold effect**
Makes the photo look like an oil painting and the subject look more three-dimensional. You can adjust the contrast and saturation. Note that subjects such as the sky or white walls may not be rendered with a smooth gradation and may look irregular or have significant noise.
-  **Water painting effect**
Makes the photo look like a watercolor painting with soft colors. You can control the color density by adjusting the filter effect. Note that night scenes or dark scenes may not be rendered with a smooth gradation and may look irregular or have significant noise.

-  **Toy camera effect**


Darkens the photo's corners and applies a unique color tone that makes it look as if it was shot by a toy camera. You can change the color cast by adjusting the color tone.

-  **Miniature effect**

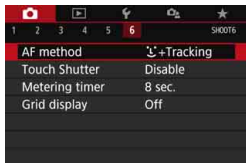
Creates a diorama effect.

If you want the image center to look sharp, take the picture without changing any setting.

To move the area that looks sharp (miniature effect frame), see “Adjusting Miniature Effect” (p.116). The AF method will be Live 1-point AF. Positioning the miniature effect frame over the AF point before shooting is recommended.

-  With Grainy B/W, the grainy effect displayed on the LCD monitor will look different from the grainy effect recorded in the picture.
- With the Soft focus and Miniature effect, the blurred effect displayed on the LCD monitor may look different from the blurred effect recorded in the picture. You can check the picture's blurred effect by pressing the depth-of-field preview button.

MENU Menu Function Settings



When the camera is set for Live View shooting, menu options exclusive to Live View shooting will appear under the [CAMERA 6] tab (the [CAMERA 2] tab in Basic Zone modes).

- **AF method**

You can select [**+Tracking**], [**Smooth zone**], or [**Live 1-point AF**]. See pages 259-268 for the AF method.

- **Touch Shutter**

Just by tapping on the LCD monitor screen, you can focus and take the picture automatically. For details, see page 269.

- **Metering timer**[☆]

You can change how long the exposure setting is displayed (AE lock time). In Basic Zone modes, metering timer is fixed at 8 sec.

- **Grid display**

With [**3x3** 3x3] or [**6x4** 6x4], you can display grid lines to help you level the camera vertically or horizontally. Also, with [**3x3+diag** 3x3+diag], the grid is displayed together with diagonal lines to help you compose with better balance by aligning the intersections over the subject.



Selecting [**CAMERA 4: Dust delete data**] or either [**Clean manually**] or [**Clean now** 4:] under [**CAMERA 4: Sensor cleaning**] will stop the Live View shooting. To start Live View shooting again, press the <CAMERA> button.

Changing the Autofocus Operation [☆]

You can select the AF (autofocus) operation characteristics to suit the shooting conditions or subject. In Basic Zone modes, the optimum AF operation is set automatically for the respective shooting mode.

1 Press the **<Q>** button.

- ▶ The Quick Control screen will appear.



2 Select **[ONE SHOT]**.

- Press the **<▲>** **<▼>** keys to select **[ONE SHOT]** (AF operation) on the left side of the screen.

3 Select the **AF operation**.

- Press the **<◀>** **<▶>** keys to select the desired AF operation, then press **<SET>**.

ONE SHOT: One-Shot AF

SERVO: Servo AF

4 Focus on the subject.

- Aim the AF point over the subject and press the shutter button halfway. The camera will then autofocus in the selected AF operation.

- Settable only for Live View shooting (not settable for movie shooting).
- If focus cannot be achieved, the AF point will turn orange. If this occurs, the picture cannot be taken even if the shutter button is pressed completely. Recompose the shot and try to focus again. Or, see “Shooting Conditions that Make Focusing Difficult” (p.266).

One-Shot AF for Still Subjects

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.
- When the drive mode is set to <[AF-ON]H> for high-speed continuous shooting, the maximum continuous shooting speed is approx. 6.0 shots/sec.
- When the drive mode is set to <[AF-ON]> for low-speed continuous shooting, the maximum continuous shooting speed is approx. 3.5 shots/sec.
- For flash photography, the continuous shooting speed will become slower. Regardless of the <[AF-ON]H> and <[AF-ON]> settings, the continuous shooting speed will be the same (max. approx. 2.0 shots/sec.).



If [**3: Beep**] is set to [**Disable**], the beeper will not sound when focus is achieved.

Servo AF for Moving Subjects

This AF operation is suited for moving subjects. While you hold down the shutter button halfway, the camera keeps focusing on the subject continuously.

- When the drive mode is set to <[H]> for high-speed continuous shooting, the maximum continuous shooting speed is approx. 4.5 shots/sec. The pictures will be taken with priority given to the continuous shooting speed.
- When the drive mode is set to <[L]> for low-speed continuous shooting, the maximum continuous shooting speed is approx. 3.5 shots/sec. The pictures will be taken with priority given to subject tracking.
- For flash photography, the continuous shooting speed will become slower. Regardless of the <[H]> and <[L]> settings, the continuous shooting speed will be the same (max. approx. 2.0 shots/sec.).
- When focus is achieved, the AF point will turn blue.
- The exposure is set at the moment the picture is taken.
- When **[AF method]** is set to [**L** + **Tracking**], focusing will be continuous as long as the Area AF frame can track the subject.

- Depending on the lens used, the distance to the subject and the subject's speed, the camera may not be able to achieve correct focus.
- Zooming during continuous shooting may throw off the focus. Zoom first, then recompose and shoot.

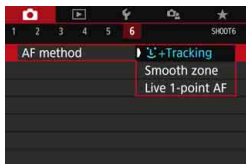
With Servo AF, the beeper will not sound even when focus is achieved.

MENU Focusing with AF

Selecting the AF Method

You can select an AF method to suit the shooting conditions and your subject. The following AF methods are provided: [**Ⓜ** (face)+Tracking] (p.260), [**Smooth zone**] (p.262), and [**Live 1-point AF**] (p.264).

If you want to achieve precise focus, set the lens's focus mode switch to **<MF>**, magnify the image, and focus manually (p.271).



Select the AF method.

- Under the [**6**] tab (the [**2**] tab in Basic Zone modes), select [**AF method**].
- Select the desired AF method, then press **<SET>**.
- While the Live View image is displayed, you can also press the **<Q>** button to select the AF method on the Quick Control screen (p.249).



- The explanations on pages 260-264 assume that [**AF operation**] is set to [**One Shot AF**] (p.257). With [**Servo AF**] (p.258) set, the AF point will turn blue when focus is achieved.
- In the **<A>** and **<SCN: A>** modes, Servo AF is set automatically, and when focus is achieved, the AF point will turn blue and the beeper will sound.
- Regarding the touch shutter (AF and shutter release by touch operation), see page 269.

☺ (face)+Tracking: AF

The camera detects and focuses on human faces. If a face moves, the AF point <[]> also moves to track the face.



Area AF frame

1 Display the Live View image.

- Press the <[]> button.
- ▶ The Live View image will appear on the LCD monitor.
- ▶ The Area AF frame will be displayed.

2 Check the AF point.

- When a face is detected, the AF point <[]> will appear over the face to be focused on.
- If multiple faces are detected, <[]> will be displayed. Use the <◀> <▶> keys to move <[]> over the face you want to focus on.
- You can also tap on the LCD monitor screen to select the face or subject. If you tap on a subject other than a human face, the AF point will be switched to <[]>.



3 Focus on the subject.

- Press the shutter button halfway to focus.
- ▶ If no faces can be detected or if you do not tap anything on the screen, focus will be achieved within the Area AF frame.
- ▶ When focus is achieved, the AF point will turn green and the beeper will sound.
- ▶ If focus is not achieved, the AF point will turn orange.



4 Take the picture.

- Check the focus and exposure, then press the shutter button completely to take the picture (p.242).

● Focusing on a subject other than a human face

If you press $\langle \text{SET} \rangle$ or the $\langle \text{AF} \rangle$ button, the AF point $\langle \text{AF} \rangle$ will appear at the center and you can use the $\langle \blacktriangle \rangle$ $\langle \blacktriangledown \rangle$ or $\langle \blacktriangleleft \rangle$ $\langle \blacktriangleright \rangle$ keys to move the AF point. Once the AF point $\langle \text{AF} \rangle$ achieves focus, it will track the subject even if you change the composition or the subject moves.



- If the subject's face is significantly out of focus, face detection will not be possible. Adjust the focus manually (p.271) so that the face can be detected, then perform AF.
- An object other than a human face may be detected as a face.
- Face detection will not work if the face is very small or large in the picture, too bright or too dark, or partially hidden.
- The $\langle \text{AF} \rangle$ may cover only a part of the face, not the whole face.



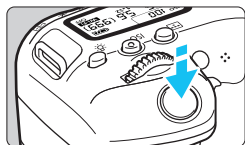
- Use the Area AF frame as a guide, and focus within the Area AF frame.
- The size of the AF point changes depending on the subject.

Smooth Zone: AF ()

The selected Zone AF frame is used to focus. The AF area is larger than with [Live 1-point AF].



Zone AF frame



1 Display the Live View image.

- Press the <📷> button.
- ▶ The Live View image will appear on the LCD monitor.
- ▶ The Zone AF frame will be displayed.

2 Select the AF point.

- Press the <▲> <▼> or <◀> <▶> keys to select a zone. To return to the center zone, press <SET> or the <🗑️> button.
- You can also touch the LCD monitor screen to move the Zone AF frame.

3 Focus on the subject.

- Aim the Zone AF frame over the subject and press the shutter button halfway.
- ▶ When focus is achieved, the AF point will turn green and the beeper will sound.
- ▶ If focus is not achieved, the Zone AF frame will turn orange.



4 Take the picture.

- Check the focus and exposure, then press the shutter button completely to take the picture (p.242).

Live 1-point AF: AF □

The camera focuses with a single AF point. This is effective when you want to focus on a particular subject.



AF point

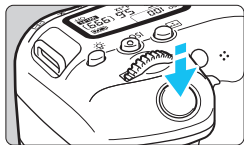
1 Display the Live View image.

- Press the <CAMERA> button.
- ▶ The Live View image will appear on the LCD monitor.
- ▶ The AF point <□> will appear.
- During movie shooting, if [Movie Servo AF] is set to [Enable], a larger AF point will be displayed.



2 Move the AF point.

- Press the <▲> <▼> or <◀> <▶> keys to move the AF point to where you want to focus. (It cannot be moved to the edge of the screen.)
- Pressing <SET> or the <DISP> button will return the AF point to the screen center.
- You can also touch the LCD monitor screen to move the AF point.



3 Focus on the subject.

- Aim the AF point over the subject and press the shutter button halfway.
- ▶ When focus is achieved, the AF point will turn green and the beeper will sound.
- ▶ If focus is not achieved, the AF point will turn orange.



4 Take the picture.

- Check the focus and exposure, then press the shutter button completely to take the picture (p.242).

Notes for AF

AF Operation

- Even when focus is achieved, pressing the shutter button halfway will focus again.
- The image brightness may change during and after the AF operation.
- 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 while the Live View image is displayed, the screen may flicker and focusing may be difficult. If this happens, exit Live View shooting and perform AF under the actual light source under which you are shooting.

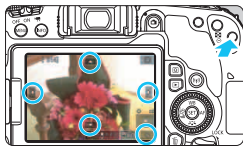


- If you cannot achieve focus with AF, set the lens's focus mode switch to <MF> and focus manually (p.271).
- If you shoot the subject at the periphery and it is slightly out of focus, recompose to move the subject (and AF point) toward the screen center, focus again, then take the picture.
- The AF-assist beam will not be emitted. However, if an EX-series Speedlite (sold separately) equipped with an LED light is used, the LED light will turn on for AF-assist as necessary.
- 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 a light source whose brightness, color, or pattern keeps changing.
- 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 body, 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.


Magnified View



In the [**Smooth zone**] and [**Live 1-point AF**] modes, either press the <Q> button or tap on [Q] displayed on the bottom right of the screen. You can magnify the image by approx. 5x or 10x and check the focus.

Magnified view is not possible with [L+Tracking].

- To move the AF point, press the <▲> <▼> or <◀> <▶> keys or tap on the spot you want to magnify.
- Either press the <Q> button or tap on [Q] to magnify the area covered by the magnifying frame. Each time you press the <Q> button or tap on [Q], the magnification ratio changes.
- The magnifying frame will appear at the center of the Zone AF frame when [**Smooth zone**] is set, and it will appear around the position of the AF point when [**Live 1-point AF**] is set.
- At 100% (approx. 1x) magnification, press the <▲> <▼> or <◀> <▶> keys or touch the screen to move the magnifying frame. Pressing the <SET> or <⏏> button will return the magnifying frame to the screen center.
- When the image is magnified by approx. 5x or 10x, you can change the magnified area by pressing the <▲> <▼> or <◀> <▶> keys or tapping on the triangle on the screen top, bottom, left, or right.
- When you press the shutter button halfway, the normal view will return for [**Smooth zone**]. For [**Live 1-point AF**], AF will proceed with the magnified view.
- With Servo AF, if you press the shutter button halfway in the magnified view, the camera will return to the normal view for focusing.

- 
- 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 normal view and magnified view.
 - When in magnified view, Movie Servo AF (p.315) will not function.
 - With the magnified view, achieving focus becomes more difficult due to camera shake. Using a tripod is recommended.

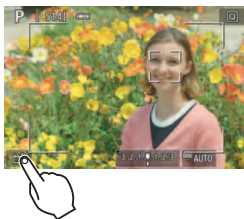
Shooting with the Touch Shutter

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








1 Display the Live View image.

- Press the  button.
- ▶ The Live View image will appear on the LCD monitor.




2 Enable the touch shutter.




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



3 Tap on the screen to shoot.

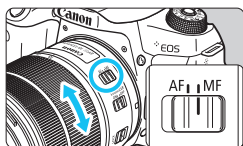
- Tap on the face or subject on the screen.
- ▶ On the point you tap, the camera will focus with the AF method that was set (p.259-264). When [**Smooth zone**] is set, it will switch to [**Live 1-point AF**].
- ▶ When focus is achieved, the AF point turns green and the picture is taken automatically.
- If focus is not achieved, the AF point turns orange and the picture cannot be taken. Tap on the face or subject on the screen again.

-  Even if you set the drive mode to H> or , the camera will still shoot in the single shooting mode.
- Even if [AF operation] is set to [Servo AF], tapping on the screen will focus on the image with [One-Shot AF].
- Tapping on the screen in magnified view will not focus or take the picture.
- If the Fish-eye effect Creative filter is set, the camera will focus using the AF point at the center of the screen regardless of the point you tap on.
- If the Miniature effect Creative filter is set, the touch shutter does not work.

-  You can also set the touch shutter with [6: Touch Shutter] (the [2] tab in Basic Zone modes).
- To shoot with bulb exposure, tap on the screen twice. The first tap on the screen will start the bulb exposure. Tapping it again will stop the exposure. Be careful not to shake the camera when tapping on the screen.

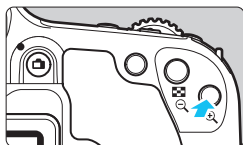
MF: Focusing Manually

You can magnify the image and focus precisely with MF (manual focus).



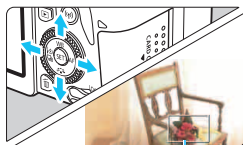
1 Set the lens's focus mode switch to <MF>.

- Turn the lens focusing ring to focus roughly.



2 Display the magnifying frame.

- Press the <Q> button.
- ▶ The magnifying frame will appear.
- You can also tap [Q] on the screen to magnify the image.



3 Move the magnifying frame.

- Press the <▲> <▼> or <◀> <▶> keys to move the magnifying frame to where you want to focus.
- Pressing <SET> or the <🗑️> button will return the magnifying frame to the screen center.

Magnifying frame



4 Magnify the image.

- Each time you press the <Q> button, the magnification of the image will change in the following sequence:

→ 1x → 5x → 10x → Normal view →

AE lock

Magnified area position

Magnification

5 Focus manually.

- While looking at the magnified image, turn the lens focusing ring to focus.
- After achieving focus, press the <⊕> button to return to the normal view.

6 Take the picture.

- Check the focus and exposure, then press the shutter button to take the picture (p.242).



- In magnified view, the exposure is locked. (Shutter speed and aperture will be displayed in red.)
- Even with manual focusing, you can use the touch shutter to take a picture.



General Live View Shooting Cautions

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.
- If Live View shooting is used continuously for a prolonged period, the camera's internal temperature may rise, and image quality may deteriorate. Always exit Live View shooting when you are not shooting.
- If you shoot a long exposure while the camera's internal temperature is high, image quality may deteriorate. Exit Live View shooting and wait a few minutes before shooting again.

White and Red Internal Temperature Warning Icons

- If the camera's internal temperature increases due to prolonged Live View shooting or under a high ambient temperature, a white or red icon will appear.
- The white icon indicates that the image quality of still photos will deteriorate. It is recommended that you temporarily exit Live View shooting and allow the camera to cool down before shooting again.
- The red icon indicates that the Live View shooting will soon stop automatically. If this happens, you will not be able to shoot again until the camera's internal temperature decreases. Exit the Live View shooting or turn off the power and let the camera rest for a while.
- Using Live View shooting at a high temperature for a prolonged period will cause the or icon to appear earlier. When you are not shooting, always turn off the camera.
- If the camera's internal temperature is high, the quality of images shot with a high ISO speed or long exposure may deteriorate even before the white icon is displayed.

Shooting Results

- 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. In magnified view, the shutter speed and aperture will be displayed in orange. Even if you take the picture in magnified view, the image will be captured with the image area of the normal view.
- If you use a TS-E lens (except the TS-E17mm f/4L or TS-E24mm f/3.5L II) for shifting or tilting the lens or if you use an extension tube, the standard exposure may not be obtained, or an irregular exposure may result.

General Live View Shooting Cautions

Live View Image

- Under low- or bright-light conditions, the Live View image may not reflect the brightness of the captured image.
- Even if a low ISO speed is set, noise may be noticeable in the displayed Live View image under low light. However, when you shoot, the image recorded will have less noise. (The image quality of the Live View image is different from that of the recorded image.)
- If the light source (illumination) within the image changes, the screen may flicker. If this happens, exit Live View shooting and resume Live View shooting under the actual light source.
- If you point the camera in a different direction, it may throw off the Live View image's correct brightness momentarily. 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 LCD monitor. However, the actual captured image will correctly show the bright area.
- In low light, if you set the [**F2: LCD brightness**] to a bright setting, noise or irregular colors may appear in the Live View image. 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.
- If the shutter speed is 1 sec. or slower, "**BUSY**" is displayed on the LCD monitor, and the Live View display will not appear until the exposure is complete.

Custom Functions

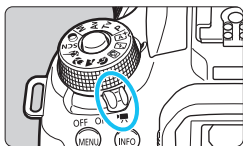
- During Live View shooting, certain Custom Function settings will not take effect (p.401).


Lens and Flash

- If the attached lens has an Image Stabilizer and you set the Image Stabilizer (IS) 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 possible 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 IS switch to <**OFF**>.
- The focus preset function is possible for Live View shooting only when using a (super) telephoto lens equipped with the focus preset mode released in and after the second half of 2011.
- FE lock will not work if the built-in flash is used. FE lock and modeling flash will not work if an external Speedlite is used.

8

Shooting Movies



Movie shooting is enabled by setting the power switch to .

- For cards that can record movies, see page 8.
- If you handhold the camera and shoot movies, camera shake can cause blurred movies. In such a case, using a tripod is recommended.
- To shoot while handholding the camera, see page 88.



Full HD 1080

Full HD 1080 indicates compatibility with High-Definition featuring 1080 vertical pixels (scanning lines).

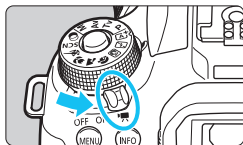


Shooting Movies

Connecting the camera to a TV set is recommended to play back the shot movies (p.369-371).

Autoexposure Shooting

When the shooting mode is set to any mode other than <M>, autoexposure control will take effect to suit the scene's current brightness.



1 Set the power switch to <Movie>.

- ▶ The reflex mirror will make a sound, then the image will appear on the LCD monitor.

2 Set the Mode Dial to a mode other than <SCN>, <P>, or <M>.



3 Focus on the subject.

- Before shooting a movie, focus with AF or manual focus (p.259-268, 271).
- By default, [Movie Servo AF: Enable] is set so that the camera always keeps focusing. To stop Movie Servo AF, see page 315.



4 Shoot the movie.

- Press the <Movie> button to start shooting a movie. To stop movie shooting, press the <Movie> button again.
- ▶ While the movie is being shot, the “●” mark will be displayed on the upper right of the screen.
- ▶ Sound will be recorded by the built-in microphones.

Recording movie



Built-in microphones



- **General Movie Shooting Cautions are on pages 321-322.**
- **If necessary, also read “General Live View Shooting Cautions” on pages 273-274.**



- In Basic Zone modes (except the <SCN> and <Q> modes), the shooting result will be the same as with <A+>. Also, the scene icon for the scene detected by the camera is displayed on the upper left (p.279).
- In the <Av> and <Tv> shooting modes, the settings will be the same as when shooting in the <P> mode.
- Settable menu functions differ between Basic Zone modes and Creative Zone modes (p.450).
- Shutter speed, aperture and ISO speed are set automatically.
- In Creative Zone modes, you can press the <★> button (p.208) to lock the exposure (AE lock). The exposure setting will be displayed for the number of seconds set with [4: Metering timer]. After applying AE lock during movie shooting, you can cancel it by pressing the <[+]> button. (AE lock setting is retained until you press the <[-]> button.)
- In Creative Zone modes, you can set the <LOCK> switch downward and turn the <[DIAL]> dial to set the exposure compensation.
- If you shoot a movie with autoexposure, the shutter speed, aperture and ISO speed will not be recorded in the movie's Exif information.
- With autoexposure movie shooting (except in time-lapse movie shooting), the camera will automatically turn on the Speedlite's LED light under low-light conditions. For details, refer to the Instruction Manual of the EX-series Speedlite equipped with an LED light.

ISO Speed in Basic Zone Modes

- The ISO speed will be set automatically within ISO 100 - ISO 12800.




















ISO Speed in the <P>, <Tv>, and <Av> Modes


- The ISO speed will be set automatically within ISO 100 - ISO 12800. The maximum limit varies depending on the [ISO Auto] setting (p.320).
- Under [4: Custom Functions(C.Fn)], if [2: ISO expansion] is set to [1:On], [Max.:H(25600)] can also be selected for [ISO Auto].
- Under [4: Custom Functions(C.Fn)], if [4: Highlight tone priority] is set to [1:Enable], the ISO speed will be ISO 200 - ISO 12800.

When switching from still photo shooting to movie shooting, check the ISO speed settings again before shooting movies.

Scene Icons

During movie shooting in Basic Zone modes (except the <SCN> and <☉> modes), an icon representing the scene detected by the camera will be displayed, and the shooting will be performed to suit the scene. For certain scenes or shooting conditions, the icon displayed may not match the actual scene.

Subject Background	Portrait* ¹	Non-Portrait		Background Color
		Nature and Outdoor Scene	Close* ²	
Bright				Gray
Backlit				
Blue Sky Included				Light blue
Backlit				
Sunset	* ³		* ³	Orange
Spotlight				Dark blue
Dark				

*1: • Displayed only when the AF method is set to [+Tracking]. If another AF method is set, the “Non-portrait” icon will be displayed even if a person is detected.

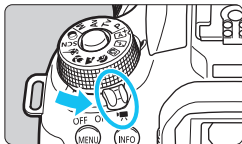
• During time-lapse movie shooting, the “Non-portrait” icon will be displayed even if a person is detected.

*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: The icon of the scene selected from the detectable scenes will be displayed.

Manual Exposure Shooting

In the **<M>** mode, you can manually set the shutter speed, aperture, and ISO speed for movie shooting. Using manual exposure to shoot movies is for advanced users.

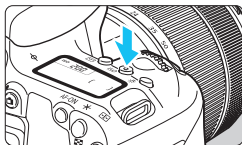


1 Set the power switch to **<Movie>**.

- ▶ The reflex mirror will make a sound, then the image will appear on the LCD monitor.



2 Set the Mode Dial to **<M>**.

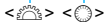


3 Set the ISO speed.

- Press the **<ISO>** button and turn the **<Sun>** or **<Moon>** dial to select the ISO speed.
- For details on the ISO speed, see the next page.



4 Set the shutter speed and aperture.






- To set the shutter speed, turn the **<Sun>** dial. The settable shutter speeds vary depending on the frame rate.
 - **25.00P** **23.98P** : 1/4000 sec. - 1/25 sec.
 - **29.97P** : 1/4000 sec. - 1/30 sec.
 - **50.00P** : 1/4000 sec. - 1/50 sec.
 - **59.94P** : 1/4000 sec. - 1/60 sec.
- To set the aperture, turn the **<Moon>** dial.
- If it cannot be set, set the **<LOCK>** switch downward, then turn the **<Sun>** or **<Moon>** dial.

5 Focus and shoot the movie.

- The procedure is the same as steps 3 and 4 for “Autoexposure Shooting” (p.276).







ISO Speed During Manual Exposure Shooting

- With **[AUTO] (A)**, the ISO speed will be set automatically within ISO 100 - ISO 12800. The maximum limit varies depending on the **[ ISO Auto]** setting (p.320).
- You can set the ISO speed manually within ISO 100 - ISO 12800 in whole-stop increments. Under **[ 4: Custom Functions(C.Fn)]**, if you set **[2: ISO expansion]** to **[1:On]**, the maximum limit of the manual ISO speed setting range will be expanded so you can also select H (equivalent to ISO 25600).
- Under **[ 4: Custom Functions(C.Fn)]**, if **[4: Highlight tone priority]** is set to **[1:Enable]**, the ISO speed will be ISO 200 - ISO 12800.



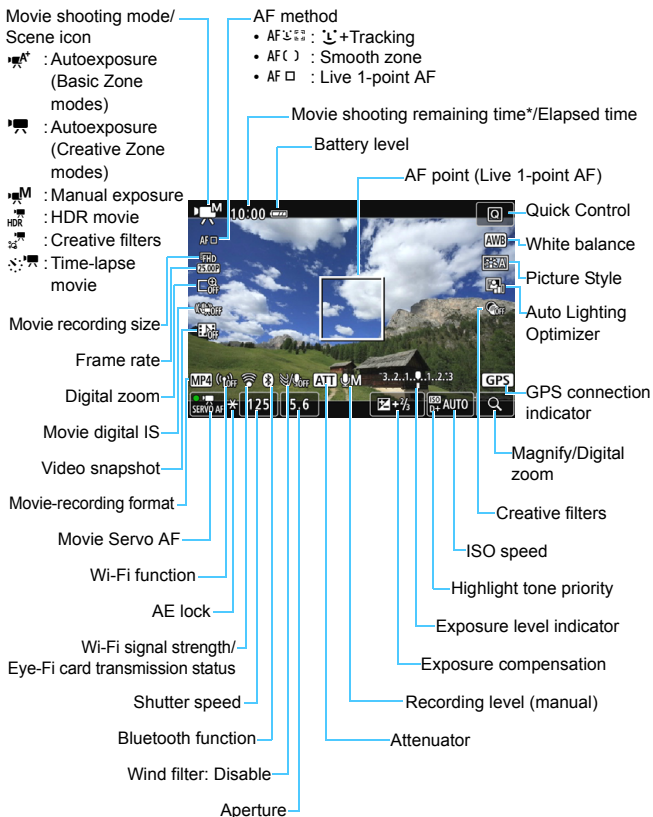
- Since shooting a movie at ISO 25600 equivalent may result in much noise, it is designated as an expanded ISO speed (displayed as “H”).
- When switching from still photo shooting to movie shooting, check the camera settings again before shooting movies.
- Changing the shutter speed or aperture during movie shooting is not recommended since the changes in the exposure will be recorded.
- When shooting a movie of a moving subject, a shutter speed of approx. 1/30 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 shooting under fluorescent or LED lighting, image flicker may be recorded.



- If you set **[ SET]: Expo comp (hold btn, turn )]** with **[14: Custom Controls]** under **[ 4: Custom Functions(C.Fn)]** (p.409), you can use exposure compensation with ISO Auto set.
- When ISO Auto is set, you can press the **< >** button to lock the ISO speed.
- If you press the **< >** button and recompose the shot, you can see the exposure level difference on the exposure level indicator (p.282) compared to when the **< >** button is pressed.
- By pressing the **<INFO>** button, you can display the histogram.

Information Display

- Each time you press the <INFO> button, the information display will change.



* Applies to a single movie clip.



- You can display the electronic level by pressing the <INFO> button (p.78).
- If the AF method is set to [**L**+Tracking] or the camera is connected to a TV set with an HDMI cable (p.369), the electronic level cannot be displayed.
- The electronic level, grid lines, or histogram cannot be displayed during movie shooting. (The display will disappear when you start shooting a movie.)
- When movie shooting starts, the movie shooting remaining time will change to the elapsed time.

Final Image Simulation

Final image simulation is a function that shows the movie as it will look with the current settings for Picture Style, white balance and other shooting functions applied.

During movie shooting, the image displayed will automatically show the effects of the settings listed below.

Final Image Simulation for Movie Shooting

- Picture Style
 - * Sharpness (Strength), contrast, color saturation, and color tone will be reflected.
- White balance
- White balance correction
- Exposure
- Depth of field
- Auto Lighting Optimizer
- Peripheral illumination correction
- Chromatic aberration correction
- Highlight tone priority
- HDR movie
- Creative filters

Still Photo Shooting

Still photos cannot be taken during movie shooting. To take still photos, stop the movie shooting and take still photos using viewfinder shooting or Live View shooting.


