Canon

EOS M2
EOS M2 (W)

Introduction

The EOS M2 is a high-performance, interchangeable-lens digital camera featuring a fine-detail CMOS sensor with approx. 18.0 effective megapixels, DIGIC 5, Hybrid CMOS AF II, approx. 4.6 fps continuous shooting, Full High-Definition (Full HD) movie shooting, and Wi-Fi functions.
The camera is highly responsive to any shooting situation, and provides many features for demanding shots.

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

With a digital camera, you can immediately view the image you have captured. While reading this manual, take a few test shots and see how they come out. You can then better understand the camera.
To avoid botched pictures and accidents, first read the "Safety Warnings" (p.345-346) and "Handling Precautions" (p.20-22).

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 in 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.

Compatible Cards

The camera can use the following cards regardless of capacity. **If the card is new or was previously formatted by another camera or computer, formatting the card with this camera is recommended** (p.57).

- SD memory cards
- SDHC memory cards*
- SDXC memory cards*
  * UHS-I cards supported.

Cards that Can Record Movies

When shooting movies, use a large-capacity SD card rated SD Speed Class 6 "CLASS⑥" or higher.

- 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 play back properly.
- If you want to shoot still photos while shooting a movie, you will need an even faster card.
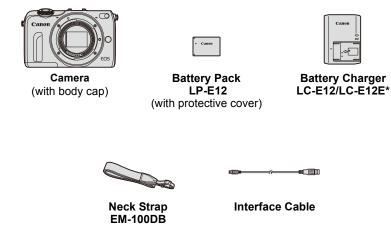- To check a card's reading/writing speed, refer to the card manufacturer's Web site.

In this manual, "card" refers to SD memory cards, SDHC memory cards, and SDXC memory cards.
   * **The camera does not come with any cards for recording images/ movies.** Please purchase these cards separately.

Item Check List

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

Camera
(with body cap)

Battery Pack
LP-E12
(with protective cover)

Battery Charger
LC-E12/LC-E12E*

Neck Strap
EM-100DB

Interface Cable

* Battery Charger LC-E12 or LC-E12E is provided. (The LC-E12E comes with a power cord.)

Software is not provided with the camera. Download it from the Canon Web site at the following URL.

http://www.canon.com/icpd/

- For information on how to download or install the software and Software Instruction Manual PDFs, see "Software Start Guide" (p.350) in this manual.
- The Instruction Manuals provided are listed on the next page.
- Depending on the Lens Kit type, Lens Instruction Manuals may also be included.
- Check that all the bundled accessories are included in the camera's package.
- Be careful not to lose any of the above items.

Instruction Manuals

Camera Basic Instruction Manual

Wi-Fi Function Basic Instruction Manual

Wi-Fi Cautions

- The Instruction Manuals consist of the provided booklets and more detailed Instruction Manual PDFs available for download from the Canon Web site.
- Instructions for downloading and viewing the Instruction Manual PDFs are shown below.

Downloading and Viewing the Instruction Manual PDFs

1 Download the Instruction Manual PDFs.

- Connect to the Internet from a computer and access the Canon Web site at the following URL.

http://www.canon.com/icpd/

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

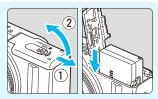**Instruction Manual PDFs Available for Download**
- Camera Instruction Manual
- Wi-Fi Function Instruction Manual
- Software Instruction Manuals

2 View the Instruction Manual PDFs.

- Double-click a downloaded Instruction Manual PDF to open it.
- To view the Instruction Manual PDFs, Adobe Reader must be installed on your computer.
- Adobe Reader can be downloaded free from the Internet.

Quick Start Guide

1 **Insert the battery** (p.34)**.**
- To charge the battery, see page 32.

2 **Insert a card** (p.34)**.**
- With the card's label facing toward the front of the camera, insert it into the card slot.

3 **Attach a lens** (p.44)**.**
- Align the lens' mount index with the camera's mount index.

4 **Press the power button to turn on the camera** (p.37)**.**
- When the LCD monitor displays the date/time/zone setting screens, see page 41.

5 Set the Mode Dial to <🄰⁺> (Scene Intelligent Auto) (p.64).
- All the necessary camera settings will be set automatically.

6 Focus the subject (p.49).
- Aim the LCD monitor's center over the subject.
- Press the shutter button halfway. The camera will focus the subject.

7 Take the picture (p.49).
- Press the shutter button completely to take the picture.

8 Review the picture (p.209).
- The captured image will be displayed for 2 sec. on the LCD monitor.
- To display the image again, press the <▶> button (p.92).

- To view the images captured so far, see "Image Playback" (p.92).
- To delete an image, see "Erasing Images" (p.254).
- After you finish shooting, attach the lens cap to protect the lens.

Conventions Used in this Manual

Icons in this Manual

<⬤>   : Indicates the Main Dial.

<▲><▼><◄><►><✛> : Indicates the Main Dial's top, bottom, left, and right keys.

<**Q**>/<SET>   : Indicates the Main Dial's center button.

⏱4, ⏱6, ⏱8, ⏱10, ⏱16 : Indicates that the corresponding function remains active for 4 sec., 6 sec., 8 sec., 10 sec., or 16 sec. respectively after you let go of the button.

* In this manual, the icons and markings indicating the camera's buttons, dials, and settings correspond to the icons and markings on the camera and on the LCD monitor.

MENU   : Indicates a function that can be changed by pressing the <MENU> button and changing the setting.

⚫   : When shown on the upper right of a page, indicates that the function is available only in the Creative Zone modes (p.27).

(p.**)   : Reference page numbers for more information.

⬤   : Warning to prevent shooting problems.

📵   : Supplemental information.

☀   : Tips or advice for better shooting.

?   : Problem-solving advice.

Basic Assumptions

● All operations explained in this manual assume that the power is <ON> (p.37).

● It is assumed that all the menu settings and Custom Functions are set to their defaults.

● The illustrations in this manual show the camera with the EF-M 18-55mm f/3.5-5.6 IS STM lens attached as an example.

Chapters

For first-time digital single-lens non-reflex camera users, Chapters 1 and 2 explain the camera's basic operations and shooting procedures.

Contents at a Glance

Shooting

Image Quality

Focusing

- **Change the focusing method** → **p.108** (Focus modes)

- **Shoot a moving subject** → **p.79**, **80**, **111** (Servo AF)

Playback

- **View the images on the camera** → **p.92** (▶ Playback)

- **Search for pictures quickly** → **p.231** (Index display)
  p.232 (🔠 Image browsing)

- **Rate images** → **p.234** (Ratings)

- **Prevent important images from accidental deletion** → **p.252** (🔒 Image protect)

- **Delete unnecessary images** → **p.254** (🗑 Erase)

- **Play back images and movies automatically** → **p.243** (Slide show)

- **View images or movies on a TV set** → **p.247** (Video OUT)

- **Adjust the LCD monitor brightness** → **p.211** (LCD monitor brightness)

- **Apply special effects to images** → **p.260** (◉ Creative filters)

Printing

- **Print pictures easily** → **p.267** (Direct printing)

Index to Features

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4 Advanced Shooting 135

5 Shooting Movies 175

12 Software Start Guide /
Downloading Images to Your Computer   349

Handling Precautions

Camera Care

- This camera is a precision instrument. Do not drop it or subject it to physical shock.
- Do not point the camera toward an intense light source, such as the sun on a sunny day or an intense artificial light source. Doing so may damage the image sensor or the camera's internal components.
- 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 well-wrung wet cloth.
- Never leave the camera near anything that has 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 shutter operation with your finger, etc. Doing so may cause a malfunction.
- Use a blower to blow away any dust on the lens. Do not use cleaners that contain organic solvents to clean the camera body or lens. For stubborn dirt, take the camera to the nearest Canon Service Center.
- Do not touch the camera's electrical contacts with your fingers. This is to prevent the contacts from corroding. Corroded contacts can cause camera misoperation.
- 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 the nearest Canon Service Center or check the camera yourself and make sure it is working properly.
- When you detach the lens, the image sensor will be exposed. To prevent scratching the image sensor, do not touch the image sensor.
- If you use continuous shooting or movie shooting for a prolonged period, the camera may become hot. This is not a malfunction.

LCD Monitor

- Although the LCD monitor is manufactured with very high precision technology with over 99.99% effective pixels, there may be a few dead pixels displaying only black or red, etc. among the remaining 0.01% or less pixels. Dead pixels are not a malfunction. They do not affect the images recorded.
- If the LCD monitor is left on for a prolonged period with the same screen displayed, 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 slow in low temperatures, or look black in high temperatures. It will return to normal at room temperature.
- After changing the LCD monitor's brightness settings, the display may look a little coarse, depending on the subject. This is not a malfunction and will not affect the recorded image.

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 magnet. 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.

Lens

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

Contacts

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 visible spots still remain after the automatic sensor cleaning, having the sensor cleaned by a Canon Service Center is recommended.

Lens Mount

Periodically cleaning the camera's body and lens mount with a soft lens cleaning cloth is recommended.

Nomenclature

Microphone (p.177)

Power button (p.37)

Mode Dial (p.27)

Flash sync contacts

Shutter button (p.49)

Hot shoe (p.296)

< $\bigoplus$ > Focal plane mark (p.78)

Speaker (p.239)

Wi-Fi antenna

Self-timer lamp/ AF-assist lamp (p.126/112)

Strap mount (p.30)

Remote control sensor (p.295)

Terminal cover

Grip

EF-M lens mount index (p.44)

Contacts (p.22)

Lens mount

Lens lock pin

Lens release button (p.45)

Body cap (p.44)

<**MIC**> External microphone IN terminal (p.201)

<**A/V OUT**/**DIGITAL**> Audio/video OUT/Digital terminal (p.251, 268, 353)

<**HDMI OUT**> HDMI mini OUT terminal (p.247)

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LCD monitor/Touch screen (p.54, 211/p.59, 230, 239)

Power/Access lamp (p.35)

<‹(ʈ)›> Wi-Fi lamp

<MENU> Menu button (p.54)

<●> Movie start/stop button (p.176)

<▶> Playback button (p.92)

<Q/SET>
Quick Control/
Set button
(p.50, 86, 236/p.40, 54)

<INFO.> Info button
(p.52, 66, 92, 180)

DC Coupler terminal cover (p.294)

Tripod socket

Card slot/Battery compartment cover
(p.34)

<◯> Main Dial (p.40)
 <▲ ⟲/⨺> Drive mode selection button (p.75, 124, 126)
 <▼ 🗑> Erase button (p.254)
 <◀ ✱> AE lock/FE lock button (p.152/p.297)
 <▶ ⨯> Aperture/Exposure compensation button
 (p.143/p.148)

Card slot (p.34)

Battery compartment (p.34)

Information Display 1: Basic Information (in Creative Zone modes, p.27)

Number of possible shots
Number of possible shots
during WB bracketing
Self-timer countdown

Maximum burst

Battery check (p.39)

Shooting mode

Q Quick Control

AF point
(FlexiZone - Single)
(p.113)

Touch shutter
(p.122)

Magnified view

AE lock

ISO speed (p.102)

Shutter speed

Highlight tone priority (p.289)

Main Dial pointer

Exposure level indicator
Exposure compensation
amount (p.148)
AEB range (p.150)

Aperture

The display will show only the settings currently applied.

Information Display 2: Detailed information (in Creative Zone modes, p.27)

Creative filters (p.128)

AF method (p.113)
AF □ FlexiZone - Single
AF ʲ⁵ ⁴ ʮ +Tracking
AF( ) FlexiZone - Multi

AF operation (p.110)
ONE SHOT
One-Shot AF
SERVO Servo AF
MF Manual Focus

Image-recording quality (p.97)
▲ L Large/Fine
◢ L Large/Normal
▲ M Medium/Fine
◢ M Medium/Normal
▲ S1 Small 1/Fine
◢ S1 Small 1/Normal
S2 Small 2 (Fine)
S3 Small 3 (Fine)
RAW + ▲ L
     RAW+Large/Fine
RAW RAW

Drive mode (p.75, 124, 126)
□ Single shooting
▣ Continuous shooting
ȷⓈ Self-timer:10 sec/ remote control
Ⓢ2 Self-timer:2 sec
Ⓢc Self-timer:Continuous

♭H High-speed sync
♭* FE lock/FEB in-progress

Eye-Fi transmission status (p.305)

Picture Style (p.106)

White balance (p.168)
AWB Auto
☀ Daylight
🏠 Shade
☁ Cloudy
☀ Tungsten light
🗛 White fluorescent light
♭ Flash
☒ Custom

Auto Lighting Optimizer (p.153)

Metering mode (p.146)
⊛ Evaluative metering
⊙ Partial metering
⊡ Spot metering
⊏⊐ Center-weighted average metering

Exposure simulation

AEB/FEB

GPS connection indicator

Digital compass

Flash exposure compensation

Image Stabilizer: OFF (only when a lens with IS function is attached)

The display will show only the settings currently applied.

📝 If you use the < 🌅 > or < 🎆 > shooting mode, use flash, or set a bulb exposure, the < **ExpSIM** > icon and histogram will be grayed out (for your reference). The histogram may not be properly displayed in low- or bright-light conditions.

Mode Dial

A⁺ : Scene Intelligent Auto

This is a fully automatic mode.
The camera analyzes the scene and sets the optimum settings automatically (p.64).

📷 : Basic Zone Modes

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

- CA : **Creative Auto** (p.71)
- ♦ : **Portrait** (p.76)
- ▲ : **Landscape** (p.77)
- ♣ : **Close-up** (p.78)
- ♦ : **Sports** (p.79)
- ♣ : **Kids** (p.80)
- ▼ : **Food** (p.81)
- ▣ : **Night Portrait** (p.82)
- ▣ : **Handheld Night Scene** (p.83)
- ▣ : **HDR Backlight Control** (p.84)

🎥 : Movie Shooting Modes

You can shoot movies (p.176).

- 🎥 : **Movie auto exposure**
- 🎥M : **Movie manual exposure**

📷 : Creative Zone Modes

These modes give you more control for shooting various subjects.

- M : **Manual exposure** (p.143)
- Av : **Aperture-priority AE** (p.139)
- Tv : **Shutter-priority AE** (p.136)
- P : **Program AE** (p.94)

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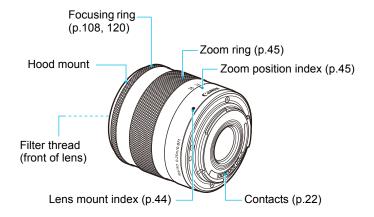
Lens
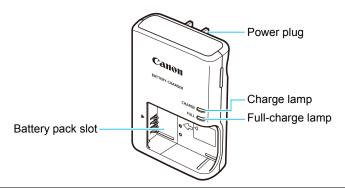
EF-M Lens
(Lens with no focus mode switch and no Image Stabilizer switch.)

Focusing ring
(p.108, 120)

Zoom ring (p.45)

Hood mount

Zoom position index (p.45)

Filter thread
(front of lens)

Lens mount index (p.44)

Contacts (p.22)

Battery Charger LC-E12

Charger for Battery Pack LP-E12 (p.32).

Power plug

Charge lamp

Full-charge lamp

Battery pack slot
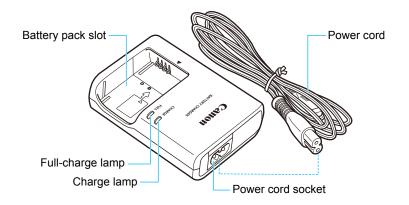
IMPORTANT SAFETY INSTRUCTIONS-SAVE THESE INSTRUCTIONS.
DANGER-TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,
CAREFULLY FOLLOW THESE INSTRUCTIONS.
For connection to a supply not in the U.S.A., use an attachment plug adapter of the
proper configuration for the power outlet, if needed.
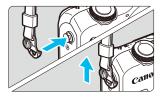
Battery Charger LC-E12E

Charger for Battery Pack LP-E12 (p.32).

Battery pack slot

Power cord

Full-charge lamp

Charge lamp

Power cord socket

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Attaching the Strap

1 **Attach the strap's metallic ring to the camera.**
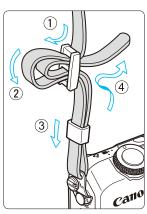
- Fit the strap's metallic ring over the camera's strap mount.

2 **Lock the strap's metallic ring.**

- Use a coin or similar tool to turn the stopper clockwise until it stops (the index marks are aligned).
- Make sure the strap's metallic ring is not loose.

Threading the Strap
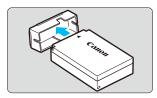
- Thread the strap as shown in the illustration and adjust the strap length.

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1

Getting Started
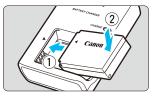
This chapter explains preparatory steps before you start shooting and basic camera operations.

Charging the Battery

1 Remove the protective cover.

● Detach the protective cover provided with the battery.
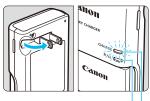
2 Attach the battery.

● Align the battery's ◀ mark with the battery charger's ▶ mark, then attach the battery securely.
● To detach the battery, follow the above procedure in reverse.

LC-E12
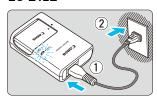
3 Recharge the battery.
For LC-E12

● As shown by the arrow, flip out the battery charger's prongs and insert the prongs into a power outlet.

For LC-E12E

● 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.

Full-charge lamp
Charge lamp

LC-E12E

● **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 hours).

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☼ 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 is 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's 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 household power outlet. 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 can damage the battery charger.

● **If the battery becomes exhausted quickly even after being fully charged, the battery has reached the end of its service life.**
Purchase a new battery.
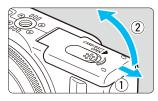
● After disconnecting the charger's power plug, do not touch the prongs for at least 3 sec.
● Do not charge any battery other than a Battery Pack LP-E12.
● Battery Pack LP-E12 is dedicated to Canon products only. Using it with an incompatible battery charger or product may result in malfunction or accidents for which Canon cannot be held liable.

Installing and Removing the Battery and Card

Load a fully charged Battery Pack LP-E12 into the camera. The camera can use an SD, SDHC, or SDXC memory card (sold separately). UHS-I Speed Class SDHC and SDXC memory cards can also be used. The captured images are recorded onto the card.
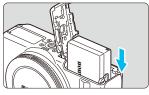
Make sure the card's write-protect switch is set upward to enable writing/erasing.

Installing the Battery and Card

1 Open the cover.
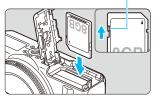
- Slide the cover as shown by the arrows and open it.

2 Insert the battery.

- The battery's "**Canon**" logo must be toward the camera's front side as you insert the battery with the battery contacts in first.
- Insert the battery until it clicks and locks in place.

Write-protect switch

3 Insert the card.

- **The card's label side must be toward the front of the camera.**
- Insert it straight down until it stops.

4 Close the cover.

- Press the cover until it snaps shut.

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P [514] 🔋

Possible shots
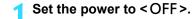
5 Check the number of possible shots.
● When you set the power to <ON>, the remaining number of images you can record to the card will be displayed on the LCD monitor.

Removing the Battery and Card

1 Set the power to <OFF>.
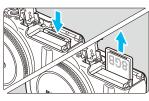
2 Open the cover.
● **Make sure the LCD monitor and access lamp are off, then open the cover.**
● If [**Recording...**] is displayed, close the cover.

3 Remove the battery.
● Press the battery lock lever as shown by the arrow and remove the battery.
● To prevent short circuiting of the battery contacts, be sure to attach the provided protective cover (p.32) to the battery.

4 Remove the card.
● Gently push in the card, then let go to eject it.
● Pull the card straight out.

5 Close the cover.
● Press the cover until it snaps shut.

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 ● After opening the card slot/battery compartment cover, be careful not to swing it back further. Otherwise, the hinge may break.

 ● **When the access lamp is blinking in orange, it indicates that images are being written to or read by the card, being erased, or data is being transferred. Do not open the card slot/battery compartment cover. Also, never do any of the following while the access lamp is blinking in orange. Otherwise, the image data, card, or camera may be damaged.**
   • **Removing the card.**
   • **Removing the battery.**
   • **Shaking or banging the camera around.**

 ● If the card already contains recorded images, the image number may not start from 0001 (p.214).

 ● 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 all the images on the card to a computer, transfer all the images and then format the card with the camera (p.57). The card may then return to normal.

 ● Do not touch the card's contacts with your fingers or metal objects.

 ● Multimedia cards (MMC) cannot be used (card error will be displayed).

 ● The number of possible shots depends 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 forgetting to insert a card (p.208).

Turning on the Power

If you set the power to <ON> and the date/time/zone setting screen appears, see page 41 to set the date/time/zone.

Pressing the power button toggles between <ON> and <OFF>.

With the power <OFF>, holding down the <▶> button for 2 sec. or longer will start the playback mode.
● When an EF-M lens is attached to the camera and the power is off, the aperture stops down to reduce the amount of light entering the camera and protect the internal components of the camera. When you set the power to <ON> or <OFF>, the aperture makes a small noise as it opens or closes.

Automatic Self-Cleaning Sensor

● When you set the power to <ON>/<OFF> or if the time set with [**Camera auto off**] under [♦2: Power saving] elapses and the camera turns off, sensor cleaning will be executed automatically. (A small sound may be heard.) During the sensor cleaning after intentionally turning the camera <OFF>, the LCD monitor will display the <⌂> icon.
● If you repeatedly switch the power to <ON>/<OFF> at a short interval, the <⌂> icon may not be displayed. This is normal and not a malfunction.
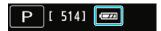
📓 If you set the power to <OFF> while an image is being recorded to the card, [**Recording...**] will be displayed and the power will turn off after the card finishes recording the image.

MENU Power-saving Features

● To save power, the LCD monitor turns off automatically if you do not operate the camera. If you continue to not operate the camera, the power will turn off automatically. While the LCD monitor is off, operation such as pressing a button will turn on the LCD monitor again. If the power turns off, either press the power button or press the <▶> for at least approx. 2 sec. to turn on the power again.

● You can change the LCD monitor auto off time and camera auto off time with [**LCD auto off**] and [**Camera auto off**] under [**ᴪ2: Power saving**] (p.210).

⌧ Checking the Battery Level

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

P [514] ⌧

⌧ : 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   [Approx. number of shots]

Temperature	Room Temperature (23°C / 73°F)	Low Temperatures (0°C / 32°F)
Possible shots	230	200

● The figures above are based on a fully-charged Battery Pack LP-E12 and CIPA (Camera & Imaging Products Association) testing standards.
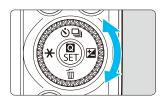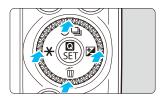
📋 ● The battery power will be consumed faster with any of the following operations:
   • Pressing the shutter button halfway for a prolonged period.
   • Using Continuous AF (p.109).
   • Using the lens Image Stabilizer.
   • Shooting movies for a prolonged period.
   • Using Movie Servo AF (p.203).
● The number of possible shots may decrease depending on the actual shooting conditions.
● The lens operation is powered by the camera's battery. Depending on the lens used, the battery power may be consumed faster.

< ◎ > Main Dial and < Q/SET > Button

Main Dial

The Main Dial can be operated in two ways: by turning it or pressing the top, bottom, left, or right edge.

Turn the Main Dial < ◎ >.
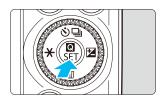
- When a function can be set (after pressing a button or tapping an icon on the screen), you can mainly make a horizontal selection by turning the < ◎ > dial.
- You can set the shutter speed, aperture, etc. by turning the < ◎ > dial.

Press the top, bottom, left, or right of the Main Dial < ◎ >.

- When a function can be set (after pressing a button or tapping an icon on the screen), you can select or adjust an item by pressing the top, bottom, left, or right of the < ◎ > dial.
- When shooting, you can select a drive mode by pressing the < ⏱/ᓬ > button, set exposure compensation by pressing the < ◙ > button, or apply AE lock by pressing the < ✳ > button. (May not be available depending on the shooting mode.)
- During playback, you can erase an image by pressing the < 🗑 > Erase button.

< Q/SET > Button

The < Q/SET > button has two features: < Q > Quick Control and < SET > Set.

< Q > Quick Control

- You can display the Quick Control screen by pressing the < Q > button while an image is displayed during shooting or playback (p.50, 236).

< SET > Set

- Press < SET > to accept your selection in menus, Quick Control functions, etc.

MENU Setting the Date, Time, and Zone

When you turn on the camera for the first time or if the date/time/zone has been reset, the date/time/zone setting screen will appear. Follow the steps below to set the time zone first. If you set the camera to the correct time zone for where you currently live, when you travel to another time zone you can simply set the camera to the correct time zone for your destination to update the camera's date/time automatically.

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.
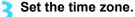
2 Under the [♥2] tab, select [Date/Time/Zone].
- Press the <◄> <►> keys to select the [♥2] tab.
- Press the <▲> <▼> keys to select [**Date/Time/Zone**], then press <SET>.

3 Set the time zone.
- **[London] is set by default.**
- Press the <◄> <►> keys to select the time zone box.
- Press <SET> so <♢> is displayed.
- Press the <▲> <▼> keys to select the time zone, then press <SET>. (Returns to <□>.)

- The menu setting procedure is explained on pages 54-56.
- In step 3, the time displayed on the upper right of the screen is the time difference compared with Coordinated Universal Time (UTC). If you do not see your time zone, set the time zone while referring to the difference with UTC.

4 Set the date and time.

- Press the <◄> <►> keys to select the number.
- Press <SET> so <↕> is displayed.
- Press the <▲> <▼> keys to set the number, 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.
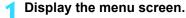
📖 ● The date/time that was set will start from when you press <SET> in step 6.
● After changing the time zone, check that the correct date/time has been set.

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MENU Selecting the Interface Language

1 Display the menu screen.
- Press the <MENU> button.
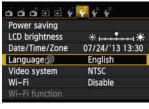
2 Under the [♥2] tab, select [Language🗐].
- Press the <◄> <►> keys to select the [♥2] tab.
- Press the <▲> <▼> keys to select [**Language🗐**], then press <SET>.

Power saving		
LCD brightness	☀ ├──┴──┤ ☀	
Date/Time/Zone	07/24/'13 13:30	
Language🗐	English	
Video system	NTSC	
Wi-Fi	Disable	
Wi-Fi function		
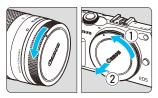
3 Set the desired language.
- Press the <▲> <▼> keys to select the language, then press <SET>.
- ► The interface language will change.

English	Norsk	Română
Deutsch	Svenska	Türkçe
Français	Español	العربية
Nederlands	Ελληνικά	ภาษาไทย
Dansk	Русский	简体中文
Português	Polski	繁體中文
Suomi	Čeština	한국어
Italiano	Magyar	日本語
Українська		SET OK

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Attaching and Detaching a Lens
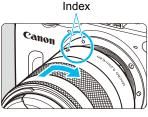
The camera is compatible with EF-M lenses. If you use Mount Adapter EF-EOS M, you can also use EF and EF-S lenses.

Attaching a Lens
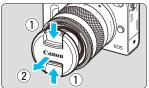
1 Remove the caps.
- Remove the rear lens cap and the body cap by turning them as shown by the arrows.

Index

2 Attach the lens.
- Align the lens' white mount index with the camera's white mount index. Turn the lens as shown by the arrow until it clicks in place.

3 Remove the front lens cap.

Minimizing 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.

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.

Zooming

To zoom, 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 slightly.

● 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 to <OFF>.
● If the front part (focusing ring) of the lens rotates during autofocusing, do not touch the rotating part.
● The focus preset function of some super telephoto lenses cannot be used with this camera. Also, Power Zoom cannot be used even if you attach a lens featuring the Power Zoom function, such as the EF35-80mm f/4-5.6 POWER ZOOM.

Lens Focal Length (Image Conversion Factor)

Since the image sensor size is smaller than the 35mm film format, it will look like the lens focal length is increased by approx. 1.6x.

Image sensor size (Approx.)
(22.3 x 14.9 mm / 0.88 x 0.59 in.)
35mm image size
(36 x 24 mm / 1.42 x 0.94 in.)

Example: An 18-55mm focal length would be equivalent to an approx. 29-88mm focal length on a 35mm camera.

Image Stabilizer

When you use a lens with built-in Image Stabilizer, camera shake is corrected to obtain a sharper shot. With <▲⁺>, the Image Stabilizer is automatically set to [**Enable**]. (It does not appear in the menu.)

* Lenses with built-in Image Stabilizer have "IS" in their names.

With an EF-M Lens

Set it with the menu. The default setting is [**Enable**].

1 Display the menu screen.
- Press the <MENU> button.
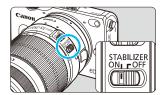
2 Under the [🗖2] tab, select [Image Stabilizer].
- [**Image Stabilizer**] is displayed when an EF-M lens with IS function is attached.
- Press the <◄> <►> keys to select the [🗖2] tab.
- Press the <▲> <▼> keys to select [**Image Stabilizer**], then press <SET>.

3 Select [Enable].
- Press the <▲> <▼> keys to select [**Enable**], then press <SET>.
- Press the <MENU> button.

IS stands for Image Stabilizer.
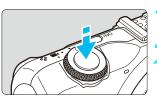
With a Non-EF-M Lens

Use the Image Stabilizer switch on the lens.

Set the STABILIZER switch to <ON>.

Using the Image Stabilizer when Shooting

1 Press the shutter button halfway.

▶ The Image Stabilizer will operate.

2 Take the picture.

● When the picture looks steady on the LCD monitor, press the shutter button completely to take the picture.

● The Image Stabilizer cannot correct "subject blur", when the subject moves at the time of exposure.
● For bulb exposures, set the IS to <OFF>. If <ON> is set, Image Stabilizer misoperation may occur.
● The Image Stabilizer may not be effective for excessive shaking such as on a rocking boat.
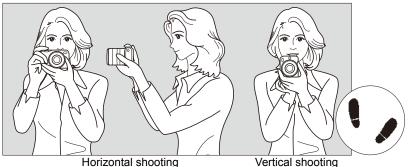
● The Image Stabilizer works in all focus modes.
● When the IS is set to <OFF>, will appear on the screen.
● When using a tripod, you can still shoot with the IS set to <ON> with no problem. However, to save battery power, setting the IS to <OFF> is recommended.
● The Image Stabilizer is effective even when the camera is mounted on a monopod.
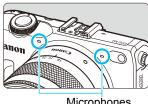
Basic Operation

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 hand's 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.
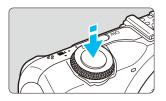
When shooting movies, be careful not to cover the microphones.

Microphones

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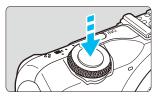
The shutter button has two steps. You can press the shutter button halfway. Then you can further press the shutter button completely.

Pressing Halfway

The camera will focus and adjust the exposure automatically (shutter speed and aperture set automatically).
The exposure setting (shutter speed and aperture) is displayed (⏲8).

Pressing Completely

This releases the shutter and takes the picture.

Preventing Camera Shake

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

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

📄 ● 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 instantly go back to shooting-ready by pressing the shutter button halfway.

Quick Control

You can directly select and set the shooting functions displayed on the LCD monitor. This is called Quick Control.
There are two types of Quick Control screens: **Q** Quick Control and INFO. Quick Control.
Hereafter, "Quick Control" refers to **Q** Quick Control.
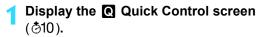
Q Quick Control

With **Q** Quick Control, you can set functions while looking at the shooting screen.

1 Display the Q Quick Control screen (⏱10).

- Press the <**Q**> button.

- You can also display the Quick Control screen by tapping [**Q**] on the upper right of the screen.

2 Select the desired function.

- Tap the function to be set.
▶ The selected function and Feature guide will appear.

3 **Set the desired function setting.**

● Select the function setting by tapping an icon displayed at the bottom of the screen.

● There are also functions with more settings when you tap [**INFO.** 国].

● To return to the shooting screen, tap [↩] or press <SET>.

AF method (p.113)

AF operation (p.110)

Image-recording quality (p.97)

Creative filters (p.260)

White balance (p.168)

Picture Style (p.106)

Auto Lighting Optimizer (p.153)

Metering mode (p.146)

AF method

AF□ AF❖☷ AF( )

● You can also perform the setting procedure with the Main Dial's <✧> or <◎> and <SET>.

● The settable functions differ depending on the shooting mode.
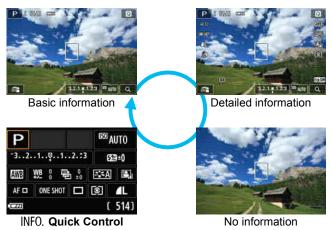
INFO. **Quick Control**

With INFO. Quick Control, you can select a shooting function from a list and set it.

1 Press the <INFO.> button.

- Each time you press the button, the displayed information will change.
- Display the INFO. Quick Control screen.

Basic information   Detailed information

INFO. **Quick Control**   No information

2 Select the desired function.
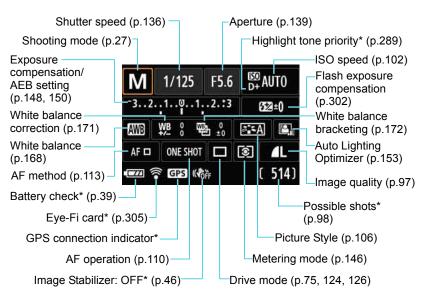
- Tap the function to be set.
- ▶ The Feature guide will appear.
- Tap it again to display the function setting screen.

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Picture Style

Auto

● 3, ● 0, ♣ 0, ● 0

3 Set the desired function setting.
- On the screen that appears, tap a function setting to set it.
- There are also functions with more settings when you tap [**INFO.** Detail set.].

Detail set.   Auto

○Sharpness

●Contrast

♣Saturation

●Color tone

Default set.   MENU ↩

Shutter speed (p.136) ─┐   ┌─ Aperture (p.139)

Shooting mode (p.27) ─┐ │   │ ┌─ Highlight tone priority* (p.289)

Exposure compensation/ AEB setting (p.148, 150)

M 1/125 F5.6 ISO AUTO ─── ISO speed (p.102)

-3..2..1..0..1..2.:3

White balance correction (p.171)

Flash exposure compensation (p.302)

White balance (p.168)

White balance bracketing (p.172)

AF method (p.113)

Auto Lighting Optimizer (p.153)

Battery check* (p.39)

Image quality (p.97)

Eye-Fi card* (p.305)

Possible shots* (p.98)

GPS connection indicator*

Picture Style (p.106)

AF operation (p.110)

Metering mode (p.146)

Image Stabilizer: OFF* (p.46)

Drive mode (p.75, 124, 126)

- You can also perform the setting procedure with the Main Dial's < ✥ > or < ◯ > and < SET >.
- * These functions cannot be set with the **INFO.** Quick Control screen.
- The settable functions differ depending on the shooting mode.

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MENU **Menu Operations**

You can set various settings with the menus such as the image-recording quality, date/time, etc. Operate the menu functions with the <MENU> button, Main Dial, and <SET> button.

LCD monitor

<MENU> button

<SET> button

Main Dial

Menu Screen

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

Scene Intelligent Auto
Basic Zone Modes

Shooting mode	
Image quality	▲L
Grid display	Off
◘Histogram disp	Disable
Release shutter without card	ON
Image review	2 sec.

Movie Shooting Modes

Movie rec. size	1920x1080
Digital zoom	Disable
Sound recording	Auto
Video snapshot	Disable
Movie Servo AF	Enable
AF w/ shutter button during ▶	ON

Creative Zone Modes

▶ Playback

◘ Shooting

♀ Set-up

★ My Menu

Tabs

Shooting mode	P
Image quality	▲L
Aspect ratio	3:2
Grid display	Off
◘Histogram disp	Disable
Release shutter without card	ON
Image review	2 sec.

Menu items   Menu settings

Menu Setting Procedure

1 Display the menu screen.
- Press the <MENU> button.

2 Select a tab.
- Press the Main Dial's <◄> <►> keys to select a tab (group of functions).
- For example, in this manual, "the [🗀3] tab" refers to the screen displayed when the third 🗀 (Shooting) tab from the left [🗀¨] is selected.

3 Select the desired item.
- Press the Main Dial's <▲> <▼> keys to select the item, then press <SET>.

4 Select the setting.
- Press the Main Dial's <▲> <▼> or <◄> <►> keys to select the desired setting. (Some settings require you to press either the <▲> <▼> or <◄> <►> keys to select them.)
- The current setting is indicated in blue.