🔊 Cautions for Movie Shooting

- 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.
- When you press the shutter button halfway to autofocus during movie shooting, the following phenomena may occur.
 - Focus may become far off momentarily.
 - The brightness of the recorded movie may change.
 - The recorded movie may be momentarily still.
 - The movie may record the lens mechanical sound.
- If <AWB> or <AWB w> is set and the ISO speed or aperture changes during movie shooting, the white balance may also change.
- If you shoot a movie under fluorescent or LED lighting, the movie image may flicker.
- Shooting a few test movies is recommended if you intend to perform zooming during movie shooting. Zooming during movie shooting may result in recording of changes in exposure or mechanical sound of the lens, or images may be out of focus.
- During movie shooting, you cannot magnify the image even if you press the <Q> button.
- Be careful not to cover the built-in microphones (p.276) with your fingers, etc.
- If you connect or disconnect the HDMI cable during movie shooting, the movie shooting will end.
- **General Movie Shooting Cautions are on pages 321-322.**
- **If necessary, also read “General Live View Shooting Cautions” on pages 273-274.**

🔊 **Do not hold the camera in the same position for long periods of time.** Even if the camera does not feel too hot, prolonged contact with the same body part may cause skin redness or blistering due to low-temperature contact burns. Using a tripod is recommended for people with circulation problems or very sensitive skin, or when using the camera in very hot places.



Notes for Movie Shooting

- Each time you shoot a movie, a new movie file is created on the card.
- The movie image's field of view is approx. 100% (with movie recording size set to [1920x1080]).
- You can also focus on the image by pressing the <AF-ON> button.
- Stereo sound is recorded by the camera's built-in microphones.
- If you connect the Directional Stereo Microphone DM-E1 (sold separately) to the camera's external microphone IN terminal (p.28), the external microphone is given the priority.
- With a fully-charged Battery Pack LP-E17, the possible movie shooting time will be as follows: approx. 1 hr. 55 min. at room temperature (23°C / 73°F) and approx. 1 hr. 50 min. at low temperatures (0°C / 32°F) (with movie recording size set to $\overline{\text{FHD}}$ [29.97P] / [25.00P] [IPB] and [ 4: Movie Servo AF: Disable] set).
- The focus preset function is possible for movie shooting when using a (super) telephoto lens equipped with the focus preset mode, released in and after the second half of 2011.

Shooting Function Settings

Function settings particular to movie shooting are described here.

Q Quick Control

If you press the <Q> button when the image is displayed on the LCD monitor, you can set **AF method**, **Movie rec. size**, **Digital zoom**, **Movie digital IS**, **Video snapshot**, White balance, Picture Style, Auto Lighting Optimizer, and Creative filters.

In Basic Zone modes, only the functions in bold above can be set.



1 Press the <Q> button (10).

- ▶ The settable functions will be displayed.

2 Select a function and set it.

- Press the <▲> <▼> keys to select a function.
- ▶ The settings of the selected function and Feature guide (p.63) will appear on the screen.
- Press the <◀> <▶> keys to set the function.
- To set Auto white balance, select [AWB], then press <SET>.
- To set the WB correction, Picture Style parameters, or Creative filters, press the <INFO> button.
- Pressing <SET> will return the camera to movie shooting.
- You can also select [↶] to return to movie shooting.

MENU Setting the Movie Recording Size



With [**1: Movie rec. size**], you can set the movie recording size (image size, frame rate, and compression method) and other functions.

Movies will be recorded in the MP4 format.

● Image Size

FHD 1920x1080

Full High-Definition (Full HD) recording quality. The aspect ratio is 16:9.

HD 1280x720

High-Definition (HD) recording quality. The aspect ratio is 16:9.

VGA 640x480

Standard-definition recording quality. The aspect ratio is 4:3.

● Frame Rate (fps: frame per second)

29.97P 29.97 fps / 59.94P 59.94 fps

For areas where the TV system is NTSC (North America, Japan, South Korea, Mexico, etc.).

25.00P 25.00 fps / 50.00P 50.00 fps

For areas where the TV system is PAL (Europe, Russia, China, Australia, etc.).


23.98P 23.98 fps

Mainly for motion pictures.



- The frame rate displayed on the movie recording size screen switches depending on whether [**3: Video system**] is set to [**For NTSC**] or [**For PAL**]. **23.98P** (23.98 fps) can be selected only when [**For NTSC**] is set.
- If you change the [**3: Video system**] setting, set the movie recording size again.

● **Compression method**

 **IPB** (Standard)



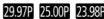







Compresses multiple frames at a time efficiently for recording.


  **IPB** (Light)

Since the movie is recorded at a low bit rate for playback on various devices, the file size will be smaller than with IPB (Standard).

Therefore, you can shoot longer than with IPB (Standard).

Total Movie Recording Time and File Size Per Minute (Approx.)

Movie Recording Size			Total Recording Time on Card			File Size
			4 GB	16 GB	64 GB	
 [1920x1080]		Standard	8 min.	35 min.	2 hr. 21 min.	431 MB/min.
		Standard	17 min.	1 hr. 10 min.	4 hr. 41 min.	216 MB/min.
		Light	43 min.	2 hr. 53 min.	11 hr. 35 min.	87 MB/min.
 [1280x720]		Standard	20 min.	1 hr. 21 min.	5 hr. 24 min.	184 MB/min.
		Light	2 hr. 5 min.	8 hr. 20 min.	33 hr. 22 min.	30 MB/min.
 [640x480]		Standard	57 min.	3 hr. 50 min.	15 hr. 20 min.	66 MB/min.
		Light	2 hr. 43 min.	10 hr. 53 min.	43 hr. 32 min.	23 MB/min.
HDR Movie (p.291)			17 min.	1 hr. 10 min.	4 hr. 41 min.	216 MB/min.
Time-lapse movie (p.296)			5 min.	23 min.	1 hr. 33 min.	654 MB/min.

 An increase in the camera's internal temperature may cause movie shooting to stop before the total recording time shown in the table above (p.321).

Movie Files Exceeding 4 GB

Even if you shoot a movie exceeding 4 GB, you can keep shooting without interruption.

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

If you use the camera to format an SD/SDHC card, the camera will format it in FAT32.

With a FAT32-formatted card, if you shoot a movie and the file size exceeds 4 GB, a new movie file will be created automatically.


When you play back the movie, you will have to play each movie file individually. Movie files cannot be played back automatically in consecutive order. After the movie playback ends, select the next movie and play it back.


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

If you use the camera to format an SDXC card, the camera will format it in exFAT.

When using an exFAT-formatted card, even if the file size exceeds 4 GB during movie shooting, the movie will be saved as a single file (rather than being split into multiple files).

Movie Shooting Time Limit

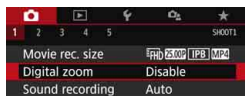
The maximum recording time of one movie clip is 29 min. 59 sec. If the movie shooting time reaches 29 min. 59 sec., the movie shooting will stop automatically. You can start shooting a movie again by pressing the <  > button. (The movie will be recorded as a new movie file.)

 When downloading movie files exceeding 4GB to a computer, use either the EOS Utility (p.488) or a card reader (p.492). Movie files exceeding 4GB will not be downloaded if you perform image download with the function of the computer's operating system.

MENU Using Movie Digital Zoom

When the recording size is **FHD 29.97P / 23.98P** (NTSC) or **FHD 25.00P** (PAL), you can shoot with an approx. 3x to 10x digital zoom.

1 Set the Mode Dial to a mode other than <SCN> or <Q>.

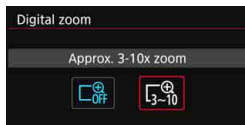


2 Select [Digital zoom].

- Under the [**1**] tab, select [**Digital zoom**], then press <SET>.

3 Select [Approx. 3-10x zoom].

- Select [**Approx. 3-10x zoom**], then press <SET>.
- Press the <MENU> button to exit the menu and return to movie shooting.



4 Use digital zoom.

- Press the <▲> <▼> keys.
- ▶ The digital zoom bar will appear.
- Press the <▲> key to zoom in or press the <▼> key to zoom out.
- When you press the shutter button halfway, the camera will focus with [**Live 1-point AF**] (fixed at center).
- To cancel digital zoom, set [**Disable**] in step 2.



- Use a tripod to prevent camera shake.
- Time-lapse movie, Movie digital IS and Creative filter cannot be set.
- The maximum ISO speed will be ISO 6400.
- Magnified view is not possible.
- 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.
- The scene icon will not be displayed.
- Also see "Shooting Conditions that Make Focusing Difficult" on page 266.

Shooting HDR Movies

You can shoot movies by reducing the clipped highlight details of bright areas even in high-contrast scenes.


The recording size is  (NTSC) or  (PAL).



1 Set the Mode Dial to <SCN>.



2 Shoot an HDR movie.

-  Since multiple frames are merged to create an HDR movie, certain parts of the movie image may look distorted. During handheld shooting, camera shake may make the distortion look more noticeable. Using a tripod is recommended. Note that even if a tripod is used for shooting, afterimages or noise may become more noticeable when the HDR movie is played back frame-by-frame or in slow-motion compared to normal playback.
- Movie digital zoom, video snapshot, time-lapse movie, and Movie digital IS cannot be set.

Shooting Movies with Creative Filter Effects

In the <C> (Creative filters) mode, you can shoot movies with one of five filter effects (Dream, Old Movies, Memory, Dramatic B&W, and Miniature effect movie).

The recording size can be set to **FHD 29.97P / 23.98P** (NTSC) or **FHD 25.00P** (PAL).



1 Set the Mode Dial to <C>.

2 Press the <Q> button (10).

▶ The Quick Control screen will appear.

3 Select [].

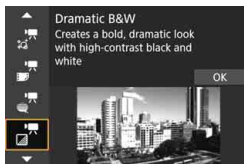
● Press the <▲> <▼> keys to select [] (Creative filters) on the upper left of the screen, then press <SET>.

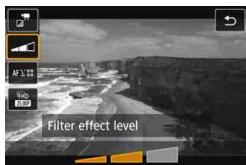


4 Select a filter effect.

● Press the <▲> <▼> keys to select a filter (p.293), then press <SET> and select [OK].

▶ The image will be displayed with the effects of the filter applied.





5 Adjust the filter effect level.

- Press the <[Q]> button and select the icon below [**Creative filters**].
- Press the <◀> <▶> keys to adjust the filter effect, then press <[SET]>.
- When the Miniature effect movie is set, select the playback speed.

6 Shoot the movie.





- Magnified view is not possible.
- The histogram is not displayed.
- Movie digital zoom, video snapshot, time-lapse movie, and Movie digital IS cannot be set.
- The color gradation of the sky or white walls may not be reproduced correctly. Irregular exposure, irregular colors, or noise may appear.



In Creative Zone modes, you can set Creative filters with Quick Control (p.286).

Creative Filter Characteristics

-  **Dream**
Creates a soft, dreamy, otherworldly atmosphere. Gives the movie a soft look overall, blurring the periphery of the screen. You can adjust the blurry areas along the screen edges.
-  **Old Movies**
Creates an atmosphere like an old film by adding wavering, scratches, and flickering effects to the image. The top and bottom of the screen are masked in black. You can modify the wavering and scratch effects by adjusting the filter effect.

-  **Memory**

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

-  **Dramatic B&W**

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

-  **Miniature effect movie**

You can shoot movies having a Miniature (diorama) effect. Select the playback speed and shoot.


If you want the image center to look sharp, take the picture without changing any setting.

To move the area that looks sharp (miniature effect frame), see “Adjusting Miniature Effect” (p.116). The AF method will be Live 1-point AF. Positioning the miniature effect frame over the AF point before shooting is recommended. During shooting, AF point or miniature effect frame will not be displayed.

In step 5, set the playback speed to **[5x]**, **[10x]**, or **[20x]** and shoot.

Playback Speed and Length (for 1-minute movie)

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

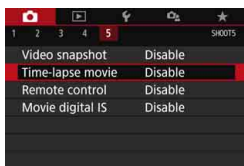
 <  > **(Miniature Effect Movies)**

- Sound will not be recorded.
- Movie Servo AF will not function.
- Miniature effect movies whose playback time is shorter than 1 sec. cannot be edited (p.364).

Shooting Time-lapse Movies

Images shot at a set interval can be stitched together automatically to create a movie file. 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, etc. Time-lapse movies are recorded in the MOV format and in **FHD 29.97P ALL-I** (NTSC) or **FHD 25.00P ALL-I** (PAL) recording size.

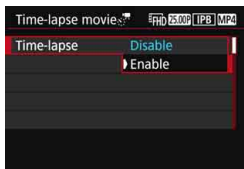
1 Set the Mode Dial to a mode other than <SCN> or <Q>.



2 Select [Time-lapse movie].

- Under the [**5**] tab (the [**3**] tab in Basic Zone modes), select [**Time-lapse movie**] and press <SET>.

3 Select [Enable].



! 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 required

Playback time

4 Set the shooting interval and number of shots.

- Check the [**⏱**: **Time required**] and [**▶**: **Playback time**] displayed at the bottom of the screen to set the shooting interval and number of shots.
- Set the shooting interval (hours:minutes:seconds) with [**Interval**].
- Set the number of shots with [**No. of shots**].
- Press <SET> so <⏱> is displayed.
- Set the desired number, then press <SET>. (Returns to <□>.)
- After completing the settings, select [**OK**] to return to the previous screen.

• Shooting Interval

Settable in the range from [00:00:01] to [99:59:59].

• Number of shots

Settable in the range from [0002] to [3600]. Set one digit at a time. If 3600 is set, the time-lapse movie will be approx. 2 min. for NTSC and approx. 2 min. 24 sec. for PAL.



5 Set the exposure.

- Select [**Auto exposure**] and set.

• Fixed 1st frame

The second and subsequent frames will also be shot with the same exposure and other shooting function settings as the first frame.

• Each frame

Each frame will be shot with the exposure adjusted to match the brightness of the scene. Note that function settings such as Picture Style and white balance will automatically be set for each frame when they are set to [**Auto**].



6 Set whether to turn off the LCD monitor automatically.

- Select [LCD auto off] and set.

• Disable

The Live View image will remain displayed during shooting. Note that the LCD monitor will turn off when approx. 30 min. elapse after the shooting started.

• Enable

The LCD monitor will turn off approx. 10 sec. after shooting the first frame.

You can press the <INFO> button to turn off or on the LCD monitor during shooting.



7 Set the beeper for shooting.

- Select [Beep as img taken] and set.
- If [Disable] is set, the beeper will not sound for shooting.



8 Check the settings.

Time required Playback time

If [Beep] is set to [Disable], the setting in step 7 cannot be set.

● **Time required**

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

● **Playback time**

Indicates the recording time (time required to play back the movie) when shooting with the set intervals to create the movie in “FHD 29.97P ALL-I (NTSC)” or “FHD 25.00P ALL-I (PAL)” format.

9 Exit the menu.

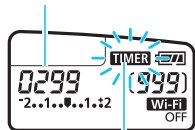
- Press the <MENU> button to turn off the menu screen.




10 Shoot the time-lapse movie.



- Press the shutter button halfway to check the focus and exposure.
- Press the <CAMERA> button to start time-lapse movie shooting.
- AF will not work during time-lapse movie shooting.
- During time-lapse movie shooting, <TIMER> will blink on the LCD panel.
- Since the electronic shutter is used for shooting, the reflex mirror and shutter make no mechanical sound during time-lapse movie shooting.
- When the set number of shots are taken, the time-lapse movie shooting will stop and be automatically canceled.

Shots remaining



Time-lapse movie

- Using a tripod is recommended.
- To cancel the time-lapse movie shooting, press the <  > button. (The setting will be switched to [Disable].) The time-lapse movie shot so far will be recorded on the card.
- You can play back the shot time-lapse movie with this camera the same way that you play back normal movies.
- If the time required for shooting is more than 24 hours but not more than 48, "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. For [Playback time], "00:00:00" will be displayed.
- If the shooting time is long, using the household power outlet accessories (sold separately, p.422) is recommended.

- With time-lapse movie set to [Enable], you cannot set [ 1: Movie rec. size] or [ 3: Video system].
- Time-lapse movie shooting cannot be set when Movie digital zoom, Movie digital IS, Video snapshot or Creative filter is set, or when Wi-Fi connection is established.
- If the camera is connected to a computer with the interface cable, or if an HDMI cable is connected to the camera, you cannot select [Enable].
- Movie Servo AF will not function.
- Regarding the settable shutter speed for manual exposure, see page 280.
- With [Interval] set to 3 sec. or less and [Auto exposure] set to [Each frame], if the brightness of the subject is significantly different from that for the last shot frame, shooting may not be performed with the set interval.
- If the image is displayed on the LCD monitor during time-lapse movie shooting, the Live View image will freeze momentarily at the time of shooting.
- Do not zoom the lens during time-lapse movie shooting. 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.



- During time-lapse movie shooting, 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.
- 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 interval between shots due to the shooting functions set or card performance, some of the shots may not be taken with the set intervals.
- If the card does not have enough free space to record the set number of shots, **[Playback time]** will be displayed in red. Although the camera can continue shooting, the shooting will stop when the card becomes full.
- If the card has no available capacity, “remaining number of possible shots” will be displayed in red as **[0000]**, and you will not be able to shoot.
- If you connect the camera to a computer with an interface cable and use EOS Utility (EOS software), set **[05: Time-lapse movie]** to **[Disable]**. If it is set to **[Enable]**, the camera cannot communicate with the computer.
- During time-lapse movie shooting, the lens's Image Stabilizer will not operate.
- If the power switch is set to <OFF>, time-lapse movie shooting will be terminated and the setting will be switched to **[Disable]**.
- Even if a flash is used, it will not fire.
- Shooting-ready state of the time-lapse movie is canceled and the setting is switched to **[Disable]** with the following operations:
 - Performing **[F3: Sensor cleaning]** or performing **[Clear all camera settings]** under **[F4: Clear settings]**.
- When time-lapse movie shooting ends, the settings are cleared automatically, and the camera returns to normal movie shooting.

You can shoot time-lapse movies with a fully-charged Battery Pack LP-E17 as shown in the table below (approx. time from start of shooting until the battery becomes exhausted). The possible shooting time will vary depending on the shooting conditions.

Total Possible Time for Time-lapse Movie Shooting

LCD Monitor During Shooting	Room Temperature (23°C / 73°F)	Low Temperatures (0°C / 32°F)
Turned on	Approx. 2 hr. 10 min.	Approx. 2 hr.
Turned off	Approx. 3 hr. 30 min.	Approx. 3 hr. 20 min.

* When shooting interval is set to [00:00:03]

You can use Wireless Remote Control BR-E1 (sold separately, p.423) or Remote Controller RC-6 (sold separately, p.426) to start and stop the time-lapse movie shooting. Set [5: Remote control] to [Enable] beforehand.

• **When Using BR-E1**

Set the release mode/movie shooting switch to the <M> position, then press the release button.

• **When Using RC-6**

See the table below.

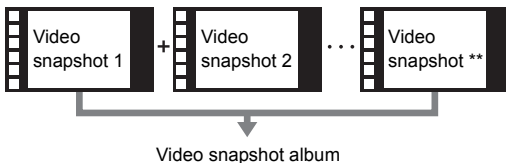
Operation Status with RC-6

Camera Status/ Remote Control Setting	<2> (2-sec. delay)	<●> (Immediate shooting)
Shooting-ready	Starts shooting	Operates according to the [btn function] setting (p.317)
During time-lapse movie shooting	Ends shooting	

MENU Shooting Video Snapshots

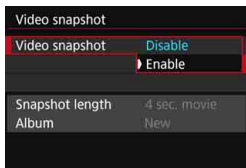
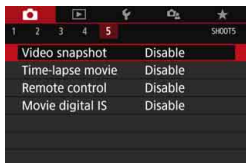
You can shoot a series of short movie clips lasting approx. 2 sec., 4 sec., or 8 sec. called video snapshots. The video snapshots can be joined together into a single movie called a video snapshot album. You can thereby show short and quick highlights of a trip or event. A video snapshot album can also be played back together with background music (p.310, 368).

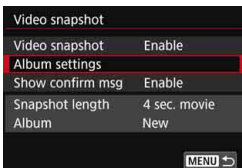
Video Snapshot Album Concept



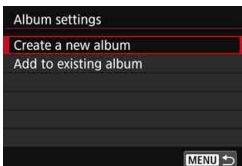
Setting the Video Snapshot Shooting Duration

- 1 Set the Mode Dial to a mode other than <SCN> or <📷>.
- 2 Select [Video snapshot].
 - Under the [📷5] tab (the [📷3] tab in Basic Zone modes), select [Video snapshot] and press <Ⓢ>.
- 3 Select [Enable].

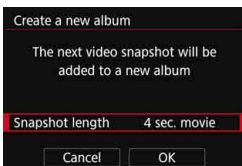




4 Select [Album settings].



5 Select [Create a new album].



6 Select the snapshot length.

- Press <SET> and use the <▲> <▼> keys to select the snapshot's length, then press <SET>.



Shooting duration

7 Select [OK].

- Press the <MENU> button to exit the menu.
- ▶ A blue bar will appear to indicate the snapshot length.
- Go to "Creating a Video Snapshot Album" (p.305).

Creating a Video Snapshot Album



8 Shoot the first video snapshot.

- Press the < [CAMERA] > button, then shoot.
- ▶ The blue bar indicating the shooting duration will gradually decrease. After the set shooting duration elapses, the shooting stops automatically.
- ▶ The confirmation screen will appear (p.306-307).



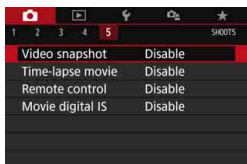
9 Save as a video snapshot album.

- Select [[MENU] Save as album], then press < (SET) >.
- ▶ The movie clip will be saved as the video snapshot album's first video snapshot.



10 Continue to shoot more video snapshots.







- Repeat step 8 to shoot the next video snapshot.
- Select [[MENU] Add to album], then press < (SET) >.
- To create another video snapshot album, select [[MENU] Save as a new album].
- Repeat step 10 as necessary.



11 Exit the video snapshot shooting.

- Set [Video snapshot] to [Disable].
To return to normal movie shooting, be sure to set [Disable].
- Press the < MENU > button to exit the menu, and return to the normal movie shooting.

Options in Steps 9 and 10











Function	Description
 Save as album (Step 9)	The movie clip will be saved as the video snapshot album's first video snapshot.
 Add to album (Step 10)	The video snapshot just recorded will be added to the album recorded immediately before.
 Save as a new album (Step 10)	A new video snapshot album is created and the movie clip is saved as the first video snapshot. The new album will be a different file from the previously recorded album.
 Playback video snapshot (Step 9 and 10)	The video snapshot just recorded will be played back. For playback operations, see the table on the next page.
 Do not save to album (Step 9)  Delete without saving to album (Step 10)	The video snapshot just recorded will be erased instead of being saved to the album. Select [OK] on the confirmation dialog.



Video snapshot	
Video snapshot	Enable
Album settings	
Show confirm msg	Disable
Snapshot length	4 sec. movie
Album	xxx-xxxx
MENU 	

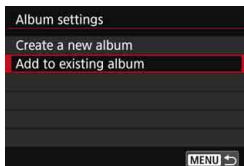
If you want to shoot another video snapshot right after shooting one video snapshot, set **[Show confirm msg]** to **[Disable]**. This setting will allow you to immediately shoot the next video snapshot without the confirmation screen appearing after you shoot each time.

[Playback video snapshot] Operations in Steps 9 and 10

Function	Playback Description
 Play	By pressing <SET>, you can play back or pause the video snapshot recorded immediately before.
 First frame	Displays the first scene of the album's first video snapshot.
 Skip backward*	Each time you press <SET>, the video snapshot skips back by a few seconds.
 Previous frame	Displays the previous frame each time you press <SET>. Holding <SET> down will rewind the movie.
 Next frame	Plays the movie frame-by-frame each time you press <SET>. Holding <SET> down will fast forward the movie.
 Skip forward*	Each time you press <SET>, the video snapshot skips forward by a few seconds.
 Last frame	Displays the last scene of the album's last video snapshot.
	Playback position
mm' ss''	Playback time (minutes:seconds)
 Volume	Turn the <VOLUME> dial to adjust the volume of the built-in speaker (p.362).
MENU 	Pressing the <MENU> button returns to the previous screen.

* With [**Skip backward**] and [**Skip forward**], the skipping length corresponds to the number of seconds set under [**Video snapshot**] (approx. 2 sec., 4 sec., or 8 sec.).

Adding to an Existing Album



1 Select [Add to existing album].

- Follow step 5 on page 304 to select [Add to existing album], then press <SET>.




2 Select an existing album.

- Turn the <DIAL> to select an existing album, then press <SET>.
- Select [OK], then press <SET>.
- ▶ Certain video snapshot settings will change to match the existing album's settings.
- Press the <MENU> button to exit the menu.
- ▶ The video snapshot shooting screen will appear.

3 Shoot the video snapshot.

- See "Creating a Video Snapshot Album" (p.305) to shoot the video snapshot.

 You cannot select an album shot with another camera.



Cautions for Shooting Video Snapshots

- You can add to an album only the video snapshots with the same duration (approx. 2 sec., 4 sec., or 8 sec. each).
- Note that if you do any of the following while shooting video snapshots, a new album will be created for subsequent video snapshots.
 - Changing the [**Movie rec. size**].
 - Changing the [**Sound rec.**] setting from [**Auto**]/[**Manual**] to [**Disable**] or from [**Disable**] to [**Auto**]/[**Manual**].
 - Updating the firmware.
- The shooting duration of a video snapshot is only approximate. Depending on the frame rate, the shooting duration displayed during playback may not be exact.

Playing Back an Album

You can play back a video snapshot album in the same way as a normal movie (p.362).



1 Play back the movie.

- Press the <▶> button to display an image.



2 Select the album.

- In the single-image display, the [SET] icon displayed on the upper left of the screen indicates a video snapshot album.
- Turn the <◉> dial to select an album.



3 Play back the album.

- Press <SET>.
- On the movie playback panel displayed, select [▶] (Play), then press <SET>.



Background Music

- You can play background music when you play back albums, normal movies, and slide shows on the camera (p.363, 368). To play background music, you must first copy the background music to the card using EOS Utility (EOS software). For information on how to copy the background music, refer to the EOS Utility Instruction Manual.
- Music recorded on the memory card must be used only for private enjoyment. Do not violate the rights of the copyright holder.

Editing an Album

After shooting, you can rearrange, delete, or play back the video snapshots in the album.



1 Select [X].

- On the movie playback panel displayed, select [X] (Edit), then press <SET>.
- ▶ The editing screen will be displayed.



2 Select an editing operation.

- Select an editing option, then press <SET>.

Function	Description
↔ Move snapshot	Press the <◀> <▶> keys to select the video snapshot you want to move, then press <SET>. Press the <◀> <▶> keys to move the snapshot, then press <SET>.
🗑 Delete snapshot	Press the <◀> <▶> keys to select the video snapshot you want to delete, then press <SET>. The [🗑] icon will be displayed on the selected video snapshot. Pressing <SET> again will cancel the selection and [🗑] will disappear.
▶ Play snapshot	Press the <◀> <▶> keys to select the video snapshot you want to play, then press <SET>.



3 Save the edited album.

- Press the <MENU> button to return to the Editing panel at the screen bottom.
- Select [] (Save), then press <()>.
- ▶ The save screen will appear.
- To save it as a new album, select [**New file**]. To save it and overwrite the original album, select [**Overwrite**], then press <()>.

- If the card does not have enough free space, [**New file**] will not be available.
- When the battery level is low, editing albums is not possible. Use a fully-charged battery.

MENU Menu Function Settings

When the power switch is set to <M>, the [CAM1], [CAM4], and [CAM5] tabs will be displayed as the menu options exclusive to movie shooting (the [CAM1], [CAM2], and [CAM3] tabs in Basic Zone modes).

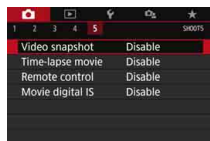
CAM1



CAM4



CAM5



CAM1

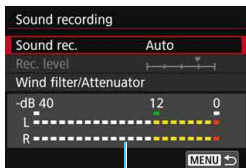
- **Movie recording size**

You can set the movie recording size (image size, frame rate, and compression method). For details, see page 287.

- **Digital zoom**

You can use digital zoom for telephoto shooting. For details, see page 290.

- **Sound recording** ☆



Level meter

Normally, the built-in microphones will record the sound in stereo. If the Directional Stereo Microphone DM-E1 (sold separately) is connected to the camera's external microphone IN terminal (p.28), the external microphone will be given priority.

[Sound rec./Rec. level] options

[Auto] : The sound-recording level is adjusted automatically. Auto level control will operate automatically in response to the sound level.

[Manual] : For advanced users. You can adjust the sound-recording level to one of 64 levels. Select **[Rec. level]** and press the <◀> <▶> keys while looking at the level meter to adjust the sound-recording level. Look at the peak hold indicator (approx. 3 sec.), 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.


[Disable] : Sound will not be recorded.


[Wind filter]

When set to **[Auto]**, it reduces wind noise when there is wind outdoors. This feature works only when you use the built-in microphones for movie shooting. When the wind filter function takes effect, part of the low bass sounds will also be reduced.

[Attenuator]

Automatically suppresses sound distortion caused by loud noises. Even if **[Sound rec.]** is set to **[Auto]** or **[Manual]** for shooting, sound distortion may still result if there is a very loud sound. In such a case, setting it to **[Enable]** is recommended.

 If you use the Wi-Fi (wireless communication) function with an external microphone, the sound noise may be recorded. During sound recording, using the wireless communication function is not recommended.

- 
- In Basic Zone modes, the settings available for **[Sound recording]** will be **[On]/[Off]**. If **[On]** is set, the sound-recording level will be adjusted automatically (same as with **[Auto]**), and the wind filter function will take effect.
 - The sound volume balance between L (left) and R (right) cannot be adjusted.
 - For both L and R, audio is recorded at a 48 kHz/16-bit sampling rate.

- **Lens aberration correction** ☆

You can set peripheral illumination correction and chromatic aberration correction. For details, see page 179.

- **Lens electronic MF** ☆


When a lens equipped with an electronic manual focusing function is used, see page 128.

📷4

- **Movie Servo AF**

With this function enabled, the camera focuses on the subject continuously during movie shooting. The default setting is **[Enable]**.

When [Enable] is set:

- The camera focuses on the subject continuously even when you are not pressing the shutter button halfway.
- If you want to keep the focus at a specific point or if you do not want the lens mechanical sound to be recorded, you can temporarily stop Movie Servo AF as follows.
 - Tap [] on the screen's bottom left.
 - Press the <⚡> button.
 - If you assign a button to **[AF stop]** with **[14: Custom Controls]** under **[📷4: Custom Functions(C.Fn)]**, you can pause Movie Servo AF while holding that button down. When you let go of the button, Movie Servo AF will resume.
- When Movie Servo AF is paused, if you return to movie shooting after operations such as pressing the <MENU> or <▶> button or changing the AF method, Movie Servo AF will resume.

When [Disable] is set:

- Press the shutter button halfway or press the <AF-ON> button to focus.

**Cautions When [Movie Servo AF] is Set to [Enable]**

- **Shooting Conditions that Make Focusing Difficult**
 - A fast-moving subject approaching or moving away from the camera.
 - A subject moving at a close distance in front of the camera.
 - Also see “Shooting Conditions that Make Focusing Difficult” on page 266.
- Since this drives the lens continuously, it will consume battery power and shorten the possible movie shooting time (p.288).
- With certain lenses, the mechanical sound for focusing may be recorded. If this happens, using the Directional Stereo Microphone DM-E1 (sold separately) may reduce the lens mechanical sound in the movie. Also, using certain USM lenses (for example, the EF-S18-135mm f/3.5-5.6 IS USM) or certain STM lenses (for example, the EF-S18-55mm f/4-5.6 IS STM) will reduce the lens mechanical sound to be recorded.
- Movie Servo AF will pause during zooming or magnified view.
- During movie shooting, if a subject approaches or moves away or if the camera is moved vertically or horizontally (panning), the recorded movie image may momentarily expand or contract (change in image magnification).
- If you want to set the lens's focus mode switch to <MF> during Movie Servo AF, first set the camera's power switch to <ON>.

● **AF method**

The AF methods are the same as described on pages 259-268. You can select [**┐+Tracking**], [**Smooth zone**], or [**Live 1-point AF**].

● **Metering timer**★

You can change how long the exposure setting is displayed (AE lock time).







- **Grid display**






With [3x3 卍] or [6x4 卐], you can display grid lines to help you level the camera vertically or horizontally. Also, with [3x3+diag 卐], the grid is displayed together with diagonal lines to help you compose with better balance by aligning the intersections over the subject.

Note that the grid is not displayed on the LCD monitor during movie shooting.


-  **button function**

You can set the functions performed by pressing the shutter button halfway or completely during movie shooting.

Setting	Pressing halfway	Pressing completely
 AF/-	Metering and AF	No function
 /-	Metering only	No function
 AF/ 	Metering and AF	Starts/stops movie shooting
 / 	Metering only	Starts/stops movie shooting

If [ AF/] or [ /] is set, besides pressing the < > button, you can start or stop the movie shooting by pressing the shutter button completely or by using Remote Switch RS-60E3 (sold separately, p.427).



During movie shooting, the [ **btn function**] setting overrides any function assigned to the shutter button with [14: Custom Controls] under [4: Custom Functions(C.Fn)].

 5

- **Video snapshot**

You can shoot video snapshots. For details, see page 303.


- **Time-lapse movie**

You can shoot time-lapse movies. For details, see page 296.



- **Remote control shooting**

When [Enable] is set, you can start or stop movie shooting using Wireless Remote Control BR-E1 (sold separately, p.423) or Remote Controller RC-6 (sold separately, p.426).

- **When Using BR-E1**

Set the release mode/movie shooting switch to the < > position, then press the release button.

- **When Using RC-6**

Set the switch to the <2> position, then press the transmit button. If the switch is set to < > (immediate release), the [ btn function] setting will be applied.

● Movie digital IS

In-camera image stabilization electronically corrects camera shake during movie shooting. This function is called "Movie digital IS". With Movie digital IS, images can be stabilized even when using a lens without Image Stabilizer. When using a lens with built-in optical Image Stabilizer, Movie digital IS will function when the lens's Image Stabilizer switch is set to <ON>.

Disable (OFF) : Image stabilization with Movie digital IS is disabled.

Enable (ON) : Camera shake will be corrected. The image will be slightly magnified.

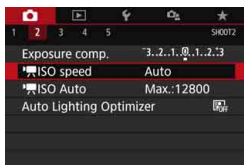
Enhanced (ON+) : Compared to when [Enable] is set, stronger camera shake can be corrected. The image will be more magnified.



- Movie digital IS will not function when the lens's optical Image Stabilizer switch is set to <OFF> (OFF).
- With a lens whose focal length is longer than 800 mm, Movie digital IS will not function.
- Movie digital IS cannot be set in the <SCN> or <Q> mode, or when Movie digital zoom, time-lapse movie or Creative filter is set.
- The wider the angle of view, the more effective the image stabilization will be. The narrower the angle of view, the less effective the image stabilization will be.
- When using a TS-E lens, fish-eye lens, or non-Canon lens, setting Movie digital IS to [Disable] is recommended.
- In magnified view, the effect of Movie digital IS will not be reflected in the image displayed on the screen.
- Since the image is magnified in Movie digital IS, the image will look grainier. Noise, dots of light, etc., may also become noticeable.
- 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.
- When Movie digital IS is set, the size of AF points will also change.
- When using a tripod, setting Movie digital IS to [Disable] is recommended.
- Certain lenses do not support this function. For details, refer to the Canon website.

ISO Speed During Movie Shooting [☆]

You can set the ISO speed separately for still photo shooting and movie shooting. Set under the [CAMERA 2] tab.



- [ISO speed]

In manual exposure, you can set the ISO speed (p.281).

- [ISO Auto]

You can set the maximum limit of the automatic ISO speed for ISO Auto to ISO 6400 or ISO 12800.

Under [4: Custom Functions(C.Fn)], if [2: ISO expansion] is set to [1:On], you can select [Max.:H(25600)].



General Movie Shooting Cautions

Red <[Red Thermometer Icon]> Internal Temperature Warning Icon

- If the camera's internal temperature increases due to prolonged movie shooting or under a high ambient temperature, a red <[Red Thermometer Icon]> icon will appear.
- The red <[Red Thermometer Icon]> icon indicates that movie shooting will soon be terminated automatically. If this happens, you will not be able to shoot again until the camera's internal temperature decreases. Turn off the power and let the camera rest for a while.
- Shooting a movie at a high temperature for a prolonged period will cause the <[Red Thermometer Icon]> icon to appear earlier. When you are not shooting, always turn off the camera.

Recording and Image Quality

- If the attached lens has an Image Stabilizer and you set the Image Stabilizer (IS) 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 shorten the total movie shooting time 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 IS switch to <OFF>.
- The camera's built-in microphones will also record the operation sound and mechanical sound of the camera during shooting. Using the Directional Stereo Microphone DM-E1 (sold separately) may reduce these sounds in the movie.
- Do not connect anything other than an external microphone to the camera's external microphone IN terminal.
- If the brightness changes during autoexposure movie shooting, the movie image may freeze temporarily. In such a case, shoot movies with manual exposure.
- If there is a very bright light source in the image, the bright area may appear black on the LCD monitor. The movie will be recorded almost exactly as it appears on the LCD monitor.
- In low light, noise or irregular colors may appear in the image. The movie will be recorded almost exactly as it appears on the LCD monitor.
- If you play back a movie with other devices, image or sound quality may deteriorate or playback may not be possible (even if the devices support MOV/MP4 format).

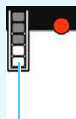
General Movie Shooting Cautions

Recording and Image Quality

- If you use a card with a slow writing speed, a five-level indicator may appear on the right of the screen during movie shooting. It indicates how much data has not yet been written to the card (remaining capacity of the internal buffer memory). The slower the card, the faster the indicator will climb upward. If the indicator becomes full, movie shooting will stop automatically.

If the card has a fast writing speed, the indicator will either not appear or the level (if displayed) will hardly go upward.

First, shoot a few test movies to see if the card can write fast enough.



Indicator

Playback and TV Connection

- If you connect the camera to a TV set (p.369) and shoot a movie, the TV set will not output any sound during the shooting. However, the sound will be properly recorded.

Restrictions on MP4-format Movies

Note that generally, the following restrictions apply to MP4-format movies.

- Sound will not be recorded for approx. the last two frames.
- When you play back movies on Windows, movie images and sound may become slightly out of synchronization.

9

Handy Features

- Disabling the Beeper (p.324)
- Card Reminder (p.324)
- Setting the Image Review Time (p.325)
- Setting the Auto Power Off Time (p.325)
- Adjusting the LCD Monitor Brightness (p.326)
- Creating and Selecting a Folder (p.327)
- File Numbering Methods (p.329)
- Setting the Copyright Information (p.332)
- Auto Rotation of Vertical Images (p.334)
- Reverting the Camera to the Default Settings (p.335)
- Preventing the LCD Monitor from Turning Off Automatically (p.338)
- Automatic Sensor Cleaning (p.339)
- Appending Dust Delete Data (p.341)
- Manual Sensor Cleaning (p.343)


Handy Features

MENU Disabling the Beeper

You can prevent the beeper from sounding when focus is achieved, during self-timer shooting, and during touch operations.

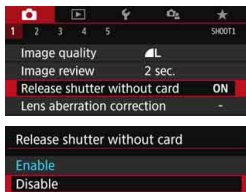


Under the [**f**3] tab, select [**Beep**], then press <SET>. Select [**Disable**], then press <SET>.

To silence the beeper only for touch operations, select [**Touch** ].

MENU Card Reminder

This setting prevents shooting if there is no card in the camera.



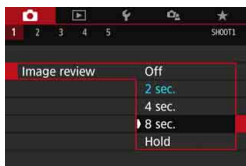
Under the [**1**] tab, select [**Release shutter without card**], then press <SET>. Select [**Disable**], then press <SET>.

If there is no card inserted in the camera and you press the shutter button, “**Card**” will be displayed in the viewfinder and on the LCD panel, and you cannot release the shutter.

MENU Setting the Image Review Time

You can change how long the image is displayed on the LCD monitor immediately after shooting. If **[Off]** is set, the image will not be displayed immediately after shooting. If **[Hold]** is set, the image review will be displayed up until the **[Auto power off]** time has elapsed.

Note that during image review, if you operate any camera controls such as pressing the shutter button halfway, the image review will end.



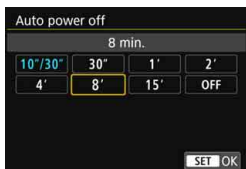
Under the [**1**] tab, select **[Image review]**, then press **<SET>**. Select the desired setting, then press **<SET>**.

MENU Setting the Auto Power Off Time

To save battery power, the camera turns off automatically after a set time of idle operation elapses. When the camera is turned off due to auto power off, you can turn it on again by pressing the shutter button, etc.

If [Disable] is set, either turn off the camera or press the <INFO> button to turn off the LCD monitor to save battery power.

Even if [Disable] is set, the LCD monitor will turn off after the camera is left idle for approx. 30 min. To turn on the LCD monitor again, press the <INFO> button.

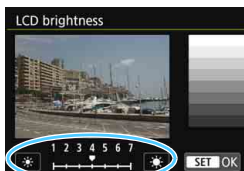
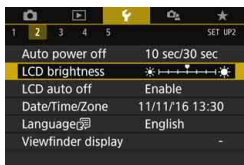


Under the [**2**] tab, select **[Auto power off]**, then press **<SET>**. Select the desired setting, then press **<SET>**.

If **[10 sec/30 sec]** is set, the camera will turn off after it is left idle for approx. 10 sec. When setting functions or during Live View shooting, movie shooting, image playback, etc., the auto power off time will be approx. 30 sec.

MENU Adjusting the LCD Monitor Brightness

You can adjust the brightness of the LCD monitor to make it easier to view.



Under the [**2**] tab, select [**LCD brightness**], then press < **SET** >. Press the < **◀** > < **▶** > keys to adjust the brightness on the adjustment screen, then press < **SET** >.

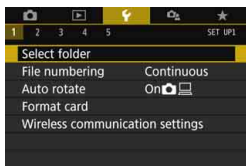
When checking the exposure of an image, set the LCD monitor brightness to 4 and prevent the ambient light from affecting the image.

MENU Creating and Selecting a Folder

You can freely create and select the folder where the captured images are to be saved.

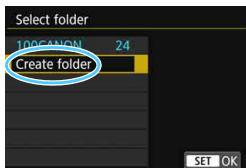
This operation is optional since a folder will be created automatically for saving captured images.

Creating a Folder



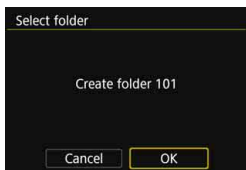
1 Select [Select folder].

- Under the [**1**] tab, select [**Select folder**], then press <SET>.



2 Select [Create folder].

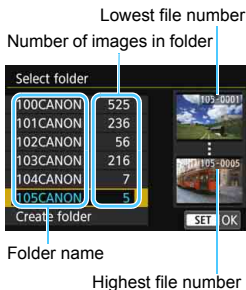
- Select [**Create folder**], then press <SET>.



3 Create a new folder.

- Select [**OK**], then press <SET>.
- ▶ A new folder with the folder number increased by one is created.

Selecting a Folder



- With the folder selection screen displayed, select a folder and press **< (SET) >**.
- ▶ The folder where the captured images will be saved is selected.
- Subsequently captured images will be recorded into the selected folder.



Folders

As with “**100CANON**” for example, the folder name starts with three digits (the folder number) followed by five alphanumeric characters. 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 (p.331) is executed, a new folder will be created automatically. Folders numbered from 100 to 999 can be created.

Creating Folders with a Computer

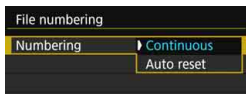
With the card open on the screen, create a new folder named “**DCIM**”. Open the DCIM folder and create as many folders as necessary to save and organize your images. The folder name must follow the format “**100ABC_D**”. The first three digits are always the folder number from 100 to 999. The last five 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 last five characters in each name are different.

MENU File Numbering Methods

The image files will be numbered from 0001 to 9999 in the order the images are taken, then saved in a folder. You can change how the file number is assigned.

The file number will appear on your computer in this format:

IMG_0001.JPG.

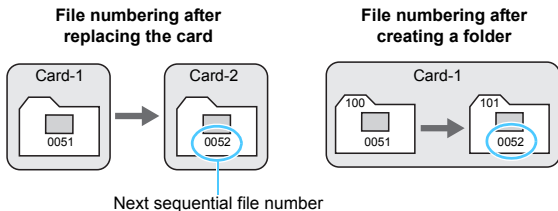


In **[File numbering]** under the **[F1]** tab, select **[Numbering]**, then press **<SET>**. The available settings are described below. Select the option, then press **<SET>**.

- [Continuous]:** When you wish to continue the file numbering sequence even after the card is replaced or a new folder is created.

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.

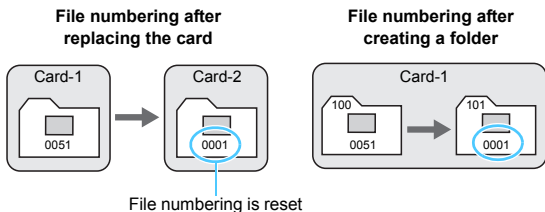
If the replacement card or existing folder already contains images recorded previously, the file numbering of the new images may continue from the file numbering of the existing images on the card or in the folder. If you want to use continuous file numbering, it is recommended that you use a newly-formatted card each time.



- **[Auto reset]:** When you wish to restart the file numbering from **0001** each time the card is replaced or a new folder is created.

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.




- **[Manual reset]:** When you wish to reset the file numbering to 0001 or to start from file number 0001 in a new folder.




In **[File numbering]** under the **[F1]** tab, select **[Manual reset]**, then select **[OK]** on the confirmation dialog.

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.

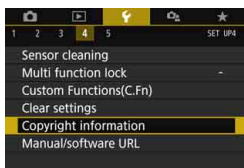
This is useful, for example, if you want to use different folders for the images taken yesterday and the ones taken today. After the manual reset, the file numbering returns to continuous or auto reset. (There will be no manual reset confirmation dialog.)

 If the file number in folder 999 reaches 9999, shooting will not be possible even if the card still has storage capacity. The LCD monitor will display a message telling you to replace the card. Replace it with a new card.

 For both JPEG and RAW images, the file name will start with "IMG_". Movie file names will start with "MVI_". The extension will be ".JPG" for JPEG images, ".CR2" for RAW images, and ".MOV" or ".MP4" for movies.

MENU Setting the Copyright Information ☆

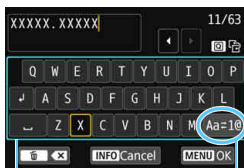
When you set the copyright information, it will be appended to the image as Exif information.

**1** Select [Copyright information].

- Under the [4] tab, select [Copyright information], then press <SET>.

**2** Select the item to be set.

- Select [Enter author's name] or [Enter copyright details], then press <SET>.



Character palette

Input mode

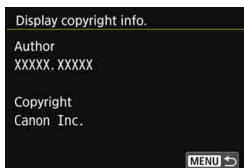
3 Enter text.

- Press the <▲> <▼> or <◀> <▶> keys to move the and select the desired character. Then press <SET> to enter it.
- You can enter up to 63 characters.
- To delete a character, press the <🗑️> button.
- By selecting [Aa=1@], you can change the input mode.
- To cancel the text entry, press the <INFO> button, then select [OK].

4 Exit the setting.

- After entering the text, press the <MENU> button, then select [OK].
- ▶ The information is saved.


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

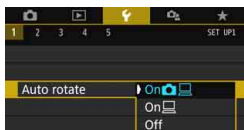
When you select [**Delete copyright information**] in step 2, you can delete the [**Author**] and [**Copyright**] information.

 If the entry for “Author” or “Copyright” is long, it may not be displayed entirely when you select [**Display copyright info.**].

-  ● If you cannot enter text in step 3, press the <Q> button and use the character palette when the blue frame appears.
- You can also set or check the copyright information with EOS Utility (EOS software, p.488).

MENU Auto Rotation of Vertical Images

Images shot in vertical orientation are rotated automatically to the proper orientation for viewing, so they will not be displayed in horizontal orientation when played back on the camera's LCD monitor or viewed on a computer screen. You can change the setting of this feature.



Under the [**1**] tab, select [**Auto rotate**], then press <[**SET**]>. The available settings are described below. Select the option, then press <[**SET**]>.

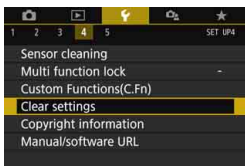
- [**On**] : The vertical image is automatically rotated during playback on both the camera's LCD monitor and on the computer screen.
- [**On**] : The vertical image is automatically rotated only on the computer screen.
- [**Off**] : The vertical image is not automatically rotated.

? FAQ

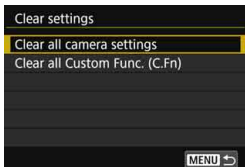
- **The vertical image is not rotated during the image review just after shooting.**
Press the <[**▶**]> button and the image playback will display the rotated image.
- **[On] is set, but the image does not rotate during playback.**
Auto rotate will not work with vertical images captured while [**Auto rotate**] was set to [**Off**]. If the vertical image is taken while the camera is pointed up or down, the image may not be rotated automatically for playback. In such a case, see "Rotating the Image" on page 352.
- **On the camera's LCD monitor, I want to rotate an image captured when [On] had been set.**
Set [**On]**, then play back the image. It will be rotated.
- **The vertical image does not rotate on the computer screen.**
The software used is not compatible with image rotation. Use EOS software instead.

MENU Reverting the Camera to the Default Settings ☆

The camera's shooting function settings and menu settings can be reverted to their defaults. This option is available in Creative Zone modes.



- 1 **Select [Clear settings].**
 - Under the [**4**] tab, select [**Clear settings**], then press <SET>.



- 2 **Select [Clear all camera settings].**
 - Select [**Clear all camera settings**], then press <SET>.



- 3 **Select [OK].**
 - Select [**OK**], then press <SET>.
 - ▶ Setting [**Clear all camera settings**] will reset the camera to the default settings as shown on pages 336-337.

? FAQ

● **Clearing all camera settings**

After the procedure above, select [**Clear all Custom Func. (C.Fn)**] in [**4: Clear settings**] to clear all the Custom Function settings (p.400).



Even if you clear all the Custom Function settings, the settings for [**14: Custom Controls**] under [**4: Custom Functions(C.Fn)**] will remain unchanged.

Shooting Function Settings

<SCN> mode	(Group Photo)
<B/W> mode	(Grainy B/W)
AF operation	One-Shot AF
AF area selection mode	Auto selection AF
Drive mode	(Single shooting)
Metering mode	(Evaluative metering)
ISO speed	AUTO (Auto)
ISO Auto	Maximum 6400
Exposure compensation/AEB	Canceled
Flash exposure compensation	Canceled
Red-eye reduction	Disable
Interval timer	Disable
Bulb timer	Disable
Anti-flicker shooting	Disable
Viewfinder display	
Electronic level	Hide
Grid display	Hide
Flicker detection	Show
Custom Functions	Unchanged
Flash control	
Flash firing	Enable
E-TTL II flash metering	Evaluative flash metering
Flash sync. speed in Av mode	Auto







Display Level Settings

Shooting screen	Standard
Menu display	Standard
Mode guide	Enable
Feature guide	Enable


Image Recording Settings

Image quality	
Aspect ratio	3 : 2
Picture Style	Auto
Auto Lighting Optimizer	Standard
Lens aberration correction	
Peripheral illumination correction	Enable
Chromatic aberration correction	Enable
Distortion correction	Disable
Diffraction correction	Enable
Lens electronic MF	Disable after One-Shot AF
White balance	Auto: Ambience priority
Custom White Balance	Canceled
White balance shift	Canceled
White balance bracketing	Canceled
Color space	sRGB
Long exposure noise reduction	Disable
High ISO speed noise reduction	Standard
File numbering	Continuous
Auto cleaning	Enable
Dust Delete Data	Erased










Camera Settings

Auto power off	10 sec/30 sec
Beep	Enable
Release shutter without card	Enable
Image review time	2 sec.
AF point display	Disable
Histogram display	Brightness
Image jump w/ 	 (10 images)
Auto rotate	On  
LCD brightness	
LCD auto off	Enable
Date/Time/Zone	Unchanged
Language	Unchanged
Video system	Unchanged
Touch control	Standard
INFO button display options	All items selected
Multi function lock	 (Quick Control Dial) only
Copyright information	Unchanged
Control over HDMI	Disable
Eye-Fi transmission	Disable
Configure: MY MENU	Unchanged
Menu display	Normal display
Wireless communication settings	
Wi-Fi	Disable
Bluetooth function	Disable

Live View Shooting Settings

Live View shooting	Enable
AF method	 +Tracking
AF operation	ONE SHOT
Touch Shutter	Disable
Metering timer	8 sec.
Grid display	Off
Creative filters	Disable

Movie Shooting Settings

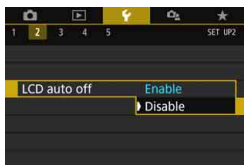
<  > mode	 (Dream)
AF method	 +Tracking
Movie Servo AF	Enable
Movie recording size	NTSC:  FHD 29.97P (Standard) PAL:  FHD 25.00P (Standard)
Digital zoom	Disable
 ISO speed	AUTO (Auto)
 ISO Auto	Maximum 12800
Sound recording	Auto
Wind filter	Auto
Attenuator	Disable
Grid display	Off
 button function	 AF/-
Video snapshot	Disable
Time-lapse movie	Disable
Remote control shooting	Disable
Movie digital IS	Disable
Creative filters	Disable




- For how to clear all the Custom Function settings, see page 400.
- For wireless communication settings, refer to the Wi-Fi (Wireless Communication) Function Instruction Manual.

MENU Disabling the Auto Turn Off of the LCD Monitor

You can prevent the display-off sensor from turning off the LCD monitor when your eye approaches the viewfinder.



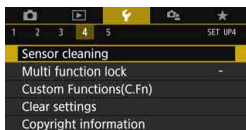
Under the [**f**2] tab, select [**LCD auto off**], then press < (SET) >. Select [**Disable**], then press < (SET) >.

 When Angle Finder C (sold separately) is attached to the viewfinder, set it to [**Disable**]. If [**Enable**] is set, the LCD monitor may remain off.

Automatic Sensor Cleaning

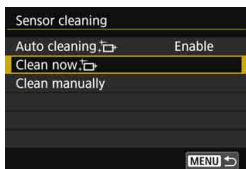
Whenever you set the power switch to <ON> or <OFF>, the Self Cleaning Sensor Unit is activated to automatically shake off any dust on the front of the sensor. Normally, you need not pay attention to this operation. However, you can manually perform sensor cleaning or can disable this unit as follows.

Activating the Sensor Cleaning Manually






1 Select [Sensor cleaning].




- Under the [**4**] tab, select [**Sensor cleaning**], then press <SET>.




2 Select [Clean now].

- Select [**Clean now **], then press <SET>.
- Select [**OK**], then press <SET>.
- ▶ The screen will indicate that the sensor is being cleaned. (A small sound may be heard.) Although there will be a mechanical sound of the shutter during the cleaning, no picture is taken.

 When Multi Shot Noise Reduction is set, [**Clean now **] cannot be selected.

-  ● For best results, perform the sensor cleaning with the camera placed upright and stable on a table or other flat surface.
- Even if you repeat the sensor cleaning, the result will not improve much. Immediately after the sensor cleaning is finished, the [**Clean now **] option remains disabled temporarily.
- Dots of light may appear on images if the sensor is affected by cosmic rays, etc. By selecting [**Clean now **], their appearance may be suppressed (p.466).

Disabling Automatic Sensor Cleaning

- In step 2, select [**Auto cleaning** ] and set it to [**Disable**].
- ▶ The sensor will no longer be cleaned when you set the power switch to <ON> or <OFF>.

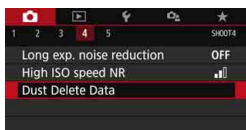
MENU Appending Dust Delete Data ☆

Normally, the Self Cleaning Sensor Unit will eliminate most of the dust that may be visible on captured images. However, for the case where visible dust still remains, you can append the Dust Delete Data to the image for erasing the dust spots later. The Dust Delete Data is used by Digital Photo Professional (EOS software, p.488) to erase the dust spots automatically.

Preparation

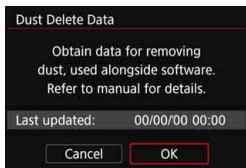
- Prepare a solid white object such as a sheet of paper.
- Set the lens focal length to 50 mm or longer.
- Set the lens's focus mode switch to <MF> and set the focus to infinity (∞). If the lens has no distance scale, rotate the camera to face toward you and turn the focusing ring clockwise all the way.

Obtaining the Dust Delete Data



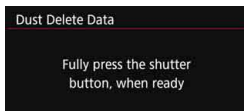
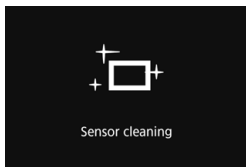
1 Select [Dust Delete Data].

- Under the [4] tab, select [Dust Delete Data], then press <SET>.



2 Select [OK].

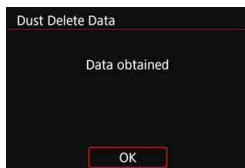
- When you select [OK] and press <SET>, the automatic sensor cleaning will be performed, then a message will appear. Although there will be a mechanical sound of the shutter during the cleaning, no picture is taken.





3 Shoot a solid-white object.

- At a distance of 20 cm - 30 cm (0.7 ft. - 1.0 ft.), fill the viewfinder with a patternless, solid-white object and take a picture.
- ▶ The picture will be taken in aperture-priority AE mode at an aperture of f/22.
- 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. Select **[OK]** and the menu will reappear.
- If the data is not obtained successfully, an error message will appear. Follow the "Preparation" procedure on the preceding page, then select **[OK]**. Take the picture again.



Dust Delete Data

After the Dust Delete Data is obtained, it is appended to all the JPEG and RAW images captured thereafter. Before an important shoot, it is recommended that you update the Dust Delete Data by obtaining it again.

For details about using Digital Photo Professional (EOS software) to erase dust spots automatically, refer to the Digital Photo Professional Instruction Manual.

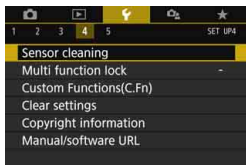
The Dust Delete Data appended to the image is so small that it hardly affects the image file size.

! Be sure to use a solid-white object such as a new sheet of white paper. If the object has any pattern or design, it may be recognized as dust data and affect the accuracy of the dust deletion with EOS software.

MENU Manual Sensor Cleaning [☆]

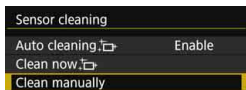
Dust that could not be removed by the automatic sensor cleaning can be removed manually with a commercially-available blower, etc. Before cleaning the sensor, detach the lens from the camera.

The image sensor is extremely delicate. If the sensor needs to be cleaned directly, having it done by a Canon Service Center is recommended.



1 Select [Sensor cleaning].

- Under the [4] tab, select [Sensor cleaning], then press <SET>.



2 Select [Clean manually].

- Select [Clean manually], then press <SET>.




3 Select [OK].


- Select [OK], then press <SET>.
- ▶ In a moment, the reflex mirror will lock up and the shutter will open.
- "CLn" will blink on the LCD panel.

4 Clean the sensor.

5 End the cleaning.

- Set the power switch to <OFF>.

 If you use a battery, make sure it is fully charged.