Expo.comp./AEB	⁻3..2..1..0..1..2.⁺3
ISO speed	Auto
ISO Auto	Max.:800
Auto Lighting Optimizer	🖪
Metering mode	⊚
Metering timer	8 sec.
Touch Shutter	Disable

5 Set the desired setting.

● Press <SET> to set it.

6 Exit the setting.

● Press the <MENU> button to return to the shooting function settings screen.

📖 ● Even when the menu screen or captured image is displayed, pressing the shutter button will enable you to shoot immediately.

● In step 2, you can also turn the <◎> dial to select a menu tab.

● In steps 2 to 5, you can also use the LCD monitor's touch screen (p.59).

● The explanation of menu functions hereinafter assumes that you have pressed the <MENU> button to display the menu screen.

● To cancel, press the <MENU> button.

● For details about each menu item, see pages 314-322.

MENU Formatting the Card

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

⚠ When the card is formatted, all images and data in 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 [�richt1] tab, select [**Format card**], then press <SET>.

2 Format the card.

● Select [**OK**], then press <SET>.
▶ When the formatting is completed, the menu will reappear.

● For low-level formatting, press the <INFO.> button to append [**Low level format**] with a checkmark [√], then select [**OK**].

🔆 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 with images or data.**
- **A card error is displayed** (p.335).

What is low-level formatting?

- Perform low-level formatting if the card's recording or reading speed seems slow or if you want to totally erase all data in the card.
- Since low-level formatting will format all recordable sectors in 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 be completed and you can use the card as usual.

- 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, execute low-level formatting or destroy the card physically to prevent the personal data from being leaked.
- **Before using a new Eye-Fi card, the software in the card must be installed in your computer. Then format the card with the camera.**

- 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.

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♪ **Using the Touch Screen**

The LCD monitor is a touch-sensitive panel that you can operate with your fingers.

Tap

Quick Control (Sample display)

- Use your finger to tap (touch briefly and then remove your finger from) the LCD monitor.
- By tapping, you can select menus, icons, etc., displayed on the LCD monitor.
- When touch-screen operation is possible, a frame will appear around the icon (except on menu screens).
- Tap [↩] to return to the previous screen.

Operations possible by tapping the screen

- Setting menu functions after pressing the <MENU> button
- Quick Control
- Setting a function after you press the <ⓢ/⌣> button
- Touch shutter
- Playback operations

Drag

Menu screen (Sample display)

● Slide your finger while touching the LCD monitor.

Scale display (Sample display)

Operations possible by dragging your finger on the screen

● Selecting a menu tab or item after pressing the <MENU> button
● Setting a scale control
● Quick Control
● Playback operations

MENU Silencing the Beep during Touch Operations

If [♥3: Beep] is set to [**Touch to** ♪] or [**Disable**], the beep will not sound during touch operations.

MENU Setting the Touch Control

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

2 Set the Touch control.
- [**Standard**] is the normal setting.
- [**Sensitive**] provides a better touch response than [**Standard**]. Try using both settings and select the one you prefer.

⚠ Cautions for Touch Screen 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 screen operations.
- If the LCD monitor has any moisture or if your fingers are wet, the touch screen may not respond or misoperation may occur. In such a case, turn off the power and wipe the LCD monitor with a cloth.
- Do not attach any protective sheet (commercially available) or sticker on the LCD monitor. It may make the touch operation response slow.
- If you perform touch operations quickly when [**Sensitive**] is set, the touch response may be slower.

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Feature Guide

The Feature guide is a simple description of the respective shooting mode, function, or option. It is displayed when you change the shooting mode or use the Quick Control screen during still photo shooting, movie shooting, or playback. When you select a function or option on the Quick Control screen, the Feature guide description is displayed. When you proceed with the operation, the Feature guide will disappear.

● **Shooting mode** (Sample)

● **Quick Control** (Sample)

Q Quick Control   INFO. Quick Control   Playback

MENU Disabling the Feature Guide

Select [Feature guide].

● Under the [♥3] tab, select [**Feature guide**], then press <SET>.
● Select [**Disable**], then press <SET>.

2

Basic Shooting and Image Playback

This chapter explains how to shoot with Scene Intelligent Auto and Basic Zone modes and how to play back images.

With <**A⁺**>, you can shoot just by pressing the shutter button. With <**🖿**>, you can also blur the background (p.74), change the ambience (p.87), and match the lighting or scene (p.90).

Scene Intelligent Auto

Basic Zone Modes

📷 **Checking the Shooting Mode Set for <🖿>**
- There are 10 Basic Zone modes (shooting modes). Select [🖿1: **Shooting mode**] on the menu to check the current shooting mode (p.55).

Flash Firing of Speedlite 90EX
- If you use the Speedlite 90EX in a Basic Zone mode, the flash will fire automatically depending on the shooting mode (p.86).

A⁺ Fully Automatic Shooting (Scene Intelligent Auto) ▬

< A⁺ > is a fully automatic mode. The camera analyzes the scene and sets the optimum settings automatically.

1 Set the Mode Dial to < A⁺ >.

AF point

2 Move the AF point.

● Tap the screen to move the AF point to where you want to focus. (It cannot go to the edges of the picture.)
● To return the AF point to the center, press the < ▼ 🗑 > button.

3 Focus the subject.

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

4 Take the picture.

● Press the shutter button completely.
▶ The captured image will be displayed for 2 sec. on the LCD monitor.
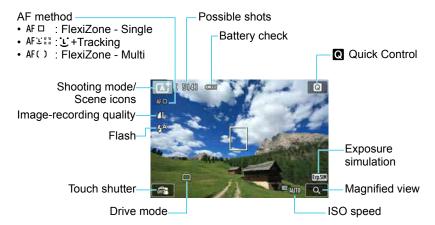
- ● The <A⁺> mode makes the colors look more impressive in nature, outdoor, and sunset scenes. If the desired color tone is not obtained, use a Creative Zone mode and select a Picture Style other than <⊞A> and shoot (p.106).
- ● The image's coverage is approx. 100% (with the image-recording quality set to JPEG ▲L).
- ● During continuous shooting, the exposure set for the first shot will also be applied to subsequent shots.
- ● With the stereo AV cable AVC-DC400ST (sold separately) or HDMI cable HTC-100 (sold separately), you can display the image being shot on a TV set (p.247, 251).

? FAQ

● **The AF point turns orange and focus is not achieved.**
Try again, aiming the AF point at an area with a good bright/dark contrast, then press the shutter button halfway. Also, focus may not be achieved if you are too close to the subject. Move away from the subject and shoot.

● **Multiple AF points appear in green.**
Focus has been achieved at all the green AF points. When the AF point covering the desired subject turns green, take the picture.

● **Pressing the shutter button halfway does not focus the subject.**
When an EF or EF-S lens is used, if the focus mode switch on the lens is set to <**MF**> (manual focus), manual focusing will be in effect. Set the focus mode switch to <**AF**> (autofocus).

Information Display

● Each time you press the <INFO.> button, the information display will change.

AF method
• AF □ : FlexiZone - Single
• AF ⁙ : ʊ̈+Tracking
• AF( ) : FlexiZone - Multi

Possible shots

Battery check

Q Quick Control

Shooting mode/
Scene icons

Image-recording quality

Flash

Exposure simulation

Touch shutter

Magnified view

Drive mode

ISO speed

● When <Exp.SIM> is displayed in white, it indicates that the image brightness is close to what the captured image will look like.
● If <Exp.SIM> is blinking, it indicates that the image is not being displayed at the suitable brightness due to low- or bright-light conditions. However, the actual image recorded will reflect the exposure setting. Note that noise may be more noticeable than the actual image recorded.
● When [📷1: 📷Histogram disp] is set to a setting other than [Disable], you can press the <INFO.> button to display the histogram. However, the histogram will not be displayed while the shutter button is pressed completely.

A⁺ Full Auto Techniques (Scene Intelligent Auto)

Recomposing the Shot

Depending on the scene, instead of having the subject at the center, you can put the subject toward the right or left and include some background. This gives the picture more balance and depth.

While you press the shutter button halfway to focus a still subject, the focus will be locked at the subject's distance. Then move the camera slightly to the right or left and press the shutter button completely. This is called "focus lock". Focus lock is also possible in Basic Zone modes (except <🏃> and <🏊>).

Scene Icons

When you shoot in the <Ⓐ⁺> mode, an icon representing the scene detected by the camera will be displayed on the upper left of the screen (at the position of the shooting mode icon).

Subject / Background	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	*4*5	*3	*4*5	*3		

*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.
*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 suiting the scene detected will be displayed.
*4: Displayed when you use a tripod for a low-light or night scene.
*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
   • IS lenses marketed in 2012 or later.
*4+*5: If the conditions in both *4 and *5 are met, the shutter speed will slow down.
* For certain scenes, the icon displayed may not match the actual scene.

Selecting a Shooting Mode (Basic Zone Mode)

1 **Set the Mode Dial to <⌂>.**

2 **Tap the shooting mode icon on the screen's upper left corner.**
- The shooting mode selection screen will appear.
- If this screen is not displayed, press the <INFO.> button a few times.

3 **Tap the screen to select a shooting mode.**

Creative Auto
Auto mode for easy setting of image brightness, background blurring, flash, other settings

Available Shooting Modes

The Basic Zone mode selection screen has three pages.

Creative Auto
Auto mode for easy setting of image brightness, background blurring, flash, other settings

Tap [«] and [»] on the left and right sides of the screen to go to another page.
- To return to the shooting screen, tap [↩] or press <SET>.

Shooting Mode		Page	Shooting Mode		Page
CA	Creative Auto	p.71	😴	Kids	p.80
🙎	Portrait	p.76	🍴	Food	p.81
🏔	Landscape	p.77	🌃	Night Portrait	p.82
🌷	Close-up	p.78	🏙	Handheld Night Scene	p.83
🏃	Sports	p.79	🔆	HDR Backlight Control	p.84

Final Image Simulation

The final image simulation reflects the settings of the Picture Style, white balance and other functions in the image so you can see what the captured image will look like.
The following settings will be automatically reflected.

- Picture Style
  * All settings such as sharpness, contrast, color saturation, and color tone will be reflected.
- White balance
- White balance correction
- Extra Effect Shot (in <A> mode)
- Ambience-based shots
- Light/scene-based shots
- Background blur (in <A> mode)
- Color tone
- Creative filters (when using [**Soft focus**] and [**Miniature effect**], with depth-of-field preview button ON)*
- Metering mode
- Exposure
- Depth of field*
- Auto Lighting Optimizer
- Peripheral illumination correction
  * While shooting, the result of the peripheral illumination correction may temporarily not be reflected.
- Highlight tone priority
- Aspect ratio (image area confirmation)

* With [**6: ▼ 🗑 button function**] under [**♀4: Custom Functions (C.Fn)**] set to [**1: Depth-of-field preview**].

Using final image simulation you can check the effects of various settings on the image, but the image displayed on the screen will not fully match the recorded image.

CA Creative Auto Shooting

In the <CA> mode, you can set the following functions before shooting:
(1) Ambience-based shots, (2) Extra Effect Shot, (3) Flash firing, (4) Background blur, and (5) Drive/self-timer mode. The default settings are the same as the <A⁺> mode.

* CA stands for Creative Auto.

1 Set the Mode Dial to <A>.

2 Tap the shooting mode icon on the screen's upper left corner.
- The shooting mode selection screen will appear.

3 Tap the screen to select [CA].

Creative Auto
Auto mode for easy setting
of image brightness, background
blurring, flash, other settings

4 Display the Quick Control screen.
- Press the <Q> button to display it.

5 Select the desired function.
- Extra Effect Shot, Ambience-based shots, and flash firing can be set with Quick Control.
- Background blur can be set by tapping the icon on the shooting screen.
- Drive/self-timer mode can be set by pressing the <Ⓢ/⌐> button.

Ambience-based shots
FSTD Standard setting

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6 **Tap the desired setting to select it.**
- ▶ The selected function and Feature guide (p.62) will appear.
- ● For setting procedure and details on each function, see pages 72-75.
- ● Select the function, then tap [↩].

7 **Take the picture.**
- ● Press the shutter button.

📖 If you change the shooting mode or set the power to <OFF>, the functions you have set on this screen will revert to their default settings. However, the AF method, Creative filter, image-recording quality, and self-timer settings will be retained.

Setting from Quick Control

(3) ———

(1)

(2)

(1) Ambience-based shots

- • You can choose the ambience you want to convey in your images. For details, see page 87.

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(2) Extra Effect Shot

- You can select any of the following effects before shooting: Creative filters (p.128), Picture Styles (p.106), and Ambience-based shots (p.87).
- Select [✍: **Enable**], then tap [↩].
- Tap [✔] and [◥] to select a shooting effect.
- When you take a picture, two images will be recorded. One with the effect applied and one without. Immediately after you take a picture, both images will be displayed together. The image without the effect is displayed on the left and the one with the effect will be on the right.
  * If you are using an Eye-Fi card and have set it to erase images after their transfer, the image without the effect will not be displayed during the playback immediately after shooting.
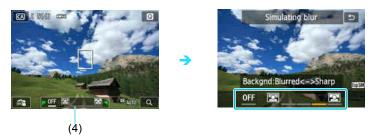
Registering your favorite shooting effects

- During the image review immediately after shooting and during playback, the image applied with the effect will have the [✍] icon. You can check which shooting effect was applied by tapping the icon.
- You can register up to two shooting effects under [★ : **Favorite effect**].
- When you select the registered [★ : **Favorite effect**], you can shoot with that shooting effect applied. You can also overwrite the [★ : **Favorite effect**].

(3) Attached Speedlite 90EX flash firing

[$⁴] **Auto flash** : The flash fires automatically when necessary.
[$] **Flash on** : The flash fires at all times.
[⏽] **Flash off** : The flash is disabled.
* When a flash other than the Speedlite 90EX is attached, the flash mode will be set to Flash on.

📖 You cannot set Extra Effect Shot and Ambience-based shots, or Extra Effect Shot and Background blur, at the same time.

Setting by Tapping the Screen

(4)

(4) Background blur

- On the shooting screen, tap Background blur and set it.
- If [OFF] is set, the degree of background blur will change depending on the brightness.
- If it is set to other than [OFF], [**Simulating blur**] will appear on the screen and you can adjust the background blur regardless of brightness.
- Set by tapping the screen. Move the index mark toward the right to make the background look more in focus, or move it toward the left to make the background look more blurred. Note that depending on the lens' maximum aperture (f/number), some positions may not be selectable.
- If you want to blur the background, see "Shooting Portraits" on page 76.
- Depending on the lens and shooting conditions, the background may not look so blurred.
- Cannot be used with flash.
- When using a Speedlite, Background blur will change to [OFF] when the Speedlite is fully recharged.

If [EXPSIM] blinks while [**Simulating blur**] is displayed, the image may have more noise or look darker than the actual image.

Setting by Pressing <ひ/□>

→ (5)

(5) Drive/self-timer mode

Set by pressing <ひ/□>.

[□] **Single shooting**:

Shoot one image at a time.

[□] **Continuous shooting**:

While you hold down the shutter button completely, shots will be taken continuously. You can shoot up to approx. 4.6 shots per second.

[ひ] **Self-timer: 10sec./remote control**:

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

[ひ₂] **Self-timer: 2 sec.**:

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

[ひc] **Self-timer: Continuous**:

Tap [▲]/[▼] 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.

- When using the self-timer, see the 📖 notes on page 127.
- If you have set Extra Effect Shot, [□] [ひc] cannot be set.

ワ Shooting Portraits (Portrait)

The < ワ > (Portrait) mode blurs the background to make the person stand out better. It also makes skin tones and the hair look softer.

☀ Shooting Tips

● **The further the distance between the subject and background, the better.**
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 the face.**
Check that the AF point covering the face turns green. For close-ups of the face, focus on the eyes.

📓 The default setting is [⤓] (continuous shooting). If you hold down the shutter button, you can shoot continuously to capture subtle changes in the subject's pose and facial expression (max. approx. 4.6 shots/sec.).

▲ Shooting Landscapes (Landscape)

Use the < ▲ > (Landscape) mode for wide scenes when you want everything to be 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 the wide-angle end of a zoom lens, objects near and far will be in focus better than at the telephoto end. It also adds breadth to landscapes.

● **Shooting night scenes.**
Use a tripod to prevent camera shake.

📓 With < ▲ >, the flash does not fire even if the Speedlite 90EX is attached.

🌷 Shooting Close-ups (Close-up)

When you want to shoot flowers or small objects 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 with no other flowers or leaves, etc., makes small objects such as flowers stand out better.

● **Move as close as possible to the subject.**
Check the lens for its minimum focusing distance. Some lenses have indications such as <**MACRO 0.25/0.8ft**>. (This example indicates a minimum focusing distance of 25 cm/0.8 ft.) 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, focus cannot be achieved.

● **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 (Sports)

Use the < 🏃 > (Sports) mode to shoot a moving subject.

🔆 Shooting Tips

● **Shoot continuously.**
When focus is achieved, the AF point will turn blue.
While the camera focuses, the beeper will sound. If focus cannot be achieved, the AF point will turn orange.
When you want to take the picture, press the shutter button completely. If you hold down the shutter button completely, the camera will shoot continuously so you can capture the changing movement.
When using a lens with "STM" in its name, such as the EF-M18-55mm f/3.5-5.6 IS STM, the camera can keep focusing and shooting continuously. With other lenses, the focus will be locked for the second and subsequent frames during continuous shooting.

⓿ ● When using a lens with "STM" in its name, such as the EF-M18-55mm f/3.5-5.6 IS STM, the continuous shooting speed becomes slower since the camera keeps focusing and shooting continuously.
● Setting the [**AF method**] to [**FlexiZone - Single**] is recommended.
● Depending on the shooting conditions, it may take a moment until the shutter is released.
● Under low light, when camera shake is prone to occur, the LCD monitor's shutter speed display on the bottom left will blink. Hold the camera steady and shoot.
● When [**FlexiZone - Multi**] is set, press the shutter button halfway to fix the AF points.
● When [☺ **(face)+Tracking**] is set, the AF point is fixed during continuous shooting.

📖 With < 🏃 >, the flash does not fire even if the Speedlite 90EX is attached.

📷 Shooting Children (Kids)

When you want to continuously focus and shoot children moving around, use <📷> (Kids). Skin tones will look healthy.

💡 Shooting Tips

● **Shoot continuously.**
  When focus is achieved, the AF point will turn blue.
  While the camera focuses, the beeper will sound. If focus cannot be achieved, the AF point will turn orange.
  When you want to take the picture, press the shutter button completely. If you hold down the shutter button completely, the camera will shoot continuously so you can capture the changing movement.
  When using a lens with "STM" in its name, such as the EF-M18-55mm f/3.5-5.6 IS STM, the camera can keep focusing and shooting continuously. With other lenses, the focus will be locked for the second and subsequent frames during continuous shooting.

● When using a lens with "STM" in its name, such as the EF-M18-55mm f/3.5-5.6 IS STM, the continuous shooting speed becomes slower since the camera keeps focusing and shooting continuously.
● Setting the [**AF method**] to [**FlexiZone - Single**] is recommended.
● Depending on the shooting conditions, it may take a moment until the shutter is released.
● When [**FlexiZone - Multi**] is set, press the shutter button halfway to fix the AF points.
● When [**👤 (face)+Tracking**] is set, the AF point is fixed during continuous shooting.

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¶ Shooting Food (Food)
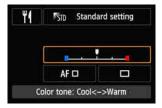
When shooting food, use <¶> (Food). The photo will look bright and vivid.

Food
For culinary photography. Makes food look fresh and vibrant.

☼ Shooting Tips

● **Change the color tone.**
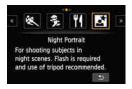
You can change [**Color tone**]. Food photos with a reddish tinge usually make the food look more vivid. To increase the food's reddish tinge, set it toward [**Warm**]. Set it toward [**Cool**] if it looks too red.

● **Shoot the subject in close-up.**
If you have a zoom lens, use the telephoto end to shoot the food in close-up.

● **Light the subject diagonally from behind.**
Lighting the food diagonally from behind will make it look more three-dimensional in the photo.

● **Avoid using flash.**
If you use flash, the light may reflect off the dish or food and results in unnatural shadows.

● Since this mode sets the color tone to make food look vivid, human subjects may be shot in an unsuitable skin tone.
● If you use flash, the [**Color tone**] setting will switch to the default setting.

⭐ Shooting Night Portraits (With a Tripod) ▬▬

To shoot people at night and obtain a natural-looking night scene in the background, use the <⭐> (Night Portrait) mode. A flash is required for shooting.
Using a tripod is also 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, use a tripod to prevent camera shake.

● **Check the subject's brightness.**
When the Speedlite 90EX's power is <ON>, the flash will fire automatically under low-light conditions to obtain a nice portrait. It is recommended to play back the image after the shooting to check the image brightness. If the subject looks dark, move nearer and shoot again.

🛑 See the cautions on page 85.

📖 ● 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.

F Shooting Night Scenes (Handheld)

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

Shooting Tips

● **Hold the camera firmly.**
While 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 of people, turn on the flash.**
When you use flash, you can shoot portraits with a night scene in the background. To take a nice portrait, the first shot will use flash. Tell the subject not to move until all four continuous shots are taken.

☼ Shooting Backlit Scenes (HDR Backlight Control) ▬

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

☼ **Shooting Tips**

● **Hold the camera firmly.**
While 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.

● Flash shooting is not possible. In low light, the AF-assist beam may be
emitted (p.112).
● See the cautions on page 85.

📓 HDR stands for High Dynamic Range.

Cautions for <📷> Night Portrait and <🏙> Handheld Night Scene

- It may be difficult to focus dots of light such as in a night scene. In such a case, set the lens's focus mode to [**MF**] and focus manually.

Cautions for <🏙> Handheld Night Scene and <☀> HDR Backlight Control

- Compared with other shooting modes, the shooting area will be smaller.
- ⚏+▲L or ⚏ cannot be selected. If ⚏+▲L or ⚏ has been set, ▲L will be set.
- 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.
- Recording the image to the card will take longer than with normal shooting. During the processing of the images, "**BUSY**" will be displayed and you cannot take another picture until the processing is completed.
- You cannot use Creative filters when shooting.
- Final image simulation is not available.
- If the shooting mode is set to <🏙> or <☀>, direct printing is not possible.

Cautions for <🏙> Handheld Night Scene

- When shooting flash photography, if the subject is too close to the camera, the picture may come out extremely bright (overexposure).
- If you use flash to shoot a night scene with few lights, the shots may not align correctly. This can result in a blurry photo.
- If you use flash and the human subject is close to the background that is also illuminated by the flash, the shots may not align correctly. This can result in a blurry photo. Unnatural shadows and unsuitable colors may also appear.
- Regarding flash coverage:
  - When using a Speedlite with automatic flash coverage setting, the zoom position will be fixed to the wide end, regardless of the lens' zoom position.
  - If you have to set the flash coverage manually, set it to the wide-angle end.

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, for example for normally lit scenes, the image may look unnatural because of the applied HDR effect.

Functions that Can Be Set with Quick Control

With <🅰️⁺> and in Basic Zone modes, you can set the following functions with **Q** Quick Control (p.50) and **INFO.** Quick Control (p.52).

Functions that Can Be Set with <🅰️⁺> and in Basic Zone Modes

●: Default setting ○: User selectable ☐: Not selectable

Function		🅰️⁺	CA	🐾	🔺	🌷	🏃	👶	🍴	🌆	🏙	HDR
AF method (p.113) **Q**	FlexiZone - Single	○	○	○	○	○	○	○	○	○	○	○
	🙂+Tracking											
	FlexiZone - Multi											
Image-recording quality (p.97) **Q**		○	○	○	○	○	○	○	○	○	○	○
Drive mode (p.124)	☐: Single shooting	●	●	○	●	●	○	○	●	●	●	●
	🔁: Continuous shooting	○	○	●	○	○	●	●	○	○	○	○
Self-timer (p.126)	⏱️ (10 sec.)	○	○	○	○	○	○	○	○	○	○	○
	🕑₂ (2 sec.)	○	○	○	○	○	○	○	○	○	○	○
	🕑c (Continuous)	○	○	○	○	○	○	○	○	○	○	○
Speedlite 90EX **Q**	⚡ᴬ: Automatic firing	●	●	●		●		●		●		
	⚡: Flash on (Fires at all times)	○	○	○		○		○	●		●	
	⚡🚫: Flash off	○	○	○	●	○	●	○				●
Ambience-based shots (p.87) **Q**			○	○	○	○	○	○	○	○	○	○
Light/scene-based shots (p.90) **Q**				○	○	○	○	○	○			
Background blur (p.74)			○									
Color tone **Q**										○		
Extra Effect Shot (p.73) **Q**			○									
Creative filters (p.128) **Q**			○	○	○	○	○	○	○	○		

* Functions with **Q** can be set with the **Q** Quick Control screen.
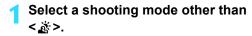
📄 If you change the shooting mode or set the power to < OFF >, it will revert to the default settings (except the AF method, image-recording quality and self-timer).

Shoot by Ambience Selection

In Basic Zone modes (except < ☀ >), you can select the ambience for shooting.

Ambience	ⒸⒶ/🐾/🏔/🌷/ ☀/🌸/🎇/🍎	🍴	Ambience Effect
🖼 Standard setting	○	○	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 Select a shooting mode other than < ☀ >.

2 Display the Quick Control screen.
- Press the < Q > button to display it.

3 Select [🖼].
- Tap on [🖼] so that [**Ambience-based shots**] appears on the screen.
- Tap [◄]/[►] to select an ambience.
▶ You can check the effect of the selected ambience.

4 Set the ambience effect.

- Tap on the item so that [**Effect**] appears on the bottom of the screen.
- Tap [◄━━━■] to select the level of the effect while checking the results on the LCD monitor.

5 Take the picture.

- Press the shutter button.
- If you change the shooting mode or set the power to <OFF>, the setting will revert back to [🄂 **Standard setting**].

- The image shown on the LCD monitor with the ambience setting applied will not look exactly the same as the actual photo.
- Using flash may minimize the ambience effect.
- In bright outdoors, the LCD monitor image you see may not have exactly the same brightness or ambience as the actual photo. Set [**42: LCD brightness**] to [**4**] and look at the LCD monitor image while the screen is unaffected by stray light.

Ambience Settings

⬛STD Standard setting
Standard settings for the respective shooting mode. Note that < 🐾 > has image characteristics geared for portraits and < ⛰ > is geared for landscapes. Each ambience is a modification of the respective shooting mode's image settings.

⬛V Vivid
Makes the image more vivid and impressive than with [⬛STD **Standard setting**].

⬛S Soft
Suited for portraits, pets, flowers, etc., when you want a soft look.

⬛W Warm
For portraits, pets, etc., when you want a warm-tone ambience.

⬛I Intense
The overall brightness is slightly suppressed while the subject is emphasized. Gives the human or living subject more presence.

⬛C Cool
The overall brightness is slightly suppressed while a cool-tone ambience is set. Makes a subject in the shade look more calm and impressive.

⬛B Brighter
The picture will look brighter.

⬛D Darker
The picture will look darker.

⬛M Monochrome
You can select the monochrome color to be black and white, sepia, or blue.

Shoot by Lighting or Scene Type

In the < 🐕 >, < 🏔 >, < 🌷 >, < 🔍 >, and < 🍃 > Basic Zone modes, you can shoot while the settings match the lighting or scene type. Normally, [STD **Default setting**] is adequate, but if the settings match the lighting condition or scene, the picture will look more accurate to your eye.

Lighting or Scene	🐕	🏔	🌷	🔍	🍃
STD Default setting	○	○	○	○	○
☀ Daylight	○	○	○	○	○
⛅ Shade	○	○	○	○	○
☁ Cloudy	○	○	○	○	○
💡 Tungsten light	○		○	○	○
▦ Fluorescent light	○		○	○	○
🌅 Sunset	○	○	○	○	○

1 Select < 🐕 >, < 🏔 >, < 🌷 >, < 🔍 >, or < 🍃 >.

2 Display the Quick Control screen.
- Press the < 🅠 > button to display it.

3 Select [STD].
- Tap on [STD] so that [**Light/scene-based shots**] appears on the screen.
- Tap [◄]/[►] to select the lighting or scene type.
▶ You can check how the image will look with the selected lighting or scene type.

Light/scene-based shots

STD Default setting

4 **Take the picture.**
- Press the shutter button.
- If you change the shooting mode or set the power to <OFF>, the setting will revert back to [STD **Default setting**].

Lighting or Scene Type Settings

STD **Default setting**
Default setting suited for most subjects.

☀ **Daylight**
For subjects under sunlight. Gives more natural-looking blue skies and greenery and reproduces light-colored flowers better.

🔆 **Shade**
For subjects in the shade. Suitable for skin tones, which may look too bluish, and for light-colored flowers.

☁ **Cloudy**
For subjects under overcast skies. Makes skin tones and landscapes, which may otherwise look dull on a cloudy day, look warmer. Also effective for light-colored flowers.

☀ **Tungsten light**
For subjects under tungsten lighting. Reduces the reddish-orange color cast caused by tungsten lighting.

🔆 **Fluorescent light**
For subjects under fluorescent lighting. Suited for all types of fluorescent lighting.

🌅 **Sunset**
Suitable when you want to capture the sunset's impressive colors.

🚫 ● When using a flash, the setting will switch to [STD **Default setting**]. (However, the shooting information will display the lighting or scene type that was set.)
  ● If you want to set this together with [**Ambience-based shots**], set the [**Light/ scene-based shots**] that best matches the ambience you have set. In the case of [**Sunset**] for example, warm colors will become prominent so the ambience you set may not work well.

▶ Image Playback

The easiest way to play back images is explained below. For more details on playback procedures, see page 229.

1 Play back the image.
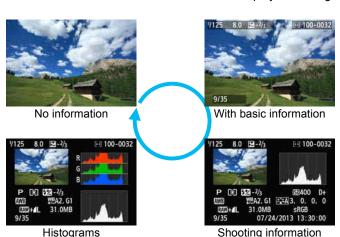
● Press the <▶> button.
▶ The last captured image or last image played back will appear.
● When the power is <OFF> and you hold down the <▶> button for 2 seconds or longer, the power will turn <ON> and the playback screen will appear.

2 Select an image.

● When you press the <◀> key, the last image captured will be displayed first. When you press the <▶> key, the first image captured will be displayed first.
● Each time you press the <INFO.> button, the information display will change.

No information   With basic information

Histograms   Shooting information

3 Exit the image playback.

● Press the <▶> button to exit the image playback and return to the shooting screen.

3

Creative Shooting

With <A⁺> and in Basic Zone modes, you can easily take pictures, but cannot change advanced function settings. In the <P> (Program AE) mode, you can set various functions for more creative shooting.

- In the <P> mode, the camera sets the shutter speed and aperture automatically to obtain a standard exposure.
- The difference between the Basic Zone modes and <P> is explained on page 308.
- The functions explained in this chapter can also be used in the <Tv>, <Av>, and <M> modes explained in Chapter 4.
- The ■ mark shown on the right of the page title indicates that the function is available only in Creative Zone modes (p.27).

* <P> stands for Program.
* **AE** stands for Auto Exposure.

P: Program AE

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

1 Set the Mode Dial to <囧>.

2 Tap the shooting mode icon on the screen's upper left corner.
- The shooting mode selection screen will appear.

3 Tap the screen to select [P].

Program AE
Auto setting of shutter speed and aperture. Other settings can be configured manually.

4 Focus the subject.
- Aim the AF point over the subject. Then press the shutter button halfway.
- The AF point achieving focus will turn green (in One-Shot AF mode).
- The shutter speed and aperture will be set automatically and displayed.

5 Check the display.

● A standard exposure will be obtained as long as the shutter speed and aperture display do not blink.

6 Take the picture.

● Compose the shot and press the shutter button completely.

☼ Shooting Tips

● **Change the ISO speed or use flash.**
To match the subject and ambient lighting level, you can change the ISO speed (p.102) or use flash. When using Speedlite 90EX, turn on the Speedlite 90EX and set [**2: External Speedlite control**]'s [**Flash firing**] to [**Enable**].

● **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 lower f/number blink, it indicates underexposure. Increase the ISO speed or use flash.
- If the "**4000**" shutter speed and the higher f/number blink, it indicates overexposure. Decrease the ISO speed.

Differences Between <P> and <A>

In the <A> mode, many functions such as the AF operation are set automatically. The functions you can change are limited. Whereas with the <P> mode, only the shutter speed and aperture are set automatically. You can freely set the AF operation and other functions (p.308).

Setting the Image-recording Quality

You can select the pixel count and the image quality. Ten image-recording quality settings are provided: ▲L, ▲L, ▲M, ▲M, ▲S1, ▲S1, S2, S3, RAW+▲L, RAW.

1 Display the Quick Control screen.
- Press the <Q> button to display it.

2 Tap the image quality.

3 Tap the desired setting to select it.
- The respective quality's pixel count and number of possible shots will be displayed to help you select the desired quality.
- Tap the desired setting to select it, then tap [↰].

Possible shots

Recorded pixels

Guide to Image-recording Quality Settings (Approx.)

Image-recording Quality			Recorded Pixels (megapixels)	File Size (MB)	Possible Shots (8 GB)	Maximum Burst
▲L	High quality	JPEG	Approx. 17.9 (18M)	6.4	1130	13 (17)
▄L				3.2	2240	2240 (2240)
▲M	Medium quality		Approx. 8.0 (8M)	3.4	2150	208 (2150)
▄M				1.7	4240	4240 (4240)
▲S1	Low quality		Approx. 4.5 (4.5M)	2.2	3380	3380 (3380)
▄S1				1.1	6630	6630 (6630)
S2			Approx. 2.5 (2.5M)	1.3	5760	5760 (5760)
S3			Approx. 0.35 (0.3M)	0.3	21060	21060 (21060)
RAW+▲L	High quality		Approx. 17.9 (18M)	23.5+6.4	230	3 (3)
RAW				23.5	300	5 (5)

* Figures for the file size, number of possible shots, and maximum burst during continuous shooting 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 apply to a UHS-I compatible 8 GB card based on Canon's testing standards.
* Figures for the number of possible shots shown in the table are only approximates based on an 8 GB card.
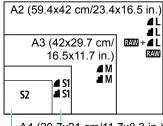
FAQ

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

Paper size

| A2 (59.4x42 cm/23.4x16.5 in.) |
| A3 (42x29.7 cm/ 16.5x11.7 in.) |
| S2 | A4 (29.7x21 cm/11.7x8.3 in.) |

12.7x8.9 cm/5.0x3.5 in.

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, ꭍ+▲L, or ꭍ is recommended. S2 is suitable for playing the images on a digital photo frame. S3 is suitable for emailing the image or using it on a Web site.

● **What's the difference between ▲ and ▲?**
These settings indicate the different levels of image quality caused by different compression rates. The ▲ setting produces a higher image quality with the same number of pixels. Although ▲ produces a slightly lower image quality, this allows more images to be saved to the card. Both S2 and S3 have ▲ (Fine) quality.

● **I was able to take more shots than the number of possible shots indicated.**
The number of possible shots indicated is only approximate. Depending on the shooting conditions, you may be able to take more shots than was indicated. It may also be fewer than indicated.

● **Does the camera display the maximum burst?**
The maximum burst (1-9) is displayed to the right of the number of possible shots. (When the maximum burst is 10 or larger, it is not displayed.)

● **When should I use ꭍ?**
ꭍ images must be processed on a computer. For details, see "ꭍ Images" and "ꭍ+▲L Images" on the next page.
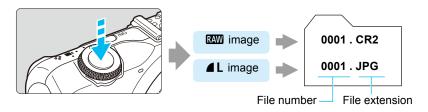
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RAW Images

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 EOS software, such as Digital Photo Professional (p.350). However, you can perform various adjustments on them that are not possible 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 Images

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 also be viewed or printed from computers on which EOS software is not installed.

RAW image → **0001 . CR2**

▲**L** image → **0001 . JPG**

File number — File extension

📖 **RAW Image Processing Software**

● The use of "Digital Photo Professional" (EOS software, p.350) is recommended when viewing RAW images on a computer.

● RAW images taken with this camera may not be processed on previous versions of Digital Photo Professional. If a previous version of Digital Photo Professional is installed on your computer, update (overwrite) it as follows.