 Using the household power outlet accessories (sold separately, p.422) is recommended.

- When Multi Shot Noise Reduction is set, [**Clean manually**] cannot be selected.
- **While cleaning the sensor, never do any of the following. If the power is cut off, the shutter will close and the shutter curtains and image sensor may get damaged.**
 - **Setting the power switch to <OFF>.**
 - **Removing or inserting the battery.**
- The surface of the image sensor is extremely delicate. Clean the sensor with care.
- Use a plain blower without any brush attached. A brush can scratch the sensor.
- Do not insert the blower tip inside the camera beyond the lens mount. If the power is turned off, the shutter will close and the shutter curtains or reflex mirror may get damaged.
- Never use pressurized air or gas to clean the sensor. Pressurized air may damage the sensor, and sprayed gas may freeze on the sensor and scratch it.
- If the battery level becomes low while cleaning the sensor, the beeper will sound as a warning. Stop cleaning the sensor.
- If a smudge that cannot be removed with a blower remains, having the sensor cleaned by a Canon Service Center is recommended.

10

Image Playback

This chapter describes advanced usage of the playback methods described in Chapter 2 “Basic Shooting and Image Playback,” how to play back and erase the captured images (still photos/movies), how to view them on a TV screen, and other playback-related functions.

Images shot and saved with another device

The camera may not be able to properly display images captured with a different camera, edited with a computer, or that have had their file names changed.


Searching for Images Quickly

Display Multiple Images on One Screen (Index Display)

Search for images quickly with the index display showing 4, 9, 36, or 100 images on one screen.






1 Play back the image.

- When you press the  button, the last image captured will be displayed.










2 Switch to the index display.


- Press the  button.
- ▶ The 4-image index display will appear. The selected image is highlighted with an orange frame.
- Pressing the  button will switch the display as follows: 9 images → 36 images → 100 images.
- Pressing the  button will switch the display as follows: 100 images → 36 images → 9 images → 4 images → 1 image.

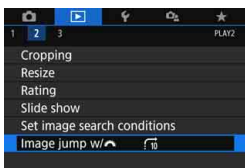


3 Select an image.


- Turn the  dial to move the orange frame and select the image. You can also press the   or   keys to select the image.
- Turning the  dial will display image(s) on the next or previous screen.
- Press  in the index display to display the selected image in the single-image display.

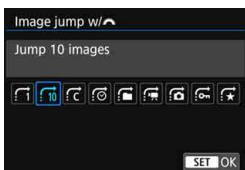
Jumping through Images (Jump Display)

In the single-image display, you can turn the < > dial to jump through the images forward or backward according to the jump method set.




1 Select [Image jump w/].


- Under the [▶2] tab, select [Image jump w/ ], then press <SET>.




2 Select the jump method.


- Turn the < > dial to select the jump method, then press <SET>.


 : Display images one by one


 : Jump 10 images

 : Jump images by the specified number

 : Display by date


 : Display by folder

 : Display movies only



 : Display stills only

 : Display protected images only

 : Display by image rating (p.353)

Turn the < > dial to select.



- With [Jump images by the specified number], you can turn the < > dial to select the number of images you want to jump (1 to 100).
- To search images by shooting date, select [Date].
- To search images by folder, select [Folder].
- If the card contains both movies and still photos, select [Movies] or [Stills] to display one or the other.
- If no images match the selected [Rating], you cannot browse through the images with the < > dial.



Jump method

Playback position

3 Browse by jumping.

- Press the <▶> button to play back images.
- In the single-image display, turn the <⚙> dial.
- ▶ You can browse by the set method.

🔍/🔍 Magnifying Images

You can magnify a captured image by approx. 1.5x to 10x on the LCD monitor.

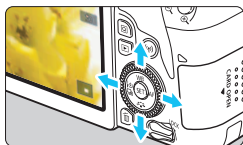


1 Magnify the image.

- Press the <🔍> button during image playback.
- ▶ The image will be magnified.
- If you hold down the <🔍> button, the image will be magnified until it reaches the maximum magnification.
- Press the <🔍> button to reduce the magnification. If you hold down the button, the magnification will be reduced to the single-image display.



Magnified area position



2 Scroll around the image.

- Press the <▲> <▼> or <◀> <▶> keys to scroll the magnified image in the direction pressed.
- To exit magnified view, press the <▶> button and the single-image display will reappear.



- Turn the <🌀> dial to view another image while maintaining the magnified view.
- A movie cannot be magnified.



Playing Back with the Touch Screen

The LCD monitor is a touch-sensitive panel that you can touch with your fingers for various playback operations. **First, press the <▶> button to play back images.**

Browsing Images



Swipe with one finger.

- With single-image display, touch the LCD monitor with **one finger**. You can browse to the next or previous image by swiping your finger to the left or right.

Swipe to the left to see the next (newer) image, or swipe to the right to see the previous (older) image.

- With index display, also touch the LCD monitor with **one finger**. You can browse to the next or previous screen by swiping your finger up or down.


Swipe up to see the next (newer) images or swipe down to see the previous (older) images.


When you select an image, the orange frame will appear. Tap on the image again to display it as a single image.

Jumping through Images (Jump Display)



Swipe with two fingers.

Touch the LCD monitor with **two fingers**. When you swipe two fingers to the left or right, you can jump through images with the method set in [Image jump w/ ] under the [▶2] tab.

 Touch operations on the camera's LCD monitor are also possible while playing back images on a TV set connected to your camera (p.369).

Reducing Image (Index Display)



Pinch two fingers.

Touch the screen with two fingers spread apart, and pinch your fingers together on the screen.

- Each time you pinch your fingers, the single-image display will change to the index display.
- When you select an image, the orange frame will appear. Tap on the image again to display it as a single image.

Magnifying Image



Spread two fingers apart.

Touch the screen with two fingers together, then spread your fingers apart on the screen.

- As you spread your fingers, the image will be magnified.
- The image can be magnified up to approx. 10x.

Double-tap.

- When you double-tap on the image with your finger, the recorded image's pixels will be displayed at approx. 100% centered around the point that you tapped on.
- To return to the single-image display, double-tap on the image again.



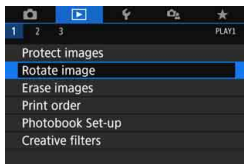
In the index display, you cannot magnify the image by double-tapping.





- You can scroll around the image by dragging your fingers.
- To reduce the image, pinch your fingers together on the screen.
- By tapping on [↶], you can return to the single-image display.

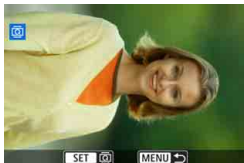
Rotating the Image

You can rotate the displayed image to the desired orientation.




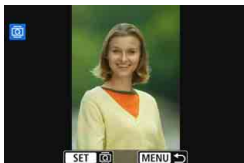
1 Select [Rotate image].

- Under the [ 1] tab, select [Rotate image], then press < >.










2 Select an image.

- Turn the < > dial to select the image to be rotated.
- You can also select an image in the index display (p.346).



3 Rotate the image.

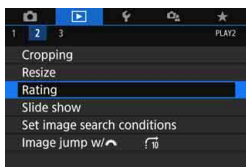
- Each time you press < >, the image will rotate clockwise as follows: 90° → 270° → 0°.
- To rotate another image, repeat steps 2 and 3.
- To exit and return to the menu, press the <MENU> button.

- If you set [ 1: Auto rotate] to [On  ] (p.334) before taking vertical shots, you need not rotate the image as described above.
- If the rotated image is not displayed in the rotated orientation during image playback, set [ 1: Auto rotate] to [On  ].
- A movie cannot be rotated.

MENU Setting Ratings

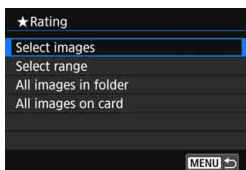
You can rate images (still photos and movies) with one of the five rating marks: [★]/[★] / [★★]/[★★] / [★★★]. This function is called rating.

Rating a Single Image



1 Select [Rating].

- Under the [▶] 2 tab, select [Rating], then press <SET>.



2 Select [Select images].

- An image is displayed.



3 Select the image to be rated.

- Turn the <DIAL> dial to select an image to be rated, then press <SET>.
- By pressing the <[Rating] Q> button, you can select images from a three-image display. To return to the single-image display, press the <Q> button.

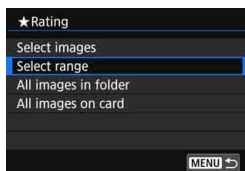


4 Rate the image.

- Press the <▲> <▼> keys to select a rating.
- When you append a rating mark for the image, the number beside the set rating will increase by one.
- To rate another image, repeat steps 3 and 4.

Specifying the Range

You can specify the range of images to rate all the images in the range at once.



1 Select [Select range].

- Select [**Select range**] in [**▶ 2: Rating**], then press <SET>.

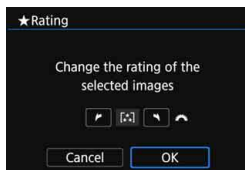


2 Specify the range of images.

- Select the first image, then press <SET>.
- Select the last image, then press <SET>.
- ▶ The [✓] icon will appear on the selected images.
- To cancel the selection, repeat this step.
- To return to the previous screen, press the <MENU> button.

3 Confirm the range.

- Press the <Q> button.

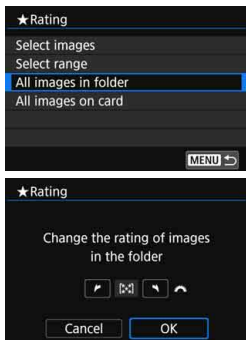


4 Rate the image.


- Turn the <DIAL> dial to select a rating mark, then select [**OK**].

Specifying All Images in a Folder or on a Card

You can rate 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 [**▶ 2: Rating**], all the images in the folder or on the card will be specified.

Turn the <  > dial to select a rating mark, then select [**OK**]. To cancel the rating, select the [**OFF**] rating mark.



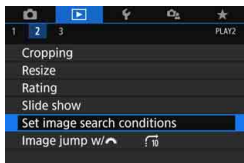
A total of up to 999 images of a given rating can be displayed. If there are 1000 or more images with a given rating, [###] will be displayed.

Taking Advantage of Ratings

- With [**▶ 2: Image jump w/ **], you can display only the images having a specific rating.
- Depending on the computer's operating system, you can see each file's rating as part of the file information display or in the provided, standard image viewer (JPEG images only).

MENU Setting Image Search Conditions

You can search for images by specifying the conditions and display the filtered images. You can also play back in a slide show, protect, or erase all the found images at once.



1 Select [Set image search conditions].

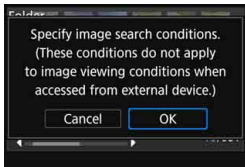
- Under the [2] tab, select [Set image search conditions], then press <SET>.



2 Set the search conditions.

- Press the <▲> <▼> keys to select the condition.
- Press the <◀> <▶> keys to set the setting.
- To cancel the condition, press the <INFO> button.
- You can even set all the conditions.
- To cancel all the conditions, press the <🗑> button.

Condition	Description
★ Rating	Images with the selected rating mark will be displayed.
🕒 Date	Images taken on the selected shooting date will be displayed.
📁 Folder	Images in the selected folder will be displayed.
🔒 Protect	“Protected” or “Unprotected” images on the card will be displayed.
📄 Type of file	Image files of the selected type will be displayed. The settable file types are [📷 Stills], [📷 (RAW)], [📷 (RAW, RAW+JPEG)], [📷 (RAW+JPEG)], [📷 (RAW+JPEG, JPEG)], [📷 (JPEG)], and [🎬 Movies].




3 Implement the search conditions.


- Press < **SET** >.
- ▶ Read the message that appears and select **[OK]**.















4 Display the found images.

- Press the < **▶** > button to play back images.
- ▶ Images that match the set conditions will appear in a yellow frame.


 If there are no images that match the condition, **[OK]** cannot be selected in step 2 even if you press < **SET** >. (You cannot proceed to step 3.)

-  ● Even if [**2: Auto power off**] is set to **[4 min.]** or less, the auto power off time will be approx. 6 min. when the search conditions screen is displayed.
- With the found images displayed, you can also perform operations (protect, erase, print order, photobook set-up, rating, and slide show) for all the found images at once.
 - The display of found images will be automatically canceled with the following operations:
 - Shooting is performed.
 - Auto power off takes effect.
 - Setting the power switch to < **OFF** >.
 - Formatting the SD card.
 - An image is added (e.g., an existing image is saved as a new image after applying a filter effect to it, resizing it, or cropping it).
 - When there are no longer any images matching the search conditions.

Quick Control for Playback


During playback, you can press the  button to set the following: [: **Protect images**], [: Rotate image], [: **Rating**], [: Creative filters], [: Resize (JPEG images only)], [: Cropping], [: **AF point display**], [: **Image jump w/ **], [: **Image search**], and [: **Send images to smartphone***].

For movies, **only the functions in bold above** can be set.

* Not selectable if [Wi-Fi] under [1: **Wireless communication settings**] is set to [Disable].












1 Press the button.


- During image playback, press the  button.
- ▶ The Quick Control options will appear.










2 Select an item and set it.

- Press the   keys to select a function.
- ▶ The name and setting of the selected function are displayed at the bottom of the screen.
- Press the   keys to set the function.
- For Protect images (p.372) and Rating (p.353), press  to select multiple images.
- For Creative filters (p.392), Resize (p.395), Cropping (p.397), Image search (p.356), and Send images to smartphone, press  and set the function.
- Image jump w/ : To set Jump images by the specified number or Rating (p.353), press .
- To cancel, press the .

3 Exit the setting.

- Press the  button to exit Quick Control.

 To rotate an image, set [**1: Auto rotate**] to [**On**  ]. If [**1: Auto rotate**] is set to [**On** ] or [**Off**], the [**Rotate image**] setting will be recorded to the image, but the camera will not rotate the image for display.

- 
- Pressing the <> button during the index display will switch to the single-image display, and the Quick Control screen will appear. Pressing the <> button again will return to the index display.
 - For images taken with another camera, the options you can select may be restricted.

Enjoying Movies

The three main ways to play back and enjoy movies are as follows:

Playback on a TV Set (p.369)



By connecting the camera to a TV set with an HDMI cable, you can play back the camera's movies and still photos on the TV set.

- ❗ Since hard disk recorders do not have an HDMI IN terminal, the camera cannot be connected to a hard disk recorder with an HDMI cable.
- Even if the camera is connected to a hard disk recorder with a USB cable, movies and still photos cannot be played back or saved.
- Movies cannot be played back on devices that do not support MOV-format or MP4-format movie files.

Playback on the Camera's LCD Monitor (p.362-368)



You can play back movies on the camera's LCD monitor. You can also edit out the movie's first and last scenes, and play back the still photos and movies on the card in an automatic slide show.

- ❗ A movie edited with a computer cannot be rewritten to the card and played back with the camera.

Playback and Editing with a Computer



The movie files recorded on the card can be transferred to a computer and played back or edited with pre-installed or general-purpose software compatible with the movie's recording format.



To play back or edit a movie with commercially-available software, use software compatible with MOV-format and MP4-format movies. For details on commercially-available software, contact the software manufacturer.

▶▶▶ Playing Back Movies



1 Play back the image.

- Press the <▶> button to display an image.

2 Select a movie.

- Turn the <◂> dial to select the movie to be played back.
- In the single-image display, the <SET ▶> icon displayed on the upper left indicates a movie. If the movie is a video snapshot, <SET ▶> will be displayed.
- In the index display, perforations at the left edge of a thumbnail indicate a movie. **As movies cannot be played back from the index display, press <SET> to switch to the single-image display.**



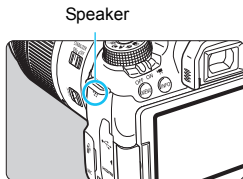
3 In the single-image display, press <SET>.

- ▶ The movie playback panel will appear at the bottom of the screen.






















4 Play back the movie.

- Select [▶] (Play), then press <SET>.
- ▶ The movie will start playing back.
- You can pause the playback by pressing <SET>.
- You can adjust the sound volume during movie playback by turning the <◂> dial.
- For more details on the playback procedure, see the next page.




⚠ The camera may not be able to play back movies shot with another camera.

Movie Playback Panel

Operation	Playback Description
 Play	Pressing <  > toggles between play and stop.
 Slow motion	Adjust the slow motion speed by pressing the <  > <  > keys. The slow motion speed is indicated on the upper right of the screen.
 First frame	Displays the movie's first frame.
 Previous frame	Displays the previous frame each time you press <  >. Holding <  > down will rewind the movie.
 Next frame	Plays the movie frame-by-frame each time you press <  >. Holding <  > down will fast forward the movie.
 Last frame	Displays the movie's last frame.
 Background music*	Plays back a movie with the selected background music (p.368).
 Edit	Displays the editing screen (p.364).
	Playback position
mm' ss"	Playback time (minutes:seconds)
 Volume	Turn the <  > dial to adjust the volume of the built-in speaker (p.362).
 MENU	Press the < MENU > button to return to the single-image display.

* When background music is set, the movie sound will not be played back.



- With a fully-charged Battery Pack LP-E17, the continuous playback time at room temperature (23°C/73°F) will be approx. 2 hr. 50 min.
- If you connect the camera to a TV set to play a movie (p.369), adjust the sound volume with the TV set. (Turning the <  > dial will not change the sound volume.)

Playback with the Touch Screen



Tap [▶] at the center of the screen.

- ▶ The movie will start playing back.
- To display the movie playback panel, tap <SET [▶]> on the upper left of the screen.
- To pause the movie while it is playing back, tap on the screen. The movie playback panel will also appear.

✂ 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 On the movie playback screen, select [✂].

- ▶ The movie editing panel will be displayed at the bottom of the screen.



2 Specify the part to be edited out.

- Select either [✂] (Cut beginning) or [▶] (Cut end), then press <SET>.
- Press the <◀> <▶> keys to see the previous or next frames. Keep holding down the key to fast forward or fast rewind the frames. Turn the <⌚> dial for frame-by-frame playback.
- After deciding which part to edit out, press <SET>. The portion highlighted in white on the top is what will remain.





3 Check the edited movie.

- Select [▶] and press <SET> to play back the edited movie.
- To change the edited part, go back to step 2.
- To cancel the editing, press the <MENU> button, then select [OK] on the confirmation dialog.



4 Save the edited movie.

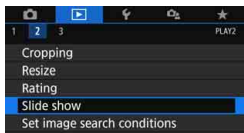
- Select [⏏], then press <SET>.
- ▶ The save screen will appear.
- To save it as a new movie, select [New file]. To save it and overwrite the original movie file, select [Overwrite], then press <SET>.
- On the confirmation dialog, select [OK], then press <SET> to save the edited movie and return to the movie playback screen.



- Since the editing is performed in approx. 1-sec. increments (position indicated by [✂] on the top of the screen), the actual position where the movie is edited may differ from the position you specified.
- If the card does not have enough free space, [New file] will not be available.
- When the battery level is low, movie editing is not possible. Use a fully-charged battery.
- Movies shot with another camera cannot be edited with this camera.

MENU Slide Show (Auto Playback)

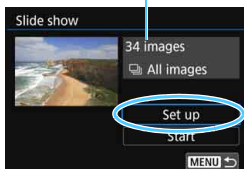
You can automatically play back all the images on the card one after another.



1 Select [Slide show].

- Under the [▶] 2 tab, select [Slide show], then press <SET>.

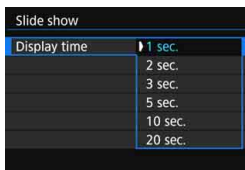
Number of images to be played back



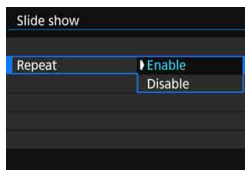
2 Configure [Set up] as desired.

- Press the <▲> <▼> keys to select [Set up], then press <SET>.
- Set the [Display time], [Repeat] (repeated playback), [Transition effect] (effect when changing images), and [Background music] for the still photos.
- See page 368 for the background music selection procedure.
- After completing the settings, press the <MENU> button.

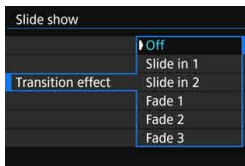
[Display time]



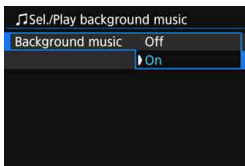
[Repeat]

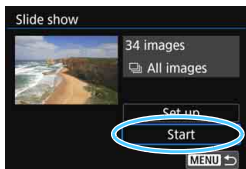


[Transition effect]



[Background music]





3 Start the slide show.

- Press the <▲> <▼> keys to select [**Start**], then press <SET>.
- ▶ After [**Loading image...**] is displayed, the slide show will start.

4 Exit the slide show.

- To exit the slide show and return to the setting screen, press the <MENU> button.



- To pause the slide show, press <SET>. During pause, [||] will be displayed on the upper left of the image. Press <SET> again to resume the slide show. You can also pause the slide show by tapping on the screen.
- During auto playback, you can press the <INFO> button to switch the still photo display format (p.121).
- During movie playback, you can adjust the sound volume by turning the <VOLUME> dial.
- During auto playback or pause, you can turn the <DISP> dial to view another image.
- During auto playback, auto power off will not take effect.
- The display time may differ depending on the image.
- To view the slide show on a TV set, see page 369.
- While viewing images in filtered playback with [▶]2: **Set image search conditions**], you can play them back in a slide show.

Selecting the Background Music

After you use EOS Utility (EOS software) to copy background music to the card, you can play background music together with the slide show.



1 Select [Background music].


- Set [Background music] to [On], then press <SET>.
- If the card has no background music, you cannot perform step 2.

2 Select the background music.

- Press the <▲> <▼> keys to select the desired background music, then press <SET>. You can also select multiple background music tracks.

3 Play the background music.

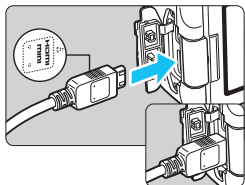
- To listen to a sample of the background music, press the <INFO> button.
- Press the <▲> <▼> keys to play another background music track. To stop listening to the background music, press the <INFO> button again.
- Adjust the sound volume by turning the <◀▶> dial.
- To delete a background music track, press the <▲> <▼> keys and select the track, then press the <🗑️> button.

 At the time of purchase, the camera does not have background music. For the procedure to copy background music to a card, refer to the EOS Utility Instruction Manual.

Viewing Images on a TV Set

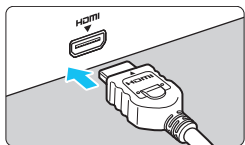
By connecting the camera to a TV set with an HDMI cable, you can play the camera's still photos and movies on the TV set. For the HDMI cable, HDMI Cable HTC-100 (sold separately) is recommended.

If the picture does not appear on the TV screen, check if the [**3: Video system**] is correctly set to [**For NTSC**] or [**For PAL**] (depending on the video system of your TV set).



1 Connect the HDMI cable to the camera.

- With the plug's <▲HDMI MINI> logo facing the front of the camera, insert it into the <HDMI OUT> terminal.

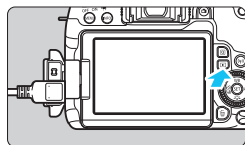


2 Connect the HDMI cable to the TV set.

- Connect the HDMI cable to the TV set's HDMI IN port.

3 Turn on the TV set and switch the TV set's video input to select the connected port.

4 Set the camera's power switch to <ON>.



5 Press the <▶> button.

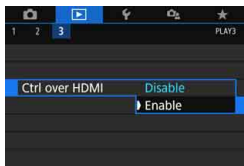
- ▶ The image will appear on the TV screen. (Nothing will be displayed on the camera's LCD monitor.)
- The images will automatically be displayed at the optimum resolution matching the connected TV set.
- By pressing the <INFO> button, you can change the display format.
- To play back movies, see page 362.

- Adjust movie sound volume with the TV set. The sound volume cannot be adjusted with the camera.
- Before connecting or disconnecting the cable between the camera and TV set, turn off the camera and TV set.
- Depending on the TV set, 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 TV sets may not display the images due to incompatibility.

MENU Using HDMI CEC TV Sets

If the TV set connected to the camera with an HDMI cable is compatible with HDMI CEC*, you can use the TV set's remote control for playback operations.

* An HDMI-standard function enabling HDMI devices to control each other so that you can control them with one remote control unit.








- 1 **Select [Ctrl over HDMI].**
 - Under the [▶3] tab, select [Ctrl over HDMI], then press <SET>.
- 2 **Select [Enable].**
- 3 **Connect the camera to a TV set.**
 - Use an HDMI cable to connect the camera to the TV set.
 - ▶ The TV set's input will switch automatically to the HDMI port connected to the camera. If it does not switch automatically, use the TV set's remote control to select the HDMI IN port the cable is connected to.
- 4 **Press the camera's <▶> button.**
 - ▶ An image will appear on the TV screen and you can use the TV set's remote control to play back images.

Still photo playback menu



Movie playback menu



-  : Return
-  : 9-image index
-  : Play movie
-  : Slide show
- INFO** : Display shooting info
-  : Rotate

5 Select an image.

- Point the remote control toward the TV set and press the ←/→ button to select an image.

6 Press the remote control's Enter button.

- ▶ The menu appears and you can perform the playback operations shown on the left.
- Press the remote control's ←/→ button to select the desired option, then press the Enter button.
- If you select [**Return**] and press the Enter button, the menu will disappear and you can use the ←/→ button to select an image.

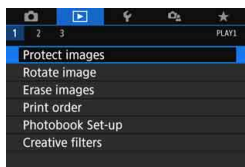


- Certain TV sets require you to first enable the HDMI CEC connection. For details, refer to the TV set's Instruction Manual.
- Certain TV sets, even those compatible with HDMI CEC, may not be able to be operated properly. In such a case, set [**▶3: Ctrl over HDMI**] to [**Disable**], and use the camera to control the playback operation.



Protecting Images

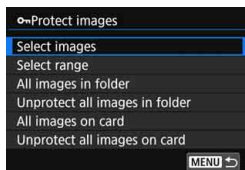
You can protect important images from being accidentally erased by the camera's erase function.

MENU Protecting a Single Image



1 Select [Protect images].

- Under the [ 1] tab, select [Protect images], then press < >.




2 Select [Select images].

- ▶ An image is displayed.





Image protection icon



3 Select the image to be protected.

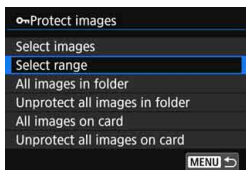
- Turn the < > dial to select the image to be protected.
- You can also select an image on the index display (p.346).

4 Protect the image.

- Press < > to protect the image. The < > icon will appear.
- To cancel the image protection, press < > again. The < > icon will disappear.
- To protect another image, repeat steps 3 and 4.

MENU Specifying the Range of Images to be Protected

You can specify the range of images to protect all the images in the range at once.



1 Select [Select range].

- Select [Select range] in [**1**]: Protect images], then press <SET>.

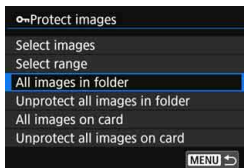


2 Specify the range of images.

- Select the first image, then press <SET>.
- Select the last image, then press <SET>.
- ▶ The images will be protected and the <On> icon will appear.
- To cancel the selection, repeat this step.
- To return to the previous screen, press the <MENU> button.

MENU 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 [▶] 1: **Protect images**, all the images in the folder or on the card will be protected. To cancel the image protection, select **[Unprotect all images in folder]** or **[Unprotect all images on card]**.

! If you format the card (p.74), the protected images will also be erased.

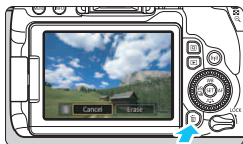
- Movies can also be protected.
- Once an image is protected, it cannot be erased by the camera's erase function. To erase a protected image, you must first cancel the protection.
- If you erase all the images (p.377), only the protected images will remain. This is convenient when you want to erase all unnecessary images at once.

Erasing Images


You can either select and erase unnecessary images one by one or erase them in one batch. Protected images (p.372) will not be erased.

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 an image shot in RAW+JPEG will erase both the RAW and JPEG images.

Erasing a Single Image




1 Play back the image to be erased.

2 Press the  button.


▶ The Erase menu will appear.

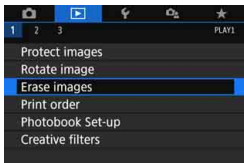
3 Erase the image.

- Select [Erase], then press . The image displayed will be erased.





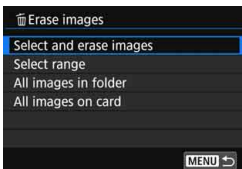
MENU Checkmarking Images to Be Erased in a Batch

By adding checkmarks  to the images to be erased, you can erase them all at once.



1 Select [Erase images].

- Under the [ 1] tab, select [Erase images], then press .



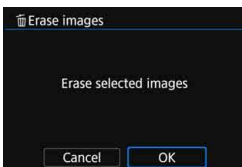
2 Select [Select and erase images].

- ▶ An image is displayed.



3 Select the images to be erased.

- Turn the <DIAL> dial to select the image to be erased, then press <SET>.
- ▶ A checkmark <✓> will be displayed on the upper left of the screen.
- By pressing the <CHECK/SEARCH> button, you can select images from a three-image display. To return to the single-image display, press the <SEARCH> button.
- To select another image to be erased, repeat step 3.

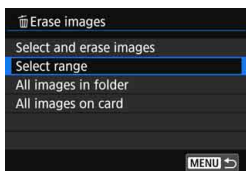


4 Erase the images.

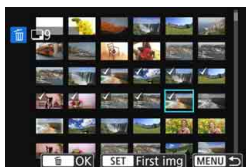
- Press the <ERASE> button.
- Select [OK], then press <SET>.
- ▶ The selected images will be erased.