　• When the software CD-ROM (EOS DIGITAL Solution Disk) is provided with the camera:
　→ Install Digital Photo Professional included on the CD-ROM.
　• When the software CD-ROM (EOS DIGITAL Solution Disk) is not provided with the camera:
　→ Download Digital Photo Professional compatible with this camera from the Canon Web site.

● Commercially-available software may not be able to display RAW images taken with this camera. For compatibility information, contact the software manufacturer.

Image-recording Quality and Aspect Ratio

The image's aspect ratio can be set with [**Aspect ratio**] under the [1] tab. The area surrounding the image on the LCD monitor is masked in black when the following aspect ratios are set: [**4:3**] [**16:9**] [**1:1**].

Aspect ratio	3:2
	4:3
	16:9
	1:1

● JPEG images will be saved with the set aspect ratio.
● RAW images will always be saved with the [**3:2**] aspect ratio. Since the aspect ratio information is appended to the RAW image, the image will be generated in the respective aspect ratio when you process the RAW image with EOS software. In the case of the [**4:3**], [**16:9**], and [**1:1**] aspect ratios, the aspect-ratio lines will appear during image playback, but the lines are not actually drawn on the image.

Image Quality	Aspect Ratio and Pixel Count (Approx.)			
	3:2	**4:3**	**16:9**	**1:1**
L **RAW**	5184x3456 (17.9 megapixels)	4608x3456 (16.0 megapixels)	5184x2912* (15.1 megapixels)	3456x3456 (11.9 megapixels)
M	3456x2304 (8.0 megapixels)	3072x2304 (7.0 megapixels)	3456x1944 (6.7 megapixels)	2304x2304 (5.3 megapixels)
S1	2592x1728 (4.5 megapixels)	2304x1728 (4.0 megapixels)	2592x1456* (3.8 megapixels)	1728x1728 (3.0 megapixels)
S2	1920x1280 (2.5 megapixels)	1696x1280* (2.2 megapixels)	1920x1080 (2.1 megapixels)	1280x1280 (1.6 megapixels)
S3	720x480 (350,000 pixels)	640x480 (310,000 pixels)	720x400* (290,000 pixels)	480x480 (230,000 pixels)

● The asterisked image-recording quality settings do not match the respective aspect ratio exactly.
● The image area displayed for the asterisked aspect ratio is slightly larger than the recorded area. Check the captured images on the LCD monitor when shooting.
● If you use a different camera to directly print images shot with this camera in the 1:1 aspect ratio, the images may not be correctly printed.

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ISO: **Changing the ISO Speed** ■

Set the ISO speed (image sensor's sensitivity to light) to suit the ambient light level. With <⌧> and in Basic Zone modes, the ISO speed is set automatically (p.104).

Using the Shooting Screen's ISO Display
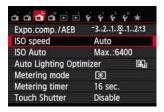
1 Tap the ISO speed.
- Tap the ISO display on the LCD monitor's lower right.

2 Set the ISO speed.
- Tap the ISO display and select the desired ISO speed, then tap [⤴].
- With [**AUTO**] selected, the ISO speed will be set automatically (p.104).

Using the Menu Screen

Using the INFO. Quick Control Screen

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 flash range will extend.
ISO 400 - ISO 1600	Overcast skies or evening time	
ISO 1600 - ISO 12800, H	Dark indoors or night	

* High ISO speeds will result in grainier images.

> ⚠ ● Under [♦4: Custom Functions (C.Fn)], if [3: Highlight tone priority] is set to [1: Enable], ISO 100 and "H" (equivalent to ISO 25600) cannot be selected (p.289).
> ● 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.
> ● With ISO 12800 or "H" (equivalent to ISO 25600), the number of possible shots/maximum burst for continuous shooting will greatly decrease.
> ● As "H" (equivalent to ISO 25600) is an expanded ISO speed setting, noise (such as dots of light and banding) and irregular colors will be more noticeable, and the resolution will be lower than usual.
> ● As the maximum ISO speed that can be set differs between still photo shooting and movie shooting (manual exposure), the ISO speed you set may change when you switch from still photo shooting to movie shooting. Even if you switch back to still photo shooting, the ISO speed will not revert to the original setting. The maximum ISO speed that can be set varies depending on the setting for [2: ISO expansion] under [♦4: Custom Functions (C.Fn)].
>   • When [0: Off] is set: If you set ISO 12800 during still photo shooting and then switch to movie shooting, the ISO speed will be changed to ISO 6400.
>   • When [1: On] is set: If you set ISO 12800 or "H" (equivalent to ISO 25600) during still photo shooting and then switch to movie shooting, the ISO speed will be changed to "H" (equivalent to ISO 12800).

> 🔲 ● Under [♦4: Custom Functions (C.Fn)], if [2: ISO expansion] is set to [1: On], "H" (equivalent to ISO 25600) can also be set (p.288).
> ● Even if a low ISO speed is set, noise may be noticeable in the LCD monitor image under low light. However, when you shoot, the image recorded will have minimal noise. (The image quality of the LCD monitor image is different from that of the recorded image.)

ISO [AUTO]

If the ISO speed is set to [**AUTO**] and you press the shutter button halfway, the current ISO speed will be displayed. As indicated below, the ISO speed will be set automatically to suit the shooting mode.

Shooting Mode	ISO Speed Setting
A⁺/CA/🎭/🌷/🏃/🍴/🖼️/☀	Automatically set within ISO 100 - ISO 6400
🏔️	Automatically set within ISO 100 - ISO 1600
🏙️	Automatically set within ISO 100 - ISO 12800
P/**Tv**/**Av**/**M**^{*1}	Automatically set within ISO 100 - ISO 6400^{*2}
With flash	ISO 400^{*3*4*5}

*1 : Fixed at ISO 400 for bulb exposures.
*2 : Depends on the maximum ISO speed limit set.
*3 : If fill flash results in overexposure, ISO 100 or a higher ISO speed will be set
      (except in <**M**> mode).
*4 : Except in the A⁺, 🏃, 🖼️, and 🏙️ modes.
*5 : Automatically set within ISO 400 - ISO 1600 (or up to the maximum limit) in the CA,
      🎭, 🏔️, 🌷, 🏃, 🍴, and <**P**> modes if you use bounce flash with an external
      Speedlite.

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MENU Setting the Maximum ISO Speed for [ISO Auto] ◪

For ISO Auto, you can set the maximum ISO speed limit within ISO 400 - ISO 6400.

Under the [📷3] tab, select [**ISO Auto**], then press <SET>. Select the ISO speed, then press <SET>.

ISO Auto
Max.:400
Max.:800
▸ Max.:1600
Max.:3200
Max.:6400
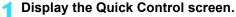
When [**AUTO**] is set, the ISO speed is indicated in whole-stop increments. However, the ISO speed is actually set in finer increments. Therefore, in the image's shooting information (p.256), you may find an ISO speed such as 125 or 640 displayed as the ISO speed.

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ぽ☆ Selecting a Picture Style ▣

Six Picture Styles are provided to suit your photographic expression or subject. Each one can be fine-tuned.

1 Display the Quick Control screen.
● Press the <▣> button to display it.

2 Tap the Picture Style.

3 Tap the desired setting to select it.
● Tap the desired setting to select it, then tap [↰].
● To fine-tune the Picture Style (p.162), press the <INFO.> button.

Picture Style Characteristics

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

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

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

📇P Portrait
For smooth skin tones. The image looks softer. Suited for close-up portraits.
By changing the [**Color tone**] (p.164), you can adjust the skin tone.

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

📇N Neutral
This Picture Style is for users who prefer to process images with their computer. Natural color tones and a subdued look.

📇F Faithful
This Picture Style is for users who prefer to process images with their computer. When the subject is captured under a color temperature of 5200K, the color is adjusted colorimetrically to match the subject's color. Vivid colors are suppressed for a subdued look.

📇M Monochrome
Creates black-and-white images.

🖐 Black-and-white images shot in formats other than **RAW** cannot be reverted to color. If you want to later shoot pictures in color, make sure the [**Monochrome**] setting has been canceled.

📇1 User Def. 1-3
You can register a basic style such as [**Portrait**], [**Landscape**], a Picture Style file, etc., and adjust it as desired (p.166). If no Picture Style is registered, the setting will be the same as the [**Auto**] default settings.

MENU Selecting a Focusing Method

With an EF-M Lens

1 Select [Focus mode].
- Under the [■2] tab, select [**Focus mode**].
- [**Focus mode**] will be displayed when an EF-M lens is attached. It will not be displayed when an EF or EF-S lens is attached.
- With <A⁺>, this setting will not be displayed. (It will be set to AF automatically.)
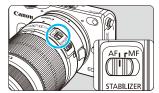
2 Select the desired item.
- **AF: AF (Auto)**
  Stands for autofocus.
- **MF: MF (Manual)**
  Stands for manual focus. To focus manually, see page 120.
- **AF+MF: Manual focus after AF**
  After focus is achieved using AF, you can make final focus adjustments manually. After the AF operation, turn the focusing ring while holding the shutter button pressed halfway.

With <🏃> or <🏃>, or if [**AF operation**] is set to [**Servo AF**] (p.111), priority is given to Servo AF. In such cases, even if you set the focus mode to [**AF+MF**], you will not be able to focus manually.

With a Non-EF-M Lens

● Set the lens focus mode switch to <**AF**> or <**MF**>.

Using Continuous AF

The camera focuses the subject continuously to achieve rough focus. This makes it quicker to achieve focus when you press the shutter button halfway. If [**Enable**] is set, the lens will operate frequently and consume more battery power. This will reduce the number of possible shots.

● Set by selecting [**Continuous AF**] under the [🗂 2] tab.
● The default setting is [**Enable**].

 While using Continuous AF with an EF or EF-S lens, do not switch the lens focus mode switch to <**MF**>. Switch to <**MF**> with the camera's power turned off.

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AF: Changing the Autofocus Operation[☆]

In Creative Zone modes, you can select the AF (autofocus) operation to suit the shooting condition or subject. With <🄰⁺> and in Basic Zone modes, the optimum AF operation is set for the respective shooting mode.

1 Set the focus mode to [AF].
- See page 108 to set the focus mode to [**AF**].

2 Display the Quick Control screen.
- Press the <🄰> button to display it.

3 Tap the AF operation.

4 Tap the desired setting to select it.
- Tap the desired setting to select it, then tap [↰].

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

📝 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 picture and try to focus again. Or see "Shooting Conditions that Make Focusing Difficult" (p.119).

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.
- With evaluative metering (p.146), 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 [♦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 subject will be focused continuously.
- The exposure is set at the moment the picture is taken.
- During continuous shooting, the AF operation for shots after the first one is as follows.
  - When using a lens with "STM" in its name, such as the EF-M18-55mm f/3.5-5.6 IS STM, the camera can keep focusing and shooting continuously. With other lenses, the focus will be locked for the second and subsequent frames during continuous shooting.
- When using a lens with "STM" in its name, the continuous shooting speed becomes slower since the camera keeps focusing and shooting continuously.
- Setting the [**AF method**] to [**FlexiZone - Single**] is recommended.
- Depending on the shooting conditions, it may take a moment until the shutter is released.
- 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.
- If you operate the zoom during continuous shooting, the focus may be lost. Shoot after using the zoom to obtain the desired composition.
- When focus is achieved, the AF point will turn blue.
- When [**FlexiZone - Multi**] is set, press the shutter button halfway to fix the AF points.
- When [☺ **(face)+Tracking**] is set, the AF point is fixed during continuous shooting.

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🌡 When an EF or EF-S lens is used, the focus will be locked as shooting starts, even if you shoot continuously with Servo AF (except for STM lenses).

📖 When using Servo AF in a Creative Zone mode, the beeper will not sound even when focus is achieved.

AF-Assist Beam

Under low-light conditions, when you press the shutter button halfway, the AF-assist lamp may be illuminated. It illuminates the subject to enable easier autofocusing.

📖 ● When you hold the camera, be sure not to obstruct the AF-assist lamp (p.48).
● In <🏃> or <🏃> mode, the AF-assist lamp does not emit the AF-assist beam.
● The AF-assist beam will not be emitted when [**AF operation**] is set to [**Servo AF**].
● In Creative Zone modes, the AF-assist beam will be emitted when necessary.
● In movie shooting modes, the AF-assist beam will not be emitted.
● Emission of the AF-assist beam makes it easier to focus at the center of the screen.
● Depending on the lens attached, the AF-assist beam may be obstructed and the camera may not be able to focus automatically.
● You can enable or disable the AF-assist beam with the [**4: AF-assist beam (LED) firing**] setting under [**4: Custom Functions (C.Fn)**].
● When using an external flash, the AF-assist beam of the flash will not be emitted. However, if you use an EX-series Speedlite (sold separately) equipped with an LED light, when [**AF operation**] is set to [**One-Shot AF**], the LED light will turn on for AF-assist if necessary.

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Using AF to Focus (AF Method)

Selecting the AF Method

You can select an AF method to suit the shooting conditions and your subject. The following AF methods are provided: [**FlexiZone - Single**], [**(face)+ Tracking**] (p.114), and [**FlexiZone - Multi**] (p.116).
If you want to achieve precise focus, set the lens focus mode switch to [**MF**], magnify the image, and focus manually (p.120).

Select the AF method.

- Select the AF method with Quick Control (p.50).
- Select the desired AF method at the bottom of the screen, then tap [↰] to set.
- You can also select from [**AF method**] under the [**2**] tab.

FlexiZone - Single: AF □

This is effective when you want to focus a particular subject, since only one AF point is used to focus.
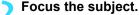
1 Move the AF point.

- Tap the screen to move the AF point to where you want to focus. (It cannot go to the edges of the picture.)
- To return the AF point to the center, press the < ▼ 🗑 > button.
- During movie shooting, if [**Movie Servo AF**] is set to [**Enable**], the AF point will be displayed in a larger size.

AF point

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2 Focus the subject.

- ● Aim the AF point over the subject and press the shutter button halfway.
- ▶ When focus is achieved, the AF point turns green and the beeper sounds. (If [**AF operation**] is set to [**Servo AF**], the AF point turns blue and the beeper will not sound.)
- ▶ If focus is not achieved, the AF point will turn orange.

3 Take the picture.

- ● Press the shutter button completely (p.64).

ʟ (face)+Tracking: AFʟ□
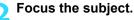
Human faces are detected and focused. If a face moves, the AF point <□> also moves to track the face.

1 Check the AF point.

- ● When a face is detected, the <□> AF point will appear over the face to be focused.
- ● You can also tap the LCD monitor screen to select the face or subject. If the subject is not a face, <□> will be displayed.
- ● If no faces can be detected, or if you tap the LCD monitor but do not select any face or subject, the camera will switch to [**FlexiZone - Multi**] with automatic selection (p.116).

2 Focus the subject.

- Press the shutter button halfway to focus.
▶ When focus is achieved, the AF point turns green and the beeper sounds. (If [**AF operation**] is set to [**Servo AF**], the AF point turns blue and the beeper will not sound.)
▶ If focus is not achieved, the AF point will turn orange.

3 Take the picture.

- Press the shutter button completely (p.64).

- If the subject's face is significantly out of focus, face detection will not be possible. You can prevent this by setting [**Continuous AF**] to [**Enable**].
- 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 <[ ]> may cover only part of the face.
- If you press the shutter button to focus again while the access lamp is illuminated after shooting, the focus mode may momentarily switch to [**FlexiZone - Multi**]. (Face detection will not function.)

- When you press the <▼ 🗑> button, the <⌗> AF point will appear at the center of the screen. Drag it to move the AF point. Press the <▼ 🗑> button again, and the AF point will move to the detected subject.
- Since AF is not possible with a face detected near the edge of the picture, the <[ ]> will be grayed out. If you press the shutter button halfway, the subject will be focused in [**FlexiZone - Multi**] AF method with automatic selection.

FlexiZone - Multi: AF( )

Up to 31 AF points (automatically selected) covering a wide area can be used to focus. This wide area can also be divided into 9 zones for focusing (zone selection).

Area frame

Zone frame

1 Select the AF zone. ☒

- During automatic selection, tap the screen to switch to zone selection. With <[A⁺]> and in Basic Zone modes, automatic selection will be set.
- To select a zone, tap it on the screen. To return to the center zone, press the <▼ 🗑> button.
- During zone selection, tap the [〔 〕�ᐧ] icon on the screen to switch to automatic selection.

2 Focus the subject.

- Aim the AF point over the subject and press the shutter button halfway.
- ▶ When focus is achieved, the AF point turns green and the beeper sounds. (If [**AF operation**] is set to [**Servo AF**], the AF point turns blue and the beeper will not sound.)
- ▶ If focus is not achieved, the area frame or zone frame will turn orange.

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3 Take the picture.
- Press the shutter button completely (p.64).

⚠ ● When the camera does not focus the desired target subject with automatic AF point selection, switch the AF method to zone selection or [**FlexiZone - Single**], and focus again.
- Depending on the aspect ratio setting, the number of AF points will differ. At [**3:2**], there will be 31 AF points. At [**1:1**] and [**4:3**], there will be 25 AF points. And at [**16:9**], 21 AF points. Also, at [**16:9**], there will be only three zones.
- For movie shooting, there will be 21 AF points (or 25 AF points if [**640x480**] is set) and three zones (or 9 zones if [**640x480**] is set).

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Notes About [FlexiZone - Single], [ㆆ (face)+Tracking], and [FlexiZone - Multi]

AF Operation

 Even when focus has been achieved, pressing the shutter button halfway will focus again.
 The image brightness may change during and after the AF operation.
 If the light source changes during autofocusing, the screen may flicker and focusing may be difficult. If this happens, turn the camera off and on again, then autofocus under the actual light source.
 When [**FlexiZone - Single**] is set and you tap on [◌] on the screen, the image at the AF point will be magnified. When you press the shutter button halfway, the camera will focus while the magnified image is displayed. (However, if [**AF operation**] is set to [**Servo AF**], the display will return to normal and then the camera will focus.) This is effective when the camera is attached to a tripod and you need to attain very precise focus. If focusing is difficult in the magnified view, return to the normal display and use AF. Note that the AF speed may differ between the normal and magnified views. The image can also be magnified when [**FlexiZone - Multi**] is set. However, if you press the shutter button halfway, the display will return to normal and the camera will focus.
 When [**FlexiZone - Multi**] is set, press the shutter button halfway to fix the AF points.
 If you magnify the view after focusing with [**FlexiZone - Single**] or [**FlexiZone - Multi**] in the normal view, precise focus may not be achieved.
 If [ㆆ (face)+Tracking] is set, magnified view is not possible. The AF point is fixed during continuous shooting.
 When [ㆆ (face)+Tracking] or [**FlexiZone - Multi**] is set, the AF point is fixed during continuous shooting.

Continuous Shooting when [AF operation] is Set to [Servo AF]:

 When using a lens with "STM" in its name, such as the EF-M18-55mm f/3.5-5.6 IS STM, the camera can keep focusing and shooting continuously during Servo AF. (The continuous shooting speed becomes slower.) With other lenses, the focus will be locked for the second and subsequent frames during continuous shooting.

 If you shoot a peripheral subject and it is slightly out of focus, aim the center AF point or zone over the subject to focus, focus again and then take the picture.
 In magnified view, focusing using AF may be difficult due to the magnified effect of camera shake. Using a tripod is recommended.

Shooting Conditions that Make Focusing Difficult

- Low-contrast subjects such as the blue sky, solid-color flat surfaces or when highlights or shadow details are lost.
- Extremely bright or dark subjects.
- Stripes and other patterns where there is contrast only in the horizontal direction.
- Subjects with repetitive patterns (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.
- When the image flickers under fluorescent or LED light sources.
- Extremely small subjects.
- Subjects at the edge of the picture.
- Subjects strongly reflecting light.
- The AF point covers both near and distant subjects (such as an animal in a cage).
- Subjects that keep moving within the AF point and cannot keep still due to camera shake or subject blur.
- Autofocusing while 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 (spots, banding, etc.) appears on the screen during AF.
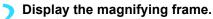
- In the above cases, if the camera cannot focus automatically, focus manually.
- With some EF or EF-S lenses (Mount Adapter EF-EOS M required), it may take longer to achieve focus or correct focus may not be achieved. For more information, refer to Canon Web site.

MF: Manual Focus

You can magnify the image and focus precisely with manual focus.
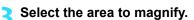
1 **Set the focus mode to [MF].**
- See page 108 to set the focus mode to [**MF**].

2 **Display the magnifying frame.**
- Tap the [🔍] icon.
▶ The magnifying frame will appear.

3 **Select the area to magnify.**
- Drag the magnifying frame to select the area you want to magnify.
- To return to the screen's center, press the <▼ 🗑> button.

4 **Magnify the image.**
- Each time you tap on [🔍] on the screen, the magnified area will change as follows:

$$\rightarrow 1x \rightarrow 5x \rightarrow 10x \rightarrow \begin{array}{c}\text{Magnification}\\\text{canceled}\end{array}$$

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, tap [Q] on the screen to return to the normal view.

6 Take the picture.

● Press the shutter button completely (p.64).

Focusing may be difficult in the magnified view due to the magnified effect of camera shake. Using a tripod is recommended.

✋ Shooting with the Touch Shutter

Just by tapping the LCD monitor screen, you can focus and take the picture automatically. This works in all shooting modes.

1 Enable the touch shutter.

- Tap [⚙] on the screen's bottom left. Each time you tap the icon, it will toggle between [⚙] and [✋].
- [✋] (Touch Shutter: Enable)
  You can tap to focus and shoot.
- [⚙] (Touch Shutter: Disable)
  You can tap to select the point to focus. Then, press the shutter button completely to shoot.

2 Tap the screen to shoot.

- Tap the face or subject on the screen.
- ▶ At the point you tap, the camera will focus in the AF method that was set (p.113-117). When [**FlexiZone - Multi**] is set, it will switch to [**FlexiZone - Single**].
- ▶ 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 the face or subject on the screen again.

⚠ ● Even if the drive mode is set to [⚐] (continuous shooting), single shooting will take effect.
- ● The touch shutter does not work with the magnified view.
- ● When [**5: Shutter/AE lock button**] is set to [**1: AE lock/AF**] or [**3: AE/AF, no AE lock**] under [♥**4: Custom Functions (C.Fn)**], autofocusing does not take effect.

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- You can also enable the touch shutter by setting [**Touch Shutter: Enable**] under the [3] tab.
- To take a bulb exposure, tap 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 the screen.
- Even if [**AF operation**] is set to [**Servo AF**], [**One-Shot AF**] will take effect when touch shutter is used.

⊒ᵢ Continuous Shooting

You can shoot up to approx. 4.6 shots per second.
This is effective for shooting a child walking toward you or capturing different facial expressions.

1 Press the <ⁱ⋮⊙/⊒ᵢ> button.
- You can also select the shooting mode on the INFO. Quick Control screen.

2 Tap [⊒ᵢ].
- By tapping [↰], you can return to the previous screen.

3 Take the picture.
- The camera shoots continuously while you hold down the shutter button completely.

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☀ **Shooting Tips**

● **Also set the AF operation** (p.110) **matching the subject.**

• **For a moving subject**

When using a lens with "STM" in its name, such as the EF-M18-55mm f/3.5-5.6 IS STM, the camera can keep focusing and shooting continuously during Servo AF. (The continuous shooting speed becomes slower.) The continuous shooting speed depends on the lens used. With other lenses, the focus will be locked for the second and subsequent frames during continuous shooting.

• **For a still subject**

When One-Shot AF is set, the camera will focus only once during continuous shooting.

● **An external flash (sold separately) can also be used.**

Since the flash will require recycling time, the continuous shooting speed will be slower.
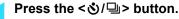
● The continuous shooting speed may decrease when shooting subjects whose brightness changes considerably.

● Depending on the lens used, the image displayed on the LCD monitor may appear darker during continuous shooting. However, the images will be recorded with the correct exposure.

● When the battery level is low, the continuous shooting speed will become slightly slower.

● The continuous shooting speed may become slower depending on the lens type, shutter speed, aperture, subject conditions, brightness, flash use, etc.

● When you use a Creative filter and shoot, even if you set the drive mode to [⊒] (continuous shooting), single shooting will take effect.

⏱ Using the Self-timer

Press the < ⏱/⏱ > button.

● You can also select the shooting mode on the INFO. Quick Control screen.

Tap the self-timer.

⏱ : **10-sec. self-timer**

The remote controller can also be used (p.295).

⏱₂ : **2-sec. self-timer**
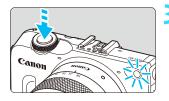
⏱c : **10-sec. self-timer plus continuous shots**

Tap [▲]/[▼] to set the number of multiple shots (2 to 10) to be taken with the self-timer.

● By tapping [⤺], you can return to the previous screen.

Take the picture.

● Focus 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 monitor.

▶ Two seconds before the picture is taken, the self-timer lamp will light up and the beeper will sound faster.

To cancel the self-timer shooting:

Press the < ⏱/⏱ > button or tap the screen.

To cancel the self-timer setting, press the < ⏱/⏱ > button and tap [□] or [⏱].

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⊕ ● With [ॐc] (Self-timer: Continuous), the interval between shots may be prolonged depending on the shooting conditions such as the image-recording quality or flash.
● When you shoot with Creative filters, even if you set the drive mode to [ॐc], single shooting will take effect.
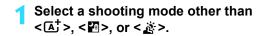
▤ ● After taking self-timer shots, playing back the image (p.92) to check focus and exposure is recommended.
● When using the self-timer to shoot only yourself, use focus lock (p.67) on an object at about the same distance as where you will stand.

⚙ Using Filter Effects

You can apply a filter effect (Grainy B/W, Soft focus, Fish-eye effect, Art bold effect, Water painting effect, Toy camera effect, or Miniature effect) before shooting. These are called Creative filters.

When you take the picture, the camera saves only the image with the filter effect applied. If you also want to save the image without a filter effect applied, take the picture without a filter effect. Then apply a filter effect and save it as a new image (p.260).

1 Select a shooting mode other than <🅰⁺>, <🄫>, or <🄍>.

2 Display the Quick Control screen.
● Press the <🅀> button to display it.

3 Tap the Creative filter icon.
● Tap [⚙] (Creative filters).

4 Tap a filter to select it.
● Tap the desired Creative filter. For details on Creative filter characteristics, see pages 130-131.
▶ You can see the effect of the Creative filter you selected.

5 Adjust the filter effect.

- You can adjust the effect except the Miniature effect. When you tap on a filter, the [◢◣] (except for Toy camera) or [▢◼▢] (Toy camera) indicator will appear. Tap [◢◣▬▬◼] or [▬▬◼▬▬] to adjust the effect while checking the results on the LCD monitor.
- For the Miniature effect, tap [↰], then drag the white frame over the part of the image you want to remain sharp. Tap [냅] to switch the white frame's orientation between vertical and horizontal.

6 Take the picture.

- Press the shutter button.

⚠ When you use a Creative filter and shoot, even if you set the Drive/self-timer mode to continuous shooting (⊒/ ⏱c), single shooting will take effect.

📋 ● You cannot shoot with Creative filters if the image-recording quality is RAW+◢L or RAW or if AEB, white balance bracketing, or Multi Shot Noise Reduction is set.
● When you use a Creative filter and shoot, the histogram will not be displayed.

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 cropped 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 while checking the resulting image. The AF method will be set to [**FlexiZone - Single**] (fixed at center).

🔅 Art bold effect
Makes the photo look like an oil painting and the subject look three-dimensional. You can adjust the contrast and saturation. Note that the sky, white walls, and similar subjects 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 adjust the color density. 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 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. The camera will focus at the center of the white frame and the AF method will be set to [**FlexiZone - Single**].

📖 ⬤ With [**Grainy B/W**], the grainy look of the image displayed on the screen may differ from that of the recorded image.

⬤ With [**Soft focus**] and [**Miniature effect**], the filter effect of the image displayed on the screen may differ from that of the recorded image. In Creative Zone modes, you can set [**6: ▼ 🗑 button function**] under [♥4: **Custom Functions (C.Fn)**] to [**1: Depth-of-field preview**] (p.291) and press the < ▼ 🗑 > button to check the filter effect of the image that will be recorded.

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, blistering or low-temperature contact burns. The use of a tripod is recommended for people with circulation problems or very sensitive skin, or when using the camera in very hot places.

When shooting, note the following:

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 you shoot continuously for a long period, the camera's internal temperature may rise, and image quality may deteriorate. When you are not shooting, turn off the camera.
- If you shoot a long exposure while the camera's internal temperature is high, image quality may deteriorate. Set the power to < OFF >, then wait a few minutes before shooting again.

White < ▥ > and Red < ▥ > Internal Temperature Warning Icons
- If the camera's internal temperature increases due to prolonged 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. You should exit shooting and allow the camera's internal temperature to cool before shooting again.
- The red < ▥ > icon indicates that the power will soon turn off 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 at a high temperature for a prolonged period will cause the < ▥ > or < ▥ > icon to appear earlier. When you are not shooting, turn off the camera.
- If the camera's internal temperature is high, the image quality of high ISO speed images or long exposures may deteriorate even before the white < ▥ > icon is displayed.

⚠ When shooting, note the following:

Shooting Result
- 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. (During the magnified view, the shutter speed and aperture turn red.) Even if you take the picture in magnified view, the image will be captured in the normal view.
- If [**3: Auto Lighting Optimizer**] (p.153) is set to any setting other than [**Disable**], the image may look bright even if a decreased exposure compensation or decreased flash exposure compensation is set.
- If you use a TS-E lens (other than 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 an irregular exposure may result.

Image on the LCD Monitor
- Under low- or bright-light conditions, the 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 image under low light. However, when you shoot, the image recorded will have minimal noise. (The image quality of the shooting screen is different from that of the recorded image.)
- If the light source (illumination) within the image changes, the screen may flicker. If this happens, turn the camera off and on again, then resume shooting under the actual light source.
- If you point the camera in a different direction, the image brightness may change greatly momentarily. Wait until the brightness level stabilizes before shooting.
- If there is a very bright light source in the picture, the bright area may appear black on the LCD monitor. However, such bright areas will be recorded properly as a bright area.
- In low-light conditions, if you set [**2: LCD brightness**] to a brighter setting, the image on the LCD monitor may develop chrominance noise. However, this chrominance noise will not be recorded in the image.
- When you magnify the image, the image sharpness may look more pronounced than in the actual image.

Lens and Flash
- The focus preset feature of some lenses cannot be used with this camera.
- Firing a modeling flash is not possible with the camera.

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Advanced Shooting

This chapter builds on Chapter 3 and introduces more ways to shoot creatively.

- The first half of this chapter explains how to use the <**Tv**>, <**Av**>, and <**M**> modes.
- All the functions explained in Chapter 3 can also be used in the <**Tv**>, <**Av**>, and <**M**> modes.
- To see which functions can be used in each shooting mode, see page 308.
- The ⓶ mark shown on the right of the page title indicates that the function is available only in Creative Zone modes (p.27).

↗↘ Main Dial Pointer

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5.6

3..2..1..⦿..1..2.:3

The pointer icon [↗↘] displayed together with the shutter speed, aperture setting, or exposure compensation amount indicates that you can turn the <◯> dial to adjust the respective setting.

Tv : Convey the Subject's Movement

You can either freeze the action or create motion blur with the < Tv >
(Shutter-priority AE) mode.
* < Tv > stands for Time value.

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

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

1 Set the Mode Dial to <2>.

2 Tap the shooting mode icon on the screen's upper left corner.

● The shooting mode selection screen will appear.

3 Tap the screen to select [Tv].

Shutter priority AE
Adjust shutter speed to make
moving subjects look still or
capture motion blurring

Shutter speed

4 **Set the desired shutter speed.**

- Turning the <⚪> dial to the right sets a faster shutter speed, and turning it to the left sets a slower one.
- See "Shooting Tips" on the next page for advice on setting the shutter speed.
- You can also set by tapping the shutter speed.

5 **Take the picture.**

Shutter Speed Display
The shutter speed display shows only the denominator. "**0"5**" indicates 0.5 sec. and "**15"**" is 15 sec.

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☀ **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.

● **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. While following the moving subject, 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 while the aperture is displayed, the aperture display will also change to maintain the same exposure (amount of light reaching the image sensor). If you exceed the adjustable aperture range, the aperture display will blink to indicate that the standard exposure cannot be obtained.
If the exposure will be too dark, the maximum aperture (smallest number) will blink. To obtain a standard exposure, set a slower shutter speed or increase the ISO speed.
If the exposure will be too bright, the minimum aperture (highest number) will blink. To obtain a standard exposure, set a faster shutter speed or decrease the ISO speed.

Av : Changing the Depth of Field

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

* < Av > stands for Aperture value, which is the size of the diaphragm hole inside the lens.

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 < ☒ >.**

2 **Tap the shooting mode icon on the screen's upper left corner.**
- The shooting mode selection screen will appear.

3 **Tap the screen to select [Av].**

M Av Tv P

Aperture priority AE
Adjust aperture to blur backgnd
(subjects stand out) or keep
foreground and backgnd in focus

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Aperture (f/number)

4 Set the desired aperture.

- Turning the < > dial to the right will set a higher f/number, and turning it to the left will set a lower f/number.
- The higher the f/number, the wider the depth of field where sharper focus is obtained in both the foreground and background.
- You can also set by tapping an f/number.

5 Take the picture.

📓 **Aperture Display**

The higher the f/number, the smaller the aperture opening will be. The apertures 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 while the shutter speed is displayed, the shutter speed display will also change to maintain the same exposure (amount of light reaching the image sensor). If you exceed the adjustable shutter speed range, the shutter speed display 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. To obtain a standard exposure, set a lower aperture f/number or increase the ISO speed.
If the picture will be too bright, the "**4000**" (1/4000 sec.) shutter speed display will blink. To obtain a standard exposure, set a higher aperture f/number or decrease the ISO speed.
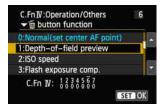
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Depth-of-Field Preview ☑

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 on the LCD monitor, the depth of field will look narrow. You can check the depth of field with the procedure below.

1 **Enable depth-of-field preview.**
- Under [♥4: Custom Function (C.Fn)], set [**6: ▼** 🗑 **button function**] to [**1: Depth-of-field preview**] (p.291).
- The Custom Function setting procedure is explained on page 286.

2 **Exit the menu.**

3 **Press the <▼** 🗑**> button.**
▶ You can check the depth of field.

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M: Manual Exposure

You can set both the shutter speed and aperture manually as desired. This method is called manual exposure.

* <**M**> stands for Manual.

1 Set the Mode Dial to <ⓐ>.

2 Tap the shooting mode icon on the screen's upper left corner.

● The shooting mode selection screen will appear.

3 Tap the screen to select [M].

| M | Av | Tv | P |

Manual exposure
Set shutter speed and aperture manually for greater freedom of expression in shots

4 Set the ISO speed (p.102)**.**

● When set to [**AUTO**], the ISO speed will change automatically in order to obtain a standard exposure.

● If you manually set the ISO speed, the image brightness will change to suit the set ISO speed, shutter speed, and aperture.

5 Set the shutter speed and aperture.

Aperture (f/number)
Shutter speed

● Press the <ⓐ> button to toggle between shutter speed selection and aperture selection.

● Turn the <◯> dial to set the shutter speed or aperture.

● You can also set by tapping the shutter speed and f/number.

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Standard exposure index

Exposure level mark

6 **Check the exposure.**

- When you press the shutter button halfway, the exposure level mark [◖] will show how far the current exposure level is from the standard exposure level.

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

- Set the exposure while checking the exposure level and image brightness, then take the picture.
- If the exposure level exceeds ±3 stops, the [◄/►] will light up at [**-3**] or [**+3**] on the exposure level scale.

 If ISO Auto is set, the ISO speed setting will change to suit the shutter speed and aperture in order to obtain a standard exposure. Therefore, you may not obtain the desired exposure effect.

- In [**3: Auto Lighting Optimizer**], if the checkmark [√] for [**Disable during man expo**] is removed, the Auto Lighting Optimizer can be set in the <**M**> mode (p.153).
- 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.25) compared to when the <✳> button was pressed.

BULB: Bulb Exposures

A bulb exposure keeps the shutter open for as long as you hold down the shutter button. It can be used to shoot fireworks and other subjects requiring long exposures.

● In the manual shooting mode, turn the < > dial to the left to set the shutter speed display to [**BULB**].
● The elapsed exposure time will be displayed on the LCD monitor.

BULB

⊕ ● Since bulb exposures produce more noise than usual, the image may look a little grainy.
● When [🗂4: **Long exp. noise reduction**] is set to [**Auto**] or [**Enable**], noise generated by the long exposure can be reduced (p.157).

📄 ● For bulb exposures, using a tripod is recommended.
● You can also use a Remote Controller (sold separately, p.295) for bulb exposures. When you press the Remote Controller's transmit button, the bulb exposure will start immediately or 2 sec. later. Press the button again to stop the bulb exposure.

⊛ Changing the Metering Mode ⊠

Four methods (metering modes) to measure the subject's brightness are provided. Normally, evaluative metering is recommended.
With <⒜⁺> and in Basic Zone modes, evaluative metering is set automatically.

1 Display the Quick Control screen.
● Press the <⒬> button to display it.

2 Tap the metering mode.

3 Tap the desired setting to select it.
● Tap the desired setting to select it, then tap [↰].
● For partial metering and spot metering, the metering range will be displayed with ○.

🔘 **Evaluative metering**
This is a general-purpose metering mode suited even for backlit subjects. The camera sets the exposure automatically to suit the scene.

▣ **Partial metering**
Effective when the background is much brighter than the subject due to backlighting, etc. The gray area in the left figure is where the brightness is metered to obtain the standard exposure.

⊡ **Spot metering**
This is for metering a specific spot of the subject or scene. The gray area in the left figure is where the brightness is metered to obtain the standard exposure. This metering mode is for advanced users.

▢ **Center-weighted average metering**
The brightness is metered at the image center and then averaged for the entire scene. This metering mode is for advanced users.

📓 When [**One-Shot AF**] is set: With 🔘, the exposure setting will be locked when you press the shutter button halfway and focus is achieved. With ▣, ⊡, and ▢, the exposure setting is set at the moment when the picture is taken. (The exposure setting is not locked when you press the shutter button halfway.)

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Setting Exposure Compensation ^N

☒ Setting Exposure Compensation

Set exposure compensation if the exposure (without flash) does not come out as desired. This feature can be used in the <**P**>, <**Tv**>, and <**Av**> shooting modes. You can set the exposure compensation up to ±3 stops in 1/3-stop increments.

On the shooting screen, you can adjust the exposure compensation while checking the results.

Increased exposure for a brighter image

Decreased exposure for a darker image

1 Press the <☒> button.

▶ <⚞⚟> will appear on both sides of the exposure level indicator.
● You can also set by tapping the exposure level.

2 Set the exposure compensation.

● Turning the <◯> dial to the right will make the image brighter, and turning it to the left will make the image darker. This is exposure compensation.

3 Take the picture.

● After deciding the image brightness, take the picture.

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4 Cancel the exposure compensation.

- Exposure compensation will not be canceled even after turning off the power.
- In steps 1 and 2, set the exposure level mark [ɪ] back to the center to cancel the exposure compensation.

Dark exposure

Increased exposure for a brighter image

📖 ⚫ If you combine it with AEB (p.150), you can set it beyond ±3 stops. Set it with [🖿3: Expo.comp./AEB] or the INFO. Quick Control screen.
⚫ The exposure compensation can also be set with [🖿3: Expo.comp./AEB].

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Auto Exposure Bracketing[☒]

This feature takes exposure compensation a step further by varying the exposure automatically (up to ±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 Display the INFO. Quick Control screen.
- Press the <INFO.> button a few times to display the INFO. Quick Control screen.

2 Select exposure compensation/AEB setting.
- Press the <✦> keys to select [**Expo.comp./AEB**], then press <SET>.

3 Set the AEB range.
- Turn the <◉> dial or tap [↗]/[↘] to set the AEB range.
- You can also set both AEB and exposure compensation. Either tap [+]/[-] or press the <◄> <►> keys to adjust the AEB range centering on exposure compensation setting.

- After you exit the setting, the AEB range will appear on the LCD monitor.

AEB range

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4 **Take the picture.**

- Press the shutter button completely. The three bracketed shots will be taken in this sequence: standard exposure, decreased exposure, and increased exposure.

📋 AEB can also be set with [☐3: Expo.comp./AEB].

Canceling AEB

- Follow steps 1 to 3 to turn off the AEB level display.
- The AEB setting will also be canceled automatically if the power is set to <OFF>, flash recycling is completed, etc.

☼ Shooting Tips

- **Using AEB with continuous shooting**
  If [⊒] continuous shooting (p.124) is set and you press the shutter button completely, the three bracketed shots will be taken continuously in this sequence: standard exposure, decreased exposure, and increased exposure.

- **Using AEB with (☐) single shooting**
  Press the shutter button three times to take the three bracketed shots. The three bracketed shots will be shot 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 Controller ([⑩ॐ] or [ॐ₂]), you can take three continuous shots after a 10-sec. or 2-sec. delay. With [ॐc] (p.126) set, the number of continuous shots will be three times the number set.

🚫 ● AEB cannot be used with flash, Multi Shot Noise Reduction, Creative filter shooting, and bulb shooting.
   ● If [☐3: Auto Lighting Optimizer] (p.153) is set to any setting other than [**Disable**], the effect of AEB may be minimal.

A Locking the Exposure (AE Lock)[☑]

You can lock the exposure when the area of focus is to be different from the exposure metering area or when you want to take multiple shots at the same exposure setting. Press the <✳> button to lock the exposure, then recompose and take the shot. This is called AE lock. It is effective for backlit subjects.

1 Focus the subject.
- Press the shutter button halfway.
▶ The exposure setting will be displayed.

2 Press the <✳> button. (⏱16)
▶ [✳] will appear and the exposure will be locked (AE lock).
- Press the <✳> button again to cancel the AE lock.

3 Recompose and take the picture.
- If you want to maintain the AE lock while taking more shots, hold down the <✳> button and press the shutter button to take another shot.

AE Lock Effects

Metering Mode (p.146)	AF Point Selection Method (p.113-117)	
	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.	

* During manual focus, AE lock is applied at the center AF point.

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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. RAW images can be corrected with Digital Photo Professional (EOS software, p.350).
With <A+> and in Basic Zone modes, [**Standard**] is set.

1 Display the Quick Control screen.
● Press the <Q> button to display it.

2 Tap the Auto Lighting Optimizer.

3 Tap the desired setting to select it.
● Tap the desired setting to select it, then tap [⤴].

4 Take the picture.
● The image will be recorded with the brightness and contrast corrected if necessary.

- Under [**♀4: Custom Functions (C.Fn)**], if [**3: Highlight tone priority**] is set to [**1: Enable**], the Auto Lighting Optimizer will be set automatically to [**Disable**] and the setting cannot be changed.
- Depending on the shooting conditions, noise may increase.
- When the effect of Auto Lighting Optimizer is too strong and the image becomes excessively bright, set it to [**Low**] or [**Disable**].
- If a setting other than [**Disable**] is set and you use exposure compensation or flash exposure compensation to darken the exposure, the image may still come out bright. If you want a darker exposure, set this function to [**Disable**].
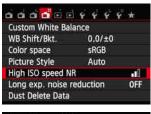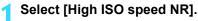
- In step 2, if you press the <**INFO.**> button and uncheck [**√**] the [**Disable during man expo**] setting, the Auto Lighting Optimizer can be set in the <**M**> mode.
- The Auto Lighting Optimizer can also be set with [**🗂3: Auto Lighting Optimizer**].

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. At low ISO speeds, the noise in the darker parts of the image (shadow areas) is further reduced. Change the setting to suit the noise level.

1 Select [High ISO speed NR].
- Under the [◻4] tab, select [**High ISO speed NR**], then press <SET>.

2 Set the desired setting.
- Select the desired noise reduction level, then press <SET>.
▶ The setting screen closes and the menu will reappear.

- **[Multi Shot Noise Reduction]**
  This applies noise reduction with higher image quality than [**High**]. For a single photo, four shots are taken in a burst and merged automatically into a single JPEG image.

3 Take the picture.
- The image will be recorded with noise reduction applied.

With [**High**], the maximum burst for continuous shooting will greatly decrease. With [**Multi Shot Noise Reduction**], you cannot take a picture until the noise reduction process is completed.

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❶ **About Multi Shot Noise Reduction**
- If there is significant misalignment in the image due to camera shake, the noise reduction effect may be minimal.
- 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 subject's movement may leave afterimages or the surrounding area of the subject may become dark.
- The followings cannot be set: AEB, WB bracketing, [❏4: **Long exp. noise reduction**], RAW+◢L/RAW. If any of these has already been set, [**Multi Shot Noise Reduction**] cannot be set.
- Flash shooting is not possible.
- You cannot set [**Multi Shot Noise Reduction**] for bulb exposures.
- If you turn off the power or change the shooting mode to <A⁺>, a Basic Zone mode, a movie shooting mode, or bulb, the setting will change to [**Standard**].
- Depending on shooting conditions, noise may appear on the image periphery.
- The image alignment may not function properly with repetitive patterns (lattice, stripes, etc.) or flat, single-tone images.
- Recording the image to the card will take longer than with normal shooting. During the processing of the images, "**BUSY**" will be displayed and you cannot take another picture until the processing is completed.
- [❏4: **Dust Delete Data**] cannot be set.
- Direct printing (p.268) is not possible.
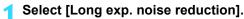
📄 If you play back or directly print a RAW+◢L or RAW image with the camera, the effect of the high ISO speed noise reduction may look minimal. Check the noise reduction effect or print noise-reduced images with Digital Photo Professional (EOS software, p.350).

Long Exposure Noise Reduction

You can reduce noise in long exposures.

1 Select [Long exp. noise reduction].
- Under the [🎞4] tab, select [**Long exp. noise reduction**], then press <SET>.
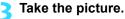
2 Set the desired setting.
- Select the desired setting, then press <SET>.
- ▶ The setting screen closes and the menu will reappear.

● **[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 in most cases.

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

3 Take the picture.
- The image applied with noise reduction is recorded.

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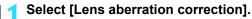
● With [**Auto**] or [**Enable**], the noise reduction process after the picture is taken may take the same amount of time as the exposure. During the noise reduction process, "**BUSY**" will be displayed and you cannot take another picture.
● Images taken at ISO 1600 or higher may look grainier with the [**Enable**] setting than with the [**Disable**] or [**Auto**] setting.

MENU Lens Peripheral Illumination / Chromatic Aberration Correction
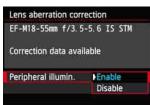
Peripheral light fall-off is a phenomenon that makes the image corners look darker due to the lens characteristics. Color fringing along subject outlines is another chromatic aberration. Both lens aberrations can be corrected. RAW images can be corrected with Digital Photo Professional (EOS software, p.350).

Peripheral Illumination Correction

AF operation	ONE SHOT AF
AF method	FlexiZoneAF□
Continuous AF	Disable
Focus mode	AF
Image Stabilizer	Enable
Lens aberration correction	
External Speedlite control	

Lens aberration correction
EF-M18-55mm f/3.5-5.6 IS STM

Correction data available

| Peripheral illumin. | ▶Enable |
| | Disable |

1 Select [Lens aberration correction].
- Under the [♦2] tab, select [**Lens aberration correction**], then press <SET>.

2 Select the desired setting.
- Check that [**Correction data available**] is displayed for the attached lens.
- Select [**Peripheral illumin.**], then press <SET>.
- Select [**Enable**], then press <SET>.
- If [**Correction data not available**] is displayed, see "Lens Correction Data" on page 161.

3 Take the picture.
- The image will be recorded with the peripheral illumination corrected.
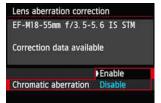
Depending on shooting conditions, noise may appear on the image periphery.

- The correction amount applied will be slightly lower than the maximum correction amount that can be set with Digital Photo Professional (EOS software).
- The higher the ISO speed, the lower the correction amount will be.

Chromatic Aberration Correction

Lens aberration correction
EF-M18-55mm f/3.5-5.6 IS STM

Correction data available

Chromatic aberration ▸Enable
Disable

1 Select the setting.

● Check that [**Correction data available**] is displayed for the attached lens.
● Select [**Chromatic aberration**], then press <SET>.
● Select [**Enable**], then press <SET>.
● If [**Correction data not available**] is displayed, see "Lens Correction Data" on the next page.

2 Take the picture.

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

● With [**Enable**], the maximum burst for continuous shooting will greatly decrease.
● If you play back a RAW image shot with the chromatic aberration corrected, the image will be displayed on the camera without the chromatic aberration correction applied. Check the chromatic aberration correction with Digital Photo Professional (EOS software, p.350).

Lens Correction Data

The camera already contains lens peripheral illumination correction data and chromatic aberration correction data for approx. 25 lenses. If you select [**Enable**], the peripheral illumination correction and chromatic aberration correction will be applied automatically for any lens whose correction data is registered in the camera.

With EOS Utility (EOS software), 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 Software Instruction Manual (PDF) for EOS Utility.

* There is no need to register EF-M lenses.

Notes for Peripheral Illumination Correction and Chromatic Aberration Correction

- Peripheral illumination correction and chromatic aberration 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.
- If you use the magnified view during shooting, the peripheral illumination correction and chromatic aberration correction will not be reflected in the image shown on the screen.

- If the effect of the correction is not visible, magnify the image and check it again.
- The corrections are also applied 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**].
- If the lens does not have distance information, the correction amount will be lower.

⚡☆ Adjusting the Picture Style[☆]

You can customize a Picture Style by adjusting individual parameters such as [**Sharpness**] and [**Contrast**]. To see the resulting effects, take test shots. To customize [**Monochrome**], see page 165.

1 Display the Quick Control screen.
● Press the <Q> button to display it.

2 Tap the Picture Style.

3 Tap a Picture Style to select it.
● After selecting a Picture Style, tap [INFO. ≣].
▶ The detail setting screen will appear.

4 Select a parameter.
● Tap the parameter to be set.

5 Set the parameter.

- Tap [◄]/[▶] to set the parameter, then tap [↰].
- ▶ The setting will be displayed.

- ● By selecting [INFO Default set.] in step 5, you can revert the respective Picture Style to its default parameter settings.
- ● To shoot with the Picture Style you adjusted, follow step 3 on page 106 to select the modified Picture Style and then shoot.
- ● If you select [🄌4: Picture Style] with the menu, the settings changed from the default will be displayed in blue.

Parameter Settings and Effects

◐ Sharpness
Adjusts the sharpness of the subject.
To make it less sharp, set it toward the **0** end. The closer it is to **0** , the
softer the image will look.
To make it sharper, set it toward the **7** end. The closer it is to **7** , the
sharper the image will look.

◑ Contrast
Adjusts the image contrast and the vividness of colors.
To decrease the contrast, set it toward the minus end. The closer it is to **■**,
the more muted the image will look.
To increase the contrast, set it toward the plus end. The closer it is to **■**,
the crisper the image will look.

◔ Saturation
Adjusts the color saturation in the image.
To decrease the color saturation, set it toward the minus end. The closer it
is to **■**, the more diluted the colors will look.
To increase the color saturation, set it toward the plus end. The closer it is
to **■** , the bolder the colors will look.

◕ Color tone
Adjusts skin color tone.
To make skin tones redder, set it toward the minus end. The closer it is to
■, the redder skin tones will look.
To make skin tones more yellow, set it toward the plus end.
The closer it is to **■** , the more yellow skin tones will look.

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▨M Monochrome Adjustment

For Monochrome, you can also set [**Filter effect**] and [**Toning effect**] in addition to [**Sharpness**] and [**Contrast**] explained on the preceding page.

◉ 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 that color. It can make the image look more impressive. The following can be selected: [**N:None**], [**S:Sepia**], [**B:Blue**], [**P:Purple**] or [**G:Green**].

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✎✐ Registering Customized Picture Styles✪ ▬▬

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**].
You can create multiple Picture Styles with different settings for parameters such as sharpness and contrast.
You can also adjust the parameters of a Picture Style that has been registered to the camera with EOS Utility (EOS software, p.350).

1 Display the Quick Control screen.
- Press the < **Q** > button to display it.

2 Tap the Picture Style.

3 Tap a User Def. to select it.
- Tap [《] and [》] to select [▣⁑1], [▣⁑2], or [▣⁑3] (User Def.).

4 Tap [INFO. ▤].
- Tap [INFO. ▤] to display the detail setting screen.

5 Select the base Picture Style.
- Tap the Picture Style to be used as the base.
- To adjust the parameters of a Picture Style that has been registered to the camera with EOS Utility (EOS software), select the Picture Style here.

6 Select a parameter.

● Tap a parameter such as [**Sharpness**] to select it.

7 Set the parameter.

● Tap [◀]/[▶] to set the parameter.
● For details, see "Adjusting the Picture Style" on pages 162-165.

● Press [↰] to register the modified Picture Style. The Picture Style selection screen will then reappear.
▶ The base Picture Style will be indicated under [**User Def.***].

● If a Picture Style has already been registered under [**User Def.***], changing the base Picture Style in step 5 will nullify the parameter settings of the registered Picture Style.
● If you execute [**Clear all camera settings**] (p.220), all the [**User Def.***] settings will revert to their defaults. Picture Styles registered via EOS Utility (EOS software) will have only their modified parameters reverted to their default settings.

● To shoot with a registered Picture Style, follow step 3 on page 106 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 (PDF).

WB: Matching the Light Source ☑

The function adjusting the color tone so that white objects look white in the picture is called white balance (WB). Normally, the <AWB> (Auto) setting will obtain the correct white balance. If natural-looking colors cannot be obtained with <AWB>, you can select the white balance that matches the light source or set it manually by shooting a sheet of white paper, etc.

1 Display the Quick Control screen.
● Press the <Q> button to display it.

2 Tap the white balance to select it.

3 Tap the desired setting to select it.
● Tap the desired setting to select it, then tap [↰].

✜ **Custom White Balance**

Custom white balance enables you to manually set the white balance for a specific light source for better accuracy. Perform this procedure under the actual light source to be used.

1 Shoot a white object.

● Fill the LCD monitor screen with a sheet of white paper, etc.
● Focus manually and set the standard exposure for the white object.
● You can set any white balance.

2 Select [Custom White Balance].

● Under the [📷4] 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 that was 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 Display the Quick Control screen.

● Press the <✚> button to display it.

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5 **Select [ ].**

- Tap the white balance.
- Tap [ ] (Custom) to select it, then tap [ ].
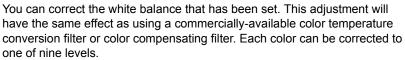
⚠️
- If the exposure obtained in step 1 differs greatly from the standard exposure, a correct white balance may not be obtained.
- In step 3, the following images cannot be selected: images captured while the Picture Style was set to [**Monochrome**] (p.107), images processed with a Creative filter, and cropped images.

📝 Instead of a white object, a gray chart or 18% gray reflector (commercially available) can produce a more accurate white balance.

MENU WB +/- Adjusting the Color Tone for the Light Source ▣

You can correct the white balance that has been 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 who are familiar with using color temperature conversion or color compensating filters.

White Balance Correction

Custom White Balance
WB Shift/Bkt.   0,0/±0
Color space   sRGB
Picture Style   Auto
High ISO speed NR   ▪▪▪
Long exp. noise reduction OFF
Dust Delete Data

1 Select [WB Shift/Bkt.].
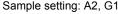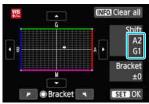
- Under the [📷4] tab, select [**WB Shift/Bkt.**], then press <SET>.
- ▶ The WB correction/WB bracketing screen will appear.

Bracket
±0
SET OK

Sample setting: A2, G1

2 Set the white balance correction.

- Press the <✥> keys to move the "■" mark on the screen to the desired position.
- B is for blue, A for amber, M for magenta, and G for green. The image's color balance will be corrected towards the selected color.
- On the upper right, "**Shift**" indicates the direction and correction amount.
- Pressing the <INFO.> button will cancel all the [**WB Shift/Bkt.**] settings.
- Press <SET> to exit the setting and return to the menu.
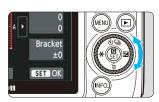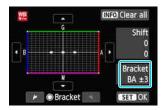
📖 One level of the blue/amber correction is equivalent to approx. 5 mireds of a color temperature conversion filter. (Mired: Measuring unit indicating the density of a color temperature conversion filter.)

White Balance Auto Bracketing

With just one shot, three images with different color balances 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 or magenta/green bias. This is called white balance bracketing (WB-BKT). White balance bracketing is possible up to ±3 stops in single-level increments.

B/A bias ±3 stops

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 to the right sets the B/A bracketing, and turning it to the left sets the M/G bracketing.

▶ On the right, "**Bracket**" indicates the bracketing direction and correction amount.

● Pressing the <INFO.> button will cancel all the [**WB Shift/Bkt.**] settings.

● Press <SET> to exit the setting and return to the menu.
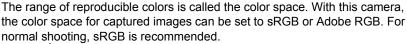
Bracketing Sequence

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 WB bracketing, the maximum burst for continuous shooting will be lower and the number of possible shots will also decrease to approx. one-third the normal number.
● 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.
● Since three images are recorded for one shot, it takes longer to record the shot to the card.
● "BKT" stands for bracketing.

MENU Setting the Color Reproduction Range ☻
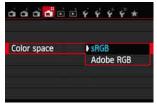
The range of reproducible colors is called the color space. With this camera, the color space for captured images can be set to sRGB or Adobe RGB. For normal shooting, sRGB is recommended.
With <🄰⁺> and in Basic Zone modes, sRGB is set.

1 Select [Color space].
- Under the [🄰4] tab, select [**Color space**], then press <SET>.

2 Set the desired color space.
- Select [**sRGB**] or [**Adobe RGB**], then press <SET>.

Adobe RGB

This is mainly for industrial use (printing machines, etc.). 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 compatible with Design rule for Camera File System 2.0 (Exif 2.21 or higher). Post-processing of the image with software will therefore be required.

📷
- If the captured still photo was shot in the Adobe RGB color space, the first character in the file name will be an underscore "_".
- The ICC profile is not appended. Refer to explanations about the ICC profile in the Software Instruction Manual (PDF).

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Shooting Movies

Set the Mode Dial to <📹> to shoot movies. The movie recording format will be MOV.

● For information on which cards can record movies, see page 3.

📄 **Full HD 1080**

Full HD 1080 indicates compatibility with High-Definition featuring 1080 vertical pixels (scanning lines).

FULL HD
1080

'R Shooting Movies

Connecting the camera to a TV set is recommended to play back the movies shot (p.247, 251).

Autoexposure Shooting

When you select the movie shooting mode ['R], autoexposure is set to adjust the brightness automatically.

1 Set the Mode Dial to <'R>.

2 Tap the shooting mode icon on the screen's upper left corner.
- The shooting mode selection screen will appear.

3 Select ['R] (Movie auto exposure) for the shooting mode.

Movie auto exposure
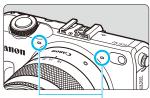
4 Focus the subject.
- Before shooting a movie, focus with AF or manual focus (p.108-121).
- By default, [**Movie Servo AF: Enable**] (p.203) is set for continuous focusing.
- When [**Movie Servo AF**] is set to [**Enable**], you can tap [servoaf] on the screen's lower left to stop/start the focusing. If you stop the focusing, the AF point will turn gray.

5 Shoot the movie.
- Press the <●> (Movie start/stop) button to start shooting a movie. To stop shooting the movie, press the <●> (Movie start/stop) button again.
- While the movie is being shot, the "●" mark will be displayed on the upper right of the screen.

Recording movie

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● While shooting a movie, be careful not to cover the microphones with your finger.

Microphones

⚠ ● With certain lenses, focus cannot be achieved with AF. Focus manually instead (p.120).
● **Cautions for movie shooting are on pages 204-206.**
● **If necessary, also read "When shooting, note the following:" on pages 132-133.**

📖 ● If [**Movie Servo AF: Disable**] is set, you can focus by pressing the shutter button halfway.
● The ISO speed (100-6400), shutter speed, and aperture are set automatically.
● Press the <✱> button to lock the current exposure setting (AE lock) (p.152). To release the AE lock, press the <✱> button again.
In movie shooting modes, you can tap [✱] to lock the exposure/release the AE lock.
● You can set the exposure compensation by pressing the <☒> button to display the range that can be set [$^{-3..2..1}$̣$^{..1..2..3}$] and then turning the <◯> dial.
● Pressing the shutter button halfway displays the shutter speed, aperture, and ISO speed on the screen's bottom. This is the exposure setting for taking a still photo. The exposure setting for movie shooting is not displayed. Note that the exposure setting for movie shooting may differ from that for still photo shooting.

Using an EX-series Speedlite (Sold Separately) Equipped with an LED Light

This camera is compatible with the function turning on the LED light automatically in low-light conditions during autoexposure shooting. **For details, refer to the EX-series Speedlite's instruction manual.**

Manual Exposure Shooting

In the [☰ᴹ] shooting mode (Movie manual exposure), you can freely set the shutter speed, aperture, and ISO speed for movie shooting. Using manual exposure to shoot movies is for advanced users.

1 Set the Mode Dial to <'☰>.

2 Tap the shooting mode icon on the screen's upper left corner.

● The shooting mode selection screen will appear.
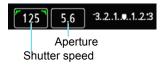
3 Select [☰ᴹ] (Movie manual exposure) for the shooting mode.

Movie manual exposure
Movie mode in which you can set the shutter speed/aperture, for more creative freedom

4 Set the shutter speed and aperture.

● Press the <☒> button to toggle between shutter speed selection and aperture selection.
● Turn the <◯> dial to set the shutter speed or aperture.
● The shutter speeds that can be set depend on the frame rate <☰>.
  • ☰₆₀, ☰₅₀ : 1/4000 sec. - 1/60 sec.
  • ☰₃₀, ☰₂₅, ☰₂₄ : 1/4000 sec. - 1/30 sec.

Aperture
Shutter speed

5 Set the ISO speed.

● As with still photos, you can set the ISO speed with 1. Shooting screen, 2. Menu screen, 3. INFO. Quick Control screen, 4. <▼ 🗑> button assigned with the menu's Custom Function (p.291).

6 Focus and shoot the movie.

● The procedure is the same as steps 4 and 5 for "Autoexposure Shooting" (p.176).

ISO speed during manual-exposure shooting

- With [**Auto**], the ISO speed will be set automatically within ISO 100 - ISO 6400.
- You can set the ISO speed manually within ISO 100 - ISO 6400 in whole-stop increments. Under [♥4: **Custom Functions (C.Fn)**], if [**2: ISO expansion**] is set to [**1: On**], the manual setting range will expand so you can also select "H" (equivalent to ISO 12800).
- Under [♥4: **Custom Functions (C.Fn)**], if [**3: Highlight tone priority**] is set to [**1: Enable**], the ISO speed will be ISO 200 - ISO 6400.
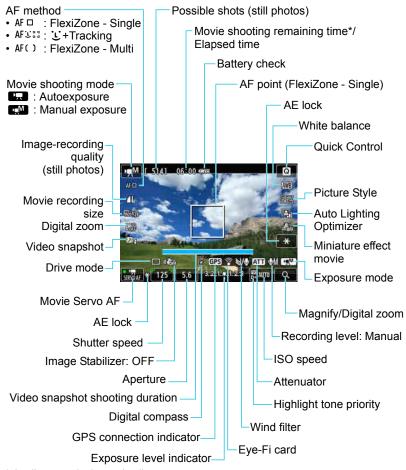
- Since shooting a movie at ISO 12800 may result in much noise, it is designated as an expanded ISO speed (displayed as "**H**").
- If [**2: ISO expansion**] under [♥4: **Custom Functions (C.Fn)**] is set to [**1: On**] and you switch to movie shooting, the manual setting range's maximum will be H (equivalent to ISO 12800). Even if you switch back to still photo shooting, the ISO speed will not revert to the original setting.
- You cannot set exposure compensation.
- Changing the shutter speed or aperture during movie shooting is not recommended since the changes in the exposure will be recorded.
- If you change the shutter speed while shooting under fluorescent or LED lighting, image flicker may be recorded.

- When ISO Auto is set, you can press the <✱> button or tap [✱] on the screen 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.180) compared to when the <✱> button was pressed.
- When [🖾1: 🖾 **Histogram disp**] is set to a setting other than [**Disable**], you can press the <INFO.> button to display the histogram. However, the histogram will not be displayed while the shutter button is pressed completely.
- When shooting a movie of a moving subject, a shutter speed of 1/30 sec. to 1/125 sec. is recommended. The faster the shutter speed, the less smooth the subject's movement will look.

Movie Shooting Screen

● Each time you press the <INFO.> button, the information display will change.

AF method
• AF □ : FlexiZone - Single
• AF ⚹ㅂ : ʻᴜ̉+Tracking
• AF( ) : FlexiZone - Multi

Possible shots (still photos)

Movie shooting remaining time*/
Elapsed time

Battery check

Movie shooting mode
🎥 : Autoexposure
🎥ᴹ : Manual exposure

AF point (FlexiZone - Single)

AE lock

White balance

Quick Control

Image-recording
quality
(still photos)

Picture Style

Movie recording
size

Auto Lighting
Optimizer

Digital zoom

Video snapshot

Miniature effect
movie

Drive mode

Exposure mode

Movie Servo AF

AE lock

Magnify/Digital zoom

Shutter speed

Recording level: Manual

Image Stabilizer: OFF

ISO speed

Aperture

Attenuator

Video snapshot shooting duration

Highlight tone priority

Digital compass

GPS connection indicator

Wind filter

Exposure level indicator

Eye-Fi card

* Applies to a single movie clip.

📖 When movie shooting starts, the movie shooting remaining time will change to the elapsed time.

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Notes on Movie Shooting

⚠ **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, blistering or low-temperature contact burns. The use of a tripod is recommended for people with circulation problems or very sensitive skin, or when using the camera in very hot places.

⚠ ● If < ⊞ > 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 may flicker.
● Zooming the lens during movie shooting is not recommended. Zooming the lens can cause changes in the exposure regardless of whether the lens' maximum aperture changes or not. Exposure changes may be recorded as a result.
● Be careful not to cover the microphones (p.177) with your finger, etc.
● **Cautions for movie shooting are on pages 204-206.**
● **If necessary, also read "When shooting, note the following:" on pages 132-133.**

📄 ● Movie-related settings are under the [☐➧1] tab (p.201).
● A movie file is recorded each time you shoot a movie. Each time the file size exceeds approx. 4 GB, a new file will be automatically created.
● The movie image's coverage is approx. 100% (with movie recording size set to [☲]).
● The sound will be recorded in stereo by the camera's built-in microphones (p.177).
● Most commercially-available external stereo microphones with a 3.5 mm diameter mini plug can be connected to the camera. If an external microphone is connected to the camera's external microphone IN terminal (p.23), it will be given priority over the built-in microphone.
● You can use the Remote Controller RC-6 (sold separately, p.295) to start and stop the movie shooting if the drive mode is [ṽ☉]. Set the shooting timing switch to <**2**> (2-sec. delay), then press the transmit button. If the switch is set to <●> (immediate shooting), still photo shooting will take effect.
● With a fully-charged Battery Pack LP-E12, the total movie shooting time will be as follows: approx. 1 hr. 30 min. at room temperature (23°C/73°F), and approx. 1 hr. 20 min. at low temperatures (0°C/32°F).
● If the Speedlite 90EX is attached, set the Speedlite's power to <**OFF**>.
● The focus preset function is available for movie shooting when using a (super) telephoto lens equipped with the focus preset mode, available since the second half of 2011.

Final Image Simulation

The final image simulation is a function that allows you to see the effects of the Picture Style, white balance, etc., on the image.
During movie shooting, the image displayed will automatically reflect the effects of the settings listed below.
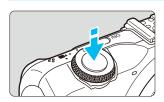
Final image simulation for movie shooting

● Picture Style
  * All settings such as sharpness, contrast, color saturation, and color tone will be reflected.
● White balance
● White balance correction
● Exposure
● Depth of field
● Auto Lighting Optimizer
● Peripheral illumination correction
● Highlight tone priority
● Miniature effect movie
  * The sped-up effect cannot be simulated.

📓 Using final image simulation, you can check the effects of various settings on the image, but the image displayed on the screen will not fully match the recorded image.

Shooting Still Photos During Movie Shooting

While shooting a movie, you can also take a still photo by pressing the shutter button completely.

Taking still photos during movie shooting

● If you take a still photo during movie shooting, the movie will record a still moment lasting approx. 1 sec.
● The still photo is recorded to the card, and when the movie image is displayed again, the movie shooting will resume automatically.

- The movie and still photo will be recorded as separate files on the card.
- Functions particular to still photo shooting are shown below. Other functions will be the same as for movie shooting.
- How to focus still photos taken during movie shooting is explained on page 204.

Function	Settings
Image-Recording Quality	As set in [🔲1: Image quality]. When the movie recording size is [**1920x1080**] or [**1280x720**], the aspect ratio will be 16:9. When the size is [**640x480**], the aspect ratio will be 4:3.
ISO Speed*	With autoexposure shooting: Automatically set within ISO 100 - ISO 6400. With manual exposure shooting: See "ISO speed during manual-exposure shooting" on page 179.
Exposure Setting	With autoexposure shooting: Automatically-set shutter speed and aperture (displayed when pressing the shutter button halfway). With manual exposure shooting: Manually-set shutter speed and aperture.
AEB	Canceled

* If highlight tone priority is set, the ISO speed range will start from ISO 200.

Continuous still photo shooting before movie shooting

Before starting to shoot movies, you can use continuous shooting in the same way as when shooting still photos using One-Shot AF.
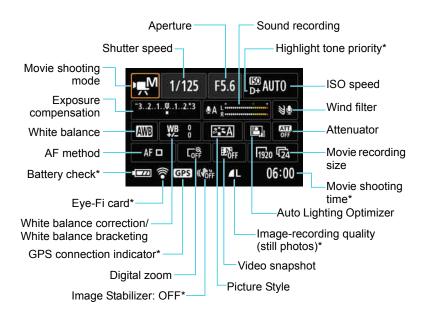
🚫 Still photo shooting is not possible while shooting video snapshots or Miniature effect movies, or while using movie digital zoom.

📋 ● The self-timer works before you start shooting the movie. During movie shooting, the camera will switch to single shooting.
  ● Even if the drive mode is set to continuous shooting (➒/⏱c), single shooting will take effect for still photo shooting during movie shooting.
  ● In movie shooting modes, AF operation is set to [**One-Shot AF**]. During movie recording, the beeper will not sound even when focus is achieved.

B **Quick Control During Movie Shooting**

Aperture

Shutter speed

Sound recording

Highlight tone priority*

Movie shooting mode

ISO speed

Exposure compensation

Wind filter

White balance

Attenuator

AF method

Movie recording size

Battery check*

Movie shooting time*

Eye-Fi card*

Auto Lighting Optimizer

White balance correction/ White balance bracketing

Image-recording quality (still photos)*

GPS connection indicator*

Video snapshot

Digital zoom

Picture Style

Image Stabilizer: OFF*

- * These functions cannot be set with the B Quick Control screen.
- ● The settable functions differ depending on the shooting mode.

Setting the Movie Recording Size

You can select the movie's image size [****x****] and frame rate [🎞] (frames recorded per second). The 🎞 (frame rate) switches automatically depending on the [♀2: Video system] setting.

1 Display the Quick Control screen.
● Press the <Q> button to display it.

2 Tap the movie recording size.

3 Tap the desired setting to select it.
● Tap the desired setting to select it, then tap [↩].

● **Image size**
  - 🎞1920 [**1920x1080**] : Full High-Definition (Full HD) recording quality. The aspect ratio will be 16:9.
  - 🎞1280 [**1280x720**] : High-Definition (HD) recording quality. The aspect ratio will be 16:9.
  - 🎞640 [**640x480**] : Standard-definition recording quality. The aspect ratio will be 4:3.

● **Frame rate** (fps: frames per second)
  - 🎞30/🎞60 : For areas where the TV format is NTSC (North America, Japan, Korea, Mexico, etc.).
  - 🎞25/🎞50 : For areas where the TV format is PAL (Europe, Russia, China, Australia, etc.).
  - 🎞24 : Records the movie at the cinematic rate of 24 fps.

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Total Movie Recording Time and File Size Per Minute

Movie Recording Size		Total Recording Time (approx.)			File Size (approx.)
		4 GB Card	8 GB Card	16 GB Card	
[**1920x1080**]	⏱30 ⏱25 ⏱24	11 min.	22 min.	44 min.	330 MB/min.
[**1280x720**]	⏱60 ⏱50	11 min.	22 min.	44 min.	330 MB/min.
[**640x480**]	⏱30 ⏱25	46 min.	1 hr. 32 min.	3 hr. 4 min.	82.5 MB/min.