MENU Specifying the Range of Images to be Erased

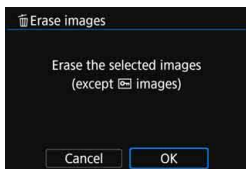
You can specify the range of images to erase all the images in the range at once.

**1** Select [Select range].

- Select [Select range] in [▶ 1: Erase images], then press <SET>.

**2** Specify the range of images.

- Select the first image, then press <SET>.
- Select the last image, then press <SET>.
- ▶ The [✓] icon will appear on the selected images.
- To cancel the selection, repeat this step.
- To return to the previous screen, press the <MENU> button.

**3** Erase the images.

- Press the <[img]> button.
- Select [OK] on the confirmation dialog, then press <SET>.
- ▶ The selected images will be erased.

MENU 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 [▶ 1: Erase images] is set to [All images in folder] or [All images on card], all the images in the folder or on the card will be erased.

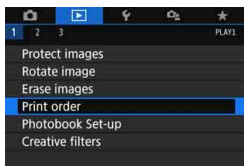
 To erase all images including protected images, format the card (p.74).

Digital Print Order Format (DPOF)



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.

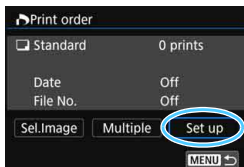
You can set the print settings such as print type, date imprinting, file number imprinting, etc. The print settings will be applied to all the images specified for printing. (They cannot be set individually for each image.)

MENU Setting the Printing Options





1 Select [Print order].


- Under the [ 1] tab, select [Print order], then press < >.



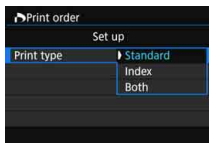
2 Select [Set up].

3 Set the options as desired.

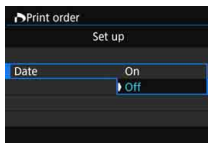
- Set the [Print type], [Date], and [File No.].
- Select the option to be set, then press < >. Select the desired setting, then press < >.

 You can send images to a Wi-Fi compatible printer supporting PictBridge (Wireless LAN) and print them. For details, refer to the Wi-Fi (Wireless Communication) Function Instruction Manual.

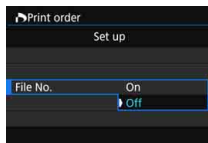
[Print type]



[Date]



[File No.]



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 number	On	[On] imprints the file number.	
	Off		

4 Exit the setting.

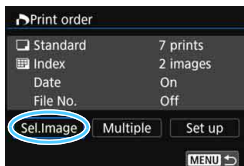
- Press the <MENU> button.
- ▶ The print order screen will reappear.
- Next, select [Sel. Image], [Multiple], or [All images] to order the images to be printed.



- RAW images and movies cannot be specified for printing.
- 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 model.
- 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. Refer to the printer's instruction manual before printing, or check with your photofinisher about compatibility when ordering prints.
- Do not specify a new print order for a card containing images that have a print order that was set by a different camera. All the print orders may be overwritten inadvertently. Also, the print order may not be possible, depending on the image type.

MENU Specifying Images for Printing

Selecting Images



Select and specify the images one by one.

By pressing the $\langle \text{Sel. Image} \rangle$ button, you can select images from a three-image display. To return to the single-image display, press the $\langle \text{Single Image} \rangle$ button. Press the $\langle \text{MENU} \rangle$ button to save the print order to the card.



[Standard] [Both]

Press the $\langle \blacktriangle \rangle$ $\langle \blacktriangledown \rangle$ keys to set the number of copies to be printed for the displayed image.

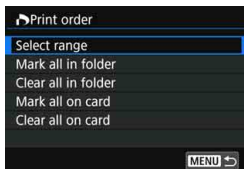


[Index]

Press $\langle \text{SET} \rangle$ to add a checkmark to the box $[\checkmark]$. The image will be included in the index print.

Selecting Multiple Images

Select Range



1 Select [Select range].

- Select **[Select range]** in **[Multiple]**, then press $\langle \text{SET} \rangle$.



2 Specify the range of images.

- Select the first image, then press <SET>.
- Select the last image, then press <SET>.
- ▶ The [✓] icon will appear on the selected images.
One copy of all the specified images will be set for printing.
- To cancel the selection, repeat this step.
- To return to the previous screen, press the <MENU> button.

• 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.

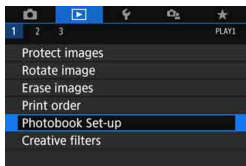


- Note that RAW images or movies will not be specified for printing even if you specify all images at once with [**Multiple**].
- When using a PictBridge-compatible printer, do not specify more than 400 images for one print order. If you specify more than this, the images may not all be printed.



Specifying Images for a Photobook

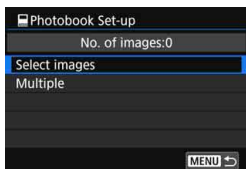
You can specify up to 998 images to be printed in a photobook. When you use EOS Utility (EOS software) to transfer images to a computer, the specified images will be copied to a dedicated folder. This function is useful for ordering photobooks online.

MENU Specifying One Image at a Time



1 Select [Photobook Set-up].

- Under the [] 1 tab, select [Photobook Set-up], then press < >.








2 Select [Select images].

- ▶ An image is displayed.

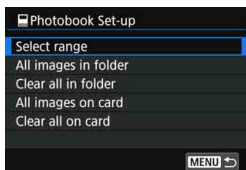


3 Select the image to be specified.

- Turn the < > dial to select the image to be specified, then press < >.
- Repeat this step to select another image. The number of images that have been specified will be displayed on the upper left of the screen.
- To display the three-image display, press the < > button. To return to the single-image display, press the < > button.
- To cancel the image specification, press < > again.

MENU Specifying the Range

You can specify the range of images to select all the images in the range at once.



1 Select [Select range].

- In [Multiple] under [▶ 1: Photobook Set-up], select [Select range], then press <SET>.

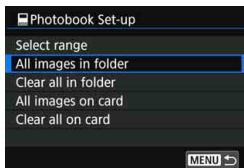


2 Specify the range of images.

- Select the first image, then press <SET>.
- Select the last image, then press <SET>.
- ▶ The [✓] icon will appear on the selected images.
- To cancel the selection, repeat this step.
- To return to the previous screen, press the <MENU> button.

MENU Specifying All Images in a Folder or on a Card

You can also specify all the images in a folder or on a card at once.



When **[Multiple]** under **[▶ 1: Photobook Set-up]** is set to **[All images in folder]** or **[All images on card]**, all the images in the folder or on the card will be specified.

To clear your selections, select **[Clear all in folder]** or **[Clear all on card]**.

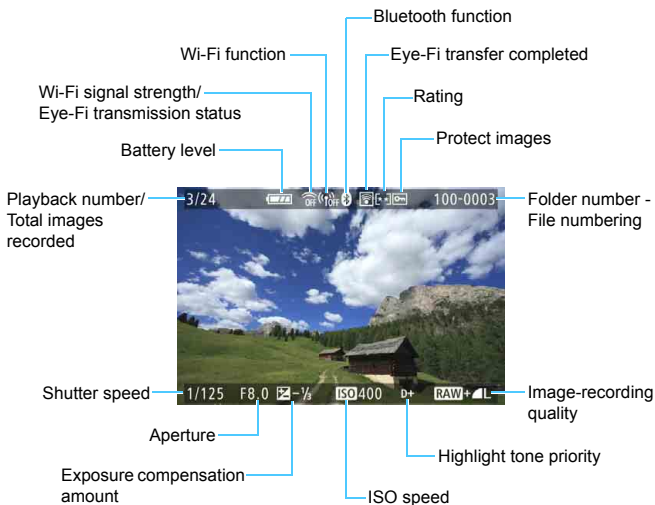
- RAW images and movies cannot be specified.
- Do not specify images already specified for a photobook in another camera for another photobook with this camera. All the photobook settings may be overwritten inadvertently.

INFO: Shooting Information Display

The information displayed varies depending on the shooting mode and settings.

Sample Information for Still Photos

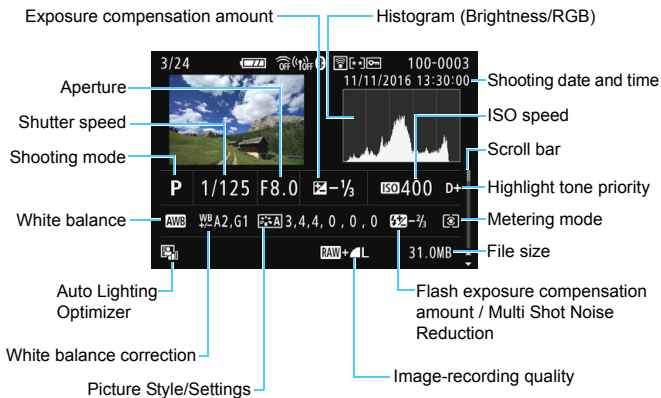
● Basic information display



- 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.

● **Shooting information display**

● **Detailed information**



* When you shoot in the **RAW + L** image-recording quality, the **RAW** file size will be displayed.

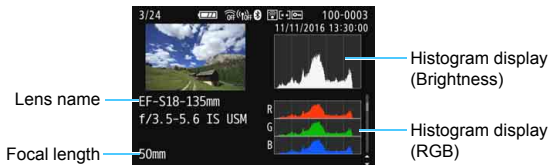
* During flash photography without flash exposure compensation, **<f>** will be displayed.

* **<NR>** will be displayed for images shot with Multi Shot Noise Reduction.

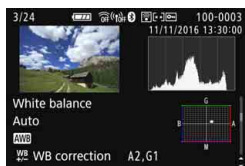
* **<C>** will be displayed for images shot with the Creative filter function and for images edited (resized or Creative filter applied) and then saved.

* For images cropped and then saved, **<C>** and **<T>** will be displayed.

- **Lens / Histogram information**



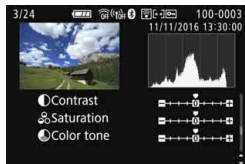
- **White balance information**



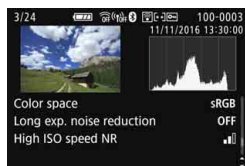
- **Picture Style information 1**



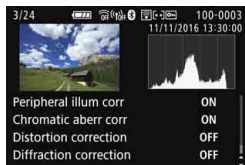
- **Picture Style information 2**



- **Color space / Noise reduction information**

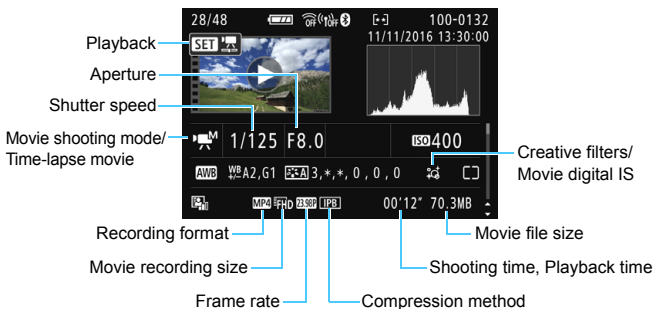


- **Lens aberration correction information**




If you used GPS Receiver GP-E2 to record GPS information for the image, the "GPS information" screen will also appear.

Sample Movie Information Display




* If manual exposure is used, the shutter speed, aperture, and ISO speed (when set manually) will be displayed.

* The  icon will be displayed for video snapshots.

 During movie playback, “* , *” will be displayed for [Fineness] and [Threshold] of [Picture Style]’s [Sharpness].

● AF Point Display

When [ 3: AF point disp.] is set to [Enable], the AF point that achieved focus will be displayed in red. If automatic AF point selection is set, multiple AF points may be displayed at the same time.

● Highlight Alert

When the shooting information is displayed, overexposed and clipped highlights will blink. To obtain a better result for the blinking areas where you want the gradation to be faithfully reproduced, set the exposure compensation to a negative amount and shoot again.

● Histogram

The brightness histogram shows the exposure level distribution and overall brightness. The RGB histogram is for checking the color saturation and gradation. The display can be switched with [▶]3: **Histogram disp**].

[Brightness] Display

This histogram is a graph showing the distribution of the image's brightness level. The horizontal axis indicates the brightness level (darker on the left and brighter on the right), while the vertical axis indicates how many pixels exist for each brightness level. The more pixels there are toward the left, the darker the image. The more pixels there are toward the right, the brighter the image. If there are too many pixels on the left, the shadow detail will be lost. If there are too many pixels on the right, the highlight detail 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). The horizontal axis indicates the color's brightness level (darker on the left and brighter on the right), while the vertical axis indicates how many pixels exist for each color brightness level. The more pixels there are toward the left, the darker and less prominent the color. The more pixels there are toward the right, the brighter and denser the color. If there are too many pixels on the left, the respective color information will be lacking. If there are too many pixels on the right, the color will be too saturated with no gradation. By checking the image's RGB histogram, you can see the color's saturation and gradation condition, as well as white balance inclination.



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Post-Processing Images

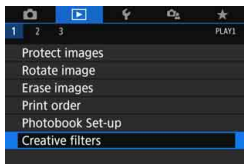
After taking a picture, you can apply a filter effect, resize the JPEG image (reduce the pixel count), or crop the JPEG image.



- The camera may not be able to process images taken with another camera.
- Post-processing of images as described in this chapter cannot be performed when the camera is connected to a computer with an interface cable.

Applying Creative Filter Effects

You can apply the following Creative filters to an image and save it as a new image: Grainy B/W, Soft focus, Fish-eye effect, Art bold effect, Water painting effect, Toy camera effect, and Miniature effect.



1 Select [Creative filters].

- Under the [**1**] tab, select [Creative filters], then press <SET>.
- ▶ An image will be displayed.



2 Select an image.

- Select the image you want to apply a filter to.
- By pressing the <[grid icon]> button, you can switch to the index display and select an image.



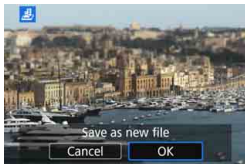
3 Select a filter effect.

- When you press <SET>, the types of Creative filters will be displayed (p.393).
- Select a filter, then press <SET>.
- ▶ The image will be displayed with the effects of the filter applied.



4 Adjust the filter effect.

- Adjust the filter effect, then press <SET>.
- For the Miniature effect, press the <▲> <▼> keys to move the white frame to where you want the image to look sharp, then press <SET>.



5 Save the image.

- Select **[OK]** to save the image.
- Check the destination folder and image file number, then select **[OK]**.
- To apply a filter to another image, repeat steps 2 to 5.



- When shooting **RAW + L** or **RAW** image, the Creative filter will be applied to the **RAW** image and the image will be saved as a JPEG image.
- If an aspect ratio was set for a **RAW** image and the filter effect is applied to it, the image will be saved in the aspect ratio that is set.
- Dust Delete Data (p.341) will not be appended to images with Fish-eye effect applied.

Creative Filter Characteristics

● **Grainy B/W**

Creates a grainy black-and-white photo. You can change the black-and-white effect by adjusting the contrast.

● **Soft focus**

Gives the image a soft look. You can change the degree of softness by adjusting the blur.

● **Fish-eye effect**

Gives the effect of a fish-eye lens. The image will have a barrel-type distortion.

Depending on the level of this filter effect, the area trimmed along the periphery of the image changes. Also, since this filter effect will magnify the image center, the apparent resolution at the center may degrade depending on the number of recorded pixels. Set the filter effect in step 4 while checking the resulting image.

- **🎨 Art bold effect**

Makes the photo look like an oil painting and the subject look more three-dimensional. You can adjust the contrast and saturation. Note that subjects such as the sky or white walls may not be rendered with a smooth gradation and may look irregular or have significant noise.

- **🎨 Water painting effect**

Makes the photo look like a watercolor painting with soft colors. You can control the color density by adjusting the filter effect. Note that night scenes or dark scenes may not be rendered with a smooth gradation and may look irregular or have significant noise.

- **📷 Toy camera effect**

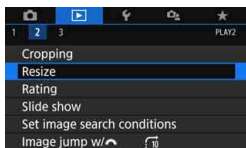
Darkens the photo's corners and applies a unique color tone that makes it look as if it was shot by a toy camera. You can change the color cast by adjusting the color tone.

- **🏠 Miniature effect**

Creates a diorama effect. You can change where the image looks sharp. In step 4, if you press the <INFO> button (or tap on [📄] on the screen), you can switch between the white frame's vertical and horizontal orientations.

Resizing JPEG Images

You can resize a JPEG image to make the pixel count lower and save it as a new image. Resizing an image is possible only with JPEG **L**, **M**, and **S1** images. **JPEG S2 and RAW images cannot be resized.**



1 Select [Resize].

- Under the [**▶**2] tab, select [**Resize**], then press < **SET** >.
- ▶ An image will be displayed.



2 Select an image.

- Select the image you want to resize.
- By pressing the < **Q** > button, you can switch to the index display and select an image.



Target sizes

3 Select the desired image size.

- Press < **SET** > to display the image sizes.
- Select the desired image size, then press < **SET** >.



4 Save the image.

- 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.

Resize Options by Original Image Quality

Original Image Quality	Available Resize Settings		
	M	S1	S2
L	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
M	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
S1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Image Sizes

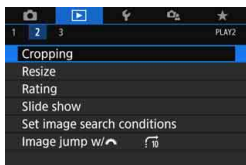
The image sizes by aspect ratios are shown in the table below.

Image Quality	Aspect Ratio and Pixel Count (Approx.)			
	3:2	4:3	16:9	1:1
M	3984x2656 (10.6 megapixels)	3552x2664 (9.5 megapixels)	3984x2240* (8.9 megapixels)	2656x2656 (7.1 megapixels)
S1	2976x1984 (5.9 megapixels)	2656x1992 (5.3 megapixels)	2976x1680* (5.0 megapixels)	1984x1984 (3.9 megapixels)
S2	2400x1600 (3.8 megapixels)	2112x1600* (3.4 megapixels)	2400x1344* (3.2 megapixels)	1600x1600 (2.6 megapixels)

- The actual aspect ratio of images in the sizes marked with an asterisk will differ from the aspect ratio indicated.
- The image may be cropped slightly depending on the resizing conditions.

🔲 Cropping JPEG Images

You can crop a captured JPEG image and save it as another image. **Images shot in RAW cannot be cropped.** JPEG images shot with **RAW** + **L** can be cropped.



1 Select [Cropping].

- Under the [▶] 2 tab, select [Cropping], then press <SET>.
- ▶ An image will be displayed.



2 Select an image.

- Select the image you want to crop.
- By pressing the <[Crop Icon]> button, you can switch to the index display and select an image.



3 Set the cropping frame size, aspect ratio, position, and tilt correction.

- Press <SET> to display the cropping frame.
- ▶ The image area within the cropping frame will be cropped.

Changing the Cropping Frame Size

- Press the <Q> or <[Crop Icon]> button.
- ▶ The cropping frame size will change. The smaller the cropping frame, the more magnified the cropped image will look.

Changing the Cropping Frame Aspect Ratio

- Turn the <[Dial]> dial.
- ▶ Cropping frame aspect ratio will change to [3:2], [16:9], [4:3], or [1:1].
- ▶ The aspect ratio will change as you turn the <[Dial]> dial. This also enables you to crop the image shot in horizontal orientation to look as if it was shot in vertical orientation.

Moving the Cropping Frame

- Press the <▲> <▼> or <◀> <▶> keys.
- ▶ The cropping frame will move up, down, left, or right.
- You can also touch the cropping frame and drag it to the desired position.

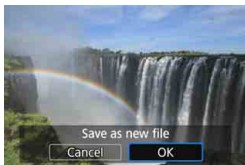
Correcting the Tilt

- Press the <INFO> button.
- ▶ Check the tilt with the displayed grid, then turn the <☉> dial to correct the tilt. You can correct the tilt up to $\pm 10^\circ$ in 0.1° increments.
- ▶ If you tap on [←] or [→] on the upper left of the screen, the tilt will be corrected in 0.5° increments.
- Press <SET>.



4 Display the cropped image in the full view.

- Press the <Q> button.
- ▶ You can see the cropped image.
- To return to the original display, press the <Q> button again.



5 Save the cropped image.

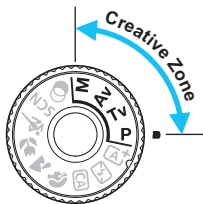
- Press <SET>, then select [OK] to save the cropped image.
- Check the destination folder and image file number, then select [OK].
- To crop another image, repeat steps 2 to 5.

- 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. In addition, you cannot resize it or apply a Creative filter.
- AF point display information (p.388) and Dust Delete Data (p.341) will not be appended to the cropped images.

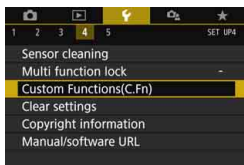
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Customizing the Camera

You can make fine adjustments to various camera functions to suit your picture-taking preferences with Custom Functions. Custom Functions can be set and work only in Creative Zone modes.



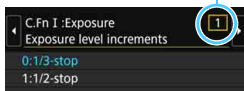
MENU Setting Custom Functions ☆



1 Select [Custom Functions(C.Fn)].

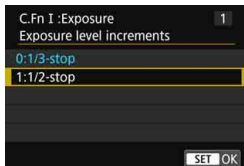
- Under the [4] tab, select [Custom Functions(C.Fn)], then press <SET>.

Custom Function number



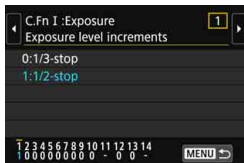
2 Select the Custom Function number.

- Press the <◀> <▶> keys to select the Custom Function number, then press <SET>.



3 Change the setting as desired.

- Press the <▲> <▼> keys to select the desired setting (number), then press <SET>.
- Repeat steps 2 to 3 if you want to set other Custom Functions.
- At the bottom of the screen, the current Custom Function settings are indicated below the respective function numbers.



4 Exit the setting.

- Press the <MENU> button.
- ▶ The screen in step 1 will reappear.

Clearing All Custom Functions

Under [4: Clear settings], select [Clear all Custom Func. (C.Fn)] to clear all the Custom Function settings (p.335).

Even if you clear all the Custom Function settings, the settings for [14: Custom Controls] under [4: Custom Functions(C.Fn)] will remain unchanged.

Custom Functions

C.Fn I: Exposure

			LV Shooting	Movie Shooting
1	Exposure level increments	p.402	<input type="radio"/>	<input type="radio"/>
2	ISO expansion		<input type="radio"/>	<input type="radio"/>
3	Exposure compensation auto cancel		<input type="radio"/>	<input type="radio"/>

C.Fn II: Image


4	Highlight tone priority	p.403	<input type="radio"/>	<input type="radio"/>
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C.Fn III: Autofocus/Drive

5	AF-assist beam firing	p.404	<input type="radio"/> *	
6	AF area selection method			
7	Auto AF point selection: Color Tracking	p.405		
8	AF point display during focus			
9	Viewfinder display illumination	p.406		
10	Mirror lockup			

* When an EX-series Speedlite (sold separately) equipped with an LED light is used.

C.Fn IV: Operation/Others

11	Warnings  in viewfinder	p.407		
12	LCD display when power ON			
13	Retract lens on power off	p.408	<input type="radio"/>	<input type="radio"/>
14	Custom Controls		Depends on setting	



Shaded Custom Functions do not function during Live View (LV) shooting or movie shooting. (Settings are disabled.)

MENU Custom Function Setting Items ☆

Custom Functions are organized into four groups based on the function type: C.Fn I: Exposure, C.Fn II: Image, C.Fn III: Autofocus/Drive, C.Fn IV: Operation/Others.


C.Fn I: Exposure

C.Fn-1 Exposure level increments

0: 1/3-stop

1: 1/2-stop

Sets 1/2-stop increments for the shutter speed, aperture, exposure compensation, AEB, flash exposure compensation, etc. This is effective when you prefer to control the exposure in less fine increments than 1/3-stop increments.

 With setting 1, the exposure level will be displayed as shown below.



C.Fn-2 ISO expansion

0: Off

1: On

When you set the ISO speed, you can set “H” (equivalent to ISO 51200) for still photos and “H” (equivalent to ISO 25600) for movies. Note that if [C.Fn-4: Highlight tone priority] is set to [1:Enable], “H” cannot be selected.

C.Fn-3 Exposure compensation auto cancel

0: Enable

When you set the power switch to <OFF>, the exposure compensation setting will be canceled.

1: Disable

The exposure compensation setting will remain in effect even if you set the power switch to <OFF>.

C.Fn II: Image

C.Fn-4 Highlight tone priority

0: **Disable**

1: **Enable**

Highlight details are improved. The dynamic range is expanded from the standard 18% gray to bright highlights. The gradation between the grays and highlights becomes smoother.



- With setting 1, the Auto Lighting Optimizer (p.175) is automatically set to **[Disable]** and the setting cannot be changed.
- With setting 1, noise (grainy image, banding, etc.) may become slightly more noticeable than with setting 0.



With setting 1, the settable ISO speed range will be ISO 200 - ISO 25600 (up to ISO 12800 for movies).

Also, the <D+> icon will be displayed in the viewfinder and on the LCD panel to indicate that highlight tone priority is enabled.

C.Fn III: Autofocus/Drive

C.Fn-5 AF-assist beam firing

Enables or disables the built-in flash's AF-assist beam or the EOS-dedicated external Speedlite's AF-assist beam.

0: Enable

The AF-assist beam will be emitted when necessary.

1: Disable

The AF-assist beam will not be emitted. This prevents the AF-assist beam from disturbing others.


2: Enable external flash only

If an external Speedlite is attached, it will emit the AF-assist beam when necessary. The camera's built-in flash will not fire the AF-assist beam.

3: IR AF assist beam only

When an external Speedlite is attached, only the infrared AF-assist beam will be emitted. Set this when you do not want the camera to fire the AF-assist beam as a burst of small flashes.




With an EX-series Speedlite equipped with an LED light, the LED light will not automatically turn on as the AF-assist beam.


 If an external Speedlite's **[AF-assist beam firing]** Custom Function is set to **[1:Disable]**, this function's setting will be overridden and the AF-assist beam will not be emitted.

C.Fn-6 AF area selection method




You can set the method for changing the AF area selection mode.

0:  → AF area selection button

After you press the  or  button, each time you press the  button, the AF area selection mode changes.

1:  → Main Dial

After you press the  or  button, turning the  dial changes the AF area selection mode.

 With setting 1, press the   keys to move the AF point horizontally.

C.Fn-7 Auto AF point selection: Color Tracking

Use this function to autofocus by recognizing colors equivalent to skin tones. This function works when the AF area selection mode is set to Zone AF (manual selection of zone), Large Zone AF (manual selection of zone), or Automatic selection AF.

0: Enable

The camera selects AF points automatically based on AF information and information on colors equivalent to skin tones.

In One-Shot AF mode, focusing on a still human subject in the AF area is made easier.

In AI Servo AF mode, focusing on a human subject in the AF area is made easier. If no skin tones can be detected, the nearest subject will be focused on. Once focus is achieved, AF points are automatically selected so that the camera continues to focus on the color of the area it focused on first.

1: Disable

AF points are automatically selected based only on AF information.



- With setting [0:Enable], focusing will take slightly longer than with setting [1:Disable].
- Even with setting [0:Enable], the expected result may not be obtained depending on the shooting conditions and subject.
- Under light so low that the flash emits the AF-assist beam automatically, AF points are selected automatically based only on AF information. (The AF will not use information on colors equivalent to skin tones.)

C.Fn-8 AF point display during focus

You can set whether or not to display the AF point(s) in the following cases: 1. when selecting the AF point(s), 2. when the camera is ready to shoot (before AF operation), 3. during AF operation, and 4. when focus is achieved.

0: Selected (constant)

The selected AF point(s) is always displayed.

1: All (constant)

All the AF points are always displayed.

2: Selected (pre-AF,focused)

The selected AF point(s) is displayed for 1, 2, and 4.

3: Selected AF pt (focused)

The selected AF point(s) is displayed for 1 and 4.

4: Disable display

For 2, 3, and 4, the selected AF point(s) will not be displayed.



With setting 2 or 3, the AF point will not be displayed even when focus is achieved with AI Servo AF.

C.Fn-9 Viewfinder display illumination

You can set whether the AF points in the viewfinder will light up in red when focus is achieved.

0: Auto


The AF points automatically light up in red under low light.





1: Enable

The AF points light up in red regardless of the ambient light level.

2: Disable

The AF points do not light up in red.

 When AI Servo AF is set, the AF points will not light up in red even when focus is achieved.

- 
- When you press the  or  button, the AF points will be illuminated in red regardless of this setting.
 - The aspect ratio lines (p.156), and the electronic level, grid, and flicker detection set with [ 2: Viewfinder display] will also light up in red.

C.Fn-10 Mirror lockup



0: Disable



1: Enable

You can prevent the camera vibration blur due to the mechanical vibrations (mirror shock) inside the camera during shooting with super telephoto lenses or shooting close-ups (macro photography). See page 209 for the mirror lockup procedure.

C.Fn IV: Operation/Others

C.Fn-11 Warnings in viewfinder

When any of the following functions are set, the  icon can be displayed on the viewfinder's bottom left (p.34). The  icon will also appear on the Quick Control screen (p.58).

Select the function for which you want the warning icon to appear, press  to add a checkmark , then select **[OK]**.


When monochrome is set:

If the Picture Style is set to **[Monochrome]** (p.162), the warning icon will appear.


When WB is corrected:

If white balance correction is set (p.173), the warning icon will appear.

When is set:

If **[ 4: High ISO speed NR]** is set to **[Multi Shot Noise Reduction]** (p.176), the warning icon will appear.



When **[ : Shooting screen]** is set to **[Guided]**, this Custom Function does not function. (Settings are disabled.)

C.Fn-12 LCD display when power ON

0: Display on

When you turn on the power, the Quick Control screen will appear (p.58).

1: Previous display status

When you turn on the power, the camera will start with the LCD monitor display in the state it was in when the power was last turned off. Therefore, if you turn off the camera when the LCD monitor is off, nothing will be displayed when you turn on the camera again. This helps to save battery power. The menu operations and image playback will be available as usual.