● **Movie Files Exceeding 4 GB**
Even if you shoot a movie exceeding 4 GB, you can keep shooting without interruption.
During movie shooting, approx. 30 sec. before the movie reaches the 4 GB file size, the elapsed shooting time displayed in the movie shooting screen will start blinking. If you keep shooting the movie and the file size exceeds 4 GB, a new movie file will be created automatically and the elapsed shooting time will stop blinking.
When you play back the movie, you will have to play each movie file individually. Movie files cannot play back consecutively automatically. After the movie playback ends, select the next movie to be played.

● **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 resume movie shooting by pressing the <●> (Movie start/stop) button. (A new movie file is recorded.)

⚠ An increase of the camera's internal temperature may cause movie shooting to stop before the maximum recording time shown in the table above (p.204).

Using Movie Digital Zoom

When the movie's image size is [**1920x1080**] (Full HD), you can shoot with an approx. 3x to 10x digital zoom.

1 Display the Quick Control screen.
- Press the < Q > button to display it.

2 Tap the Digital zoom icon.

Digital zoom

3 Select [ ].
- Tap [ ] (Approx. 3-10x) to select it, then tap [ ].

Approx 3–10x

4 Use digital zoom.
- Tap [/] on the screen's lower right.
▶ The digital zoom bar will appear.

- Tap [⟨∆⟩] to zoom in or tap [⟨w⟩] to zoom out.
- When you press the shutter button halfway, the camera will focus with [**FlexiZone - Single**] (fixed at center).
- To cancel digital zoom, set [**Disable**] in step 3.

⚠ ● Use a tripod to prevent camera shake.
  ● When movie digital zoom is set, the maximum ISO speed will be ISO 6400 (it cannot be expanded to H: equivalent to ISO 12800). Also, magnified view is not possible.
  ● Since movie digital zoom processes the image digitally, the image will look rougher at higher magnifications. Noise, light spots, etc., may also become noticeable.
  ● Also see "Shooting Conditions that Make Focusing Difficult" on page 119.
  ● Still photo shooting is not possible.

Shooting Miniature Effect Movies

You can shoot sped-up movies with a Miniature (diorama) effect. Select the playback speed and shoot.

1 Display the Quick Control screen.
- Press the <Q> button to display it.

2 Tap the Miniature effect movie icon.
- Tap [🗻₀ꜰꜰ] (Miniature effect movie).

3 Tap the desired setting to select it.
- Tap [🗻₅ₓ] (5x), [🗻₁₀ₓ] (10x), or [🗻₂₀ₓ] (20x) to select it, then tap [↩].

4 Position the white frame over the part you want to remain sharp.
- Tap the part you want to remain sharp to move the white frame over it.
- To switch the white frame's orientation between vertical and horizontal, tap [🔁] on the screen's lower right.

5 **Shoot the movie.**

● The [**AF method**] will be [**FlexiZone - Single**] to focus at the center of the white frame.
● The white frame is not displayed while you shoot.

Playback Speed and Play Time (for 1-minute movie)

Speed	Play Time
💦₅ₓ (5x)	Approx. 12 sec.
💦₁₀ₓ (10x)	Approx. 6 sec.
💦₂₀ₓ (20x)	Approx. 3 sec.
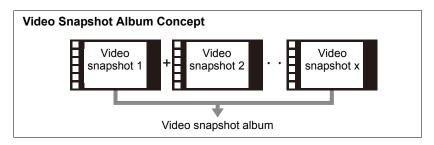
● Sound will not be recorded.
● With Miniature effect movies, Movie Servo AF will not work.
● Miniature effect movies cannot be set if video snapshot is set.
● You cannot take still photos while shooting a Miniature effect movie.
● Movies whose play time is shorter than 1 sec. cannot be edited (p.241).
● Miniature effect movies cannot be set if movie digital zoom is set.

MENU Shooting Video Snapshots
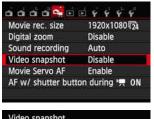
You can easily create a short movie with the video snapshot function.
A video snapshot is a short movie clip lasting approx. 2 sec., 4 sec., or 8 sec.
A collection of video snapshots is called a video snapshot album and can be saved to the card as a single movie file. By changing the scene or angle in each video snapshot, you can create dynamic short movies.
A video snapshot album can also be played together with background music (p.198, 240).
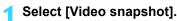
Video Snapshot Album Concept

| Video snapshot 1 | + | Video snapshot 2 | · · | Video snapshot x |

↓

Video snapshot album
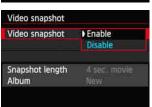
Setting the Video Snapshot Shooting Duration
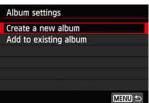
1 Select [Video snapshot].
● Under the [📹1] tab, select [**Video snapshot**], then press <SET>.

2 Select [Enable].
● Select [**Enable**], then press <SET>.

Video snapshot	
Video snapshot	Enable
Album settings	
Show confirm msg	Enable
Snapshot length	4 sec. movie
Album	New
MENU ↄ	

3 Select [Album settings].

- Select [**Album settings**], then press <SET>.
- If you want to continue shooting for an existing album, go to "Adding to an Existing Album" (p.196).

Album settings	
Create a new album	
Add to existing album	
MENU ↄ	

4 Select [Create a new album].

- Select [**Create a new album**], then press <SET>.

Create a new album

The next video snapshot will be added to a new album

Snapshot length	4 sec. movie
Cancel	OK

5 Select the Snapshot length.

- Press <SET>, then press the <▲> <▼> keys to select the snapshot's length, then press <SET>.

Shooting duration

6 Select [OK].

- Select [**OK**], then press <SET>.
- Press the <MENU> button to exit the menu and return to the movie shooting screen. A blue bar will appear to indicate the snapshot length.
- Go to "Creating a Video Snapshot Album" (p.193).

Creating a Video Snapshot Album

7 Shoot the first video snapshot.

- Press the <●> (Movie start/stop) button to shoot a movie.
- ▶ The blue bar indicating the shooting duration will gradually decrease. After the set shooting duration elapses, the shooting stops automatically.
- ▶ After the LCD monitor turns off and the access lamp blinks, the confirmation screen will appear (p.194).

8 Save as a video snapshot album.

- Select [**🎬 Save as album**], then press <SET>.
- ▶ The movie clip will be saved as the video snapshot album's first video snapshot.

9 Continue to shoot more video snapshots.

- Repeat step 7 to shoot the next video snapshot.
- Select [**🎬 Add to album**], then press <SET>.
- To create another video snapshot album, select [**🎬 Save as a new album**].
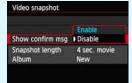
10 Quit the video snapshot shooting.

- 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 screen.

Movie rec. size	1920x1080 🎬
Digital zoom	Disable
Sound recording	Auto
Video snapshot	Disable
Movie Servo AF	Enable
AF w/ shutter button during 🎥	ON

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Options in Steps 8 and 9

Function	Description
Save as album (Step 8)	The movie clip will be saved as the video snapshot album's first video snapshot.
Add to album (Step 9)	The video snapshot just recorded will be added to the album recorded immediately before.
Save as a new album (Step 9)	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 (Steps 8 and 9)	The video snapshot just recorded will be played. For playback operations, see the table on page 195.
Do not save to album (Step 8) **Delete without saving to album** (Step 9)	If you want to delete the video snapshot you just recorded and not save it to the album, select [**OK**].

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 message appearing after you shoot each time.

[Playback video snapshot] Operations

Function	Playback Description
▶ **Play**	Each time you press <SET>, you can play or pause the just-recorded video snapshot.
◄◄ **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.
◄II **Previous frame**	Each time you press <SET>, the previous frame is displayed. Hold down <SET> to rewind the movie.
II▶ **Next frame**	Each time you press <SET>, the next frame is displayed. Hold down <SET> to fast forward the movie.
▶I **Skip forward***	Each time you press <SET>, the video snapshot skips forward by a few seconds.
▶▶I **Last frame**	Displays the last scene of the album's last video snapshot.
▭▬▬▭	Playback position
mm' ss"	Playback time (minutes:seconds)
◀I Volume	You can adjust the volume of the built-in speaker (p.239) by turning the <◯> dial.
MENU ⟲	The previous screen will reappear.

* With [**Skip backward/Skip forward**], the skip length will correspond to the number of seconds set under [**Video snapshot**] (approx. 2 sec., 4 sec., or 8 sec.).

Adding to an Existing Album

Album settings

Create a new album

Add to existing album

MENU ↩

1 Select [Add to existing album].
- Follow step 4 on page 192 to select [**Add to existing album**], then press <SET>.

SET 🎬 MENU ↩

2 Select an existing album.
- Press the <◀> <▶> keys to select an album, then press <SET>.
- Review the message, select [**OK**] on the dialog screen, then press <SET>.
▶ Certain video snapshot settings will change to match the existing album's settings.
- Press the <MENU> button to exit the menu and return to the movie shooting screen.

3 Shoot the video snapshot.
- Go to "Creating a Video Snapshot Album" (p.193).

⚠ You cannot select an album shot with another camera.

Cautions for Shooting Video Snapshots

- You can add to an album only 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**] (p.185).
  - Changing the [**Sound rec.**] setting from [**Auto/Manual**] to [**Disable**] or from [**Disable**] to [**Auto/Manual**] (p.201).
  - Updating the firmware.
- You cannot take still photos while shooting a video snapshot.
- 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 an Album

You can play back a completed album in the same way as a normal movie (p.239).

1 Play back the movie.

● Press the <▶> button to display images.

2 Select the album.

● Press the <◄> <►> keys to select an album.
● In the single-image display, [▲ 🎬] displayed on the upper left indicates that the image is a video snapshot.

3 Play back the album.

● Tap the [▶] (Play) icon at the center of the screen, or tap [▲ 🎬] and then tap [▶] (Play) on the movie playback panel that appears.
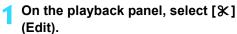
Background Music

● Music recorded on the memory card must be used only for private enjoyment. Do not violate the rights of the copyright holder.
● You can play background music when you play back albums, normal movies, and slide shows on the camera (p.240, 243). 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 Software Instruction Manual (PDF).

Editing an Album

After shooting, you can rearrange, delete, or play back the video snapshots in the album.

1 On the playback panel, select [✕] (Edit).

▶ The editing screen will be displayed.

2 Select an editing operation.

● Tap the icon of the editing operation or press the <◄> <►> keys to select an editing operation, then press <SET>.

Function	Description
⇄ **Move snapshot**	Tap the video snapshot you want to move or press the <◄> <►> keys to select the video snapshot you want to move, then press <SET>. Press the <◄> <►> keys to move the snapshot to the desired location.
🗑 **Delete snapshot**	Tap the video snapshot you want to delete or 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**	Tap the video snapshot you want to play or 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's bottom.
● Tap [□] (Save), or press the <◀> <▶> keys to select [□] (Save) and press <SET>.
▶ The save screen will appear.
● To save it as a new file, select [**New file**]. To save it and overwrite the original movie file, select [**Overwrite**], then press <SET>.

● ● 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.

EOS Software Usable with Albums

● **EOS Video Snapshot Task:** Enables the editing of albums. This is a function of ImageBrowser EX.

MENU Movie Menu Function Settings

When you set the Mode Dial to <🎥>, the [🎥1] tab will show functions dedicated to movie shooting. The menu options are as follows.

[🎥1] menu

Movie rec. size	1920x1080🎞️
Digital zoom	Disable
Sound recording	Auto
Video snapshot	Disable
Movie Servo AF	Enable
AF w/ shutter button during 🎥	ON
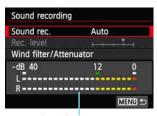
● **Movie recording size**
You can set the image size and frame rate. For details, see pages 185-186.

● **Digital zoom**
You can use digital zoom for shooting. For details, see pages 187-188.

● **Sound recording**

Sound recording	
Sound rec.	Auto
Rec. level	
Wind filter/Attenuator	
-dB 40	12	0
L	
R	

Level meter

Normally, the built-in microphone will record stereo sound. If a commercially-available microphone equipped with a mini plug (3.5 mm diameter) is connected to the camera's external microphone IN terminal (p.23), it will be given priority.

[**Sound rec./Rec. level**] options
  [**Auto**]   : The sound-recording level is adjusted automatically. Auto
                     level control will operate in response to the sound level.
  [**Manual**]   : For advanced users. You can adjust the recording level
                     manually. Select [**Rec. level**] and while looking at the level
                     meter, press the <◄> <►> keys to adjust. The loudest
                     sound will be displayed for approx. 3 sec. Adjust so that
                     the level meter on the right of "12" lights up occasionally. If
                     it exceeds "0", the sound will be distorted.
  [**Disable**]   : Sound is not recorded.

[**Wind filter**]
  When set to [**Enable**], it reduces wind noise when there is wind outdoors.
  This feature takes effect only with the built-in microphone.
  Note that [**Enable**] will also reduce low bass sounds, so set this function to
  [**Disable**] when there is no wind. It will record a more natural sound than
  with [**Enable**].

[**Attenuator**]
  Even if you set [**Sound recording**] to [**Auto**] or [**Manual**] and shoot, sound
  distortion may still result if there is a very loud sound. In such a case,
  setting it to [**Enable**] is recommended.

📷 ● The sound volume balance between L (left) and R (right) cannot be adjusted.
   ● Both L and R record audio at a 48 kHz/16-bit sampling rate.

● **Video snapshots**
  You can shoot video snapshots. For details, see page 191.

● **Movie Servo AF**
The default setting is [**Enable**]. You can focus by pressing the shutter
button halfway regardless of the setting.

• **When [Enable] is set:**
  • You can shoot a movie while focusing a moving subject continuously.

• **When [Disable] is set:**
  • You can focus only when the shutter button is pressed halfway.

⚠ ● When using Movie Servo AF, the camera may record the lens operation
noise. To reduce the recording of the lens operation noise, use a
commercially-available external microphone.
● When using the Mount Adapter EF-EOS M, during Movie Servo AF, turn off
the power before you set the lens focus mode switch to <**MF**>.
● Since using Movie Servo AF will consume battery power, the number of
possible shots and the movie shooting time will be reduced.

📄 ● If you want to stop focusing at the target spot or if you do not want the lens
operation noise to be recorded, you can temporarily stop Movie Servo AF as
follows. When you stop Movie Servo AF, the AF point will turn gray. When you
perform the same steps below, Movie Servo AF will resume.
  • Tap the [🔲] icon on the lower left of the screen.
  • If [**5: Shutter/AE lock button**] is set to [**2: AF/AF lock, no AE lock**] under
    the [4: **Custom Functions (C.Fn)**], Movie Servo AF will stop while you
    hold down the < ✱ > button. When you let go of the < ✱ > button, Movie
    Servo AF will resume.
● While Movie Servo AF is stopped, if you operate the <MENU> button or <▶>
button, change the AF method, or switch the focus mode, and then return to
movie shooting, the stop state of Movie Servo AF will be canceled.

● **AF with shutter button during <🎥> (movie recording)**
When you press the shutter button while shooting a movie, you can shoot
a still photo. The default setting is [**ONE SHOT**].

• **When [ONE SHOT] is set:**
  • You can focus again and shoot a still photo by pressing the shutter
    button halfway while shooting a movie.
  • When shooting a static subject (not moving), you can take a picture with
    precise focus.

• **When [Disable] is set:**
  • You can immediately start shooting a still photo by pressing the shutter
    button, even though focus is not achieved. It is effective when you want
    to give priority to the shutter chance rather than to focus.

⚠ Movie Shooting Cautions

White <🌡> and Red <🌡> Internal Temperature Warning Icons

● If the camera's internal temperature increases due to prolonged movie
  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. You should stop still photo shooting and allow the camera's
  internal temperature to cool before shooting again. Since movie image quality
  will hardly be affected, you can still shoot movies.

● The red <🌡> icon indicates that the power will soon turn off 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
  <🌡> or <🌡> icon to appear earlier. When you are not shooting, turn off the
  camera.

Movie Shooting Cautions

Recording and Image Quality

● If the attached lens has an Image Stabilizer and you set the Image Stabilizer (IS) 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 or decrease the number of possible shots depending on shooting conditions. If you use a tripod or if the Image Stabilizer is not necessary, it is recommended to set the IS to <OFF>.

● The camera's built-in microphone will also pick up camera operation noise. Using a commercially-available external microphone can prevent (or reduce) these noises from being recorded.

● 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, that part may look momentarily still when you play back the movie. In such cases, shoot movies with manual exposure.

● If there is a very bright light source in the picture, the bright area may appear black on the LCD monitor. The movie will be recorded in almost the same way you see it on the LCD monitor.

● In low light, noise or irregular colors may appear in the image. The movie will be recorded in almost the same way you see it on the LCD monitor.

● 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

⬤ Movie Shooting Cautions

- 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 be different from that of the actual scene.
  - The recorded movie may be momentarily still.
  - The movie may record the lens operation noise.
  - You cannot shoot still photos when focus is not achieved, such as when the subject is moving.
- Regarding image quality of still photos, see "Image Quality" on page 132.

Connecting to a TV
- If you connect the camera to a TV set (p.247, 251) and shoot a movie, the TV will not output any sound during the shooting. However, the sound will be properly recorded.

⬤ 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 refer to "Shooting Conditions that Make Focusing Difficult" on page 119.
  - Since using Movie Servo AF will consume battery power, the number of possible shots and movie shooting time will be reduced.
  - During zooming or image magnification, Movie Servo AF operation will be paused momentarily.
  - **During movie shooting, if a subject approaches / 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).**

6

Handy Features

Handy Features

MENU Disabling the Beeper

You can prevent the beeper from sounding when focus is achieved, during self-timer operation, and during touch screen operations.

Under the [♦3] tab, select [**Beep**], then press <SET>. Select [**Disable**], then press <SET>.
To silence the beeper only during touch screen operations, select [**Touch to** ⬚].

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, "No card in camera" will be displayed on the LCD monitor, and you cannot release the shutter.

3 Setting the Image Review Time

You can change how long the image is displayed on the LCD monitor immediately after capture. If [**Off**] is set, the image will not be displayed immediately after image capture. If [**Hold**] is set, the image review will be displayed up until the [**LCD auto off**] time.

During image review, if you operate anything 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>.

3 Displaying the Grid

By displaying a grid on the LCD monitor, you can check the picture for any horizontal or vertical tilt. Two grid patterns are provided.
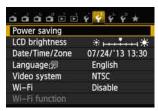
Under the [**1**] tab, select [**Grid display**], then press <SET>. Select either [**Grid 1 ╫**] or [**Grid 2 ▦**], then press <SET>.

MENU Setting Power-saving Features (LCD auto off, Camera auto off)

If you do not operate the camera for a while, first the LCD monitor and eventually the entire camera will turn off automatically to save power.
The Power lamp will blink when you set the power to <ON> and turn off when you are using the camera. When the LCD monitor turns off, the Power lamp will light up in green.

Power saving	
LCD brightness	☀ ┠━━━┷━━━┩ ☀
Date/Time/Zone	07/24/'13 13:30
Language ⚙	English
Video system	NTSC
Wi-Fi	Disable
Wi-Fi function	

Power saving

LCD auto off	15 sec.
	30 sec.
	1 min.
	3 min.
	▶ 5 min.
	10 min.
	30 min.

Power saving

	0 sec.
Camera auto off	30 sec.
	1 min.
	3 min.
	▶ 5 min.
	10 min.
	Disable

- Under the [**♥2**] tab, select [**Power saving**], then press <SET>.
- Select the desired setting for [**LCD auto off**] and [**Camera auto off**], then press <SET>.

LCD auto off

- You can set how long the camera waits before turning the LCD monitor off.

Camera auto off

- You can set how much longer the camera waits after turning the LCD monitor off before automatically turning itself off.
- If the camera's power has turned off to save power, you can turn it on again by pressing the power button, or by holding down the <▶> button for at least 2 sec.

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MENU Adjusting the LCD Monitor Brightness

When the ambient light is too bright or too dark, you can adjust the brightness of the LCD monitor to make it easier to read. You can either use the menu to set the brightness level or set the Custom Function to make it brighter temporarily.

Adjusting the brightness with the menu

Under the [♥2] tab, select [**LCD brightness**], then press <SET>. On the adjustment screen, tap [☀]/[☀] or press the <◄> <►> keys to adjust the brightness. 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 reviewed image as much as possible.

📔 If [**6:** ▼ 🗑 **button function**] under [♥4: **Custom Functions (C.Fn)**] is set to [**4: Incr LCD brightness (temp)**] (p.291), you can set the same brightness as level [**7**] on the scale by pressing the <▼ 🗑> button.

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>.
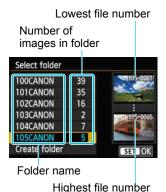
2 Select [Create folder].
● Select [**Create folder**], then press <SET>.

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

Lowest file number

Number of
images in folder

Folder name

Highest file number

- With the folder selection screen displayed, select a folder and press <SET>.
- Subsequent 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.215) 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 the folder number, from 100 to 999. The final 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, the camera cannot recognize folders having the same folder number even if the last five characters are different, such as 100ABC_D and 100W_XYZ.

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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**.
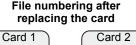
Under the [**♥1**] tab, select [**File numbering**], then press <SET>. The available settings are described below. Select the option, then press <SET>.
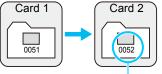
● **Continuous**
The file numbering continues in sequence even after you replace the card or create a folder.
Even after you replace the card or create a new folder, the file numbering continues in sequence up to 9999. This is convenient when you want to save images numbered anywhere between 0001 to 9999 on multiple cards or folders into one folder on your computer.
If the replacement card or existing folder already contains images recorded previously, the file numbering of the new images may continue from the file numbering of the existing images on the card or in the folder. If you want to use continuous file numbering, it is recommended that you use a newly-formatted card each time.
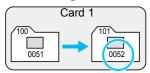
File numbering after replacing the card

Card 1 → Card 2

0051   0052

Next sequential file number

File numbering after creating a folder

Card 1

100 → 101

0051   0052

● **Auto reset**
The file numbering restarts 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 convenient if you want to organize images by cards or folders.
However, 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 in the card or folder. If you want to save images with the file numbering starting from 0001, use a newly formatted card each time.
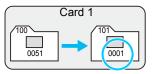
File numbering after replacing the card

Card 1 → Card 2
0051   0001

File numbering is reset

File numbering after creating a folder

Card 1
100   101
0051   0001

● **Manual reset**
To reset the file numbering to 0001 manually or to start from file number 0001 in a new folder.
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 convenient if you want to use different folders for the images taken yesterday and the ones taken today, for example. After the manual reset, the file numbering returns to continuous or auto reset. (There will be no Manual reset confirmation screen.)

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" for movies.

MENU Setting 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 option to be set.

● Select [**Enter author's name**] or [**Enter copyright details**], then press <SET>.
▶ The text entry screen will appear.
● Select [**Display copyright info.**] to check the copyright information currently set.
● Select [**Delete copyright information**] to delete the copyright information currently set.

3 Enter text.

● Refer to "Text Entry Procedure" on the next page and enter the copyright information.
● Enter up to 63 alphanumeric characters and symbols.

4 Exit the setting.

● After entering the text, tap [**OK**].
● On the confirmation dialog, select [**OK**] and press <SET>.

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Text Entry Procedure

XXXXX. XXXXX | 11/63

● **Changing the Entry Area:**
Press the <INFO.> button to toggle between the top and bottom areas.

● **Moving the Cursor:**
Either tap [◄]/[►] in the top area or press the <◄> <►> keys to move the cursor.

● **Entering Text:**
In the bottom area, type directly with the keyboard, or select a character with the <◯> dial or <✧> keys, then press <SET> to enter it.

● **Changing the Entry Mode:**
Tap [Aa⇄1@] in the bottom area. Each time you tap it, the entry mode will change as follows: Lower case → Numerals / Symbols 1 → Numerals / Symbols 2 → Upper case.

● **Deleting a Character:**
Either tap [MENU 🗑] or press the <MENU> button to delete one character.

● **Exiting:**
You can complete the text entry and return to the screen in step 2 by tapping [**OK**].

● **Canceling the Text Entry:**
You can cancel the text entry and return to the screen in step 2 by tapping [**Cancel**].

📋 You can also set or check the copyright information with EOS Utility (EOS software, p.350).

3 Auto Rotation of Vertical Images

When you shoot a vertical image and view it with the camera or computer, it will be rotated automatically to the vertical orientation. You can change this setting.

Under the [♈1] tab, select [**Auto rotate**], then press <SET>. The available settings are described below. Select the option, then press <SET>.

- **[On ➊ 💻]:** The vertical image is automatically rotated during playback on both the camera's LCD monitor and on the computer.
- **[On💻]** : The vertical image is automatically rotated only on the computer.
- **[Off]** : The vertical image is not automatically rotated.

❓ FAQ

- **The vertical image is not rotated during the image review immediately after it is captured.**
  The image will be rotated when you press the <▶> button to play back images.
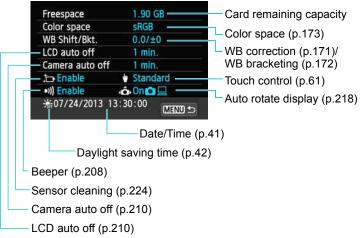
- **[On ➊ 💻] is set, but the image does not rotate during playback**.
  Auto rotate will not work with vertical images captured while [**Auto rotate**] was set to [**Off**]. If the vertical image is taken while the camera is pointed up or down, the image may not be rotated automatically for playback. In such a case, rotate the image with the procedure explained in "Rotating the Image" on page 233.

- **On the camera's LCD monitor, I want to rotate an image captured when [On💻] had been set**.
  After you take the picture, you can still set [**On ➊ 💻**] so that the image will be rotated during playback.

- **The vertical image does not rotate on the computer screen.**
  The software used is not compatible with image rotation. Use EOS software instead.

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MENU Checking Camera Settings
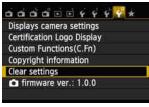
With the [♦4] tab's [**Displays camera settings**], you can check the major camera settings.

Settings display

Freespace	1.90 GB
Color space	sRGB
WB Shift/Bkt.	0,0/±0
LCD auto off	1 min.
Camera auto off	1 min.
⎍ Enable	♥ Standard
•)) Enable	⚙ On ⚙ ⎍
☀07/24/2013 13:30:00	MENU ↰

- Card remaining capacity
- Color space (p.173)
- WB correction (p.171)/ WB bracketing (p.172)
- Touch control (p.61)
- Auto rotate display (p.218)
- Date/Time (p.41)
- Daylight saving time (p.42)
- Beeper (p.208)
- Sensor cleaning (p.224)
- Camera auto off (p.210)
- LCD auto off (p.210)
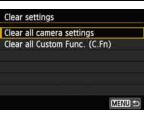
3 **Reverting the Camera to the Default Settings** 2

In Creative Zone and movie shooting modes, the camera's shooting settings and menu settings can be reverted to their defaults. With this procedure, all settings in all shooting modes, including <A+> and Basic Zone modes, will revert to their default values.
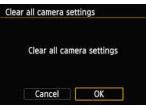
1 Select [Clear settings].
● Under the [♥4] tab, select [**Clear settings**], then press <SET>.

Displays camera settings
Certification Logo Display
Custom Functions(C.Fn)
Copyright information
Clear settings
☐ firmware ver.: 1.0.0

2 Select [Clear all camera settings].
● Select [**Clear all camera settings**], then press <SET>.

Clear settings

Clear all camera settings
Clear all Custom Func. (C.Fn)

MENU ↰

3 Select [OK].
● Select [**OK**], then press <SET>.
▶ Setting [**Clear all camera settings**] will reset the camera to the default settings as shown on the next page.

Clear all camera settings

Clear all camera settings

Cancel   OK

? **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.286).

Still Photo Shooting Settings

Shooting mode	Basic Zone mode	Ⓜ (Creative Auto)
	Creative Zone mode	P (Program AE)
AF operation		One-Shot AF
AF method		FlexiZone - Single
Continuous AF		Enable
Focus mode		AF
Image Stabilizer		Enable
Touch Shutter		Disable
Grid display		Off
Aspect ratio		3:2
Metering timer		8 sec.
Drive mode		□ (Single shooting)
Metering mode		◫ (Evaluative metering)
ISO speed		AUTO (Auto)
ISO Auto		Maximum 6400
Exposure compensation/AEB		Canceled
Flash exposure compensation		0 (Zero)
Custom Functions		Unchanged
External Speedlite function settings		Unchanged

Image-recording Settings

Image quality	◢L
Picture Style	Auto
Auto Lighting Optimizer	Standard
Peripheral illumination correction	Enable/ Correction data retained
Chromatic aberration correction	Disable/ Correction data retained
Color space	sRGB
White balance	⚇ (Auto)
Custom white balance	Canceled
White balance correction	Canceled
White balance bracketing	Canceled
Long exposure noise reduction	Disable
High ISO speed noise reduction	Standard
File numbering	Continuous
Auto cleaning	Enable
Dust Delete Data	Erased

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Camera Settings

Camera auto off	1 min.
LCD auto off	1 min.
Beep	Enable
Release shutter without card	Enable
Image review	2 sec.
☐ Histogram display	Disable
▶ Histogram display	Brightness
Image jump with ◯	🔟 (10 images)
Auto rotate	On☐ 🖥
LCD brightness	✳ ┝┼┼┼┥ ☀
Date/Time/Zone	Unchanged
Language	Unchanged
Video system	Unchanged
Screen color	1
Feature guide	Enable
Touch control	Standard
Copyright information	Unchanged
Control over HDMI	Disable
Eye-Fi transmission	Disable
My Menu settings	Unchanged
Display from My Menu	Disable
Wi-Fi	Disable

Movie Shooting Settings

Shooting mode	🎬 (Movie auto exposure)
AF method	FlexiZone - Single
Movie Servo AF	Enable
Focus mode	AF
Image Stabilizer	Enable
AF with shutter button during 🎬	ONE SHOT
Grid display	Off
Metering timer	8 sec.
Movie recording size	1920x1080
Sound recording	Auto
Video snapshot	Disable
Movie digital zoom	Disable

- Refer to the Wi-Fi Function Instruction Manual for Wi-Fi function settings.
- Regarding GPS settings, refer to the GPS unit's instruction manual.

MENU Changing the Shooting Settings Screen Color

You can change the background color of the shooting settings screen (INFO. Quick Control).

Under the [♦3] tab, select [**Screen color**], then press <SET>. Select the desired color, then press <SET>.

MENU Changing the Exposure Value Display Time ★
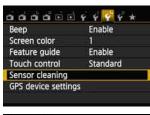
You can change the length of time that the exposure value will be displayed (the exposure lock period when using AE lock).
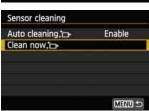
- Under the [🔲3] tab, select [**Metering timer**], then press <SET>. Select the desired setting, then press <SET>.
- With <🄰⁺> and in Basic Zone modes, the length of time will be fixed at 8 seconds.
- When an external flash is attached and FE lock is applied, the length of time will be fixed at 16 seconds.

☐ **Sensor Cleaning**

When you switch the power to <ON> or <OFF> (or Camera auto off), the Self Cleaning Sensor Unit will operate automatically to remove dust on the image sensor. Normally, you need not pay attention to this operation. You can also activate or stop the Self Cleaning Sensor Unit when necessary.

Cleaning the Sensor Now

Beep	Enable
Screen color	1
Feature guide	Enable
Touch control	Standard
Sensor cleaning	
GPS device settings	

1 Select [Sensor cleaning].
- Under the [♥3] tab, select [**Sensor cleaning**], then press <SET>.

Sensor cleaning
Auto cleaning ☐   Enable
Clean now ☐
                    MENU ↩

2 Select [Clean now ☐].
- Select [**Clean now ☐**], then press <SET>.
- On the dialog screen, select [**OK**] and press <SET>.
▶ The screen will indicate that the sensor is being cleaned. Although there will be a shutter sound, a picture is not taken.
- The camera will restart.
▶ The sensor cleaning also works while no lens is attached. If no lens is attached, do not insert your finger or blower tip beyond the lens mount. This is to prevent damage to the shutter curtains.

🗐 ● 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 will remain disabled temporarily.

Disabling Automatic Sensor Cleaning

● In step 2, select [**Auto cleaning** ⊢] and set it to [**Disable**].

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 surface of 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 Set the power to < OFF >.

2 Detach the lens.

3 Clean the sensor.

4 End the cleaning.

● 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. It can damage the shutter curtains.
● Never use canned air or gas to clean the sensor. The blowing force can damage the sensor or the spray gas can freeze on the sensor.
● If a smudge that cannot be removed with a blower remains, having the sensor cleaned by a Canon Service Center is recommended.

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, if visible dust still remains, you can append the Dust Delete Data to images for erasing the dust spots later. The Dust Delete Data is used by Digital Photo Professional (EOS software, p.350) 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 focus mode switch to [**MF**] and set the focus to infinity (∞). If the lens has no distance scale, look at the front of the lens and turn the focusing ring clockwise all the way.

Obtain the Dust Delete Data

1 Select [Dust Delete Data].
- Under the [☐4] tab, select [**Dust Delete Data**], then press <SET>.

2 Select [OK].
- Select [**OK**] and press <SET>. After the automatic self-cleaning of the sensor is performed, a message will appear. Although there will be a shutter sound during the cleaning, a picture is not taken.

3 **Shoot a solid-white object.**

● At a distance of 20 cm - 30 cm (0.7 ft. - 1.0 ft.), fill the LCD monitor 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.

Dust Delete Data

Data obtained

OK

▶ 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 was not obtained successfully, a message to that effect 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 to update the Dust Delete Data by obtaining it again.
For details about using Digital Photo Professional (EOS software, p.350) to erase dust spots, refer to the Software Instruction Manual (PDF).
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 paper has any pattern or design, it may be recognized as dust data and affect the accuracy of the dust deletion with EOS software.

7

Image Playback

This chapter explains functions related to viewing photos and movies, in more detail than in Chapter 2 "Basic Shooting and Image Playback". Here you will find explanations of how to play back and erase photos and movies with the camera and view them on a TV set.

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.

❖ Playback with the Touch Screen

The LCD monitor is a touch-sensitive panel that you can touch with your fingers for playback operations. **Press the <▶> button to play back images.** (The last captured image will appear.)
If the power is off, you can hold down the <▶> button for 2 sec. or longer to turn on the camera and display the playback screen.

Browse Images

Swipe with one finger.

● In the single-image display, use **one finger** to swipe the image to the left or right to see another image.
Swipe to the left to see the next (newer) image or swipe to the right to see the previous (older) image.

● In the index display (where multiple images are displayed), use **one finger** to scroll up or down the screen to display another screen of index images. Swipe your finger up to see newer images or swipe your finger down to see the older images. When you select an image and tap it, it will be displayed as a single image.

Jump through Images (Jump Display)

Swipe with two fingers.

When you use **two fingers** to swipe left or right on the screen, you can jump through images with the method set in [**Image jump with ⚲**] under the [▶2] tab.

Reduce Images (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 screen changes from a single-image display to an index display of 4 images, 9 images, 36 images, then 100 images.

● In the index display, perforations at the left edge of a thumbnail indicate a movie.

● In the index display, press <SET> to switch to the single-image display. Alternatively, select an image to display an orange frame, then tap the image again to display it as a single image.

Magnify Images

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.

● You can scroll around the image by dragging your finger.

● To reduce the image, pinch your fingers together on the screen.

● Tapping [↩] on the screen's upper right will return to the single-image display.

Touch screen operations on the camera's LCD monitor are also possible while playing back images on a TV set connected to your camera (p.247, 251).

⮥ 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.

⬛ ⬛ ⬛ ⬛ ⬛ **⬛** ⬙ ⬙ ⬙ ⬙ ★
Cropping
▶Histogram disp   **Brightness**
Image jump with☀   ⬙₁₀
Slide show

Image jump with☀
Jump 10 images
⬙	⬙₁₀	⬙₁₀₀	⬙
⬙	⬙	⬙	⬙★
SET OK

1 Select [Image jump with ⬙].

● Under the [▶2] tab, select [**Image jump with ⬙**], then press < SET >.

2 Select the jump method.

● Press the < ⬙ > keys to select the desired jump method, then press < SET >.

  ⬙ : **Display images one by one**
  ⬙₁₀ : **Jump 10 images**
  ⬙₁₀₀ : **Jump 100 images**
  ⬙ : **Display by date**
  ⬙ : **Display by folder**
  ⬙ : **Display movies only**
  ⬙ : **Display stills only**
  ⬙★ : **Display by image rating** (p.234)

3 Browse by jumping.

● Press the < ▶ > button to play back images.

● In the single-image display, turn the < ⬙ > dial.

Jump method
Playback position
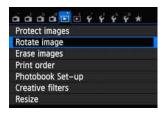
📄 ● To search images by shooting date, select [**Date**].
  ● To search images by folder, select [**Folder**].
  ● If the card contains both movies and still photos, select [**Movies**] or [**Stills**] to display only one or the other.
  ● If no images match the selected [**Rating**], [**Stills**] or [**Movies**], you cannot browse through the images with the < ⬙ > dial.

⟳ Rotating the Image

You can rotate the image for viewing.

1 Select [Rotate image].
- Under the [▶1] tab, select [**Rotate image**], then press <SET>.

2 Select an image.
- Press the <◄> <►> keys to select the image to be rotated.
- You can also select an image in the index display (p.231).
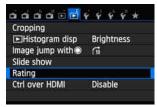
3 Rotate the image.
- Each time you press <SET>, the image will rotate clockwise as follows: 90° → 270° → 0°.
- To rotate another image, repeat steps 2 and 3.
- To exit and return to the menu, press the <MENU> button.
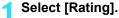
📄 ● If you have set [♥1: Auto rotate] to [On📷 ⟳] (p.218) before taking vertical shots, you need not rotate the image as described above.
● If the rotated image is not displayed in the rotated orientation during image playback, set [♥1: Auto rotate] to [On📷 ⟳].
● A movie cannot be rotated.

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MENU Setting Ratings

You can rate images and movies with one of five rating marks: [⋅]/[∶]/[∴]/[⁙]/[⁙]. This function is called rating.

1 Select [Rating].

● Under the [▶2] tab, select [**Rating**], then press <SET>.

2 Select an image.

● Press the <◄> <►> keys to select an image or movie to be rated.

● To select images on a three-image display, touch the LCD monitor with two fingers spread apart, then pinch the fingers together on the monitor. To return to the single-image display, touch the LCD monitor with two fingers together, then spread the fingers apart on the monitor.

3 Rate the image or movie.

● Press the <▲> <▼> keys to select a rating.

▶ The total number of images and movies rated will be counted for each rating.

● To rate another image or movie, repeat steps 2 and 3.

● Press the <MENU> button to return to the menu.

The total number of images with a given rating that can be displayed is 999. If there are more than 999 images with a given rating, [**###**] will be displayed for that rating.

Taking Advantage of Ratings

● With [▶**2: Image jump with** ○], you can display only images and movies with a specific rating.
● With [▶**2: Slide show**], you can play back only images and movies with a specific rating.
● With Digital Photo Professional (EOS software, p.350), you can select only still photos with a specific rating.
● With Windows 8, Windows 7, and Windows Vista, you can see each file's rating as part of the file information display or in the provided image viewer (still photos only).

Q Quick Control During Playback

In the single-image display, you can press the <Q> button to set any of the following: [O⌐: **Protect images**, ⓐ: Rotate image, ★: **Rating**, ◉: Creative filters, ⬚: Resize (JPEG images only), ⌗: Cropping, ⬚: **Image jump with** ⬚, (ᵖ): **Wi-Fi***].
For movies, only the functions in bold above can be set.
During playback, Quick Control can be performed only with Q Quick Control, not with the INFO. button.
* Not selectable if [♥2: Wi-Fi] is set to [**Disable**].

The procedure is the same as that for using Quick Control during shooting. However, for Creative filters (p.260), Resize (p.262), Cropping (p.265), and the Wi-Fi function, you also press <SET> to set them.

 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.

 For images taken with another camera, the functions you can select may be limited.

'᠇ Enjoying Movies

Playback on a TV Set (p.247, 251)

Use the AV cable AVC-DC400ST or HDMI cable HTC-100 (both sold separately) to connect the camera to a TV set. Then you can play captured movies and still photos on the TV set.

If you have a High-Definition TV set and connect your camera with an HDMI cable, you can watch Full High-Definition (Full HD: 1920x1080) and High-Definition (HD: 1280x720) movies with higher image quality.

- 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 or saved.
- If the TV has a card slot compatible with MOV files, you can play movies from the card inserted in the TV set.

Playback on the Camera's LCD Monitor (p.239-246)

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.

- This camera may not be able to play back movies shot with other cameras.
- A movie edited with a computer cannot be rewritten to the card and played back with the camera. However, video snapshot albums edited with EOS Video Snapshot Task (p.200) can be played on the camera.

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Playback and Editing with a Computer (p.350)

The movie files recorded on the card can be transferred to a computer and played or edited with ImageBrowser EX (EOS software).

> ● To have the movie play back smoothly on a computer, use a high-performance computer. Regarding the computer hardware requirements for ImageBrowser EX, refer to the PDF file ImageBrowser EX User Guide.
> ● If you want to use commercially-available software to play back or edit the movies, be sure it is compatible with MOV files. For details on commercially-available software, contact the software manufacturer.

'Ꝗ Playing Movies

1 Play back the image.
- Press the <▶> button to display images.

2 Select a movie.
- Press the <◀> <▶> keys to select a movie.
- In the single-image display, [▲ 'Ꝗ] displayed on the upper left of the screen indicates a movie. If the movie is a video snapshot, [▲ ⬛] will be displayed.
- You can press the <INFO.> button to switch to the shooting information display (p.257).
- In the index display, perforations at the left edge of a thumbnail indicate a movie. **As movies cannot be played in the index display, press <SET> to switch to the single-image display.**

3 Tap [▶] at the center of the screen.
▶ The movie will start playing.
- To pause the movie while it is playing, tap the screen. The movie playback panel will also appear (p.240).
- During movie playback, you can turn the <◌> dial to adjust the built-in speaker's sound volume.

Speaker

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Displaying the Movie Playback Panel

In the single-image display, tap [▲⟋].

▶ The movie playback panel will appear at the bottom of the screen.

Movie Playback Panel

Operation	Playback Description
▶ **Play**	Press <SET> to toggle between play and stop.
▶ **Slow motion**	Adjust the slow motion speed by pressing the <◀> <▶> keys. The slow motion speed is indicated at the upper right of the screen.
◀◀ **First frame**	Displays the movie's first frame.
◀‖ **Previous frame**	Each time you press <SET>, the previous frame is displayed. Hold down <SET> to rewind the movie.
‖▶ **Next frame**	Each time you press <SET>, the next frame is displayed. Hold down <SET> to fast forward the movie.
▶▶ **Last frame**	Displays the movie's last frame.
✂ **Edit**	Displays the editing screen (p.241).
♫ **Background music***	Play back a movie with the selected background music (p.246).
▭▭▭▭	Playback position
mm' ss"	Playback time (minutes:seconds)
📢 **Volume**	You can adjust the volume of the built-in speaker (p.239) by turning the <◎> dial.
MENU ↰	Returns to the single-image display.

* When background music is set, the movie's sound will not be played.
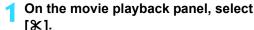
📓 ● With a fully-charged Battery Pack LP-E12, the continuous playback time at room temperature (23°C/73°F) will be as follows: approx. 2 hr. 20 min.
  ● If you took a still photo while you shot the movie, the still photo will be displayed for approx. 1 sec. during the movie playback.

X Editing a Movie's First and Last Scenes

You can edit out the first and last scenes of a movie in increments of approx.
1 second (except for video snapshots).

1 On the movie playback panel, select [X].

▶ The editing screen will be displayed.

2 Specify the part to be edited out.

● Select either [⚹] (Cut beginning) or [⚹] (Cut end), then press <SET>.

● Tap [◀II]/[II▶] to see the previous or next frame. Tap and hold down [◀II]/[II▶] to fast forward the frames.

● After deciding which part to edit out, press <SET>. The portion highlighted in gray on the top of the screen is what will remain.

3 Check the edited movie.

● Select [▶] and press <SET> to play the portion shown in gray.

● To change the edit, go back to step 2.

● To cancel the edit, press the <MENU> button, select [**OK**] on the confirmation dialog, then press <SET>.

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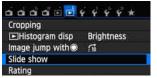
4 **Save the edited movie.**
- Select [], then press <SET>.
- ▶ The save screen will appear.
- To save it as a new file, select [**New file**]. To save it and overwrite the original movie file, select [**Overwrite**], then press <SET>.
- On the confirmation dialog, select [**OK**], then press <SET> to save the edited movie and return to the movie playback screen.

- ● When the battery level is low, movie editing is not possible. Use a fully-charged battery.
- ● Since the editing is performed in increments of approx. 1 second (the position indicated by [X]), the exact position where the movie is edited may differ slightly from the position you specified.
- ● If the card does not have enough free space, [**New file**] will not be available.

MENU Slide Show (Auto Playback)

You can play back the images on the card as an automatic slide show.

1 Select [Slide show].
- Under the [▶2] tab, select [**Slide show**], then press <SET>.

2 Select the images to be played.
- Set the option that appears as [**All images**] and is highlighted with a frame.
- Press the <▲> <▼> keys to select [**All images**], then press <SET>. Press the <▲> <▼> keys to select an option for selecting which images to play and then press <SET>.
- You can also select an option from a list by tapping the [**All images**] option twice.

Item	Playback Description
⊃ **All images**	All the still photos and movies on the card will be played back.
▦ **Date**	Still photos and movies taken on the selected shooting date will be played back.
▣ **Folder**	Still photos and movies in the selected folder will be played back.
'➔ **Movies**	Only the movies on the card will be played back.
▢ **Stills**	Only the still photos on the card will be played back.
★ **Rating**	Only the still photos and movies with the selected rating will be played back.

[**Date], [Folder], or [★ Rating]**

- Select the date, folder, or rating of the images to be played.
- When [**INFO.** ⌖] is highlighted, press the <INFO.> button.
- Select the desired option, then press <SET>.

[**Date**]

Select date		
2013/07/24	6	
2013/07/26	28	
2013/07/29	12	

SET OK

[**Folder**]

Select folder		
100CANON	22	
101CANON	38	
102CANON	43	

SET OK

[**Rating**]

★Select images		
★All	0	
[·]	1	
[··]	6	
[·.·]	0	
[::]	3	
[::·]	0	
OFF	36	

SET OK

3 Set [Set up] as desired.

Slide show	
	20 images
	All images
	INFO. ⌖
Set up	
Start	
	MENU ↩

- 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.
- The background music selection procedure is explained on page 246.
- After selecting the settings, press the <MENU> button.

[**Display time**]

Slide show

Display time   ▶1 sec.
                 2 sec.
                 3 sec.
                 5 sec.
                 10 sec.
                 20 sec.

[**Repeat**]

Slide show

Repeat   ▶Enable
                 Disable

[**Transition effect**]

Slide show

                 ▶Off
                 Slide in 1
Transition effect Slide in 2
                 Fade 1
                 Fade 2
                 Fade 3

[**Background music**]

♫Sel./Play background music

Background music   Off
                   ▶On

Slide show
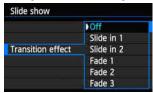
20 images
☐All images

Set up
Start

MENU ↰

4 **Start the slide show.**
   ● Select [**Start**], then press <SET>.
   ▶ After [**Loading image...**] is displayed, the slide show will start.

5 **Quit the slide show.**
   ● To quit 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 the screen.
   ● During the slide show, you can press the <INFO.> button to change the still photo display format (p.92).
   ● During movie playback, you can adjust the sound volume by turning the <⊙> dial.
   ● During the slide show or during pause, you can press the <◄> <►> keys to view another image.
   ● During the slide show, auto power off will not work.
   ● The display time may vary depending on the image.
   ● To view the slide show on a TV set, see page 247.

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Selecting the Background Music

♪Sel./Play background music
Background music   On
  ✓ ANGELS
  ✓ BELOVED
    GO SPORTS
    MEMORIES
  Delete
  SET ✓ INFO ► ◢�example ● MENU ↰

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 background music from the card, tap [**Delete**].

At the time of purchase, you cannot select background music with the camera. You must first use EOS Utility (EOS software) to copy the background music to the card. For details, refer to the EOS Utility Instruction Manual (PDF).

Viewing Images on a TV Set
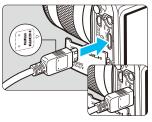
You can view still photos and movies on a TV set.
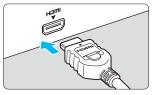
- **❶** ● Adjust the movie's sound volume with the TV set. The sound volume cannot be adjusted with the camera.
  - ● Before connecting or disconnecting the cable between the camera and the TV set, turn off the camera and TV set.
  - ● Depending on the TV set, part of the image displayed may be cut off.
  - ● Before connecting the camera to a TV set, set [♥**2: Wi-Fi**] to [**Disable**].

Viewing on High-Definition (HD) TV Sets (Connected with HDMI)

HDMI Cable HTC-100 (sold separately) is required.

1 Connect the HDMI cable to the camera.

- ● With the plug's <▲**HDMI MINI**> side 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's HDMI IN port.

3 Turn on the TV set and switch the TV's video input to select the connected port.

4 Set the camera's power 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 TV set's optimum resolution.

● By pressing the <INFO.> button, you can change the display format.

● To play back movies, see page 239.

When the camera is connected to a TV set, the following operations cannot be performed:

● **During shooting:**
  • Moving the AF point
  • Magnifying/reducing the image
  • Switching Movie Servo AF ON/OFF during movie shooting
  • Zooming with movie digital zoom
  • Switching the frame's vertical/horizontal orientation or moving the frame when the Creative filter "Miniature effect" is set

● **During movie playback:**
  • Quick Control

The images cannot be output at the same time from both the <**HDMI OUT**> and <**A/V OUT**> terminals.
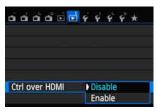
● Do not connect any other device's output to the camera's <**HDMI OUT**> terminal. Doing so may cause a malfunction.

● Certain TV sets may not be able to play back the captured images. In such a case, use the AV cable AVC-DC400ST (sold separately) to connect to the TV set.

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 Set [Ctrl over HDMI] to [Enable].
- Under the [▶2] tab, select [**Ctrl over HDMI**], then press <SET>.
- Select [**Enable**], then press <SET>.

2 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.

3 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.

4 Select an image.
- Press the remote control's ←/→ button to select an image.

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Still photo playback menu

| ↩ | ⊞⊞⊞ | ⊕ | INFO. | ⊚ |

Movie playback menu

| ↩ | 🎬 | ⊞⊞⊞ | ⊕ | INFO. |

↩ : Return
⊞⊞⊞ : 9-image index
🎬 : Play movie
⊕ : Slide show
INFO. : Disp. shooting info
⊚ : Rotate

5 Press the remote control's Enter button.
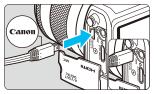
▶ The menu appears and you can perform the playback operations shown on the left.

● Press the ←/→ button to select the desired option, then press the Enter button. For a slide show, press the ↑/↓ button to select an 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.
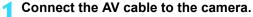
📷 ● Some TV sets require you to first enable the HDMI CEC connection. For details, refer to the TV set's instruction manual.
● Certain TV sets, even those compatible with HDMI CEC, may not operate properly. In such a case, disconnect the HDMI cable and set [▶**2: Ctrl over HDMI**] to [**Disable**]. Then, connect the camera and TV set again using the HDMI cable, and then use the camera to control the playback operation.
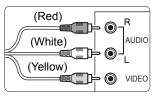
Viewing on Non-HD TV Sets (Connected with AV Cable)

Stereo AV Cable AVC-DC400ST (sold separately) is required. If you use an AV cable to connect the camera to a TV, the playback will be in standard definition.

1 Connect the AV cable to the camera.
- With the plug's <**Canon**> logo facing the front of the camera, insert it into the <**A/V OUT**> terminal.

(Red)
(White)
(Yellow)

R
AUDIO
L
VIDEO

2 Connect the AV cable to the TV set.
- Connect the AV cable to the TV set's video IN terminal and audio IN terminals.

3 Turn on the TV set and switch the TV set's video input to select the connected port.
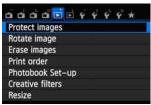
4 Set the camera's power to <ON>.

5 Press the <▶> button.
- ▶ The image will appear on the TV screen. (Nothing will be displayed on the camera's LCD monitor.)
- To play back movies, see page 239.

- ● Do not use any AV cable other than AVC-DC400ST (sold separately). Images may not be displayed if you use a different cable.
- ● If the video system format does not match the TV set's, the images will not be displayed properly. If this happens, switch to the proper video system format with [**♀2: Video system**].
- ● Before connecting the camera to a TV set, set [**♀2: Wi-Fi**] to [**Disable**].
- ● The images cannot be output at the same time from both the <**HDMI OUT**> and <**A/V OUT**> terminals.

🔒 Protecting Images

Protecting an image prevents it from being erased accidentally.

🗃 Protecting a Single Image

Protect images
Rotate image
Erase images
Print order
Photobook Set-up
Creative filters
Resize

1 Select [Protect images].
- Under the [▶1] tab, select [**Protect images**], then press <SET>.

🔒Protect images

Select images
All images in folder
Unprotect all images in folder
All images on card
Unprotect all images on card

2 Select [Select images].
- Select [**Select images**], then press <SET>.

Image protect icon

3 Protect the image.
- Press the <◀> <▶> keys to select an image to be protected, then press <SET>.
- When an image is protected, the <🔒> icon will appear on the top of the screen.
- To cancel the image protection, press <SET> again. The <🔒> icon will disappear.
- To protect another image, repeat step 3.
- Press the <MENU> button to return to the screen in step 2.

3 **Protecting All Images in a Folder or on a Card**

You can protect all the images in a folder or on a card at one time.

When you select [**All images in folder**] or [**All images on card**] in [x**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.57)**, 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.255), only the protected images will remain. This is convenient when you want to erase unnecessary images all at once.

🗑 **Erasing Images**

You can either select and erase images one by one or erase them in one batch. Protected images (p.252) 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 a 🖾+▲L image 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 at the bottom of the screen.
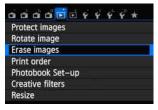
3 Erase the image.
● Select [**Erase**], then press <SET>. The image displayed will be erased.

🗑 **Checkmarking [√] Images to be Erased in a Batch**

By appending checkmarks [√] to the images to be erased, you can erase multiple images at one time.

1 Select [Erase images].
● Under the [▶1] tab, select [**Erase images**], then press <SET>.

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2 Select [Select and erase images].

- Select [**Select and erase images**], then press <SET>.
- ▶ An image will be displayed.
- To select images on a three-image display, touch the LCD monitor with two fingers spread apart, then pinch the fingers together on the monitor. To return to the single-image display, touch the LCD monitor with two fingers together, then spread the fingers apart on the monitor.

3 Select the images to be erased.

- Press the <◀> <▶> keys to select an image to be erased, then press <SET>.
- ▶ A checkmark [√] will be displayed on the upper left of the screen.
- To select other images to be erased, repeat step 3.

4 Erase the images.
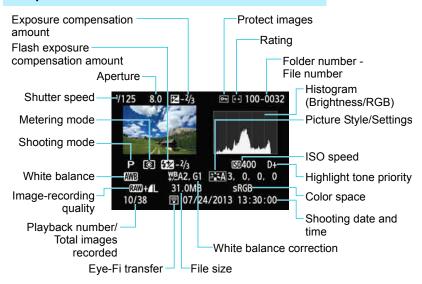
- Press the <🗑> button.
- Select [**OK**], then press <SET>.
- ▶ The selected images will be erased.

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 one time. 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 also erase protected images, format the card (p.57).

B: **Shooting Information Display**

Sample Still Photo Taken in a Creative Zone Mode

Exposure compensation amount

Flash exposure compensation amount

Aperture

Shutter speed

Metering mode

Shooting mode

White balance

Image-recording quality

Playback number/ Total images recorded

Eye-Fi transfer

File size

Protect images

Rating

Folder number - File number

Histogram (Brightness/RGB)

Picture Style/Settings

ISO speed

Highlight tone priority

Color space

Shooting date and time

White balance correction

- With RAW + ◢L images, the RAW file size is displayed.
- For still photos taken during movie shooting, [◦🎥] will be displayed.
- If a Creative filter or Resize has been applied to the image, [◻] will appear instead of [RAW +].
- If Cropping has been applied to the image, [RAW +] will change to [◻] and [◢L] will change to [◻].
- Photos taken with flash without any flash exposure compensation are marked with [◻]. Photos taken with flash exposure compensation are marked with [◻].

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Sample Still Photo Taken with <🄰⁺> or in a Basic Zone Mode

Shooting mode

Ambience and
ambience effects

Lighting or scene

* With images taken with <🄰⁺> or in a Basic Zone mode, the information displayed will
differ depending on the shooting mode.

Sample Movie

Shooting time

Display movie
playback panel

Playback

Shooting mode

Movie recording
size

Shutter speed
and aperture for
movie shooting

Movie file size

Frame rate

* If manual exposure was used, the shutter speed, aperture, and ISO speed (when set
manually) will be displayed.
* [📷] will be displayed for video snapshots.

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● **Highlight Alert**
When the shooting information is displayed, any overexposed areas of the image will blink. To obtain more image detail in the overexposed areas, 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 [▶2: ▶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.

8

Post-Processing Images

After taking a picture, you can apply a filter effect, resize the image (reduce the number of pixels), or crop the image.

⚠️ ● The camera may not be able to process images taken with another camera.
● Post-processing images as described in this chapter is not possible while the camera is connected to a computer via the <**DIGITAL**> terminal.
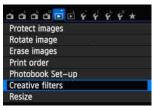
◉ Applying Filter Effects

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.
You can use the same Creative filters that are available during still photo shooting (p.128).
You can also apply Creative filters with Quick Control during playback.

1 Select [Creative filters].
- Under the [▶1] tab, select [**Creative filters**], then press <SET>.
- ▶ An image will be displayed.
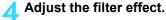
2 Select an image.
- Select the image you want to apply a filter to.
- You can also select an image in the index display.

3 Select a filter.
- When you press <SET>, the types of Creative filters will be displayed.
- For details on Creative filter characteristics, see pages 130-131.
- Press the <◄> <►> keys to select a Creative filter, then press < SET >.
- ▶ The image will be displayed with the corresponding filter applied.

4 Adjust the filter effect.

● Press the <◄> <►> keys to adjust the filter effect, then press <SET>.
● For the Miniature effect, press the <▲> <▼> keys to move the white frame over the part of the image you want to remain sharp. Then press <SET>.
  Press <INFO.> button to switch the white frame's orientation between vertical and horizontal.

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.
● Press the <MENU> button to return to the menu.
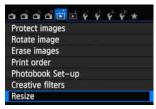
📓 ● When shooting **RAW**+▲L or **RAW** images, the Creative filter will be applied to the **RAW** image and the image will be saved as a JPEG image.
  ● If an aspect ratio is set for shooting a **RAW** image and a Creative filter is applied, the image will be saved as a JPEG image in the aspect ratio that was set.

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□ **Resizing JPEG Images**

You can resize an image to make the pixel count lower and save it as a new image. Resizing an image is possible only with JPEG **L**/**M**/**S1**/**S2** images. **RAW and JPEG S3 images cannot be resized.**
You can also resize with the Quick Control screen.

Protect images
Rotate image
Erase images
Print order
Photobook Set-up
Creative filters
Resize

1 **Select [Resize].**
- Under the [▶1] tab, select [**Resize**], then press <SET>.
- ▶ An image will be displayed.

2 **Select an image.**
- Select the image you want to resize.
- You can also select an image in the index display.

8.0M 3456x2304

M   S1   S2   S3

Target sizes

3 **Select the desired image size.**
- When you press <SET>, the image size will be displayed.
- Press the <◀> <▶> keys to 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.
- Press the <MENU> button to return to the menu.

Resize Options According to Original Image Size

Original Image Size	Available Resize Settings			
	M	**S1**	**S2**	**S3**
L	○	○	○	○
M		○	○	○
S1			○	○
S2				○
S3				

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Image Sizes

The image size displayed in step 3 on page 262, such as [**M ****x****], has a 3:2 aspect ratio. The image sizes for each aspect ratio are shown in the table below.
The asterisked image-recording quality figures do not exactly match the aspect ratio. The image will be cropped slightly.

Image Quality	Aspect Ratio and Pixel Count (Approx.)			
	3:2	4:3	16:9	1:1
M	3456x2304 (8.0 megapixels)	3072x2304 (7.0 megapixels)	3456x1944 (6.7 megapixels)	2304x2304 (5.3 megapixels)
S1	2592x1728 (4.5 megapixels)	2304x1728 (4.0 megapixels)	2592x1456* (3.8 megapixels)	1728x1728 (3.0 megapixels)
S2	1920x1280 (2.5 megapixels)	1696x1280* (2.2 megapixels)	1920x1080 (2.1 megapixels)	1280x1280 (1.6 megapixels)
S3	720x480 (350,000 pixels)	640x480 (310,000 pixels)	720x400* (290,000 pixels)	480x480 (230,000 pixels)

✄ Cropping JPEG Images

You can crop a JPEG image as desired and save it as a new image. **RAW and JPEG S3 images cannot be cropped.** The ▨+◢L image's JPEG image 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.
- You can also select an image in the index display.

3 Set the cropping frame's size, position, orientation, and aspect ratio.
- Press <SET> to display the cropping frame.
▶ Everything outside the cropping frame will be removed.

Changing the Cropping Frame Size
- Tap the screen and pinch two fingers closed or spread them apart as necessary to change the size of the cropping frame. The smaller the cropping frame, the larger the image magnification will be.

Moving the Cropping Frame
- Press the <✚> keys to move the frame over the image vertically or horizontally.
- You can also touch the cropping frame and drag it to the desired position.

Rotating the Cropping Frame Orientation

● Turn the <◯> dial to select [⊞].
● Pressing <SET> will toggle the cropping frame between the vertical and horizontal orientations. This enables you to create a vertical image from a horizontal one, and vice versa.

Changing the Cropping Frame Aspect Ratio

● Turn the <◯> dial to select [⊞ 3:2].
● Pressing <SET> will toggle the aspect ratio between [**3:2**], [**16:9**], [**4:3**], and [**1:1**].

4 Check the cropped image.

● Turn the <◯> dial to select [⊡].
● Pressing <SET> will toggle the screen between the cropped image and the cropping frame display.

5 Save the image.

● Turn the <◯> dial to select [⊡].
● Select [**OK**], then press <SET> 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.
● To return to the menu, press the <MENU> button.

Save as new file
Cancel   OK

⬤ ● You cannot crop an image that has been cropped.
   ● You cannot apply a Creative filter or resizing to a cropped image.

9

Printing Images

● **Printing** (p.268)
You can connect the camera directly to a printer and print out the images on the card. The camera is compatible with "⧉ PictBridge" which is the standard for direct printing.
You can also use a wireless LAN to send images to a PictBridge (Wireless LAN) printer and print them. For details, refer to the Wi-Fi Function Instruction Manual.

● **Digital Print Order Format (DPOF)** (p.278)
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 give the print order to a photofinisher.

● **Specifying Images for a Photobook** (p.282)
You can specify images in the card for printing in a photobook.
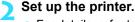
Preparing to Print

The direct printing procedure can be performed entirely with the camera while you look at the LCD monitor.
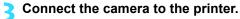
Connecting the Camera to a Printer
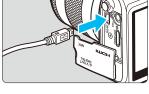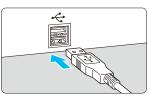
1 Set the camera's power to <OFF>.

2 Set up the printer.
● For details, refer to the printer's instruction manual.

3 Connect the camera to the printer.
● Use the interface cable provided with the camera.
● Connect the cable to the camera's <**DIGITAL**> terminal with the cable plug's < ⭤ > icon facing the back of the camera.
● To connect to the printer, refer to the printer's instruction manual.

4 Turn on the printer.

5 Set the camera's power to <ON>.
▶ Some printers may make a beeping sound.

PictBridge

Press SET button for print menu

SET

6 Play back the image.

● Press the <▶> button.

▶ The image will appear, and the [🖨] icon will appear on the upper left to indicate that the camera is connected to a printer.

⚠ ● Before using the printer, make sure it has a PictBridge connection port.
● Movies cannot be printed.
● The camera cannot be used with printers compatible only with CP Direct or Bubble Jet Direct.
● If there is a long beeping sound in step 5, it indicates a problem with the printer. Resolve the problem displayed in the error message (p.277).
● Printing is not possible when shooting mode is set to <🎞> or <🎆>, or when Multi Shot Noise Reduction is set.
● If [♥2: Wi-Fi] is set to [**Enable**], direct printing via an interface cable is not possible. Set it to [**Disable**], then connect the interface cable.

📖 ● You can also print RAW images taken with this camera.
● If you use a battery pack to power the camera, make sure it is fully charged. With a fully-charged battery, printing up to approx. 2 hr. 30 min. is possible.
● Before disconnecting the cable, first turn off the camera and printer. Hold the plug (not the cord) to pull out the cable.
● For direct printing, using AC Adapter Kit ACK-E12 (sold separately) to power the camera is recommended.

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⚙ Printing

The screen display and setting options will differ depending on the printer. Some settings may not be available. For details, refer to the printer's instruction manual.

Printer-connected icon

Press SET button for print menu

1 Select the image to be printed.
- Check that the [⚙] icon is displayed on the upper left of the LCD monitor.
- Press the <◄> <►> keys to select the image to be printed.

2 Press <SET>.
▶ The print setting screen will appear.

Print setting screen

━ Sets the printing effects (p.273).
━ Sets the date or file number imprinting to on or off.

⊠ Off
⊙ Off
🔲 1 copies ━ Sets the quantity to be printed.
Cropping ━ Sets the cropping (p.276).
Paper settings ━ Sets the paper size, type, and layout.
Cancel ━ Returns to the screen in step 1.
Print

🔲 9x13cm
🗗 Photo
📑 Borderless

━ Starts the printing.

The paper size, type, and layout you have set are displayed.

* Depending on the printer, certain settings such as the date and file number imprinting and cropping may not be selectable.

⊠ Off
⊙ Off
🔲 1 copies
Cropping
Paper settings
Cancel
Print
🔲 9x13cm
🗗 Photo
📑 Borderless

3 Select [Paper settings].
- Select [**Paper settings**], then press <SET>.
▶ The paper settings screen will appear.

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🔲 Setting the Paper Size

- Select the size of the paper loaded in the printer, then press <SET>.
▶ The paper type screen will appear.

🔳 Setting the Paper Type

- Select the type of the paper loaded in the printer, then press <SET>.
▶ The page layout screen will appear.

🔲 Setting the Page Layout

- Select the page layout, then press <SET>.
▶ The print settings screen will reappear.

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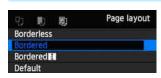| Bordered	The print will have white borders along the edges.
Borderless	The print will have no borders. If your printer cannot print borderless prints, the print will have borders.
Bordered 🔢	The shooting information*[1] will be imprinted on the border on 9x13 cm and larger prints.
xx-up	Option to print 2, 4, 8, 9, 16, or 20 images on one sheet.
20-up 🔢 **35-up 🔲**	20 or 35 images will be printed as thumbnails on A4 or Letter size paper*[2]. • [**20-up 🔢**] will have the shooting information*[1] imprinted.
Default	The page layout will vary depending on the printer model or its settings.

*1: From the Exif data, the camera name, lens name, shooting mode, shutter speed, aperture, exposure compensation amount, ISO speed, white balance, etc., will be imprinted.

*2: After ordering the prints with "Digital Print Order Format (DPOF)" (p.278), it is recommended that you print by following "Direct Printing of Print-Ordered Images" (p.281).

🟡 If the image's aspect ratio is different from the printing paper's aspect ratio, the image may be cropped significantly if you print it as a borderless print. If the image is cropped, it may look more grainy on the paper due to the fewer number of pixels.

4 Set the printing effects.

- Set them if necessary. If you do not need to set any printing effects, go to step 5.
- **What is displayed on the screen differs depending on the printer.**
- Select the option, then press <SET>.
- Select the desired printing effect, then press <SET>.
- If the [**INFO** 国] icon is displayed brightly, you can also adjust the printing effect (p.275).

Printing Effect	Description
〜On	The image will be printed using the printer's standard colors. The image's Exif data is used to make automatic corrections.
〜Off	No automatic correction will be applied.
〜Vivid	The image will be printed with higher saturation to produce more vivid blues and greens.
〜NR	Image noise is reduced before printing.
B/W B/W	Prints in black-and-white with true blacks.
B/W Cool tone	Prints in black-and-white with cool, bluish blacks.
B/W Warm tone	Prints in black-and-white with warm, yellowish blacks.
■Natural	Prints the image in the actual colors and contrast. No automatic color adjustments are applied.
■Natural M	The printing characteristics are the same as the "Natural" setting. However, this setting enables finer printing adjustments than with "Natural".
〜Default	The printing will differ depending on the printer. For details, refer to the printer's instruction manual.

* **When you change the printing effects, changes are reflected in the image displayed on the upper left. Note that the printed image may look slightly different from the displayed image, which is only an approximation. This also applies to [Brightness] and [Adjust levels] on page 275.**

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5 **Set the date and file number imprinting.**
- Set it if necessary.
- Select [⊘], then press <SET>.
- Set as desired, then press <SET>.

6 **Set the number of copies.**
- Set it if necessary.
- Select [⬚], then press <SET>.
- Select the number of copies, then press <SET>.
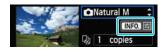
7 **Start printing.**
- Select [**Print**], then press <SET>.

🔲 ● The [**Default**] setting for printing effects and other options are the printer's own default settings as set by the printer's manufacturer. Refer to the printer's instruction manual to find out what the [**Default**] settings are.
- Depending on the image's file size and image-recording quality, it may take some time for the printing to start after you select [**Print**].
- If image tilt correction (p.276) is applied, it may take longer to print the image.
- To stop the printing, press <SET> while [**Stop**] is displayed, then select [**OK**].
- If you execute [**Clear all camera settings**] (p.220), all the settings will revert to their defaults.

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⊞ Adjustment of Printing Effects

In step 4 on page 273, if the [**INFO.** 国] icon is displayed brightly when you select a printing effect, you can press the <INFO.> button to adjust the printing effect. What can be adjusted or what is displayed will depend on the selection made in step 4.

● **Brightness**
The image brightness can be adjusted.

● **Adjust levels**
When you select [**Manual**], you can change the histogram's distribution and adjust the image's brightness and contrast.
With the Adjust levels screen displayed, press the <INFO.> button to change the position of the [↕].
Press the <◀> <▶> keys to change the shadow level (0-127) or highlight level (128-255).

● **Brightener**
Effective in backlit conditions that can make the subject's face look dark. When [**On**] is set, the face will be brightened for printing.

● **Red-eye corr.**
Effective for images shot using flash, where the subject has red eye. When [**On**] is set, the red eye will be corrected for printing.

📋 ● The [**Brightener**] and [**Red-eye corr.**] effects will not be reflected on the screen.
● When you select [**Detail set.**], you can adjust the [**Contrast**], [**Saturation**], [**Color tone**], and [**Color balance**]. To adjust the [**Color balance**], change the values: B is for blue, A for amber, M for magenta, and G for green. The image's color balance will be corrected towards the selected color.
● If you select [**Clear all**], all the printing effect settings will be reverted to their defaults.

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Cropping the Image

Tilt correction

You can crop the image and print only the cropped portion as if the image was recomposed.
Set the cropping right before printing. If you set the cropping and then set the print settings, you may have to set the cropping again before printing.

1 **On the print settings screen, select [Cropping].**

2 **Set the cropping frame size, position, and aspect ratio.**

● The image area within the cropping frame will be printed. The cropping frame's aspect ratio can be changed with [**Paper settings**].

Changing the cropping frame size
Tap the screen and pinch two fingers closed or spread them apart as necessary to change the size of the cropping frame. The smaller the cropping frame, the larger the image magnification will be for printing.

Moving the cropping frame
Press the < ✧ > keys to move the frame over the image vertically or horizontally. Move the cropping frame until it covers the desired image area.

Rotating the frame
Pressing the <INFO.> button will toggle the cropping frame between the vertical and horizontal orientations. This enables you to create a vertically oriented print from a horizontal image.