C.Fn-13 Retract lens on power off

This is the setting for the lens retraction mechanism when a gear-driven STM lens (such as EF40mm f/2.8 STM) is attached to the camera. You can set it to retract the extended lens automatically when the camera's power switch is set to <OFF>.

0: Enable

1: Disable



- With auto power off, the lens will not retract regardless of the setting.
- Before detaching the lens, make sure that it is retracted.



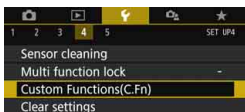
With setting 0, this function takes effect regardless of the lens's focus mode switch setting (AF or MF).

C.Fn-14 Custom Controls

You can assign frequently-used functions to camera buttons or dials according to your preferences. For details, see page 409.

Custom Controls [☆]

You can assign frequently-used functions to camera buttons or dials according to your preferences for easy operations.



1 Select [Custom Functions(C.Fn)].

- Under the [**4**] tab, select [**Custom Functions(C.Fn)**], then press <SET>.



2 Select [14: Custom Controls].

- ▶ The Custom Controls setting screen will appear.



3 Select a camera button or dial.

- Select a camera button or dial, then press <SET>.
- ▶ The name of the camera control and the assignable functions will be displayed.
- ▶ The diagram on the left will show the location of the selected button or dial.



4 Assign a function.













- Select a function, then press <SET>.

5 Exit the setting.

- When you press <SET> to exit the setting, the screen in step 3 will reappear.
- Press the <MENU> button to exit.

With the screen in step 3 displayed, you can press the <MENU> button to revert the Custom Control settings to their defaults. Note that the [14: Custom Controls] settings will remain unchanged even if you select [Clear all Custom Func. (C.Fn)] under [4: Clear settings].

Assignable Functions to Camera Controls

Function		Page			
AF	 AF	Metering and AF start	410	<input type="radio"/>	<input type="radio"/>
	AF-OFF	AF stop		<input type="radio"/>	<input type="radio"/>
Exposure		Metering start	411	<input type="radio"/>	<input type="radio"/>
	 AEL FEL	AE lock/FE lock		<input type="radio"/>	<input type="radio"/>
		AE lock		<input type="radio"/>	<input type="radio"/>
		AE lock (while button pressed)		<input type="radio"/>	<input type="radio"/>
	FEL	FE lock		<input type="radio"/>	<input type="radio"/>
	 ±	Exposure compensation (hold button, turn )			
Flash		Flash exposure compensation	412	<input type="radio"/>	<input type="radio"/>
		Flash function settings		<input type="radio"/>	<input type="radio"/>
Images		Image quality	412	<input type="radio"/>	<input type="radio"/>
Operation	MENU	Menu display	412	<input type="radio"/>	<input type="radio"/>
	OFF	No function (disabled)		<input type="radio"/>	<input type="radio"/>

AF: Metering and AF start



When you press the button assigned to this function, metering and AF are performed.

AF-OFF: AF stop

The AF will stop while you hold down the button assigned to this function. Useful when you want to stop the AF during AI Servo AF.

: Metering start

When you press the shutter button halfway, exposure metering is performed. (AF is not performed.)

	
<input type="radio"/>	
<input type="radio"/>	
<input type="radio"/>	
<input type="radio"/>	
<input type="radio"/>	
	<input type="radio"/>
	<input type="radio"/>
	<input type="radio"/>
	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>

AEL : AE lock/FE lock**Normal shooting (No flash)**

When you press the button assigned to this function, you can lock the exposure (AE lock) while the metering timer is active. Useful when you want to set the focus and exposure separately or take multiple shots at the same exposure setting.

With flash

For flash photography, pressing the button assigned to this function will fire a preflash and record the required flash output (FE lock).

*** : AE lock**

When you press the button assigned to this function, you can lock the exposure (AE lock) while the metering timer is active. Useful when you want to set the focus and exposure separately.



*** : AE lock (while button pressed)**

The exposure will be locked (AE lock) while you hold down the shutter button.


FEL: FE lock

For flash photography, pressing the button assigned to this function will fire a preflash and record the required flash output (FE lock).


  : Exposure compensation (hold button, turn )

You can set the exposure compensation by turning the  dial while holding down . Useful when you want to set exposure compensation in **<M>** manual exposure with ISO Auto set.


: **Flash exposure compensation**

Press <  > to display the exposure compensation setting screen (p.218) for the attached (built-in or external) flash unit on the LCD monitor.


: **Flash function settings**

Press <  > to display the flash function setting screen (p.225) on the LCD monitor.

: **Image quality**

Press <  > to display the image-recording quality setting screen (p.152) on the LCD monitor.

MENU: Menu display

Press <  > to display the menu on the LCD monitor.

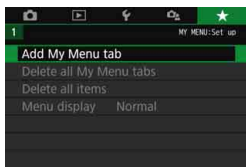
OFF: No function (disabled)

Use this setting when you do not want to assign any function to the button.

MENU Registering My Menu ☆

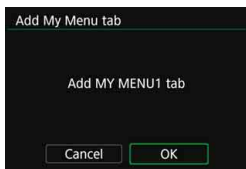
Under My Menu tab, you can register menu items and Custom Functions whose settings you change frequently. You can also name the registered menu tabs, and press the <MENU> button to display the My Menu tab first.

Creating and Adding My Menu Tab



1 Select [Add My Menu tab].

- Under the [★] tab, select [Add My Menu tab], then press <SET>.



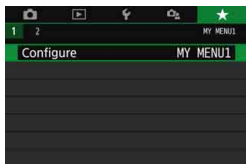
2 Select [OK].

- The [MY MENU1] tab is created.
- You can create up to five menu tabs by repeating steps 1 and 2.



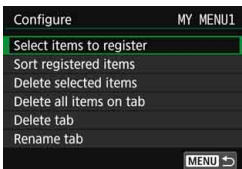
When [🔧: Menu display] is set to [Guided], the [★] tab will not be displayed. Change the [Menu display] to [Standard] (p.61).

Registering Menu Items under the My Menu Tab(s)

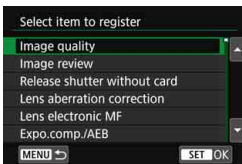


1 Select [Configure: MY MENU*].

- Press the <◀> <▶> keys to select [Configure: MY MENU*] (tab for registering menu items), then press <SET>.



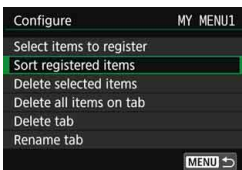
2 Select [Select items to register].



3 Register the desired items.

- Select the desired item, then press $\langle \text{SET} \rangle$.
- Select **[OK]** on the confirmation dialog.
- You can register up to six items.
- To return to the screen in step 2, press the $\langle \text{MENU} \rangle$ button.

My Menu Tab Settings



You can sort and delete items under the menu tab, and rename or delete the menu tab.

• Sort registered items

You can change the order of the registered items in My Menu. Select **[Sort registered items]** and select the item whose order you want to change. Then press $\langle \text{SET} \rangle$. With $[\blacklozenge]$ displayed, press the $\langle \blacktriangle \rangle$ $\langle \blacktriangledown \rangle$ keys to change the order, then press $\langle \text{SET} \rangle$.

• 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 under the tab.

● Delete tab

You can delete the My Menu tab currently displayed. 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.

- Press the <☒> button to delete any unnecessary characters.
- Press the <▲> <▼> or <◀> <▶> keys to move the and select the desired character. Then press <SET> to enter it.
- By selecting [**Aa=1@**], you can change the input mode.
- You can enter up to 16 characters.
- To cancel the text entry, press the <INFO> button, then select [**OK**].

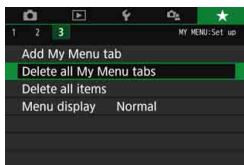
3 Exit the setting.

- After entering the text, press the <MENU> button, then select [**OK**].
- ▶ The set name is saved.



If you cannot enter text in step 2, press the <Q> button and use the character palette when the blue frame appears.

Deleting All My Menu Tabs / Deleting All Items



You can delete all the created My Menu tabs or My Menu items registered under them.

- **Delete all My Menu tabs**

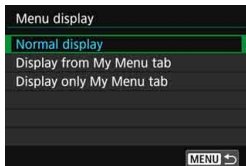
You can delete all My Menu tabs you created. When you select **[Delete all My Menu tabs]**, all the tabs from **[MY MENU1]** to **[MY MENU5]** will be deleted and the **[★]** tab will revert to its default.

- **Delete all items**

You can delete all the items registered under the **[MY MENU1]** to **[MY MENU5]** tabs. The tab(s) will remain. When **[Delete all items]** is selected, all the items registered under all the created tabs will be deleted.

ⓘ If you perform **[Delete tab]** or **[Delete all My Menu tabs]**, tab names renamed with **[Rename tab]** will also be deleted.

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**
Only the [★] tab is displayed. (The 📷, ▶, 🗣, and 📺 tabs will not be displayed.)



13

Reference

This chapter provides reference information for camera features, system accessories, etc.

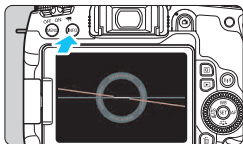


Certification Logo

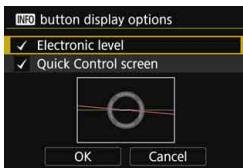
Select [**5: Certification Logo Display**]* and press <SET> to display some of the logos of the camera's certifications. Other certification logos can be found in this Instruction Manual, on the camera body, and on the camera's package.

* Displayed under the [**4**] tab during movie shooting.

INFO Button Functions

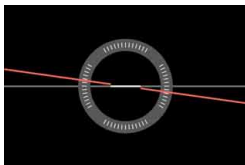


When you press the <INFO> button with the camera being ready to shoot, you can toggle the display between the electronic level and Quick Control screen.



[**INFO** button display options] under the [**3**] tab enables you to select the options displayed when the <INFO> button is pressed.

- Select the desired display option, then press <SET> to add a checkmark <✓>.
- After completing the selection, select [**OK**], then press <SET>.



Electronic level

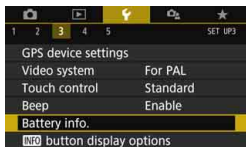


Quick Control screen

- You cannot remove the checkmarks from both items.
- Even if you set the [**Electronic level**] not to be displayed, it will still be displayed during Live View shooting and movie shooting by pressing the <INFO> button.

MENU Checking the Battery Information

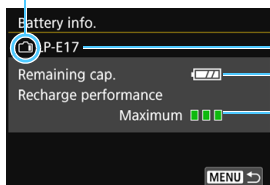
You can check the conditions of the battery you are using on the LCD monitor.



Select [Battery info.].

- Under the [**3**] tab, select [**Battery info.**], then press <SET>.
- ▶ The battery information screen will appear.

Battery position



Battery model or household power source being used.

The battery level (p.46) is displayed.

Battery's recharge performance level is displayed in three levels.

■■■■ (Green) : Battery's recharge performance is fine.

■■■ (Green) : Battery's recharge performance is slightly degraded.

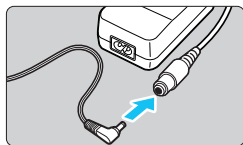
■■ (Red) : Purchasing a new battery is recommended.

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.

If a battery communication error message is displayed, follow the instructions in the message.

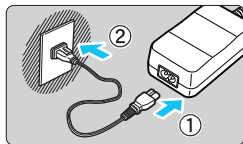
Using a Household Power Outlet

You can power the camera with a household power outlet by using the DC Coupler DR-E18 and AC Adapter AC-E6N (each sold separately).



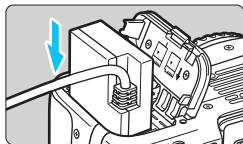
1 Connect the DC coupler's plug.

- Connect the DC coupler's plug to the AC Adapter's socket.



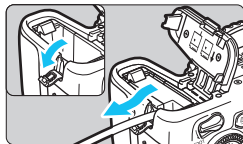
2 Connect the power cord.

- Connect the power cord as shown in the illustration.
- After using the camera, unplug the power plug from the power outlet.




3 Insert the DC coupler.

- Open the battery compartment cover and insert the DC coupler securely until it locks.



4 Push in the DC cord.

- Open the DC cord hole cover and install the cord as shown in the illustration.
- Close the battery compartment cover.

 Do not connect or disconnect the power cord when the camera's power switch is set to <ON>.

Remote Control Shooting

Wireless Remote Control BR-E1 (Sold Separately)

You can use a Bluetooth® connection with Bluetooth low energy technology-compatible Wireless Remote Control BR-E1 for remote control operations. In order to use the BR-E1, **you first need to pair the camera and remote controller (registering the device to the camera).**

Pairing

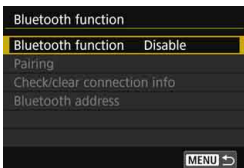


1 Select [Wireless communication settings].

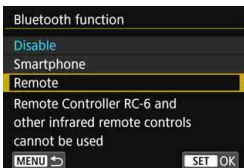
- Under the [1] tab, select [Wireless communication settings], then press <SET>.



2 Select [Bluetooth function].

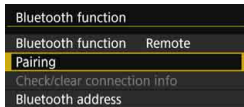


3 Select [Bluetooth function].




4 Select [Remote].


- If a message “Register a nickname to identify the camera.” appears, press <SET> and register a nickname. For the procedure to register a nickname, refer to page 13 of the Wi-Fi (Wireless Communication) Function Instruction Manual.



5 Select [Pairing].

- Select **[Pairing]**, then press $\langle \text{SET} \rangle$.
- Press and hold the $\langle \text{W} \rangle$ button and $\langle \text{T} \rangle$ button simultaneously for 3 sec. or more.
- ▶ Pairing starts. After the pairing is complete, the remote controller is registered to the camera.
- For operations after the pairing is complete, refer to Wireless Remote Control BR-E1's Instruction Manual.

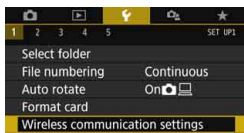
 After pairing is complete, the battery will be consumed even during auto power off, so the remaining battery level may be low when using the camera.

- 
- When you are not using BR-E1, set **[Bluetooth function]** to **[Disable]** in step 4. When you want to use the remote controller again, simply select **[Remote]** to connect to the remote controller.
 - When the shooting ends, the camera's self-timer lamp will light up briefly.

Clear Remote Controller Connection Information

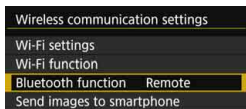
To pair with another BR-E1, clear the connection information of the remote controller currently connected.

You can check the connection status of the camera and remote controller from the **[Check/clear connection info]** screen in step 4.

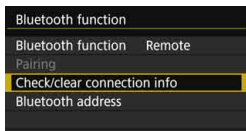


1 Select [Wireless communication settings].

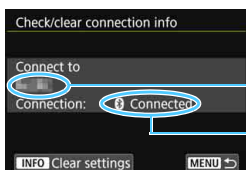
- Under the **[1]** tab, select **[Wireless communication settings]**, then press $\langle \text{SET} \rangle$.



2 Select [Bluetooth function].



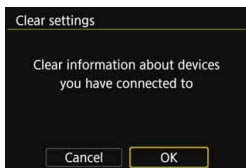
3 Select [Check/clear connection info].



4 Press the <INFO> button.

Bluetooth address of the remote controller

[Connecting...] is displayed when the remote controller is not being operated.

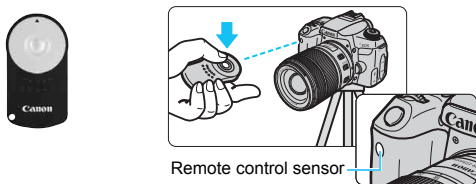


5 Clear the connection information.

- Select [OK], then press <SET>.
- ▶ The remote controller's connection information will be cleared.

Remote Controller RC-6 (Sold Separately)

This remote controller enables you to take pictures wirelessly up to approx. 5 meters/16.4 feet away from the camera. You can either shoot immediately or with a 2-sec. delay.



- Set the drive mode to $\langle \text{[i]} \text{[S]} \rangle$ (p.149).
- Point the remote controller toward the camera's remote control sensor, then press the transmit button.
- ▶ The camera will autofocus.
- ▶ When focus is achieved, the self-timer lamp will light up and the picture will be taken.

Cautions for Remote Control Shooting

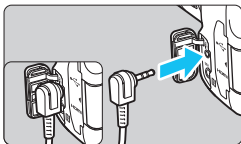
- The BR-E1 and RC-6 cannot be used simultaneously. Set the **[Bluetooth function]** to **[Disable]** when using the RC-6.
- Fluorescent or LED lighting may cause camera misoperation by triggering the shutter inadvertently. Try to keep the camera away from such light sources.
- If you point a remote controller for a TV set toward the camera and operate it, it may cause camera misoperation by triggering the shutter inadvertently.
- If flash light is emitted from a flash on another camera around this camera, it may cause camera malfunction by triggering the shutter inadvertently. Do not expose the remote control sensor to flash light from a flash on another camera.

Notes for Remote Control Shooting

- You can also use Remote Controller RC-1 or RC-5 (each sold separately).
- Remote control shooting is also possible with an EX-series Speedlite equipped with a remote-release function.
- Remote control shooting is also possible during movie shooting (p.275).
- In remote control shooting, even if **[F2: Auto power off]** is set to **[1 min.]** or less, the auto power off time will be approx. 2 min.

Remote Switch RS-60E3 (Sold Separately)

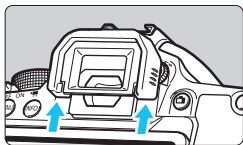
Remote Switch RS-60E3 comes with an approx. 60 cm/2.0 ft cord. When connected to the camera's remote control terminal, it can be pressed halfway and completely, just like the shutter button.



Using the Eyepiece Cover

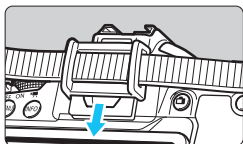
When you take a picture without looking through the viewfinder, such as when you use the self-timer, bulb exposure, or a remote switch, stray light entering the viewfinder may cause the picture to look dark. To prevent this, use the eyepiece cover (p.37) attached to the camera strap.

Note that attaching the eyepiece cover is not necessary in Live View shooting or movie shooting.



1 Detach the eyecup.

- Push the bottom of the eyecup to detach it.



2 Attach the eyepiece cover.

- Slide the eyepiece cover down into the eyepiece groove to attach it.
- After you finish shooting, detach the eyepiece cover and attach the eyecup by sliding it down into the eyepiece groove.

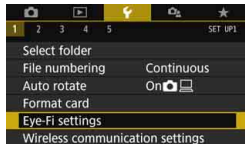
Using Eye-Fi Cards

With a commercially-available Eye-Fi card already set up, you can automatically transfer captured images to a computer or upload them to an online service via a wireless LAN.

The image transfer is a function of the Eye-Fi card. For instructions on how to set up and use the Eye-Fi card or to troubleshoot any image transfer problems, refer to the Eye-Fi card's instruction manual or contact the card manufacturer.

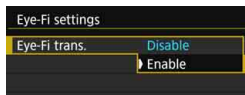
The camera is not guaranteed to support Eye-Fi card functions (including wireless transfer). In case of a problem with an Eye-Fi card, please check with the card manufacturer. Also note that approval is required to use Eye-Fi cards in many countries or regions. Without approval, use of the card is not permitted. If it is unclear whether the card has been approved for use in your area, please check with the card manufacturer.

1 Insert an Eye-Fi card (p.41).



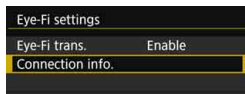
2 Select [Eye-Fi settings].

- Under the [**1**] tab, select [**Eye-Fi settings**], then press **<SET>**.
- This menu is displayed only when an Eye-Fi card is inserted into the camera.



3 Enable Eye-Fi transmission.

- Select [**Eye-Fi trans.**], then press **<SET>**.
- Select [**Enable**], then press **<SET>**.
- If you set [**Disable**], there will be no automatic transmission even with the Eye-Fi card inserted (transmission status icon **OFF**).



4 Display the connection information.

- Select [**Connection info.**], then press **<SET>**.



5 Check the [Access point SSID:].

- Check that an access point is displayed for [Access point SSID:].
- You can also check the Eye-Fi card's MAC address and firmware version.
- Press the <MENU> button to exit the menu.



6 Take the picture.

- ▶ The picture is transferred and the <Wi-Fi> icon switches from gray (not connected) to one of the icons in the sequence below.
- For transferred images, is displayed in the shooting information (p.385).

Transmission status icon

- (Gray) **Not connected** : No connection with access point.
- (Blinking) **Connecting...**: Connecting to access point.
- (Illuminated) **Connected**: Connection to access point established.
- (†) **Transferring...** : Image transfer to access point in progress.

⚠ Cautions for Using Eye-Fi Cards

- Under [Wi-Fi settings] of [1: Wireless communication settings], if [Wi-Fi] is set to [Enable], image transfer with an Eye-Fi card will not be possible.
- If “” is displayed, an error occurred while retrieving the card information. Turn the camera's power switch off and on again.
- Even if [Eye-Fi trans.] is set to [Disable], it may still transmit a signal. In hospitals, on airplanes, and in other places where wireless transmissions are prohibited, remove the Eye-Fi card from the camera beforehand.
- If the image transfer does not function, check the Eye-Fi card and computer settings. For details, refer to the card's instruction manual.
- Depending on the wireless LAN's connection conditions, the image transfer may take longer or it may be interrupted.
- Because of the communication function, the Eye-Fi card may become hot.
- The camera's battery power will be consumed faster.
- During the image transfer, auto power off will not take effect.
- If you insert a wireless LAN card other than an Eye-Fi card, [Eye-Fi settings] will not appear. Also, the transmission status icon <Wi-Fi> will not appear.

Function Availability Table by Shooting Mode

Still Photo Shooting in Basic Zone Modes:



●: Set automatically ○: User selectable □: Not selectable/Disabled

Function		A ⁺	S	CA	P	M	L	Hand
Image quality settings selectable		○	○	○	○	○	○	○
Aspect ratio								
ISO speed	Automatically set/Auto	●	●	●	●	●	●	●
	Manually set							
Picture Style	Automatically set	□	□	□	□	□	□	□
	Manual selection							
Ambience-based shots				○				
Background blur				○				
Brightness					○	○	○	○
Color tone								
White balance	Auto	AWB	AWB	AWB	AWB	AWB	AWB	AWB
	Preset							
	Custom							
	Correction/Bracketing							
Auto Lighting Optimizer		●	●	●	●	●	●	●
Lens aberration correction	Peripheral illumination correction	●	●	●	●	●	●	●
	Chromatic aberration correction	●	●	●	●	●	●	●
	Distortion correction							
	Diffraction correction	●	●	●	●	●	●	●
Long exposure noise reduction								
High ISO speed noise reduction		●	●	●	●	●	●	●
Anti-flicker shooting*1		●	●	●	●	●	●	●
Color space	sRGB	●	●	●	●	●	●	●
	Adobe RGB							
Metering	Evaluative metering	●	●	●	●	●	●	●
	Center-weighted average metering							
	Metering mode selection							

*1: Settable only with viewfinder shooting.

Function								
AF operation (Viewfinder shooting)	One-Shot AF				●*2	●	●	
	AI Servo AF							●*2
	AI Focus AF	●*2	●*2	●*2				
AF operation (Live View shooting)	One-Shot AF	●	●	●	●	●	●	
	Servo AF							●
AF	AF area selection mode	○	○	○	○	○	○	○
	AF point selection	○	○	○	○	○	○	○
	AF-assist beam	●		●	●		●	
Exposure	Program shift							
	Exposure compensation							
	AEB							
	AE lock							
	Depth-of-field preview							
	Interval timer*1	○	○	○	○	○	○	○
Drive	Single shooting	○	○	○	○	○	○	○
	High-speed continuous shooting	○	○	○	○	○	○	○
	Low-speed continuous shooting	○	○	○	○	○	○	○
	Self-timer	○	○	○	○	○	○	○
Built-in flash	Automatic firing	○		○	○		○	
	Flash on (Fires at all times)	○		○	○		○	
	Flash off	○	●	○	○	●	○	●
	Red-eye reduction	○		○	○		○	
	FE lock*1							
	Flash exposure compensation							
	Wireless control							
External flash	Flash on (Fires at all times)	●		●	●	●	●	●
	Flash off		●					
	Function settings							
	Custom Function settings							
Live View shooting		○	○	○	○	○	○	○
Quick Control		○	○	○	○	○	○	○

*2: AF will be performed using color tracking.








Still Photo Shooting in Basic Zone Modes: SCN

●: Set automatically ○: User selectable □: Not selectable/Disabled


Function		SCN						
Image quality settings selectable		○	○	○	○	○	○ ^{*1}	○ ^{*1}
Aspect ratio								
ISO speed	Automatically set/Auto	●	●	●	●	●	●	●
	Manually set							
Picture Style	Automatically set							
	Manual selection							
Ambience-based shots								
Background blur								
Brightness		○	○	○	○	○	○	
Color tone				○	○			
White balance	Auto							
	Preset							
	Custom							
	Correction/Bracketing							
Auto Lighting Optimizer		●	●	●	●	●	●	●
Lens aberration correction	Peripheral illumination correction	●	●	●	●	●	●	●
	Chromatic aberration correction	●	●	●	●	●	●	●
	Distortion correction	●						
	Diffraction correction	●	●	●	●	●	●	●
Long exposure noise reduction								
High ISO speed noise reduction		●	●	●	●	●	●	●
Anti-flicker shooting ^{*2}		●	●	●	●	●	●	●
Color space	sRGB	●	●	●	●	●	●	●
	Adobe RGB							
Metering	Evaluative metering	●	●	●		●	●	●
	Center-weighted average metering				●			
	Metering mode selection							

*1: + or cannot be selected.
































*2: Settable only with viewfinder shooting.




Function		SCN						
								
AF operation (Viewfinder shooting)	One-Shot AF	●*3		●	●	●	●	●*3
	AI Servo AF		●*3					
	AI Focus AF							
AF operation (Live View shooting)	One-Shot AF	●		●		●	●	●
	Servo AF		●					
AF	AF area selection mode	○	○	○		○	○	○
	AF point selection	○	○	○	●	○	○	○
	AF-assist beam	●		●	●	●	●	●
Exposure	Program shift							
	Exposure compensation							
	AEB							
	AE lock							
	Depth-of-field preview							
	Interval timer ²	○	○	○	○	○	○	○
Drive	Single shooting	○	○	○	○	○	○	○
	High-speed continuous shooting	○	○	○	○	○	○	○
	Low-speed continuous shooting	○	○	○	○	○	○	○
	Self-timer	○	○	○	○	○	○	○
Built-in flash	Automatic firing	○	○			●		
	Flash on (Fires at all times)	○	○	○			○	
	Flash off	○	○	○	●		○	●
	Red-eye reduction	○	○	○		○	○	
	FE lock ²							
	Flash exposure compensation							
	Wireless control							
External flash	Flash on (Fires at all times)	●	●	●		●	●	
	Flash off				●			●
	Function settings							
	Custom Function settings							
Live View shooting		○	○	○		○	○	○
Quick Control		○	○	○	○	○	○	○

*3: AF will be performed using color tracking.











Still Photo Shooting in Basic Zone Modes: 

●: Set automatically ○: User selectable □: Not selectable/Disabled

Function											
											
Image quality settings selectable*1		○	○	○	○	○	○	○	○	○	○
Aspect ratio											
ISO speed	Automatically set/Auto	●	●	●	●	●	●	●	●	●	●
	Manually set										
Picture Style	Automatically set										
	Manual selection										
Ambience-based shots											
Background blur											
Brightness											
Color tone											
White balance	Auto										
	Preset										
	Custom										
	Correction/Bracketing										
Auto Lighting Optimizer											
Lens aberration correction	Peripheral illumination correction	●	●	●	●	●	●	●	●	●	●
	Chromatic aberration correction	●	●	●	●	●	●	●	●	●	●
	Distortion correction										
	Diffraction correction	●	●	●	●	●	●	●	●	●	●
Long exposure noise reduction											
High ISO speed noise reduction		●	●	●	●	●	●	●	●	●	●
Anti-flicker shooting*2		●	●	●	●	●	●	●	●	●	●
Color space	sRGB	●	●	●	●	●	●	●	●	●	●
	Adobe RGB										
Metering	Evaluative metering	●	●		●	●	●	●	●	●	●
	Center-weighted average metering			●							
	Metering mode selection										

*1:  +  or  cannot be selected.

*2: Settable only with viewfinder shooting.


Function											
											
AF operation (Viewfinder shooting)	One-Shot AF							●*3	●*3	●*3	●*3
	AI Servo AF										
	AI Focus AF	●*3	●*3	●	●*3	●*3	●				
AF operation (Live View shooting)	One-Shot AF	●	●	●	●	●	●	●	●	●	●
	Servo AF										
AF	AF area selection mode	○	○		○	○		○	○	○	○
	AF point selection	○	○	●	○	○	●	○	○	○	○
	AF-assist beam	●	●	●	●	●	●	●	●	●	●
Exposure	Program shift										
	Exposure compensation										
	AEB										
	AE lock										
	Depth-of-field preview										
	Interval timer ²	○	○	○	○	○	○	○	○	○	○
Drive	Single shooting	○	○	○	○	○	○	○	○	○	○
	High-speed continuous shooting							○	○	○	○
	Low-speed continuous shooting							○	○	○	○
	Self-timer	○	○	○	○	○	○	○	○	○	○
Built-in flash	Automatic firing	○	○	○	○	○	○				
	Flash on (Fires at all times)	○	○	○	○	○	○				
	Flash off	○	○	○	○	○	○	●	●	●	●
	Red-eye reduction	○	○	○	○	○	○				
	FE lock ²										
	Flash exposure compensation										
	Wireless control										
External flash	Flash on (Fires at all times)	●	●	●	●	●	●				
	Flash off							●	●	●	●
	Function settings										
	Custom Function settings										
Live View shooting		○	○	○	○	○	○	○	○	○	○
Quick Control		○	○	○	○	○	○	○	○	○	○

*3: AF will be performed using color tracking.