Image tilt correction
By turning the < ◯ > dial, you can adjust the image tilt angle up to ±10 degrees in 0.5-degree increments. When you adjust the image tilt, the < ⌓ > icon on the screen will turn blue.

3 **Press <SET> to exit the cropping.**

▶ The print settings screen will reappear.
● You can check the cropped image area on the upper left of the print settings screen.

- Depending on the printer, the cropped image area may not be printed as you specified.
- The smaller you make the cropping frame, the grainier the picture will look in the print.

Handling Printer Errors

If you resolve a printer error (no ink, no paper, etc.) and select [**Continue**] to resume printing but it does not resume, operate the buttons on the printer to resume printing. For details on resuming the printing, refer to the printer's instruction manual.

Error Messages

If a problem occurs during printing, an error message will appear on the camera's LCD monitor. Press <SET> to stop printing. After fixing the problem, resume printing. For details on how to fix a printing problem, refer to the printer's instruction manual.

Paper Error
Check whether the paper is properly loaded in the printer.
Ink Error
Check the printer's ink level, and check the waste ink tank.
Hardware Error
Check for any printer problems other than paper and ink problems.
File Error
The selected image cannot be printed via PictBridge. Images taken with another camera or images edited with a computer may not be printable.
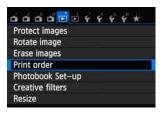
W **Digital Print Order Format (DPOF)**

You can set the print type, date imprinting, and file number imprinting. The print settings will be applied to all print-ordered images. (They cannot be set individually for each image.)

Setting the Printing Options

1 Select [Print order].
- Under the [▶1] tab, select [**Print order**], then press <SET>.

2 Select [Set up].
- Select [**Set up**], then press <SET>.
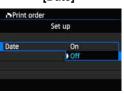
3 Set the option as desired.
- Set the [**Print type**], [**Date**], and [**File No.**].
- Select the option to be set, then press <SET>. Select the desired setting, then press <SET>.

[Print type]	[Date]	[File No.]
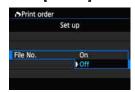
Print type	◉	Standard	Prints one image on one sheet.	
	⊞	Index	Multiple thumbnail images are printed on one sheet.	
	◉ ⊞	Both	Prints both the standard and index prints.	
Date	On		[**On**] imprints the recorded date on the print.	
	Off			
File number	On		[**On**] imprints the file number on the print.	
	Off			

4 **Exit the setting.**

● Press the <MENU> button.
▶ The print order screen will reappear.
● Next, select [**Sel.Image**], [**By**▣], or [**All image**] to order the images to be printed.


⬤ ● 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, you must use the card whose print order specifications have been set. It will not work if you just extract images from the card and try to print them.
● Certain DPOF-compatible 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 insert into the camera a card whose print order was set by another camera and then try to specify a print order. The print order may be overwritten. Also, depending on the image type, the print order may not be possible.

📝 RAW images and movies cannot be print ordered.

Print Ordering

● **Sel.Image**

Select and order images one by one.
To select images on a three-image display, touch the LCD monitor with two fingers spread apart, then pinch the fingers together on the monitor. To return to the single-image display, touch the LCD monitor with two fingers together, then spread the fingers apart on the monitor.
Press the <MENU> button to save the print order to the card.

[Standard] [Both]
Press the <▲> <▼> keys to set the number of copies to be printed for the displayed image.

Quantity

Total images selected

[Index]
Press <SET> to add a checkmark to the box [√]. The image will be included in the index print.

Checkmark

Index icon

● **By■**
Select [**Mark all in folder**] and select the folder. A print order for one copy of all the images in the folder will be placed. If you select [**Clear all in folder**] and select the folder, the print order will be cleared for all the images in the folder.

● **All image**
If you select [**Mark all on card**], one copy of all the images on the card will be set 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 and movies will not be included in the print order even if you set [**By■**] or [**All image**].
● When using a PictBridge printer, specify no more than 400 images for one print order. If you specify more than this, all the images may not be printed.

🖐 **Direct Printing of Print-Ordered Images**

⤷Print order	
☐ Standard	7 prints
⊞ Index	2 images
Date	On
File No.	Off
Sel.Image	By∎	All image
Set up	Print	MENU ↩

With a PictBridge printer, you can easily print images with DPOF.

1 Prepare to print.
- See page 268.
  Follow the "Connecting the Camera to a Printer" procedure up to step 5.

2 Under the [▶1] tab, select [Print order].

3 Select [Print].
- [**Print**] will be displayed only if the camera is connected to a printer and printing is possible.

4 Set the [Paper settings] (p.270).
- Set the printing effects (p.273) if necessary.

5 Select [OK].

- ⚠ Before printing, be sure to set the paper size.
  - Certain printers cannot imprint the file number.
  - If [**Bordered**] is set, certain printers may imprint the date on the border.
  - Depending on the printer, the date may appear faint if it is imprinted on a bright background or on the border.
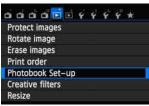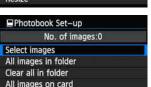
- 📖 Under [**Adjust levels**], [**Manual**] cannot be selected.
  - If you stopped the printing and want to resume printing the remaining images, select [**Resume**]. Note that printing will not resume if you stop the printing and any of the following occurs:
    - Before resuming the printing, you changed the print order or deleted print-ordered images.
    - When you set the index, you changed the paper settings before resuming the printing.
    - When you paused the printing, the card's remaining capacity was low.
  - If a problem occurs during printing, see page 277.

❏ **Specifying Images for a Photobook**

When you select images to use in photobooks (up to 998 images) and use EOS Utility (EOS software) to transfer them to a computer, the selected images will be copied into a dedicated folder. This function is useful for ordering photobooks online.

Specify One Image at a Time

1 Select [Photobook Set-up].

● Under the [▶1] tab, select [**Photobook Set-up**], then press <SET>.

2 Select [Select images].

● Select [**Select images**], then press <SET>.

▶ An image will be displayed.

● To select images on a three-image display, touch the LCD monitor with two fingers spread apart, then pinch the fingers together on the monitor. To return to the single-image display, touch the LCD monitor with two fingers together, then spread the fingers apart on the monitor.

3 Select the image to be specified.

● Press the <◄> <►> keys to select the image to be specified, then press <SET>.

● Repeat this step. The number of images which have been specified will be displayed on the upper left of the screen.

● To cancel the specified image, press <SET> again.

● Press the <MENU> button to return to the screen in step 2.

Specifying All Images in a Folder or on a Card

You can specify all the images in a folder or on a card at one time.

When [▶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 cancel the image specification, select [**Clear all in folder**] or [**Clear all on card**].

🖐 Do not specify for a photobook with this camera images that were already specified for a different photobook using another camera. The photobook settings may be overwritten.

📝 RAW images and movies cannot be specified.

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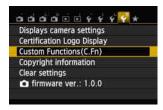
10 Customizing the Camera

You can customize various camera functions to suit your picture-taking preferences with Custom Functions. Custom Functions can be set and used in Creative Zone and movie shooting modes.

MENU Setting Custom Functions[■]
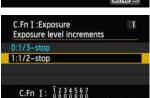
1 Select [Custom Functions (C.Fn)].
- Under the [♥4] tab, select [**Custom Functions (C.Fn)**], then press <SET>.

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 and 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 for 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.220).

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Custom Functions

C.Fn I: Exposure

			Still Photo Shooting	Movie Shooting
1	Exposure level increments	p.288	○	○
2	ISO expansion		○	During manual exposure

C.Fn II: Image

3	Highlight tone priority	p.289	○	○

C.Fn III: Autofocus

4	AF-assist beam (LED) firing	p.290	○	-

C.Fn IV: Operation/Others

5	Shutter/AE lock button	p.290	○	○
6	▼ 🗑 button function	p.291	○	○*
7	Release shutter without lens		○	○

MENU Custom Function Settings ☑

Custom Functions are organized into four groups based on the function type:
C.Fn I: Exposure, C.Fn II: Image, C.Fn III: Autofocus, 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.

C.Fn-2   ISO expansion

0: Off

1: On

When you set the ISO speed, you will be able to set "**H**" (equivalent to ISO
25600) for still photos and "**H**" (equivalent to ISO 12800) for movies. Note
that if [**C.Fn-3: Highlight tone priority**] is set to [**1: Enable**], "**H**" cannot
be set.

C.Fn II: Image

C.Fn-3   Highlight tone priority

0: Disable

1: Enable

Improves the highlight detail. 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.153) is automatically set to [**Disable**] and the setting cannot be changed.
- With setting 1, noise (grainy image, banding, etc.) may become slightly more pronounced than with setting 0.

With setting 1, the range that can be set will be ISO 200 - ISO 12800 (up to ISO 6400 for movies).
Also, the [**D+**] icon will be displayed on the LCD monitor when highlight tone priority is enabled.

C.Fn III: Autofocus

C.Fn-4   AF-assist beam (LED) firing

You can enable or disable the AF-assist beam.

0: Enable
When necessary, the self-timer/AF-assist lamp will emit the AF-assist beam. This setting is applicable also for LED-compatible external flashes.

1: Disable
The AF-assist beam is not emitted.

C.Fn IV: Operation/Others

C.Fn-5   Shutter/AE lock button

0: AF/AE lock

1: AE lock/AF
This is convenient when you want to focus and meter separately. Press the < ✱ > button to autofocus, and press the shutter button halfway to apply AE lock.

2: AF/AF lock, no AE lock
In the Servo AF operation, you can press the < ✱ > button to pause the AF operation momentarily. This prevents the AF from being thrown off by any obstacle passing between the camera and subject. The exposure is set at the moment the picture is taken.

3: AE/AF, no AE lock
This is useful for subjects which keep moving and stopping repeatedly. With Servo AF, pressing the < ✱ > button starts or stops the Servo AF. The exposure is set at the moment the picture is taken. Thus, the optimum focusing and exposure will always be achieved as you wait for the decisive moment.

- During continuous shooting, even if you press the < ✱ > button, the AF operation will not start or stop.
- During continuous shooting without autofocus, using the [**1: AE lock/AF**] or [**3: AE/AF, no AE lock**] setting, the maximum number of frames per second depends on the AF operation settings and the lens used (p.125).

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C.Fn-6   ▼ 🗑 button function

You can assign a frequently-used function to the < ▼ 🗑 > button. While the camera is ready to shoot, press < ▼ 🗑 >.

0: Normal (set center AF point)

1: 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 on the LCD monitor, the depth of field will look narrow (shallow).

Press the < ▼ 🗑 > button to stop down the lens to the current aperture setting and check the depth of field (range of acceptable focus).

2: ISO speed

The ISO speed setting screen will appear. Press the < ◄ > < ► > keys or turn the < ◉ > dial to set the ISO speed.

3: Flash exposure compensation

Set flash exposure compensation if the flash exposure of the subject does not come out as desired. You can set the exposure compensation up to ±2 stops in 1/3-stop increments.

4: Increase LCD brightness (temporarily)

Pressing the < ▼ 🗑 > button will set the LCD monitor brightness to the same level as the menu's [7] setting. Press the button again and it will return to the previous brightness.

If the power turns < OFF > or the brightness adjustment screen is displayed with the menu, the previous brightness will return.

- Even if [**1: Depth-of-field preview**] is set, the modeling flash of an external flash will not fire.
- In movie shooting modes, if [**1: Depth-of-field preview**] or [**3: Flash exposure comp.**] is set, the button operations will be disabled. In movie auto exposure, if [**2: ISO speed**] is set, the button operations will be disabled.

C.Fn-7   Release shutter without lens

0: Disable

When set to [**Disable**], not only the shutter button is disabled but the < ● > (Movie start/stop) button will be disabled as well. Even if you press the button, movie recording will not start.

1: Enable

Even when no lens is attached to the camera, pressing the shutter button completely will release the shutter.

MENU Registering My Menu

Under the My Menu tab, you can register up to six menu options and Custom Functions whose settings you change frequently.

1 Select [My Menu settings].
● Under the [★] tab, select [**My Menu settings**], then press <SET>.

2 Select [Register to My Menu].
● Select [**Register to My Menu**], then press <SET>.

3 Register the desired items.
● Select an item to register, then press <SET>.
● On the confirmation dialog, select [**OK**], then press <SET> to register the item.
● You can register up to six items.
● To return to the screen in step 2, press the <MENU> button.

About My Menu Settings

● **Sort**
You can change the order of the registered items in My Menu. Select [**Sort**], select the item whose order you want to change, then press <SET>. With [◆] displayed, press the <▲> <▼> keys to change the order, then press <SET>.

● **Delete item/items and Delete all items**
You can delete any of the registered items. [**Delete item/items**] deletes one item at a time, and [**Delete all items**] deletes all registered items.

● **Display from My Menu**
When [**Enable**] is set, the [★] tab will be displayed first when you display the menu screen.

11

Reference

This chapter provides reference information for camera features, system accessories, etc.
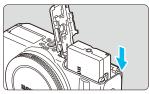
📓 **Certification Logo**
Under the [♈4] tab, if you select [**Certification Logo Display**] and press <SET>, some of the logos of the camera's certifications will appear. Other certification logos can be found in this Instruction Manual, on the camera body, and on the camera's package.
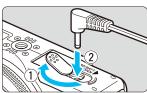
Using a Household Power Outlet

With AC Adapter Kit ACK-E12 (sold separately), you can connect the camera to a household power outlet and not worry about the remaining battery level.
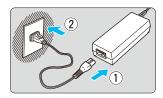
1 Insert the DC Coupler.
- Open the cover and insert the DC Coupler until it locks in place.

2 Connect the DC Coupler.
- 1. Open the cover, 2. Insert the adapter's plug into the coupler firmly.
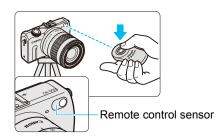
3 Connect the power cord.
- Connect the power cord as shown in the illustration.
- After using the camera, unplug the power plug from the power outlet.

Do not connect or disconnect the power cord while the camera's power is set to <ON>.

Remote Control Shooting

Remote Controller RC-6 (Sold Separately)

This Remote Controller enables you to take pictures wirelessly up to approx. 5 meters/16.4 feet from the front of the camera. You can either shoot immediately or use a 2-sec. delay.

Remote control sensor

- Set the self-timer to < 🖐️⚡️ > (p.126).
- Point the Remote Controller toward the camera's remote control sensor and 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.

- The picture is not taken until focus is achieved.
- 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.

- Remote Controller RC-1/RC-5 (sold separately) can also be used.
- The Remote Controller can also be used for shooting movies (p.175). Remote Controller RC-5 cannot be used to take still photos in movie shooting modes.

External Speedlites

EOS-dedicated, EX-series Speedlites

The basic operation is simple.
When an EX-series Speedlite (sold separately) is attached to the camera,
almost all the automatic flash control is done by the camera.
**For detailed instructions, 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.

Shoe-mount Speedlites   Macro Lites

● **Camera-linked Speedlite 90EX power off**
  When you turn off the camera's power after having shot with a Speedlite
  90EX attached, the Speedlite's power will also be turned off. However,
  depending on the operation, the Speedlite's power off may not be correctly
  linked to the camera's power off.

● **Shooting modes and flash modes when using Speedlite 90EX**

Shooting Mode	Flash Mode
A⁺/CA/🐾/🌷/🎇	Auto flash/Flash on/Flash off
P/**Tv**/**Av**/**M**	Flash on/Flash off
🌃	Auto flash
🍴/🎨	Flash on
🏔/🏊/🌅/Movie shooting modes	Flash off

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● **Shooting modes and flash modes when using Speedlites other than 90EX**

Shooting Mode	Flash Mode
P/**Tv**/**Av**/**M**	Flash on/Flash off
A⁺/CA/🐾/🌷/🌄/🍴/🎇/🍴/🖼/📰	Flash on
👤/Movie shooting modes	Flash off

● **FE lock**
FE lock is a flash photography method that ensures that a certain part of the subject is correctly illuminated. Frame the subject so it appears in the center of the screen and press the camera's <✱> button before taking the picture.
The range where FE lock is applied will be displayed with a red ○ at the center of the screen.

⚠ ● FE lock may not be correctly applied if the <✱> button is not held pressed for at least approx. 1 second with the flash unit attached.
● If you press the shutter button completely without pressing it halfway first when a flash unit is attached, the shutter may not be released until you hold down the shutter button at least approx. 1 sec.

📖 ● With an EX-series Speedlite not compatible with flash function settings (p.301), only **[Flash exposure compensation]** can be set for **[External flash func. setting]**. (**[Shutter synchronization]** 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 ⌐🔆.
● If the Speedlite's Custom Function has the flash metering mode set to TTL autoflash, the flash will fire at full output only.
● With external flashes other than the EX-series Speedlites equipped with an LED light, the AF-assist beam will not be emitted.

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Canon Speedlites Other Than the EX-series

● **With an EZ/E/EG/ML/TL-series Speedlite set in TTL or A-TTL autoflash mode, the flash will fire at full output.**
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.

● If the camera is used with a flash unit or flash accessory dedicated to another camera brand, the camera may not operate properly and malfunction may result.

● Do not attach a high-voltage flash unit on the camera's hot shoe. It may not fire.

MENU Setting Speedlite Functions☎

You can set Speedlite functions with the menu. **Applicable only to a compatible EX-series Speedlite when attached to the camera.**
The setting procedure is the same as that for setting a camera menu function.

Select [External Speedlite control].
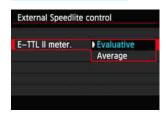
- Under the [☎2] tab, select [**External Speedlite control**], then press <SET>.
- ▶ The external Speedlite control screen will appear.

Flash Firing

- Normally, set this to [**Enable**].
- **If [Disable] is set, the external Speedlite will not fire.** This is useful when you only want to use the flash's AF-assist beam.

E-TTL II Metering

- For normal flash exposures, set this to [**Evaluative**].
- [**Average**] is for advanced users. As with an external Speedlite, the metering area is averaged. Flash exposure compensation may be necessary depending on shooting conditions.

Flash Synchronization Speed in Av Mode

Flash sync. speed in Av mode

Auto	AUTO
1/200–1/60sec. auto	1/200–1/60 A
1/200 sec. (fixed)	1/200

SET OK

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.

● **1/200–1/60 A : 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.
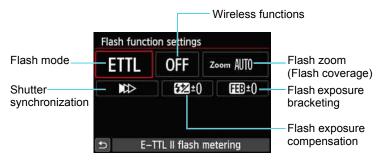
● **1/200 : 1/200 sec. (fixed)**
The flash sync speed is fixed at 1/200 sec. This more effectively prevents subject blur and camera shake than with [**1/200-1/60 sec.auto**]. However, in low light, the subject's background will come out darker than with [**1/200-1/60 sec. auto**].

🛇 If [**1/200-1/60 sec. auto**] or [**1/200 sec. (fixed)**] is set, high-speed sync is not possible in the < **Av** > mode.

Flash Function Settings

On the screen, the settable functions and the display will differ depending on the Speedlite, current flash mode, flash Custom Function settings, etc.
For details on your Speedlite's flash functions, refer to the instruction manual of the Speedlite (sold separately).
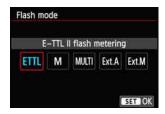
Sample Display

Wireless functions

Flash mode

Flash zoom (Flash coverage)

Shutter synchronization

Flash exposure bracketing

Flash exposure compensation

● **Flash mode**

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

[**E-TTL II flash metering**] is the standard mode of EX-series Speedlites for automatic flash shooting.
The [**Manual flash**] mode is for setting the Speedlite's [**Flash output level**] yourself.
For information on other flash modes, refer to a compatible Speedlite's instruction manual.

● **Wireless functions**

Wireless (multiple) flash shooting is possible with radio or optical transmission. For details on wireless flash, refer to the instruction manual of the Speedlite compatible with wireless flash.

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● **Flash zoom (Flash coverage)**

With Speedlites that have a zooming flash head, you can set the flash coverage. Normally, set this to [**AUTO**] so that the camera will automatically set the flash coverage to match the lens focal length.

● **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 fire 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 Second-curtain synchronization, two flashes will be fired: Once when you press the shutter button completely, and once immediately before the exposure ends.

If [**High-speed synchronization**] is set, the flash can be used at all shutter speeds. This is especially effective for portraits using fill flash when you want to give priority to the aperture setting.

● **Flash exposure compensation**

Set flash exposure compensation if the flash exposure of the subject does not come out as desired.
For details, refer to the instruction manual of the Speedlite.

● **Flash exposure bracketing (FEB)**

While the flash output is changed automatically, three shots are taken. For details, refer to the instruction manual of a Speedlite compatible with flash exposure bracketing.
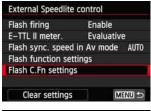
⬦ When using second-curtain synchronization, set the shutter speed to 1/25 sec. or slower. If the shutter speed is 1/30 sec. or faster, first-curtain synchronization will be used automatically even if [**Second-curtain synchronization**] is set.
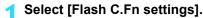
📖 ● With an EX-series Speedlite not compatible with flash function settings, you can only set the following: [**Flash firing**], [**E-TTL II meter.**], and [**Flash exposure compensation**] under [**Flash function settings**]. ([**Shutter synchronization**] can also be set with certain EX-series Speedlites.)
● If flash exposure compensation is set with the Speedlite, you cannot set the flash exposure compensation on the camera (with the flash function settings). If it is set with both the camera and Speedlite, the Speedlite's setting overrides the camera's.

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Flash Custom Function Settings

For details on the Speedlite's Custom Functions, refer to the instruction manual of the Speedlite (sold separately).

External Speedlite control	
Flash firing	Enable
E–TTL II meter.	Evaluative
Flash sync. speed in Av mode	AUTO
Flash function settings	
Flash C.Fn settings	
Clear settings	MENU ↔

1 Select [Flash C.Fn settings].

● Select [**Flash C.Fn settings**], then press <SET>.

Flash C.Fn settings	1
Auto power off	
0:Enabled	
1:Disabled	

2 Set the functions.

● Press the <◄> <►> keys to select the number, then press <SET>.
● Select the setting, then press <SET>.

Clear Settings

External Speedlite control	
Flash firing	Enable
E–TTL II meter.	Evaluative
Flash sync. speed in Av mode	AUTO
Flash function settings	
Flash C.Fn settings	
Clear settings	MENU ↔

1 Select [Clear settings].

● Under the [🗖**2: External Speedlite control**] tab, select [**Clear settings**], then press <SET>.

Clear settings	
Clear flash settings	
Clear all Speedlite C.Fn's	
	MENU ↔

2 Select the settings to be cleared.

● Select either [**Clear flash settings**] or [**Clear all Speedlite C.Fn's**], then press <SET>.
● When you select [**OK**], the respective flash settings will be cleared.

With an EX-series Speedlite, if the [**Flash metering mode**] Custom Function is set to [**TTL**] (autoflash), the Speedlite will fire at full output.

The Speedlite's Personal Functions (P.Fn) cannot be set or canceled with the camera's [**External Speedlite control**] screen. Set it with the Speedlite.

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's manufacturer.

⚠ **The camera is not guaranteed to support Eye-Fi card functions (including wireless transfer). In case of an issue 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.34)**.**
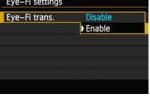
2 Select [Eye-Fi settings].
- Under the [♦1] tab, select [**Eye-Fi settings**], then press <SET>.
- This menu is displayed only when an Eye-Fi card is inserted into the camera.
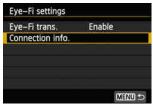
3 Enable Eye-Fi transmission.
- Press <SET>, set [**Eye-Fi trans.**] to [**Enable**], then press <SET>.
- If you set [**Disable**], automatic transmission will not occur even with the Eye-Fi card inserted (transmission status icon 📶).

4 Display the connection information.
- Select [**Connection info.**], then press <SET>.

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Connection info.

Access point SSID:
ABCDEFG1234567890
Connection: Connecting…
MAC address: 00-12-5a-07-4b-9c
Eye-Fi firmware Ver.:
3.0144 Jun 2 2009 22:26:17

MENU

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 three times to exit the menu.

6 Take the picture.

- ▶ The picture is transferred and the [🛜] icon switches from gray (not connected) to one of the icons below.
- For transferred images, [📶] is displayed in the shooting information display (p.256).

Transmission status icon

🛜 (Gray) **Not connected**   : No connection with access point.
🛜 (Blinking) **Connecting**   : Connecting to access point.
🛜 (Displayed) **Connected**   : Connection to access point established.
🛜 (↑) **Transferring**   : Image transfer to access point in progress.

Cautions for Using Eye-Fi Cards

- If [♀2: Wi-Fi] is set to [**Enable**], image transfer with an Eye-Fi card is not possible.
- If "●" is displayed, an error occurred while retrieving the card information. Turn the camera's power off and on again.
- Even if [**Eye-Fi trans.**] is set to [**Disable**], it may still transmit a signal. In hospitals, airports, and other places where wireless transmissions are prohibited, remove the Eye-Fi card from the camera.
- 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 transmission function, the Eye-Fi card may become hot.
- The 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 on the menu. Also, the transmission status icon [ ] will not appear on the LCD monitor.

Function Availability Table According to Shooting Mode

Still Photo Shooting

●: Set automatically ○: User selectable ☐: Not selectable/Disabled

Shooting Mode		🄰+	Basic Zone Mode										Creative Zone Mode			
			CA	🎭	🏔	🌷	🏃	👥	🍴	📷	🏙	🌆	P	Tv	Av	M
Image-recording quality settings		○	○	○	○	○	○	○	○	○	○*1	○*1	○	○	○	○
ISO speed	Automatically set/ISO Auto	●	●	●	●	●	●	●	●	●	●	●	○	○	○	○
	Manual												○	○	○	○
	Maximum for Auto												○	○	○	○
Creative filters			○	○	○	○	○	○	○	○	○		○	○	○	○
Picture Style	Automatic selection/Auto	●	●	●	●	●	●	●	●	●	●	●	○	○	○	○
	Manual selection												○	○	○	○
Extra Effect Shot			○													
Ambience-based shots			○	○	○	○	○	○	○	○	○	○				
Light/scene-based shots				○	○	○	○	○	○							
Background blur			○													
Color tone									○							
White balance	Auto	●	●	●	●	●	●	●	●	●	●	●	○	○	○	○
	Preset												○	○	○	○
	Custom												○	○	○	○
	Correction/Bracketing												○	○	○	○
Auto Lighting Optimizer		●	●	●	●	●	●	●	●	●	●	●	○	○	○	○
Lens aberration correction	Peripheral illumination correction	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Chromatic aberration correction	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Long exposure noise reduction													○	○	○	○
High ISO speed noise reduction		●	●	●	●	●	●	●	●	●	●	●	○	○	○	○
Highlight tone priority													○	○	○	○
Color space	sRGB	●	●	●	●	●	●	●	●	●	●	●	○	○	○	○
	Adobe RGB												○	○	○	○
AF operation	One-Shot AF	●	●	●	●	●			●	●	●	●	○	○	○	○
	Servo AF						●	●					○	○	○	○
AF method	FlexiZone - Single	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Face+Tracking	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	FlexiZone - Multi	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

*1: 🅁🄰🅆+⌐L or 🅁🄰🅆 cannot be selected.

Shooting Mode		🅰⁺	Basic Zone Mode										Creative Zone Mode			
			CA	👤	🏔	🌷	🏃	🎑	🍴	📷	🎨	💡	P	Tv	Av	M
Focus mode	AF	● *2	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	MF	*2	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	AF+MF	*2	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Continuous AF		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
AF-assist beam		●	●	●	●	●	●	●	●	●	●	●	○	○	○	○
Metering mode	Evaluative metering	●	●	●	●	●	●	●	●	●	●	●	○	○	○	○
	Metering mode selection												○	○	○	○
Exposure	Program shift												○			
	Exposure compensation												○	○	○	
	AEB												○	○	○	○
	AE lock												○	○	○	*3
	Depth-of-field preview												○	○	○	○
Drive/ self- timer mode	Single shooting	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Continuous shooting	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	⬛⏱ (10 sec.)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	⏱₂ (2 sec.)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	⏱c (Continuous)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Speedlite 90EX	Automatic firing	○	○	○		○		○		●						
	Flash on	○	○	○		○		○	●		●		○	○	○	○
	Flash off	○	○	○	●	○	●	○				●	○	○	○	○
	FE lock												○	○	○	○
	Flash exposure compensation												○	○	○	○
	Wireless control												○	○	○	○
External flash	Function settings												○	○	○	○
	Custom Function settings												○	○	○	○
Aspect ratio													○	○	○	○
Quick Control		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Feature guide		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

*2: Selectable when an EF or EF-S lens is used.
*3: With ISO Auto, you can set a fixed ISO speed.

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Movie Shooting

●: Set automatically ○: User selectable ☐: Not selectable/Disabled

Shooting Mode		Movies		Still Photos	
		🎥	🎥M	🎥	🎥M
Image-recording quality settings (movie)		○	○		
Image-recording quality settings (still photo)				○	○
Video snapshot		○	○		
Miniature effect movie		○	○	○*1	○*1
Movie digital zoom		○	○		
ISO speed	Automatically set/ISO Auto	●	○	●	○
	Manual		○		○
Picture Style	Automatically set/Auto	○	○	○	○
	Manual selection	○	○	○	○
White balance	Auto	○	○	○	○
	Preset	○	○	○	○
	Custom	○	○	○	○
	Correction	○	○	○	○
	Bracketing			○	○
Auto Lighting Optimizer		○	○	○	○
Lens aberration correction	Peripheral illumination correction	○	○	○	○
	Chromatic aberration correction				
Long exposure noise reduction					
High ISO speed noise reduction					
Highlight tone priority		○	○	○	○
Color space	sRGB	●	●	*2	*2
	Adobe RGB			*2	*2
AF operation	One-Shot AF			●	●
	Servo AF				
AF method	FlexiZone - Single	○	○	○	○
	Face+Tracking	○	○	○	○
	FlexiZone - Multi	○	○	○	○

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Shooting Mode		Movies		Still Photos	
		ᴴ🎥	ᴴ🎥M	ᴴ🎥	ᴴ🎥M
Focus mode	AF	○	○	○	○
	MF	○	○	○	○
	AF+MF	○	○	○	○
Movie Servo AF		○	○		
AF-assist beam					
Metering mode					
Exposure	Program shift				
	Exposure compensation	○		○	
	AEB				
	AE lock	○	*3	○	*3
	Depth-of-field preview				
Drive/self-timer mode	Single shooting			○	○
	Continuous shooting*4			○	○
	🔟⟳ (10 sec.)*4			○	○
	⟳2 (2 sec.)*4			○	○
	⟳C (Continuous)*4			○	○
Aspect ratio					
Sound recording		○	○		
Quick Control		○	○	○	○
Feature guide		○	○	○	○
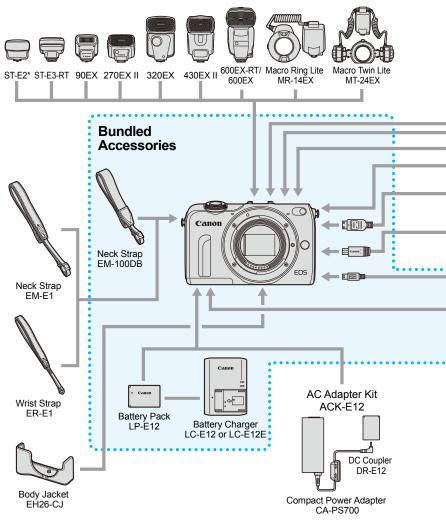
*1: Still photos with a Miniature effect will be taken.
*2: Settings for still photo shooting will take effect.
*3: With ISO Auto, you can set a fixed ISO speed.
*4: Works only before you start shooting a movie. Only single shooting is available while shooting movies.
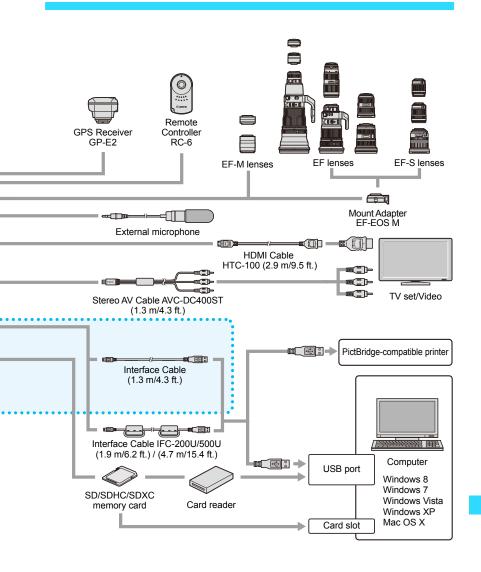
System Map

ST-E2*   ST-E3-RT   90EX   270EX II   320EX   430EX II   600EX-RT/600EX   Macro Ring Lite MR-14EX   Macro Twin Lite MT-24EX

Bundled Accessories

Neck Strap EM-100DB

Neck Strap EM-E1

Wrist Strap ER-E1

Body Jacket EH26-CJ

Battery Pack LP-E12

Battery Charger LC-E12 or LC-E12E

AC Adapter Kit ACK-E12

DC Coupler DR-E12

Compact Power Adapter CA-PS700

* Depending on the lens attached, use of the Off-Camera Shoe Cord OC-E3 (sold separately) may be necessary.

GPS Receiver
GP-E2

Remote
Controller
RC-6

EF-M lenses

EF lenses

EF-S lenses

Mount Adapter
EF-EOS M

External microphone

HDMI Cable
HTC-100 (2.9 m/9.5 ft.)

Stereo AV Cable AVC-DC400ST
(1.3 m/4.3 ft.)

TV set/Video

Interface Cable
(1.3 m/4.3 ft.)

PictBridge-compatible printer

Interface Cable IFC-200U/500U
(1.9 m/6.2 ft.) / (4.7 m/15.4 ft.)

USB port

Computer

Windows 8
Windows 7
Windows Vista
Windows XP
Mac OS X

SD/SDHC/SDXC
memory card

Card reader

Card slot

* All cable lengths given are approximate figures.

MENU **Menu Settings**

Still Photo

Shooting 1 (Red)   Page

Shooting mode*	**1**: CA Creative Auto / 🐾 Portrait / ▲ Landscape / ♣ Close-up / 🏃 Sports / 👶 Kids / 🍴 Food / Night Portrait / Handheld Night Scene / HDR Backlight Control	69 94 136 139 143
	2: **P** / **Tv** / **Av** / **M**	
Image quality	▲L / ▄L / ▲M / ▄M / ▲S1 / ▄S1 / S2 / S3 / RAW + ▲L / RAW	97
Aspect ratio	3:2 / 4:3 / 16:9 / 1:1	101
Grid display	Off / Grid 1 ⊞ / Grid 2 ⊟	209
📷 Histogram display	Disable / Brightness / RGB	66
Release shutter without card	Enable / Disable	208
Image review	Off / 2 sec. / 4 sec. / 8 sec. / Hold	209

* Grayed out with <A+>.

Shooting 2 (Red)

AF operation	One-Shot AF / Servo AF	110
AF method	FlexiZone - Single / ꞏꞋ+Tracking / FlexiZone - Multi	113
Continuous AF	Enable / Disable	109
Focus mode*	AF / MF / AF+MF	108
Image Stabilizer*	Enable / Disable	46
Lens aberration correction	Peripheral illumination: Enable / Disable Chromatic aberration: Enable / Disable	159
External Speedlite control	Flash firing / E-TTL II metering / Flash sync. speed in Av mode / Flash function settings / Flash C.Fn settings	299

* [**Focus mode**] and [**Image Stabilizer**] (for a lens with IS function) will be displayed when an EF-M lens is attached. With <A+>, they will not be displayed.

📝 Shaded menu options are not displayed with <A+> or in Basic Zone modes.