Still Photo Shooting in Creative Zone Modes

●: Set automatically ○: User selectable □: Not selectable/Disabled

Function		P	Tv	Av	M
Image quality settings selectable		○	○	○	○
Aspect ratio		○	○	○	○
ISO speed	Automatically set/Auto	○	○	○	○
	Manually set	○	○	○	○
Picture Style	Automatically set	○	○	○	○
	Manual selection	○	○	○	○
Creative filters ^{*1*2}		○	○	○	○
White balance	Auto	○	○	○	○
	Preset	○	○	○	○
	Custom	○	○	○	○
	Correction/Bracketing	○	○	○	○
Auto Lighting Optimizer		○	○	○	○
Lens aberration correction	Peripheral illumination correction	○	○	○	○
	Chromatic aberration correction	○	○	○	○
	Distortion correction	○	○	○	○
	Diffraction correction	○	○	○	○
Long exposure noise reduction		○	○	○	○
High ISO speed noise reduction		○	○	○	○
Highlight tone priority		○	○	○	○
Anti-flicker shooting ^{*3}		○	○	○	○
Color space	sRGB	○	○	○	○
	Adobe RGB	○	○	○	○
Metering	Evaluative metering	○	○	○	○
	Metering mode selection	○	○	○	○

*1: RAW +  L or RAW cannot be selected.

*2: Settable only during Live View shooting.

*3: Works only during viewfinder shooting.

Function		P	Tv	Av	M
AF operation (Viewfinder shooting)	One-Shot AF	○	○	○	○
	AI Servo AF	○	○	○	○
	AI Focus AF	○	○	○	○
AF operation (Live View shooting)	One-Shot AF	○	○	○	○
	Servo AF	○	○	○	○
AF	AF area selection mode ^{*3}	○	○	○	○
	AF point selection	○	○	○	○
	AF-assist beam	○	○	○	○
Exposure	Program shift	○			
	Exposure compensation	○	○	○	*4
	AEB	○	○	○	○
	AE lock	○	○	○	*5
	Depth-of-field preview	○	○	○	○
	Interval timer ^{*3}	○	○	○	○
Drive	Single shooting	○	○	○	○
	High-speed continuous shooting	○	○	○	○
	Low-speed continuous shooting	○	○	○	○
	Self-timer	○	○	○	○
Built-in flash	Automatic firing				
	Flash on (Fires at all times)	○	○	○	○
	Flash off	○	○	○	○
	Red-eye reduction	○	○	○	○
	FE lock ^{*3}	○	○	○	○
	Flash exposure compensation	○	○	○	○
	Wireless control	○	○	○	○
External flash	Flash on (Fires at all times)	○	○	○	○
	Flash off	○	○	○	○
	Function settings	○	○	○	○
	Custom Function settings	○	○	○	○
Live View shooting		○	○	○	○
Quick Control		○	○	○	○

*4: Settable only with ISO Auto set.

*5: With ISO Auto, you can set a fixed ISO speed.

Movie Shooting

●: Set automatically ○: User selectable □: Not selectable/Disabled

Function										P	Tv	Av	M
Select movie recording size		○	○	○	○	○	○	○	●	○*1	○	○	○
Digital zoom		○	○	○	○	○	○	○	□	○	○	○	○
HDR movie shooting		□	□	□	□	□	□	□	●	□	□	□	□
Creative filters		□	□	□	□	□	□	□	□	○	○	○	○
Video snapshot		○	○	○	○	○	○	○	□	○	○	○	○
Time-lapse movie		○	○	○	○	○	○	○	□	○	○	○	○
ISO speed	Automatically set/ Auto	●	●	●	●	●	●	●	●	●	●	●	○
	Manually set	□	□	□	□	□	□	□	□	□	□	□	○
Picture Style	Automatically set									○	○	○	○
	Manual selection	□	□	□	□	□	□	□	□	○	○	○	○
White balance	Auto									○	○	○	○
	Preset	□	□	□	□	□	□	□	□	○	○	○	○
	Custom	□	□	□	□	□	□	□	□	○	○	○	○
	Correction	□	□	□	□	□	□	□	□	○	○	○	○
Auto Lighting Optimizer		●	●	●	●	●	●	●	●	○	○	○	○
Lens aberration correction	Peripheral illumination correction	●	●	●	●	●	●	●	●	○	○	○	○
	Chromatic aberration correction	●	●	●	●	●	●	●	●	○	○	○	○
High ISO speed noise reduction		●	●	●	●	●	●	●	●	●	●	●	●
Highlight tone priority		□	□	□	□	□	□	□	□	○	○	○	○
Movie digital IS		○	○	○	○	○	○	○	□	○	○	○	○

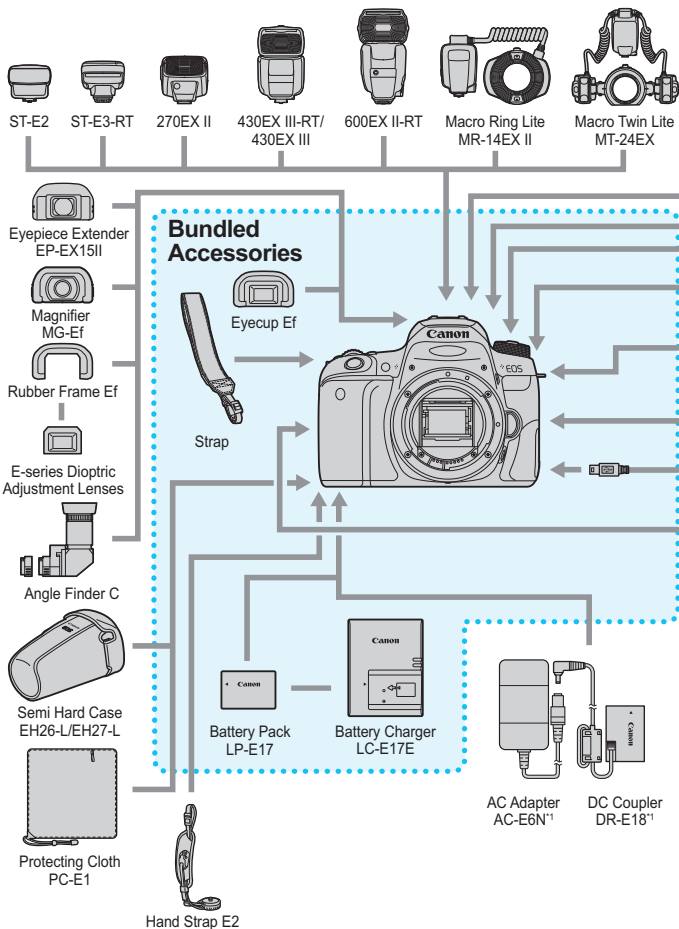
*1: and cannot be selected.

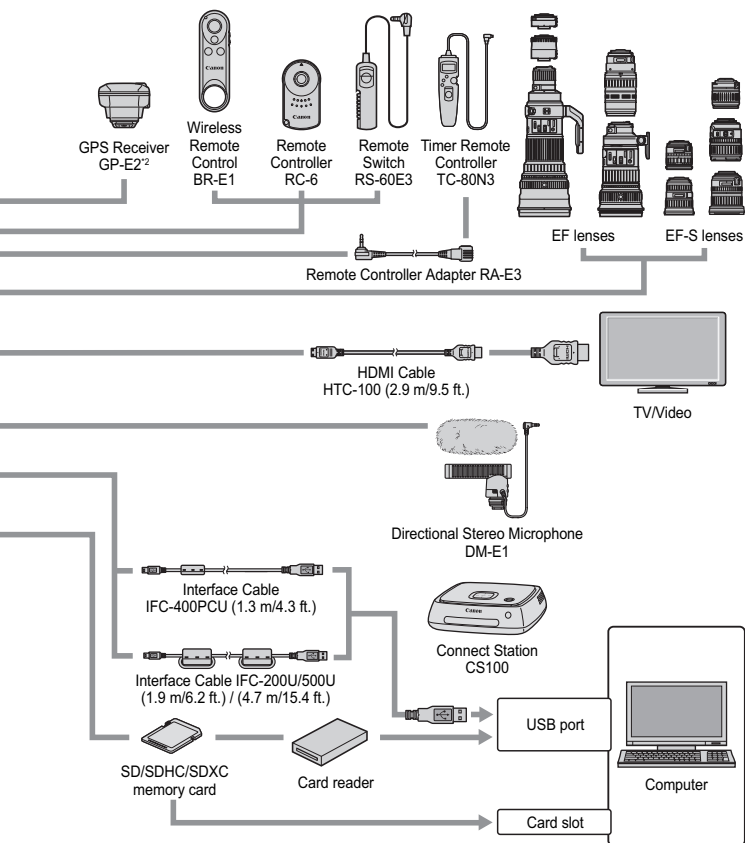
Function										SCN		P	Tv	Av	M
Metering		●	●	●	●	●	●	●	●	●	●	●	●	●	●
AF	Face+Tracking	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Smooth zone	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Live 1-point AF	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Manual focusing (MF)	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Movie Servo AF	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Exposure	Program shift														
	Exposure compensation											○	○	○	*2
	AE lock											○	○	○	*3
	Depth-of-field preview														
Aspect ratio															
Sound recording		○	○	○	○	○	○	○	○	○	○	○	○	○	○
Quick Control		○	○	○	○	○	○	○	○	○	○	○	○	○	○

*2: Settable only with ISO Auto set.

*3: With ISO Auto, you can set a fixed ISO speed.

System Map





*1: AC Adapter Kit ACK-E18 can also be used.

*2: The digital compass cannot be used with this camera. (Shooting direction will not be recorded.)

* All cable lengths given are approximate figures.

MENU Menu Settings

Viewfinder Shooting (Basic Zone Modes)

📷: Shooting 1 (Red)

Page

Image quality	L / L / M / M / S1 / S2 / RAW + L+ / RAW *	152
Image review time	Off / 2 sec. / 4 sec. / 8 sec. / Hold	325
Release shutter without card	Enable / Disable	324
Red-eye reduction	Disable / Enable	217
Interval timer	Disable / Enable (Interval / Number of shots)	211
Live View shooting	Enable / Disable	243

* Not selectable in the <SCN: > and < > modes.

Live View Shooting (Basic Zone Modes)

📷: Shooting 1 (Red)

Page

Image quality	L / L / M / M / S1 / S2 / RAW + L+ / RAW *	152
Image review time	Off / 2 sec. / 4 sec. / 8 sec. / Hold	325
Release shutter without card	Enable / Disable	324
Red-eye reduction	Disable / Enable	217

* Not selectable in the <SCN: > and < > modes.

📷: Shooting 2 (Red)

AF method	L + Tracking / Smooth zone / Live 1-point AF	259
Touch shutter	Disable / Enable	269
Grid display	Off / 3x3 / 6x4 / 3x3+diag	255



- Shaded menu options are not displayed in Basic Zone modes.
- The menu tabs and options displayed under [(Playback)], [(Set-up)], and [(My Menu)] are basically the same for viewfinder shooting, Live View shooting, and movie shooting, although there may be slight differences.

Viewfinder Shooting and Live View Shooting (Creative Zone Modes)

📷: Shooting 1 (Red)

Page

Image quality	📷 L / 📷 L / 📷 M / 📷 M / 📷 S1 / 📷 S1 / S2 / RAW + 📷 L / RAW	152
Image review time	Off / 2 sec. / 4 sec. / 8 sec. / Hold	325
Release shutter without card	Enable / Disable	324
Lens aberration correction	Peripheral illumination correction: Enable / Disable	179
	Chromatic aberration correction: Enable / Disable	
	Distortion correction: Disable / Enable	
	Diffraction correction: Enable / Disable	
Lens electronic MF	Disable after One-Shot AF / Enable after One-Shot AF	128

📷: Shooting 2 (Red)

Exposure compensation/AEB setting	1/3- and 1/2-stop increments, ± 5 stops* (AEB ± 2 stops)	206
Flash control	Flash firing / E-TTL II metering / Flash synchronization speed in Av mode / Built-in flash settings / External flash function settings / External flash C.Fn setting / Clear settings	223
Red-eye reduction	Disable / Enable	217
📷 ISO speed	ISO speed setting	158
📷 ISO Auto	Max.:400 / Max.:800 / Max.:1600 / Max.:3200 / Max.:6400 / Max.:12800 / Max.:25600	160
Auto Lighting Optimizer	Disable / Low / Standard / High	175
	Disable during manual exposure	

* During Live View shooting or when [📷: Shooting screen] is set to [Guided], exposure compensation can be set up to ± 3 stops.

📷: Shooting 3 (Red)

Page

Metering mode	Evaluative metering / Partial metering / Spot metering / Center-weighted average metering	203
Color space	sRGB / Adobe RGB	187
Picture Style	Auto / Standard / Portrait / Landscape / Fine Detail / Neutral / Faithful / Monochrome / User Defined 1-3	161
White balance	(Ambience priority) / (White priority) / / / / /	169
Custom White Balance	Manual setting of white balance	171
White balance shift/ bracketing	White balance correction: B/A/M/G bias, 9 levels each	173
	White balance bracketing: B/A and M/G bias, single-level increments, ± 3 levels	174

📷: Shooting 4 (Red)

Long exposure noise reduction	Disable / Auto / Enable	177
High ISO speed noise reduction	Disable / Low / Standard / High / Multi Shot Noise Reduction	176
Dust Delete Data	Obtain data to be used with Digital Photo Professional (EOS software) to delete dust spots	341




📷: Shooting 5 (Red)

Interval timer*	Disable / Enable (Interval / Number of shots)	211
Bulb timer	Disable / Enable (Exposure time)	201
Anti-flicker shooting*	Disable / Enable	185
Aspect ratio	3:2 / 4:3 / 16:9 / 1:1	156
Live View shooting*	Enable / Disable	243

* Not displayed for Live View shooting.

📷: Shooting 6* (Red)

Page


AF method	☺+Tracking / Smooth zone / Live 1-point AF	259
Touch shutter	Disable / Enable	269
Metering timer	4 sec. / 8 sec. / 16 sec. / 30 sec. / 1 min. / 10 min. / 30 min.	255
Grid display	Off / 3x3  / 6x4  / 3x3+diag 	255

* The [📷6] tab appears in Live View shooting.

▶: Playback 1 (Blue)

Protect images	Protect images	372
Rotate image	Rotate images	352
Erase images	Erase images	375
Print order	Specify images to be printed (DPOF)	378
Photobook Set-up	Specify images for a photobook	382
Creative filters	Grainy B/W / Soft focus / Fish-eye effect / Art bold effect / Water painting effect / Toy camera effect / Miniature effect	392

▶: Playback 2 (Blue)





Cropping	Crop part of the image	397
Resize	Downsize JPEG image's pixel count	395
Rating	Rate images	353
Slide show	Display time / Repeat / Transition effect / Background music	366
Set image search conditions	Rating / Date / Folder / Protect / Type of file	356
Image jump w/ 	1 image / 10 images / Jump images by the specified number / Date / Folder / Movies / Stills / Protect / Rating	347

▶: Playback 3 (Blue)

Page

AF point display	Disable / Enable	388
Histogram display	Brightness / RGB	389
Control over HDMI	Disable / Enable	370

🔧: Set-up 1 (Yellow)

Select folder	Create and select a folder	327
File numbering	Numbering: Continuous / Auto reset	329
	Manual reset	331
Auto rotate	On   / On   / Off	334
Format card	Erase data on the card by formatting	74
Eye-Fi settings	Displayed when a commercially-available Eye-Fi card is inserted	428
Wireless communication settings	Wi-Fi settings: Wi-Fi/NFC connection / Password / Connection history / MAC address	-*
	Wi-Fi function: Transfer images between cameras / Connect to smartphone / Remote control (EOS Utility) / Print from Wi-Fi printer / Upload to Web service	
	Bluetooth function: Bluetooth function / Pairing / Check/clear connection info / Bluetooth address	
	Send images to smartphone	
	Nickname	
	Clear settings	

* For details, refer to the Wi-Fi (Wireless Communication) Function Instruction Manual.



- When using a wireless communication function, be sure to check the countries and areas of use, and observe the laws and regulations of the country or region.
- [**Y1: Wireless communication settings**] cannot be selected if the camera is connected to a computer, GPS receiver, or another device with an interface cable.

Y: Set-up 2 (Yellow)

Page

Auto power off	10 sec/30 sec / 30 sec. / 1 min. / 2 min. / 4 min. / 8 min. / 15 min. / Disable	325
LCD brightness	Adjust the brightness (seven levels)	326
LCD auto off*	Enable / Disable	338
Date/Time/Zone	Date (year, month, day) / Time (hour, min., sec.) / Daylight saving time / Time zone	47
Language	Select the interface language	50
Viewfinder display*	Electronic level: Hide / Show	78
	Grid display: Hide / Show	80
	Flicker detection: Show / Hide	81

* Not displayed for Live View shooting or movie shooting.

Y: Set-up 3 (Yellow)

GPS device settings	Settings available when the GPS Receiver GP-E2 (sold separately) is attached	-
Video system	For NTSC / For PAL	369
Touch control	Standard / Sensitive / Disable	73
Beep	Enable / Touch	324
Battery information	Remaining capacity / Recharge performance	421
INFO button display options*	Electronic level / Quick Control screen	420

* Not displayed for Live View shooting or movie shooting.



Cautions for Using GPS Receiver GP-E2 (sold separately)

- Check if your country or area allows the use of GPS and follow any legal regulations.
- Update the GP-E2's firmware to Version 2.0.0 or later. (Using the cable for connection is not possible with firmware versions earlier than Version 2.0.0.) When updating the firmware, an interface cable (sold separately, p.441) must be used. For how to update the GP-E2's firmware, refer to the Canon website.
- Note that the digital compass cannot be used with this camera. (Shooting direction will not be recorded.)

Set-up 4 (Yellow)

Page

Sensor cleaning*	Auto cleaning : Enable / Disable	339
	Clean now	
	Clean manually	343
Multi function lock	Main Dial	57
	Quick Control Dial	
	Touch control	
Custom Functions (C.Fn)	Customize camera functions as desired	402
Clear settings	Clear all camera settings / Clear all Custom Functions (C.Fn)	335
Copyright information	Display copyright information / Enter author's name / Enter copyright details / Delete copyright information	332
Manual/software URL	QR code for the download site	5

* Displayed under the 3 tab during movie shooting.

☛ : Set-up 5*¹ (Yellow)

Page

Certification Logo Display ^{*2}	Displays some of the logos of the camera's certifications	419
📷 firmware ver. ^{*3}	For updating the firmware	-

*1: Not displayed for movie shooting.

*2: Displayed under the [☛4] tab during movie shooting.

*3: Not displayed for Live View shooting.



To prevent an inadvertent update of the firmware, selecting [📷 firmware ver.] will disable touch control.

📷 : Display level settings (Blue green)

Shooting screen [*]	Standard / Guided	59
Menu display	Standard / Guided	61
Mode guide [*]	Enable / Disable	62
Feature guide	Enable / Disable	63

* Cannot be set during Live View shooting or movie shooting.

★ : My Menu^{*} (Green)

Add My Menu tab	Add My Menu tabs 1-5	413
Delete all My Menu tabs	Delete all My Menu tabs	416
Delete all items	Delete all items under My Menu tabs 1-5	416
Menu display	Normal display / Display from My Menu tab / Display only My Menu tab	417

* Not displayed when [📷 : Menu display] is set to [Guided].

Movie Shooting

📷: Shooting 1 (Red)

Page

Movie recording size	<ul style="list-style-type: none"> • 1920x1080 / 1280x720 / 640x480 • NTSC: 59.94p / 29.97p / 23.98p • PAL: 50.00p / 25.00p • Standard / Light 	287
Digital zoom	Disable / Approx. 3-10x zoom	313
Sound recording*	Sound recording: Auto / Manual / Disable	313
	Recording level	
	Wind filter: Auto / Disable	
	Attenuator: Disable / Enable	
Lens aberration correction	Peripheral illumination correction: Enable / Disable	179
	Chromatic aberration correction: Enable / Disable	
Lens electronic MF	Disable after One-Shot AF / Enable after One-Shot AF	128

* In Basic Zone modes, the settings available for **[Sound recording]** will be [On/Off].

📷: Shooting 2 (Red)

Exposure compensation	1/3- and 1/2-stop increments, ± 3 stops	206
ISO speed*	ISO speed setting	158 320
ISO Auto	Max.:6400 / Max.:12800	320
Auto Lighting Optimizer	Disable / Low / Standard / High	175
	Disable during manual exposure	

* Settable only for manual exposures.

📷: Shooting 3 (Red)

Page

Picture Style	Auto / Standard / Portrait / Landscape / Fine Detail / Neutral / Faithful / Monochrome / User Defined 1-3	161
White balance	AWB (Ambience priority) / AWB w (White priority) / / / / / /	169
Custom White Balance	Manual setting of white balance	171
White balance shift	B/A/M/G bias, 9 levels each	173

📷: Shooting 4* (Red)

Movie Servo AF	Enable / Disable	315
AF method	+Tracking / Smooth zone / Live 1-point AF	316
Metering timer	4 sec. / 8 sec. / 16 sec. / 30 sec. / 1 min. / 10 min. / 30 min.	316
Grid display	Off / 3x3 / 6x4 / 3x3+diag	317
button function	AF / AF / AF / AF	317

* In Basic Zone modes, these menu options are displayed under the [2] tab.

📷: Shooting 5* (Red)

Video snapshot	Video snapshot: Enable / Disable	303
	Album settings: Create a new album / Add to existing album	
	Show confirm message: Enable / Disable	
Time-lapse movie	Disable / Enable (Interval / Number of shots / Auto exposure / LCD auto off / Beep as image taken)	296
Remote control shooting	Disable / Enable	318
Movie digital IS	Disable / Enable / Enhanced	319

* In Basic Zone modes, these menu options are displayed under the [3] tab.

Troubleshooting Guide

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

Power-Related Problems

The battery does not recharge.

- Do not use any battery other than genuine Canon Battery Pack LP-E17.

The battery charger's lamp blinks.

- If (1) the battery charger or battery has a problem or (2) communication with the battery failed (with a non-Canon battery pack), the protection circuit will stop charging, and the charge lamp will blink in orange. In the case of (1), unplug the charger's power plug from the power outlet. Detach and reattach the battery to the charger. Wait two or three minutes, then reconnect the power plug to the power outlet. If the problem persists, contact your dealer or nearest Canon Service Center.

The camera is not activated even when the power switch is set to <ON>.

- Make sure the battery is installed properly in the camera (p.40).
- Make sure the battery compartment cover is closed (p.40).
- Make sure the card slot cover is closed (p.41).
- Recharge the battery (p.38).
- Press the <INFO> button (p.76).

The access lamp still blinks even when the power switch is <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 other than genuine Canon Battery Pack LP-E17.
- Remove and install the battery again (p.40).
- If the electrical contacts are dirty, use a soft cloth to clean them.

The battery becomes exhausted quickly.

- Use a fully-charged battery (p.38).
- The battery performance may have degraded. See [**▼3: Battery info.**] to check the battery's recharge performance level (p.421). If the battery performance is poor, replace the battery with a new one.
- The number of possible 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 LCD monitor frequently.
 - Continuing Live View shooting or movie shooting for a prolonged period.
 - Using the Wi-Fi function.
 - The Eye-Fi card's transmission is enabled.

The camera turns off by itself.

- Auto power off is in effect. If you do not want auto power off to take effect, set [**▼2: Auto power off**] to [**Disable**] (p.325).
- Even if [**▼2: Auto power off**] is set to [**Disable**], the LCD monitor will still turn off after the camera is left idle for approx. 30 min. (The camera's power does not turn off.) Press the <INFO> button to turn on the LCD monitor.

Shooting-Related Problems

The lens cannot be attached.

- The camera cannot be used with EF-M lenses (p.51).

The viewfinder is dark.

- Install a recharged battery in the camera (p.38).

No images can be shot or recorded.

- Make sure the card is properly inserted (p.41).
- Slide the card's write-protect switch to the Write/Erase setting (p.41).
- If the card is full, replace the card or delete unnecessary images to make space (p.41, 375).
- If you try to focus in the One-Shot AF mode and the focus indicator <●> in the viewfinder blinks, a picture cannot be taken. Press the shutter button halfway again to refocus automatically, or focus manually (p.54, 146).

The card cannot be used.

- If a card error message is displayed, see page 41 or 467.

An error message is displayed when the card is inserted in another camera.

- SDXC cards are formatted in exFAT. This means that 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 lens's focus mode switch to <AF> (p.51).
- Press the shutter button gently to prevent camera shake (p.53-54).
- If the lens has an Image Stabilizer, set the IS switch to <ON>.
- In low light, the shutter speed may become slow. Use a faster shutter speed (p.192), set a higher ISO speed (p.158), use flash (p.216), or use a tripod.

There are fewer AF points.

- Depending on the attached lens, the number of usable AF points and patterns varies. The lenses are categorized into eight groups from A to H. Check which group your lens belongs to. Using a lens in Groups E to H will have fewer usable AF points (p.139-140).

The AF point is blinking.

- Regarding the AF points lighting up or blinking when you press the <AF-ON> or <AF-ON/LOCK> button, see page 132.

The AF points do not light up in red.

- The AF points light up in red only when focus is achieved in low light or with a dark subject.
- In Creative Zone modes, you can set whether to have the AF points light in red for when focus is achieved (p.406).

I cannot lock the focus and recompose the shot.

- Set the AF operation to One-Shot AF. Focus lock is not possible in the AI Servo AF mode or when servo takes effect in AI Focus AF mode (p.124).

Horizontal stripes appear, or the exposure or color tone look strange.

- Horizontal stripes (noise) or irregular exposures can be caused by fluorescent lighting, LED lighting, or other light sources during viewfinder or Live View shooting. Also, the exposure or color tone may not come out right. A slow shutter speed may reduce the problem.

The standard exposure cannot be obtained or the exposure is irregular.

- During viewfinder shooting or Live View shooting, if you use a TS-E lens (except the TS-E17mm f/4L or TS-E24mm f/3.5L II) and shift or tilt the lens or use an Extension Tube, the standard exposure may not be obtained or the exposure may be irregular.

The continuous shooting speed is slow.

- The maximum continuous shooting speed may become slower depending on the shutter speed, aperture, subject conditions, brightness, lens, flash use, temperature, battery type, remaining battery level, shooting function settings, etc. For details, see page 148.

The maximum burst during continuous shooting is lower.

- If you shoot something that has fine detail such as a field of grass, the file size will be larger, and the actual maximum burst may be lower than the number listed on page 153.

ISO 100 cannot be set.

- Under [**F4: Custom Functions(C.Fn)**], if [**4: Highlight tone priority**] is set to [**1:Enable**], ISO 100 cannot be set. If [**0:Disable**] is set, ISO 100 can be set (p.403). This also applies to movie shooting (p.320).

Expanded ISO speeds cannot be selected.

- Under [**F4: Custom Functions(C.Fn)**], if [**4: Highlight tone priority**] is set to [**1:Enable**], the settable ISO speed range will be ISO 200 - ISO 25600 (up to ISO 12800 for movies) even when [**2: ISO expansion**] is set to [**1:On**]. If [**0:Disable**] is set for [**4: Highlight tone priority**], [**H**] can be set (p.403). This also applies to movie shooting (p.320).

The Auto Lighting Optimizer cannot be set.

- Under [**F4: Custom Functions(C.Fn)**], if [**4: Highlight tone priority**] is set to [**1:Enable**], the Auto Lighting Optimizer cannot be set. If [**0:Disable**] is set, the Auto Lighting Optimizer can be set (p.403).

Even if I set a decreased exposure compensation, the image comes out bright.

- Set [**2: Auto Lighting Optimizer**] to [**Disable**]. When [**Standard**] [**Low**] [**High**] is set, even if you set a decreased exposure compensation or flash exposure compensation, the image may come out bright (p.175).

When I use the <Av> mode with flash, the shutter speed becomes slow.

- If you shoot at night when the background is dark, the shutter speed automatically becomes slow (slow-sync shooting) so that both the subject and background are properly exposed. To prevent a slow shutter speed, under [**2: Flash control**], set [**Flash sync. speed in Av mode**] to [**1/200-1/60sec. auto**] or [**1/200 sec. (fixed)**] (p.224).

The built-in flash rises by itself.

- In shooting modes (<A+> <CA> <P> <M> <SCN: 1 2 3 4> <Q: 1 2 3 4 5 6 7 8 9 10>) whose default setting is <A> (Built-in autoflash), the built-in flash will be raised automatically when necessary.
- In the <SCN: 1 2 3 4> and <Q: 1 HDR 2 HDR 3 HDR 4 HDR> modes, when you press the shutter button halfway under low-light conditions, the built-in flash may be raised automatically and emit the AF-assist beam.

The built-in flash does not fire.

- If you use the built-in flash too often in too short a period of time, the flash may stop firing for a while to protect the light-emitting unit.

The external flash always fires at full output.

- If you use a flash unit other than an EX-series Speedlite, the flash will always be fired at full output (p.222).
- Under [**Q2: Flash control**], if [**Flash metering mode**] in [**External flash C.Fn setting**] is set to [**TTL flash metering**] (autoflash), the flash will always be fired at full output (p.228).

Flash exposure compensation cannot be set for the external Speedlite.

- If flash exposure compensation is set with the external Speedlite, compensation amount cannot be set with the camera. When the external Speedlite's flash exposure compensation is canceled (set to 0), flash exposure compensation can be set with the camera.

High-speed sync cannot be set in the <Av> mode.

- Under [**Q2: Flash control**], set [**Flash sync. speed in Av mode**] to [**Auto**] (p.224).



The camera makes a noise when it is shaken.

- A small noise may be heard when the camera's internal mechanism moves slightly.


The shutter makes two release sounds during Live View shooting.

- If you use flash, the shutter will make two release sounds each time you shoot (p.244).

During Live View shooting, a white or red icon is displayed.

- It indicates that the camera's internal temperature is high. If the white  icon is displayed, the still photo's image quality may deteriorate. If the red  icon is displayed, it indicates that the Live View shooting will soon stop automatically (p.273).

During movie shooting, the red icon is displayed.

- It indicates that the camera's internal temperature is high. If the red  icon is displayed, it indicates that the movie shooting will soon stop automatically (p.321).

Movie shooting stops by itself.

- If the card's writing speed is slow, movie shooting may stop automatically. For cards that can record movies, see page 8. To find out the card's writing speed, refer to the card manufacturer's website.
- If you shoot a movie for 29 min. 59 sec., the movie shooting will stop automatically.

The ISO speed cannot be set for movie shooting.

- In shooting modes other than <M>, the ISO speed is set automatically.
In the <M> mode, you can manually set the ISO speed (p.281).

The exposure changes during movie shooting.

- If you change the shutter speed or aperture during movie shooting, the changes in the exposure may be recorded.
- Zooming the lens during movie shooting may cause changes in the exposure regardless of whether the lens's maximum aperture changes or not. The changes in the exposure may be recorded as a result.

The subject looks distorted during movie shooting.

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

The image flickers or horizontal stripes appear during movie shooting.

- Flickering, horizontal stripes (noise), or irregular exposures can be caused by fluorescent lighting, LED lighting, or other light sources during movie shooting. Also, changes in the exposure (brightness) or color tone may be recorded. In the <M> mode, a slow shutter speed may reduce the problem.

Wi-Fi

Wi-Fi cannot be set.

- If the camera is connected to a computer, GPS receiver, or other device with an interface cable, Wi-Fi functions cannot be set. ([**1**: **Wireless communication settings**]) will be grayed out.) Disconnect the interface cable before setting any functions.
- Refer to the Wi-Fi (Wireless Communication) Function Instruction Manual.

Operation Problems

I cannot change the setting with the <

- Set the <LOCK> switch downward (lock release, p.57).
- Check the [**4**: **Multi function lock**] setting (p.57).

A camera button or dial does not work as expected.

- Under [**4**: **Custom Functions(C.Fn)**], check the [**14**: **Custom Controls**] setting (p.409).
- During movie shooting, check the [ **btn function**] setting (p.317).

During touch screen operations, the beeper suddenly sounds softer.

- Check if your finger is blocking the speaker (p.28).

Touch operation is not possible.

- Check if [**3**: **Touch control**] is set to [**Standard**] or [**Sensitive**] (p.73).

Display Problems

The LCD monitor does not turn on or suddenly turns off.

- If there is dust on top of the eyepiece cover (p.427), the LCD monitor may not turn on or may suddenly turn off, due to incorrect operation of the display-off sensor. If this occurs, remove the dust.
- If the LCD monitor does not turn on with Eyepiece Extender EP-EX15II (sold separately) or Magnifier MG-Ef (sold separately) attached to the viewfinder, set [**2: LCD auto off**] to [**Disable**] (p.338).

The menu screen shows fewer tabs and options.

- In Basic Zone modes, certain tabs and menu options are not displayed. Set the shooting mode to a Creative Zone mode (p.67).
- Under the [**★**] tab, [**Menu display**] is set to [**Display only My Menu tab**] (p.417).

The file name's first character is an underscore (“_”).

- Set the color space to sRGB. If Adobe RGB is set, the first character will be an underscore (p.187).

The file name starts with “MVI_”.

- It is a movie file (p.331).

The file numbering does not start from 0001.

- If the card already contains recorded images, the image file number may not start from 0001 (p.331).

The shooting date and time displayed are incorrect.

- Make sure the correct date and time are set (p.47).
- Check the time zone and daylight saving time (p.47).

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 printing, you can imprint the date and time in the picture, using the date and time recorded in the shooting information (p.378).

[###] is displayed.

- If the number of images recorded on the card exceeds the number the camera can display, [###] will be displayed (p.355).

In the viewfinder, the AF point display speed is slow.

- In low temperatures, the display speed of the AF points may become slower due to the AF point display device's characteristics. The display speed will return to normal at room temperature.

The LCD monitor does not display a clear image.

- If the LCD monitor is dirty, use a soft cloth to clean it.
- In low or high temperatures, the LCD monitor display may seem slow or may look black. It will return to normal at room temperature.

[Eye-Fi settings] does not appear.

- [Eye-Fi settings] will appear only when an Eye-Fi card is inserted in the camera. If the Eye-Fi card has a write-protect switch set to the LOCK position, you will not be able to check the card's connection status or disable Eye-Fi transmission (p.428).
- If [Wi-Fi] is set to [Enable] for [Wi-Fi settings] under [🔑 1: Wireless communication settings], [Eye-Fi settings] cannot be selected even when an Eye-Fi card is installed.

Playback Problems

Part of the image blinks in black.

- It is the highlight alert (p.389). Overexposed areas with clipped highlight will blink.

The image cannot be erased.

- If the image is protected, it cannot be erased (p.372).

The movie cannot be played back.

- Movies edited with a computer cannot be played back with the camera.

Operation sound and mechanical sound can be heard during movie playback.

- If you operate the camera's dials or lens during movie shooting, the operation sound will also be recorded. Using the Directional Stereo Microphone DM-E1 (sold separately) is recommended (p.313).

The movie appears to freeze momentarily.

- If there is a drastic change in the exposure level during autoexposure movie shooting, the recording will stop momentarily until the brightness stabilizes. In such a case, shoot in the <M> mode (p.280).

No picture on the TV set.

- Make sure the [**Y3: Video system**] is correctly set to [**For NTSC**] or [**For PAL**] (depending on the video system of your TV set).
- Make sure the HDMI cable's plug is inserted all the way in (p.369).

There are multiple movie files for a single movie shoot.

- If the movie file size reaches 4 GB, another movie file will be created automatically (p.289). 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 such a case, connect your camera to the computer with the interface cable, then transfer the images to the computer using EOS Utility (EOS software, p.488).


The image cannot be resized.

- With this camera, you cannot resize JPEG **S2** or RAW images (p.395).










The image cannot be cropped.

- With this camera, you cannot crop RAW images (p.397).



A red box is displayed on the image.

- [ **3: AF point disp.**] is set to [**Enable**] (p.388).

A red box is not displayed on the image.


- Even if [ **3: AF point disp.**] is set to [**Enable**] (p.388), the red box is not displayed for the following images:
 - Images shot with Multi Shot Noise Reduction (p.176)
 - Images recorded with distortion correction enabled (p.181)
 - Images shot in the <**SCN**:    > or < :     > modes
 - Cropped images (p.397)
 - Images with Fish-eye effect applied after shooting (p.392)

Dots of light appear on the image.


- White, red, blue, or other colored dots of light may appear on images if the sensor is affected by cosmic rays, etc. Their appearance may be suppressed if you perform **[Clean now **] under **[4: Sensor cleaning]** (p.339).

Sensor Cleaning Problems

The shutter makes a sound during sensor cleaning.


- When you select **[Clean now **], the shutter will make a mechanical sound, but no picture is taken (p.339).

Automatic sensor cleaning does not work.

- If you repeatedly turn the power switch <ON> and <OFF> within a short time period, the < > icon may not be displayed (p.45).

Computer Connection Problems

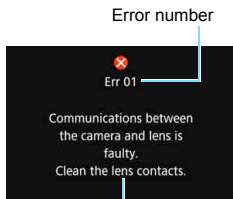
Communication between the connected camera and computer does not work.

- When using EOS Utility (EOS software), set **[5: Time-lapse movie]** to **[Disable]** (p.296).

I cannot transfer images to a computer.

- Install EOS software on the computer (p.488).
- While a Wi-Fi connection is established, the camera cannot be connected to a computer with an interface cable.

Error Codes



Error number

Err 01

Communications between
the camera and lens is
faulty.

Clean the lens contacts.

Cause and countermeasures

If there is a problem with the camera, an error message will appear. Follow the on-screen instructions.

Number	Error Message and Solution
01	<p>Communications between the camera and lens is faulty. Clean the lens contacts.</p> <p>→ Clean the electrical contacts on the camera and lens, use a Canon lens, or remove and install the battery again (p.27, 28, 40).</p>
02	<p>Card cannot be accessed. Reinsert/change card or format card with the camera.</p> <p>→ Remove and insert the card again, replace the card, or format the card (p.41, 74).</p>
04	<p>Cannot save images because card is full. Replace card.</p> <p>→ Replace the card, erase unnecessary images, or format the card (p.41, 375, 74).</p>
05	<p>The built-in flash could not be raised. Turn the camera off and on again.</p> <p>→ Operate the power switch (p.45).</p>
06	<p>Sensor cleaning could not be performed. Turn the camera off and on again.</p> <p>→ Operate the power switch (p.45).</p>
10, 20 30, 40 50, 60 70, 80 99	<p>An error prevented shooting. Turn the camera off and on again or re-install the battery.</p> <p>→ Operate the power switch, remove and install the battery again, or use a Canon lens (p.45, 40, 51).</p>

* If the error message still appears after following the above instructions, write down the error code number and contact your nearest Canon Service Center.

Specifications

• Type

Type:	Digital, single-lens reflex, AF/AE camera with built-in flash
Recording media:	SD/SDHC*/SDXC* memory cards * UHS-I cards supported
Image sensor size:	Approx. 22.3 x 14.9 mm
Compatible lenses:	Canon EF lenses (including EF-S lenses) * Excluding EF-M lenses (35mm-equivalent angle of view is that of a lens with approx. 1.6x the focal length indicated.)
Lens mount:	Canon EF mount

• Image Sensor

Type:	CMOS sensor
Effective pixels:	Approx. 24.2 megapixels * Rounded to the nearest 100,000.
Aspect ratio:	3:2
Dust delete feature:	Auto, Manual, Dust Delete Data appending

• Recording System

Recording format:	Design rule for Camera File System (DCF) 2.0
Image type:	JPEG, RAW (14-bit Canon original), RAW+JPEG Large simultaneous recording possible
Pixels recorded:	L (Large) : 24.0 megapixels (6000 x 4000) M (Medium) : Approx. 10.6 megapixels (3984 x 2656) S1 (Small 1) : Approx. 5.9 megapixels (2976 x 1984) S2 (Small 2) : Approx. 3.8 megapixels (2400 x 1600) RAW : 24.0 megapixels (6000 x 4000)
Aspect ratio:	3:2, 4:3, 16:9, 1:1
Create/select a folder:	Possible
File numbering:	Continuous, Auto reset, Manual reset

• Image Processing During Shooting

Picture Style:	Auto, Standard, Portrait, Landscape, Fine Detail, Neutral, Faithful, Monochrome, User Defined 1 - 3
White balance:	Auto (Ambience priority), Auto (White priority), Preset (Daylight, Shade, Cloudy, Tungsten light, White fluorescent light, Flash), Custom White balance correction, and White balance bracketing provided * Flash color temperature information transmission possible

Noise reduction:	Applicable to long exposures and high ISO speed shots
Automatic image brightness correction:	Auto Lighting Optimizer provided
Highlight tone priority:	Provided
Lens aberration correction:	Peripheral illumination correction, Chromatic aberration correction, Distortion correction, Diffraction correction


• Viewfinder

Type:	Eye-level pentamirror
Field of view coverage:	Vertical/Horizontal approx. 95% (with Eye point approx. 19 mm and aspect ratio set to 3:2)
Magnification:	Approx. 0.82x (-1 m ⁻¹ with 50mm lens at infinity)
Eyepoint:	Approx. 19 mm (from eyepiece lens center at -1 m ⁻¹)
Dioptric adjustment range:	Approx. -3.0 - +1.0 m ⁻¹ (dpt)
Focusing screen:	Fixed, Precision Matte
Grid display:	Provided
Electronic level display:	Provided
Mirror:	Quick-return type
Depth-of-field preview:	Provided

• Autofocus (for viewfinder shooting)

Type:	TTL secondary image-registration, phase-difference detection with the dedicated AF sensor
AF points:	Max. 45 points (Cross-type AF point: Max. 45 points) * Number of available AF points, Dual cross-type AF points, and cross-type AF points vary depending on the lens used and aspect ratio settings. * Dual cross-type focusing at f/2.8 with center AF point. (AF group: When Group A lenses are used)
Focusing brightness range:	EV -3 - 18 (with the center AF point supporting f/2.8, One-Shot AF, at room temperature, ISO 100)
Focus operation:	One-Shot AF, AI Servo AF, AI Focus AF, Manual focusing (MF)
AF area selection mode:	Single-point AF (Manual selection), Zone AF (Manual selection of zone), Large Zone AF (manual selection of zone), Automatic selection AF
AF point automatic selection conditions:	Automatic AF point selection possible based on color information equivalent to skin tones.
AF-assist beam:	Small series of flashes fired by built-in flash

• Exposure Control

Metering mode:	63-zone TTL open-aperture metering using 7560-pixel RGB plus IR metering sensor <ul style="list-style-type: none">• Evaluative metering (linked to all AF points)• Partial metering (approx. 6.0% of viewfinder at center)• Spot metering (approx. 3.5% of viewfinder at center)• Center-weighted average metering
Metering brightness range:	EV 1 - 20 (at room temperature, ISO 100)
Shooting mode:	Basic Zone modes: Scene Intelligent Auto, Flash Off, Creative Auto, Portrait, Landscape, Close-up, Sports, Special scene modes (Group Photo, Kids, Food, Candlelight, Night Portrait, Handheld Night Scene, HDR Backlight Control), Creative filters (Grainy B/W, Soft focus, Fish-eye effect, Water painting effect, Toy camera effect, Miniature effect, HDR art standard, HDR art vivid, HDR art bold, HDR art embossed) Creative Zone modes: Program AE, Shutter-priority AE, Aperture-priority AE, Manual exposure
ISO speed (Recommended exposure index):	Basic Zone modes: ISO speed set automatically Creative Zone modes: ISO Auto, ISO 100 - ISO 25600 set manually (whole-stop increments), and ISO expansion to H (equivalent to ISO 51200) provided
ISO speed settings:	Maximum limit for ISO Auto settable
Exposure compensation:	Manual: $\pm 5^*$ stops in 1/3- or 1/2-stop increments * With [ : Shooting screen: Guided] set, ± 3 stops AEB: ± 2 stops in 1/3- or 1/2-stop increments (can be combined with manual exposure compensation)
AE lock:	Auto: Applied in One-Shot AF with evaluative metering when focus is achieved Manual: With AE lock button
Flicker reduction:	Provided
Interval timer:	Shooting interval and number of shots settable
Bulb timer:	Bulb exposure time settable

• Shutter

Type: Electronically-controlled, focal-plane shutter
 Shutter speed: 1/4000 sec. to 30 sec. (total shutter speed range; available range varies by shooting mode), Bulb, X-sync at 1/200 sec.

• Drive System

Drive mode: Single shooting, High-speed continuous shooting, Low-speed continuous shooting, 10-sec. self-timer/remote control, 2-sec. delay, 10-sec. delay with continuous shooting

Continuous shooting speed: High-speed continuous shooting: Max. approx. 6.0 shots/sec.*
 * Max. approx. 4.5 shots/sec. during Live View shooting or when [Servo AF] is set.
 Low-speed continuous shooting: Max. approx. 3.0 shots/sec.*
 * Max. approx. 3.5 shots/sec. during Live View shooting

Max. burst: JPEG Large/Fine: Approx. 190 shots (Card Full)
 RAW: Approx. 21 shots (approx. 27 shots)
 RAW+JPEG Large/Fine: Approx. 19 shots (approx. 23 shots)
 * Figures are based on Canon's testing standards (3:2 aspect ratio, ISO 100 and Standard Picture Style) using an 8 GB card.
 * Figures in parentheses apply to an UHS-I compatible 16 GB card based on Canon's testing standards.
 * "Card Full" indicates that shooting is possible until the card becomes full.

•Flash

Built-in flash:	Retractable, auto pop-up flash Guide No.: Approx. 12/39.4 (ISO 100, in meters/feet) Flash coverage: Approx. 17mm lens angle of view Recharge time: Approx. 3 sec.
External Speedlite:	Compatible with EX-series Speedlites
Flash metering:	E-TTL II autoflash
Flash exposure compensation:	±2 stops in 1/3- or 1/2-stop increments
FE lock:	Provided
PC terminal:	None
Flash control:	Built-in flash function settings, external Speedlite function settings, external Speedlite Custom Function settings Wireless flash control via optical transmission possible

•Live View Shooting

Focus method:	Dual Pixel CMOS AF system
AF method:	Face+Tracking, Smooth zone, Live 1-point AF Manual focus (approx. 5x / 10x magnification possible)
AF operation:	One-Shot AF, Servo AF
Focusing brightness range:	EV -2 - 18 (at room temperature, ISO 100, One-Shot AF)
Metering mode:	Evaluative metering (315 zones), Partial metering (approx. 6.0% of Live View screen), Spot metering (approx. 2.6% of Live View screen), Center-weighted average metering
Metering brightness range:	EV 0 - 20 (at room temperature, ISO 100)
Exposure compensation:	±3 stops in 1/3-stop or 1/2-stop increments
Creative filters:	Provided
Touch shutter:	Provided
Grid display:	Three types

• Movie Shooting

Recording format:	MP4
Movie:	* Time-lapse movie shooting: MOV MPEG-4 AVC / H.264 Variable (average) bit rate
Audio:	AAC
Recording size and frame rate:	Full HD (1920x1080): 59.94p/50.00p/29.97p/25.00p/ 23.98p HD (1280x720) : 59.94p/50.00p/29.97p/25.00p VGA (640x480) : 29.97p/25.00p
Compression method:	IPB (Standard), IPB (Light) * Time-lapse movie shooting: ALL-I
Bit rate:	Full HD (59.94p/50.00p)/IPB (Standard) : Approx. 60 Mbps Full HD (29.97p/25.00p/23.98p)/IPB (Standard) : Approx. 30 Mbps Full HD (29.97p/25.00p)/IPB (Light) : Approx. 12 Mbps HD (59.94p/50.00p)/IPB (Standard) : Approx. 26 Mbps HD (29.97p/25.00p)/IPB (Light) : Approx. 4 Mbps VGA (29.97p/25.00p) (Standard) : Approx. 9 Mbps VGA (29.97p/25.00p) (Light) : Approx. 3 Mbps HDR Movie : Approx. 30 Mbps Time-lapse movie : Approx. 90 Mbps
Focus system:	Dual Pixel CMOS AF system
AF method:	Face+Tracking, Smooth zone, Live 1-point AF Manual focus (approx. 5x / 10x magnification available for focus check)
Movie Servo AF:	Provided
Movie digital IS:	Provided (Enable/Enhanced)
Digital zoom:	Approx. 3x - 10x
Focusing brightness range:	EV -2 - 18 (at room temperature, ISO 100, One-Shot AF)

Specifications

Metering mode:	Center-weighted average and Evaluative metering with the image sensor * Automatically set by the AF method
Metering brightness range:	EV 0 - 20 (at room temperature, ISO 100, with center-weighted average metering)
Exposure control:	Autoexposure shooting (Program AE for movie shooting) and manual exposure
Exposure compensation:	±3 stops in 1/3- or 1/2-stop increments
ISO speed (Recommended exposure index):	For autoexposure shooting: ISO 100 - ISO 12800 set automatically. In Creative Zone modes, the upper limit is expandable to H (equivalent to ISO 25600). For manual exposure shooting: ISO Auto (ISO 100 - ISO 12800 set automatically), ISO 100 - ISO 12800 set manually (whole-stop increments), expandable to H (equivalent to ISO 25600)
ISO speed settings:	Maximum limit for ISO Auto settable
HDR Movie Shooting:	Possible
Creative filters for movies:	Dream, Old Movies, Memory, Dramatic B&W, Miniature effect movie
Video snapshots:	Settable to 2 sec./4 sec./8 sec.
Sound recording:	Built-in stereo microphones, external stereo microphone terminal provided Sound-recording level adjustable, wind filter provided, attenuator provided
Grid display:	Three types
Time-lapse movie:	Shooting interval (hours:minutes:seconds), Number of shots, Auto exposure (Fixed 1st frame, Each frame), LCD auto off, Beep as image shot settable
Still photo shooting:	Not possible during movie shooting
• LCD Monitor	
Type:	TFT color, liquid-crystal monitor
Monitor size and dots:	Wide 7.7 cm (3.0 in) (3:2) with approx. 1.04 million dots
Brightness adjustment:	Manual (7 levels)
Electronic level:	Provided
Interface languages:	25
Touch screen technology:	Capacitive sensing

• Playback

Image display format:	Single-image display (without shooting information), Single-image display (with basic information), Single-image display (Shooting information displayed: Detailed information, Lens/histogram, White balance, Picture Style 1, Picture Style 2, Color space/noise reduction, Lens aberration correction), Index display (4/9/36/100 images)
Highlight alert:	Overexposed highlights blink
AF point display:	Provided (may not be displayed depending on shooting conditions)
Zoom magnification ratio:	Approx. 1.5x - 10x
Image search:	Search conditions settable (Rating, Date, Folder, Protect, File type)
Image browsing methods:	Single image, 10 images, specified number, date, folder, movies, stills, protect, rating
Image rotation:	Possible
Image protection:	Possible
Rating:	Provided
Movie playback:	Enabled (LCD monitor, HDMI), built-in speaker
Slide show:	Automatically play back all images or the images that match search conditions
Background music:	Selectable for slide shows and movie playback

• Post-Processing of Images

Creative filters:	Grainy B/W, Soft focus, Fish-eye effect, Art bold effect, Water painting effect, Toy camera effect, Miniature effect
Resize:	Provided
Cropping:	Provided

• Print Ordering

DPOF:	Version 1.1 compliant
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• Customization Features

Custom Functions:	14
My Menu:	Up to 5 screens can be registered
Copyright information:	Text entry and appending possible
Display level settings:	Shooting screen, Menu display, Mode guide, Feature guide

• Interface

DIGITAL terminal:	Computer communication (Hi-Speed USB equivalent), GPS Receiver GP-E2, Connect Station CS100 connection
HDMI mini OUT terminal:	Type C (Auto switching of resolution), CEC-compatible
External microphone IN terminal:	3.5 mm diameter stereo mini-jack Directional Stereo Microphone DM-E1 connection
Remote control terminal:	For Remote Switch RS-60E3
Wireless remote control:	Compatible with Wireless Remote Control BR-E1 (Bluetooth connection) and Remote Controller RC-6
Eye-Fi card:	Supported

• Power

Battery:	Battery Pack LP-E17 (Quantity 1) * AC power usable with household power outlet accessories.
Number of possible shots:	With viewfinder shooting: Approx. 600 shots at room temperature (23°C/73°F), approx. 550 shots at low temperatures (0°C/32°F) With Live View shooting: Approx. 270 shots at room temperature (23°C/73°F), approx. 230 shots at low temperatures (0°C/32°F) * With a fully-charged Battery Pack LP-E17.
Movie shooting time:	Approx. 1 hr. 55 min. at room temperature (23°C/73°F) Approx. 1 hr. 50 min. at low temperatures (0°C/32°F) * With a fully-charged Battery Pack LP-E17.

• Dimensions and Weight

Dimensions (W x H x D):	Approx. 131.0 x 99.9 x 76.2 mm / 5.16 x 3.93 x 3.00 in.
Weight:	Approx. 540 g / 19.05 oz. (Including battery and card) Approx. 493 g / 17.39 oz. (Body only)

• Operation Environment

Working temperature range:	0°C - 40°C / 32°F - 104°F
Working humidity:	85% or less

• Battery Pack LP-E17

Type:	Rechargeable lithium-ion battery
Rated voltage:	7.2 V DC
Battery capacity:	1040 mAh
Working temperature range:	For charging: 5°C - 40°C / 41°F - 104°F For shooting: 0°C - 40°C / 32°F - 104°F
Working humidity:	85% or less
Dimensions (W x H x D):	Approx. 33.0 x 14.0 x 49.4 mm / 1.30 x 0.55 x 1.94 in.
Weight:	Approx. 45 g / 1.59 oz. (excluding protective cover)

• Battery Charger LC-E17E

Compatible battery:	Battery Pack LP-E17
Recharge time:	Approx. 2 hours (at room temperature (23°C/73°F))
Rated input:	100 - 240 V AC (50/60 Hz)
Rated output:	8.4 V DC / 700 mA
Working temperature range:	5°C - 40°C / 41°F - 104°F
Working humidity:	85% or less
Dimensions (W x H x D):	Approx. 67.3 x 27.7 x 92.2 mm / 2.65 x 1.09 x 3.63 in. (excluding power cord)
Weight:	Approx. 80 g / 2.82 oz. (excluding power cord)

- All the data above is based on Canon's 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 the exterior are subject to change without notice.
- If a problem occurs with a non-Canon lens attached to the camera, consult the respective lens manufacturer.



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* Notice displayed in English as required.

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This product includes third party software.

- expat.h

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■
If a chemical symbol is printed beneath the symbol shown above, in accordance with the Battery Directive, this indicates that a heavy metal (Hg = Mercury, Cd = Cadmium, Pb = Lead) is present in this battery or accumulator at a concentration above an applicable threshold specified in the Battery Directive.

This product should be handed over to a designated collection point, e.g., on an authorized one-for-one basis when you buy a new similar product or to an authorized collection site for recycling waste electrical and electronic equipment (EEE) and batteries and accumulators. Improper handling of this type of waste could have a possible impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. Your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources.

For more information about the recycling of this product, please contact your local city office, waste authority, approved scheme or your household waste disposal service or visit www.canon-europe.com/weee, or www.canon-europe.com/battery.


CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO LOCAL REGULATION.









14

Software Start Guide / Downloading Images to a Computer

This chapter describes the following:

- Overview of the software for EOS cameras
- How to download and install the software on a computer
- How to download and view the Software Instruction Manuals (PDF files)
- How to download images from the camera to a computer

Software Start Guide

Software Overview

This section describes an overview of various software applications for EOS cameras. An Internet connection is required to download and install the software. Download and installation are not possible in environments with no Internet connection.

EOS Utility

With the camera connected to a computer, EOS Utility enables you to transfer still photos and movies shot with the camera to the computer. You can also use this software to set various camera settings and shoot remotely from the computer connected to the camera. Also, you can copy background music tracks, such as EOS Sample Music*, to the card.

* You can use the background music as the soundtrack for a video snapshot album, movie, or slide show played back with your camera.

Digital Photo Professional

This software is recommended for users who shoot RAW images. You can view, edit, and print RAW and JPEG images.

* Certain functions differ between the version to be installed on a 64-bit computer and that to be installed on a 32-bit computer.

Picture Style Editor

You can edit Picture Styles, and create and save original Picture Style files. This software is aimed at advanced users who are experienced in image processing.

Downloading and Installing the Software



- **Do not connect the camera to a computer before you install the software. The software will not be installed correctly.**
- Even if a previous version of the software is installed on your computer, follow the procedure below to install the latest version. (The previous version will be overwritten.)

1 Download the software.

- Connect to the Internet from a computer and access the following Canon website.

www.canon.com/icpd

- Select your country or region of residence and download the software.
- Decompress it on the computer.

For Windows: Click the displayed installer file to start the installer.

For Macintosh: A dmg file will be created and displayed. Follow the steps below to start the installer.

- (1) Double-click the dmg file.
 - ▶ A drive icon and installer file will appear on the desktop. If the installer file does not appear, double-click the drive icon to display it.
- (2) Double-click the installer file.
 - ▶ The installer starts.

2 Follow the on-screen instructions to install.

Downloading and Viewing the Software Instruction Manuals (PDF Files)

Internet connection is required to download the Software Instruction Manuals (PDF files). Download is not possible in environments with no Internet connection.

1 Download the Software Instruction Manuals (PDF files).

- Connect to the Internet and access the following Canon website.

www.canon.com/icpd

2 View the Software Instruction Manuals (PDF files).

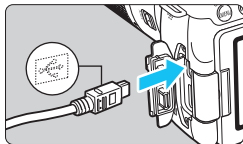
- Double-click a downloaded Instruction Manual (PDF file) to open it.
- To view the Instruction Manuals (PDF files), Adobe Acrobat Reader DC or other Adobe PDF viewer (most recent version recommended) is required.
- Adobe Acrobat Reader DC can be downloaded for free from the Internet.
- To learn how to use PDF viewing software, refer to the software's Help section.

Downloading Images to a Computer

You can use EOS software to download images from the camera to a computer. There are two ways to do this.

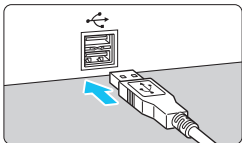
Downloading by Connecting the Camera to the Computer

1 Install the software (p.489).




2 Use an interface cable (sold separately) to connect the camera to the computer.

- Connect the cable to the camera's digital terminal with the cable plug's <↔> icon facing the front of the camera.
- Connect the cord's plug to the computer's USB terminal.



3 Use EOS Utility to transfer the images.

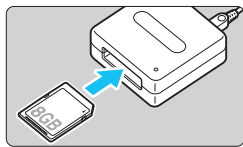
- Refer to the EOS Utility Instruction Manual.

 While a Wi-Fi connection is established, the camera cannot be connected to a computer with an interface cable.

Downloading Images with a Card Reader

You can use a card reader to download images to a computer.


1 Install the software (p.489).



2 Insert the card into the card reader.

3 Use Digital Photo Professional to download the images.

- Refer to the Digital Photo Professional Instruction Manual.

 When downloading images from the camera to a computer with a card reader without using EOS software, copy the DCIM folder on the card to the computer.

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












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