◻⁺⁺ Shooting 3 (Red)   Page

Exposure compensation/AEB	1/3-stop or 1/2-stop increments, ±3 stops (AEB: ±2 stops)	150
ISO speed	AUTO / 100 / 200 / 400 / 800 / 1600 / 3200 / 6400 / 12800 / H	102
ISO Auto	Max.: 400 / Max.: 800 / Max.: 1600 / Max.: 3200 / Max.: 6400	105
Auto Lighting Optimizer	Disable / Low / Standard / High	153
	Disable during manual exposure	
Metering mode	☉ Evaluative metering / ☉ Partial metering / ⚬ Spot metering / ⬚ Center-weighted average metering	146
Metering timer	4 sec. / 8 sec. / 16 sec. / 30 sec. / 1 min. / 10 min. / 30 min.	223
Touch Shutter	Disable / Enable	122

◻⁺⁺ Shooting 4 (Red)

Custom White Balance	Manual setting of white balance	168
White balance shift/ bracketing	WB correction: White balance correction BKT setting: White balance bracketing	171 172
Color space	sRGB / Adobe RGB	173
Picture Style	⬚⬚A Auto / ⬚⬚S Standard / ⬚⬚P Portrait / ⬚⬚L Landscape / ⬚⬚N Neutral / ⬚⬚F Faithful / ⬚⬚M Monochrome / ⬚⬚1 User Def. 1-3	106 162 166
High ISO speed noise reduction	Disable / Low / Standard / High / Multi Shot Noise Reduction	155
Long exposure noise reduction	Disable / Auto / Enable	157
Dust Delete Data	Obtain data to be used to erase dust spots	226

▶ **Playback 1** (Blue)

Page

Protect images	Select images / All images in folder / Unprotect all images in folder / All images on card / Unprotect all images on card	252
Rotate image	Rotate vertical images	233
Erase images	Select and erase images / All images in folder / All images on card	254
Print order	Specify images to be printed (DPOF)	278
Photobook Set-up	Select images / All images in folder / Clear all in folder / All images on card / Clear all on card	282
Creative filters	Grainy B/W / Soft focus / Fish-eye effect / Art bold effect / Water painting effect / Toy camera effect / Miniature effect	260
Resize	Downsize the image's pixel count	262

▶ **Playback 2** (Blue)

Cropping	Crop part of the image	265
▶Histogram display	Brightness / RGB	258
Image jump with ◯	1 image / 10 images / 100 images / Date / Folder / Movies / Stills / Rating	232
Slide show	Images (content) to play back / Display time / Repeat / Transition effect / Background music	243
Rating	[**OFF**] / [⋅] / [⋅⋅] / [⋅⋅⋅] / [⋅⋅⋅⋅] / [⋅⋅⋅⋅⋅]	234
Control over HDMI	Disable / Enable	249

Y' Set-up 1 (Yellow)   Page

Select folder	Create and select a folder	212
File numbering	Continuous / Auto reset / Manual reset	214
Auto rotate	On✿ 🖵 / On 🖵 / Off	218
Format card	Initialize and erase data on the card	57
Eye-Fi settings	Displayed when a commercially-available Eye-Fi card is used.	305

Y: Set-up 2 (Yellow)

Power saving	LCD auto off: 15 sec. / 30 sec. / 1 min. / 3 min. / 5 min. / 10 min. / 30 min.	210
	Camera auto off: 0 sec. / 30 sec. / 1 min. / 3 min. / 5 min. / 10 min. / Disable	
LCD brightness	Seven brightness levels provided	211
Date/Time/Zone	Date (year, month, day) / Time (hour, min., sec.) / Daylight saving time / Time zone	41
Language 🗊	Select the interface language	43
Video system	NTSC / PAL	251
Wi-Fi	Disable / Enable	*-
Wi-Fi function	Transfer images between cameras / Connect to smartphone / Print from Wi-Fi printer / Upload to Web service / View images on DLNA devices	

* For details, refer to the Wi-Fi Function Instruction Manual (PDF).

🚫 ● When using the Wi-Fi function, be sure to check the countries and areas of use, and use it in accordance with the laws and regulations of the country or region.
   ● The Wi-Fi function cannot be set if the camera is connected to a printer, computer, GPS receiver or other device with an interface cable.

❤ Set-up 3 (Yellow)   Page

Beep	Enable / Touch to 🔇 / Disable	208
Screen color	Select the shooting settings screen color	223
Feature guide	Enable / Disable	62
Touch control	Standard / Sensitive	61
Sensor cleaning	Auto cleaning: Enable / Disable	224
	Clean now	
GPS device settings	Settings available when the GPS Receiver GP-E2 (sold separately) is attached	-

❤ Set-up 4 (Yellow)

Displays camera settings	Display major camera settings	219
Certification Logo Display	Display some of the logos of the camera's certifications	293
Custom Functions (C.Fn)	Customize camera functions as desired	286
Copyright information	Display copyright information / Enter author's name / Enter copyright details / Delete copyright information	216
Clear settings	Clear all camera settings / Clear all Custom Func. (C.Fn)	220
📷 firmware ver.*	For updating the firmware	-

* During firmware updates, the touch screen will be disabled to prevent accidental operations.

★ My Menu (Green)

My Menu settings	Register frequently-used menu options and Custom Functions	292

🔅 When using GPS, be sure to check the countries and areas of use, and use the device in accordance with the laws and regulations of the country or region.

Movies

1 Shooting 1 (Red)   Page

Shooting mode	'兎Movie auto exposure / '兎ᴹMovie manual exposure	176
Image quality	◢L/ ◢L/ ◢M/ ◢M/ ◢S1/ ◢S1/ S2/ S3/ **RAW**+◢L/ **RAW**	97
Grid display	Off / Grid 1 ⊞ / Grid 2 ⧆	209
3Histogram display	Disable / Brightness / RGB	179
Release shutter without card	Enable / Disable	208
Image review	Off / 2 sec. / 4 sec. / 8 sec. / Hold	209

1 Shooting 2 (Red)

AF method	FlexiZone - Single / 📷+Tracking / FlexiZone - Multi	113
Focus mode	AF / MF / AF+MF	108
Image Stabilizer	Enable / Disable	46
Lens aberration correction	Peripheral illumination: Enable / Disable	159

1 Shooting 3 (Red)

Exposure compensation*1	1/3-stop or 1/2-stop increments, ±3 stops	150
ISO speed*2	AUTO / 100 / 200 / 400 / 800 / 1600 / 3200 / 6400 / H	102
Auto Lighting Optimizer	Disable / Low / Standard / High	153
	Disable during manual exposure	
Metering timer	4 sec. / 8 sec. / 16 sec. / 30 sec. / 1 min. / 10 min. / 30 min.	223

*1: Cannot be set in the < '兎ᴹ > mode.
*2: In the < '兎 > mode, settings other than [**AUTO**] cannot be set.

📷⁴ Shooting 4 (Red)   Page

Custom White Balance	Manual setting of white balance	168
White balance shift/ bracketing	WB correction: White balance correction	171
	BKT setting: White balance bracketing	172
Picture Style	🎨A Auto / 🎨S Standard / 🎨P Portrait /	106
	🎨L Landscape / 🎨N Neutral / 🎨F Faithful /	162
	🎨M Monochrome / 🎨1 User Def. 1-3	166

🎥 Movie 1 (Red)

Movie recording size	1920x1080 (📹30 / 📹25 / 📹24) / 1280x720 (📹60 / 📹50) / 640x480 (📹30 / 📹25)	185
Digital zoom	Disable / Approx. 3-10x zoom	187
Sound recording	Sound recording: Auto / Manual / Disable	201
	Recording level	
	Wind filter/Attenuator: Disable / Enable	
Video snapshot	Video snapshot: Enable / Disable	191
	Album settings: Create a new album / Add to existing album	
	Show confirm message: Enable / Disable	
	Snapshot length: 2 sec. movie / 4 sec. movie / 8 sec. movie	
Movie Servo AF	Enable / Disable	203
AF with shutter button during 🎥	ONE SHOT / Disable	204

▶ Playback 1 (Blue)   Page

Protect images	Select images / All images in folder / Unprotect all images in folder / All images on card / Unprotect all images on card	252
Rotate image	Rotate vertical images	233
Erase images	Select and erase images / All images in folder / All images on card	254
Print order	Specify images to be printed (DPOF)	278
Photobook Set-up	Select images / All images in folder / Clear all in folder / All images on card / Clear all on card	282
Creative filters	Grainy B/W / Soft focus / Fish-eye effect / Art bold effect / Water painting effect / Toy camera effect / Miniature effect	260
Resize	Downsize the image's pixel count	262

▶ Playback 2 (Blue)

Cropping	Crop part of the image	265
▶ Histogram display	Brightness / RGB	258
Image jump with ◎	1 image / 10 images / 100 images / Date / Folder / Movies / Stills / Rating	232
Slide show	Images (content) to play back / Display time / Repeat / Transition effect / Background music	243
Rating	[**OFF**] / [⋅] / [∶] / [⋰] / [⋱] / [⋄]	234
Control over HDMI	Disable / Enable	249

♈ Set-up 1 (Yellow)

Select folder	Create and select a folder	212
File numbering	Continuous / Auto reset / Manual reset	214
Auto rotate	On ▣ 🖳 / On 🖳 / Off	218
Format card	Initialize and erase data on the card	57
Eye-Fi settings	Displayed when a commercially-available Eye-Fi card is used.	305

Ý: Set-up 2 (Yellow)   Page

Power saving	LCD auto off: 15 sec. / 30 sec. / 1 min. / 3 min. / 5 min. / 10 min. / 30 min.	210
	Camera auto off: 0 sec. / 30 sec. / 1 min. / 3 min. / 5 min. / 10 min. / Disable	
LCD brightness	Seven brightness levels provided	211
Date/Time/Zone	Date (year, month, day) / Time (hour, min., sec.) / Daylight saving time / Time zone	41
Language 🗐	Select the interface language	43
Video system	NTSC / PAL	251
Wi-Fi	Disable / Enable	*
Wi-Fi function	Transfer images between cameras / Connect to smartphone / Print from Wi-Fi printer / Upload to Web service / View images on DLNA devices	

* For details, refer to the Wi-Fi Function Instruction Manual (PDF).

Ý·· Set-up 3 (Yellow)

Beep	Enable / Touch to 🔇 / Disable	208
Screen color	Select the shooting settings screen color	223
Feature guide	Enable / Disable	62
Touch control	Standard / Sensitive	61
Sensor cleaning	Auto cleaning: Enable / Disable	224
	Clean now	
GPS device settings	Settings available when the GPS Receiver GP-E2 (sold separately) is attached	-

Ý:: Set-up 4 (Yellow)

Displays camera settings	Display major camera settings	219
Custom Functions (C.Fn)	Customize camera functions as desired	286
Clear settings	Clear all camera settings / Clear all Custom Func. (C.Fn)	220

Troubleshooting Guide

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

Power-Related Problems

The battery pack does not recharge.

- Check that the battery pack is properly attached to the battery charger.
- Check that the battery charger is properly connected to the power outlet.
- Do not recharge any battery pack other than a genuine Canon Battery Pack LP-E12.

The battery charger's lamp blinks.

- If there is a problem with the battery charger, the protective circuit will stop the charging operation and the charge lamp will blink in orange. If this happens, disconnect the charger's power plug from the power outlet and remove the battery pack. Attach the battery pack to the charger again and wait a while before connecting the charger to a power outlet again.

The camera does not operate even when pressing the power button.

- Make sure the battery is properly installed in the camera (p.34).
- Make sure the card slot/battery compartment cover is closed (p.34).
- Recharge the battery (p.32).

The access lamp still blinks even when the power is set to < OFF >.

- If the power is turned off while an image is being recorded to the card, the access lamp will remain on/continue to blink for a few seconds. When the image recording is completed, the power will turn off automatically.

The battery becomes exhausted quickly.

- ● Use a fully-charged battery pack (p.32).
- ● The rechargeable battery pack performance will degrade with repeated use. If the battery loses power quickly, purchase 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.
  - • Using Continuous AF (p.109).
  - • Using the lens Image Stabilizer.
  - • Shooting movies for a prolonged period.
  - • Using Movie Servo AF (p.203).
- ● At low temperatures, the number of possible shots decreases (p.39).

The LCD monitor turns off by itself.

- ● The power-saving function is turning off the LCD monitor. Press any camera button or tap the LCD monitor to turn it on again.
  You can change the time until the monitor turns off automatically with the [♀2: Power saving]'s [**LCD auto off**] setting.

The camera turns off by itself.

- ● The power-saving function is turning off the camera. If you do not want auto power off to take effect, set [♀2: Power saving]'s [**Camera auto off**] to [**Disable**] (p.210).

There is a noise when the power is turned ON/OFF (with an EF-M lens attached).

- ● When you turn off the camera, the lens aperture stops down to prevent light from entering the camera. This is to protect the camera's internal components. When you set the power to <ON> or <OFF>, the aperture makes a small noise as it opens or closes.

Shooting-Related Problems

No images can be shot or recorded.

- ● Make sure the card is properly inserted (p.34).
- ● Slide the card's write-protect switch to the Write/Erase position (p.34).
- ● If the card is full, replace the card or delete unnecessary images to make room (p.34, 254).

The card cannot be used.

- ● If a card error message is displayed, see page 36 or 335.

The image is out of focus.

- ● Set the focus mode to [**AF**] (p.108).
- ● To prevent camera shake, press the shutter button gently (p.48, 49).
- ● If the lens has an Image Stabilizer, set the IS to <ON> (p.46).
- ● In low light, the shutter speed may become slow. Use a faster shutter speed (p.136), set a higher ISO speed (p.102), use flash (p.296), or use a tripod.

I cannot lock the focus and recompose the shot.

- ● Set [**AF operation**] to [**One-Shot AF**]. Focus lock is not possible while [**Servo AF**] is active (p.111).

When Servo AF is set, it takes longer for the shutter to be released.

- ● Keep tracking the subject with the shutter button pressed completely.

When [FlexiZone - Multi] is set, it takes longer for the camera to focus automatically.

 ● Depending on the shooting conditions, it may take longer to focus the subject. Use [**FlexiZone - Single**] or focus manually.

During continuous shooting, the image on the LCD monitor seems to be out of focus.

 ● The displayed image may differ from the actually recorded images. Check the recorded images.

The continuous shooting speed is slow.

 ● Depending on the lens type, shutter speed, aperture, subject conditions, brightness, etc., the continuous shooting speed may become slower.

When I press the shutter button, it does not take a picture immediately.

 ● After you press the shutter button, if the picture is taken 10 sec. later or after you hear a beeping sound, it means the self-timer has been set. Press the <ʘ/➔> button and tap [☐] or [➔] to cancel the self-timer (p.126).

After shooting, the periphery of the screen is dark.
Faces cannot be detected.

 ● In the image that appears immediately after image capture until the captured image appears, the periphery of the screen looks darker (and the result of the face detection is not reflected). If you shoot under these conditions, the results of the peripheral illumination correction and face detection will be reflected in the picture.
 ● After shooting, let go of the shutter button. After shooting, if you return to the shutter button's halfway position from the completely pressed position, the periphery of the screen looks darker while you hold this position since the result of the peripheral illumination correction will not be reflected on the screen. (The result of the face detection is not reflected either.) If you shoot under these conditions, the results of the peripheral illumination correction and face detection will be reflected in the picture.

The maximum burst during continuous shooting is lower.

● With <█> (Handheld Night Scene) or <◬> (HDR Backlight Control) shooting mode, the maximum burst for continuous shooting will greatly decrease (p.85).
● With ISO 12800 or "**H**" (equivalent to ISO 25600), the maximum burst for continuous shooting will greatly decrease (p.103).
● With [**Chromatic aberration: Enable**], the maximum burst for continuous shooting will greatly decrease (p.160).
● During WB bracketing, the maximum burst for continuous shooting will decrease (p.172).
● Set [🗂4: High ISO speed NR] to [**Standard/Low/Disable**]. If it is set to [**High**] or if [**Multi Shot Noise Reduction**] is set, the maximum burst during continuous shooting will greatly decrease (p.155).
● 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 mentioned on page 98.

ISO 100 cannot be set.

● Under [♀4: Custom Functions (C.Fn)], if [**3: Highlight tone priority**] is set to [**1: Enable**], ISO 100 cannot be set. If [**0: Disable**] is set, ISO 100 can be set (p.289). This also applies to movie shooting (p.179).

ISO speed [H] (equivalent to ISO 25600) cannot be set.

● Under [♀4: Custom Functions (C.Fn)], if [**3: Highlight tone priority**] is set to [**1: Enable**], the [**H**] ISO speed (equivalent to ISO 25600) cannot be selected even when [**2: ISO expansion**] is set to [**1: On**]. If [**0: OFF**] is set, ISO speed [**H**] can be set (p.289).

The Auto Lighting Optimizer cannot be set.

● Under [♦4: Custom Functions (C.Fn)], if [3: 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.289).

Even though I set a decreased exposure compensation, the image comes out bright.

● Set [🗂3: 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.153).

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 becomes slow automatically (slow-sync shooting) so that both the subject and background are properly exposed. To prevent a slow shutter speed, under [🗂2: External Speedlite control], set [Flash sync. speed in Av mode] to [1/200-1/60 sec. auto] or [1/200 sec. (fixed)] (p.300).

The flash always fires at full output.

● If you use a flash unit other than an EX-series Speedlite, the flash will fire at full output (p.298).
● Under [🗂2: External Speedlite control], if [Flash metering mode] under [Flash C.Fn settings] is set to [TTL] (autoflash), the flash will fire at full output (p.304).

I cannot set flash exposure compensation with [Flash function settings].

● If flash exposure compensation has been set on an external Speedlite, [Flash exposure compensation] (p.302) cannot be set in the [Flash function settings] screen. Also, if you set flash exposure compensation with the camera and then set flash exposure compensation with the external Speedlite, the Speedlite's flash exposure compensation setting will be given priority. When the 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 [■ 2: External Speedlite control], set [**Flash sync. speed in Av mode**] to [**Auto**] (p.300).

During shooting, a white < 國 > or red < 國 > icon is displayed.

- It indicates that the camera's internal temperature is high. If the white < 國 > icon is displayed, the still photo's image quality may deteriorate. If the red < 國 > icon is displayed, it indicates that the power will soon turn off automatically (p.132, 204).

Movie shooting stops by itself.

- If the card's writing speed is slow, movie shooting may stop automatically. Use an SD Speed Class 6 "CLASS⑥" or faster card. To find out a card's read/write speed, see the card manufacturer's Web site, etc.
- If the movie shooting time reaches 29 min. 59 sec., the movie shooting will stop automatically.

The ISO speed cannot be set for movie shooting.

- If movie auto exposure is set, the ISO speed is set automatically. You can set the ISO speed only if movie manual exposure is set (p.179).

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 can cause changes in the exposure regardless of whether the lens' maximum aperture changes or not. 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 quickly (high-speed panning) 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 light, LED bulbs, or other light sources during movie shooting. Also, changes in the exposure (brightness) or color tone may also be recorded. With movie manual exposure, a slower shutter speed may solve the problem.

Wi-Fi

Wi-Fi cannot be set.

● If the camera is connected to a printer, computer, GPS receiver, or other device with an interface cable, or if it is connected to a TV set with a stereo AV cable or HDMI cable (both sold separately), Wi-Fi cannot be set ([5 2: Wi-Fi] will be grayed out). Disconnect the cable, then set the Wi-Fi.
● For details, refer to the Wi-Fi Function Instruction Manual.

Operation Problems

During touch screen operations, the beeper suddenly sounds softer.

● Check if your finger is covering the speaker (p.23).

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Display Problems

The menu screen shows few tabs and options.

● With Scene Intelligent Auto, Basic Zone modes, and movie shooting modes, certain tabs and menu options are not displayed. Set the shooting mode to a Creative Zone mode (p.54).

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.173).

The file name starts with "MVI_".

● It is a movie file (p.215).

The file numbering does not start from 0001.

● If the card already contains recorded images, the image number may not start from 0001 (p.214).

The shooting date and time displayed is incorrect.

● Make sure the correct date and time has been set (p.41).
● Check the time zone and daylight saving time (p.41).

The date and time is not in the picture.

● The shooting date and time does not appear in the picture. The date and time is instead recorded in the image data as shooting information. When printing, you can imprint the date and time in the picture by using the date and time recorded in the shooting information (p.274).

[###] is displayed.

- If the number of images in the card exceeds the maximum number of images that the camera can display, [###] will be displayed (p.235).

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 card transmission (p.305).

Playback Problems

Part of the image blinks in black.

- It is the highlight alert (p.258). Overexposed highlight areas with a loss of highlight detail will blink.

The image cannot be erased.

- If the image is protected, it cannot be erased (p.252).

The movie cannot be played back.

- Movies edited with a computer using EOS software such as ImageBrowser EX (p.350) or other software cannot be played back with the camera. However, video snapshot albums edited with EOS Video Snapshot Task (p.200) can be played back on the camera.

When the movie is played back, camera operation noise can be heard.

- If you operate the camera's dials or lens during movie shooting, the operation noise will also be recorded. Using an external microphone (commercially available) is recommended (p.201).

The movie has still moments.

- During autoexposure movie shooting, if there is a drastic change in the exposure level, the recording will stop momentarily until the brightness stabilizes. If this happens, shoot in the < ᴹ > (manual exposure) mode (p.178).

No image appears on the TV screen.

- Use a stereo AV cable or HDMI cable (sold separately, p.247, 251).
- Make sure the stereo AV cable or HDMI cable's plug is inserted all the way in (p.247, 251).
- Set the video OUT system (NTSC/PAL) to the same video system as the TV set (p.251).
- Set [**2: Wi-Fi**] to [**Disable**] before connecting a cable.

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.186).

My card reader does not recognize the card.

- Depending on the card reader and computer OS used, SDXC cards might not be correctly recognized. If this occurs, connect your camera to the computer with the provided interface cable, then transfer the images to your computer using EOS Utility (EOS software, p.350).

I cannot resize the image.

- JPEG S3 and RAW images cannot be resized (p.262).

I cannot crop the image.

- JPEG S3 and RAW images cannot be cropped (p.265).

Sensor Cleaning Problems

The shutter makes a noise during sensor cleaning.

- If you selected [**Clean now** $\cdot\sqcap$], the shutter will make a noise, but no picture is taken (p.224).

Automatic sensor cleaning does not work.

- If you repeatedly switch the power to < ON >/< OFF > at a short interval, the < $\sqcap$ > icon may not be displayed (p.37).

Printing-Related Problems

There are fewer printing effects than listed in the instruction manual.

- What is displayed on the screen differs depending on the printer. This instruction manual lists all the printing effects available (p.273).

Direct printing does not work.

- If [**2: Wi-Fi**] is set to [**Enable**], direct printing via an interface cable is not possible. Set [**Wi-Fi**] to [**Disable**], then connect the camera to the printer with an interface cable.

Error Codes

Error number

If there is a problem with the camera, an error message will appear. Follow the on-screen instructions.

Cause and countermeasures

Number	Error Message and Solution
01	**Communications between the camera and lens is faulty. Clean the lens contacts.**
	➜ Clean the electrical contacts on the camera and lens, use a Canon lens, or remove and install the battery pack again (p.22, 23, 34).
02	**Card cannot be accessed. Reinsert/change card or format card with camera.**
	➜ Remove and insert the card again, replace the card, or format the card (p.34, 57).
04	**Cannot save images because card is full. Replace card.**
	➜ Replace the card, erase unnecessary images, or format the card (p.34, 254, 57).
06	**Sensor cleaning could not be performed. Turn the camera off and on again.**
	➜ Operate the power button (p.37).
10, 20 30, 40 50, 70 80, 99	**An error prevented shooting. Turn the camera off and on again or re-install the battery.**
	➜ Operate the power button, remove and install the battery pack again, or use a Canon lens (p.37, 34).
60	**An error prevented shooting. Turn the camera off and on again or re-install the battery.**
	➜ The lens movement may be obstructed. Turn the camera off and on again, taking care not to touch the lens.

* If the error still persists, write down the error number and contact your nearest Canon Service Center.

Specifications

• Type

Type:	Digital single-lens non-reflex AF/AE camera
Recording media:	SD memory card, SDHC memory card, SDXC memory card
	* Compatible with UHS-I
Image sensor size:	Approx. 22.3 x 14.9 mm
Compatible lenses:	Canon EF-M, EF*, and EF-S* lenses
	* Mount Adapter EF-EOS M required.
	(35 mm-equivalent focal length is approx. 1.6 times the lens focal length)
Lens mount:	Canon EF-M mount

• Image Sensor

Type:	CMOS sensor
Effective pixels:	Approx. 18.00 megapixels
Aspect ratio:	3:2
Dust delete feature:	Auto, 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
Recorded pixels:	L (Large) : Approx. 17.90 megapixels (5184 x 3456)
	M (Medium) : Approx. 8.00 megapixels (3456 x 2304)
	S1 (Small 1) : Approx. 4.50 megapixels (2592 x 1728)
	S2 (Small 2) : Approx. 2.50 megapixels (1920 x 1280)
	S3 (Small 3) : Approx. 350,000 pixels (720 x 480)
	RAW : Approx. 17.90 megapixels (5184 x 3456)

• Image Processing During Shooting

Picture Style:	Auto, Standard, Portrait, Landscape, Neutral, Faithful, Monochrome, User Def. 1 - 3
Basic+:	Ambience-based shots, Light/scene-based shots
Extra Effect Shot:	Possible (in < CA > mode)
White balance:	Auto, Preset (Daylight, Shade, Cloudy, Tungsten light, White fluorescent light, Flash), Custom
	White balance correction and white balance bracketing features provided
	* Flash color temperature information transmission enabled

Noise reduction:	Applicable to long exposures and high ISO speed shots
Automatic image brightness correction:	Auto Lighting Optimizer
Highlight tone priority:	Provided
Lens aberration correction:	Peripheral illumination correction, Chromatic aberration correction

• Autofocus

Type:	Hybrid CMOS AF System (FlexiZone - Single, Face+Tracking, FlexiZone - Multi)
AF points:	31 points (Max.)
Focusing brightness range:	EV 1 - 18 (at room temperature, ISO 100)
AF operation:	One-Shot AF, Servo AF
AF-assist beam:	Built-in (LED lamp)

• Exposure Control

Metering modes:	Real-time metering with image sensor Evaluative metering (315 zones), Partial metering (approx. 11% of shooting screen), Spot metering (approx. 2.8% of shooting screen), Center-weighted average metering
Brightness metering range:	EV 1 - 20 (at room temperature, ISO 100)
Exposure control:	Program AE (Scene Intelligent Auto, Creative Auto, Portrait, Landscape, Close-up, Sports, Kids, Food, Night Portrait, Handheld Night Scene, HDR Backlight Control, Program), Shutter-priority AE, Aperture-priority AE, Manual exposure
ISO speed: (Recommended exposure index)	<A> and Basic Zone modes*: ISO 100 - ISO 6400 set automatically * Landscape: ISO 100 - ISO 1600, Handheld Night Scene: ISO 100 - ISO 12800 set automatically Creative Zone modes: ISO 100 - ISO 12800 set manually (whole-stop increments), ISO 100 - ISO 6400 set automatically, maximum ISO speed settable for ISO Auto, or ISO expansion to "H" (equivalent to ISO 25600)
Exposure compensation:	Manual: ±3 stops in 1/3- or 1/2-stop increments 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

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• Shutter

Type: Electronically-controlled, focal-plane shutter
Shutter speeds: 1/4000 sec. to 30 sec. (Total shutter speed range;
                               available range varies by shooting mode), Bulb, X-
                               sync at 1/200 sec.

• External Speedlite

Compatible Speedlites: EX-series Speedlite (Flash functions settable with the
                               camera)
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

• Drive System

Drive mode: Single shooting, continuous shooting, self-timer with
                               10-sec. or 2-sec. delay and 10-sec. delay with
                               continuous shooting
Continuous shooting speed: Max. approx. 4.6 shots/sec.
Max. burst: JPEG Large/Fine: Approx. 13 (approx. 17) shots
                               RAW: Approx. 5 (approx. 5) shots
                               RAW+JPEG Large/Fine: Approx. 3 (approx. 3) shots
                               * Figures are based on Canon's testing standards (ISO
                                 100 and "Standard" Picture Style) using an 8 GB
                                 card.
                               * Figures in parentheses apply to a UHS-I compatible
                                 8 GB card based on Canon's testing standards.

• Still Photo Shooting

Aspect ratio settings: 3:2, 4:3, 16:9, 1:1
Focus mode: AF, MF (manual focusing, approx. 5x / 10x
                               magnification possible), AF+MF
Continuous AF: Provided
Touch shutter: Provided
Grid display: Two types
Creative filters: Grainy B/W, Soft focus, Fish-eye effect, Art bold effect,
                               Water painting effect, Toy camera effect, Miniature
                               effect
Depth-of-field preview: Provided

• Movie Shooting

Recording format: MOV
  Movie: MPEG-4 AVC/H.264
                            Variable (average) bit rate
  Audio: Linear PCM

Recording size
and frame rate:

       1920x1080 (Full HD) : 30p/25p/24p
       1280x720 (HD)   : 60p/50p
       640x480 (SD)   : 30p/25p
       * 30p: 29.97 fps, 25p: 25.00 fps, 24p: 23.98 fps,
         60p: 59.94 fps, 50p: 50.00 fps

File size: 1920x1080 (30p/25p/24p) : Approx. 330 MB/min.
                        1280x720 (60p/50p)   : Approx. 330 MB/min.
                        640x480 (30p/25p)   : Approx. 82.5 MB/min.

Focusing: Hybrid CMOS AF System* (FlexiZone - Single,
                        Face+Tracking, FlexiZone - Multi)
                        Manual focusing (approx. 5x / 10x magnification
                        possible)
                        * Focusing brightness range: EV 1 - 18 (at room
                          temperature, ISO 100)

Focus mode: AF, MF (manual focusing, approx. 5x / 10x
                        magnification possible), AF+MF

Digital zoom: Approx. 3x-10x
Metering modes: Center-weighted average and evaluative metering with
                        the image sensor
                        * Automatically set by the focusing mode

Servo AF: Provided
Brightness metering range: EV 1 - 20 (at room temperature, ISO 100)
Exposure control: Program AE for movies and manual exposure
Exposure compensation: ±3 stops in 1/3-stop increments
ISO speed: With autoexposure shooting: ISO 100 - ISO 6400 set
(Recommended   automatically
 exposure index)   With manual exposure: ISO 100 - ISO 6400 set
                        automatically/manually, expandable to "H" (equivalent
                        to ISO 12800)

Video snapshots: Settable to 2 sec./4 sec./8 sec.
Miniature effect movie: Possible
Sound recording: Built-in stereo microphone
                        External stereo microphone terminal provided
                        Sound recording level adjustable, wind filter (for built-in
                        microphone) provided, attenuator provided

Grid display: Two types

• 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)
Interface languages:	25
Feature guide:	Displayable

• Playback

Image display formats:	Single image display, Single image + Info display (Basic info, shooting info, histogram), image index (4/9/36/100), image rotate possible
Zoom magnification:	Approx. 1.5x - 10x
Highlight alert:	Overexposed highlights blink
Image browsing methods:	Single image, jump by 10 or 100 images, by shooting date, by folder, by movies, by stills, by rating
Image rotate:	Possible
Ratings:	Provided
Movie playback:	Enabled (LCD monitor, video/audio OUT, HDMI OUT) Built-in speaker
Image protect:	Possible
Slide show:	All images, by date, by folder, by movies, by stills, or by rating. Five transition effects selectable
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:	Possible

• Direct Printing

Type:	PictBridge (USB and Wireless LAN)
Printable images:	JPEG and RAW images
Print ordering:	DPOF Version 1.1 compatible

• Custom Functions

Custom Functions:	7
My Menu registration:	Possible
Copyright information:	Entry and inclusion possible

• Interface

Audio/video OUT/	
Digital terminal:	Analog video (compatible with NTSC/PAL) / stereo audio output
	Computer communication and direct printing (Hi-Speed USB equivalent), GPS receiver GP-E2 connection
HDMI mini OUT terminal:	Type C (auto switching of resolution), CEC-compatible
External microphone	
IN terminal:	3.5 mm diameter stereo mini-jack
Wireless remote control:	Compatible with Remote Controller RC-6
Eye-Fi card:	Compatible

• Power

Battery:	Battery Pack LP-E12 (Quantity 1)
	* AC power can be supplied via AC Adapter Kit ACK-E12
Number of possible shots:	Approx. 230 shots at room temperature (23°C/73°F)
(Based on CIPA testings tandards)	Approx. 200 shots at low temperatures (0°C/32°F)
Movie shooting time:	Approx. 1 hr. 30 min. at room temperature (23°C/73°F)
	Approx. 1 hr. 20 min. at low temperatures (0°C/32°F)
	(with a fully-charged Battery Pack LP-E12)

• Dimensions and Weight

Dimensions (W x H x D):	Approx. 104.9 x 65.2 x 31.6 mm / 4.1 x 2.6 x 1.2 in.
Weight:	Approx. 274 g / 9.7 oz. (CIPA Guidelines: including body, battery pack, card),
	Approx. 238 g / 8.4 oz. (Body only, without lens cap)

• Operation Environment

Working temperature range:	0°C - 40°C / 32°F - 104°F
Working humidity:	85% or less

• Battery Pack LP-E12

Type:	Rechargeable lithium-ion battery
Rated voltage:	7.2 V DC
Battery capacity:	875 mAh
Working temperature range:	During charging: 5°C - 40°C / 41°F - 104°F
	During shooting: 0°C - 40°C / 32°F - 104°F
Working humidity:	85% or less
Dimensions (W x H x D):	Approx. 32.5 x 12.5 x 48.5 mm / 1.3 x 0.49 x 1.9 in.
Weight:	Approx. 35 g / 1.2 oz.

• Battery Charger LC-E12

Compatible battery: Battery Pack LP-E12
Recharging time: Approx. 2 hours (at room temperature)
Rated input: 100 - 240 V AC (50/60 Hz)
Rated output: 8.4 V DC / 540 mA
Working temperature range: 5°C - 40°C / 41°F - 104°F
Working humidity: 85% or less
Dimensions (W x H x D):   Approx. 65 x 25.5 x 90 mm / 2.6 x 1.0 x 3.5 in.
Weight: Approx. 81 g / 2.9 oz.

• Battery Charger LC-E12E

Compatible battery: Battery Pack LP-E12
Recharging time: Approx. 2 hours (at room temperature)
Rated input: 100 - 240 V AC (50/60 Hz)
Rated output: 8.4 V DC / 540 mA
Working temperature range: 5°C - 40°C / 41°F - 104°F
Working humidity: 85% or less
Dimensions (W x H x D):   Approx. 65 x 25.5 x 90 mm / 2.6 x 1.0 x 3.5 in.
                             (excluding power cord)
Weight: Approx. 76 g / 2.7 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, maximum diameter, length 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.

Trademarks

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- Microsoft and Windows are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.
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About MPEG-4 Licensing

"This product is licensed under AT&T patents for the MPEG-4 standard and may be used for encoding MPEG-4 compliant video and/or decoding MPEG-4 compliant video that was encoded only (1) for a personal and non-commercial purpose or (2) by a video provider licensed under the AT&T patents to provide MPEG-4 compliant video. No license is granted or implied for any other use for MPEG-4 standard."
* Notice displayed in English as required.

Use of genuine Canon accessories is recommended
This product is designed to achieve excellent performance when used with genuine Canon accessories.
Canon shall not be liable for any damage to this product and/or accidents such as fire, etc., caused by the malfunction of non-genuine Canon accessories (e.g., a leakage and/or explosion of a battery pack). Please note that this warranty does not apply to repairs arising out of the malfunction of non-genuine Canon accessories, although you may request such repairs on a chargeable basis.

Safety Warnings

Follow these safeguards and use the equipment properly to prevent injury, death, and material damage.

Preventing Serious Injury or Death

- To prevent fire, excessive heat, chemical leakage, and explosions, follow the safeguards below:
  - Do not use any batteries, power sources, and accessories not specified in this booklet. Do not use any home-made or modified batteries.
  - Do not short-circuit, disassemble, or modify the battery pack or back-up battery. Do not apply heat or apply solder to the battery pack or back-up battery. Do not expose the battery pack or back-up battery to fire or water. And do not subject the battery pack or back-up battery to strong physical shock.
  - Do not install the battery pack or back-up battery in reversed polarity (+ –). Do not mix new and old or different types of batteries.
  - Do not recharge the battery pack outside the allowable ambient temperature range of 0°C - 40°C (32°F - 104°F). Also, do not exceed the recharging time.
  - Do not insert any foreign metallic objects into the electrical contacts of the camera, accessories, connecting cables, etc.

- Keep the back-up battery away from children. If a child swallows the battery, consult a physician immediately. (Battery chemicals may harm the stomach and intestines.)

- When disposing of a battery pack or back-up battery, insulate the electrical contacts with tape to prevent contact with other metallic objects or batteries. This is to prevent fire or an explosion.

- If excessive heat, smoke, or fumes are emitted during battery pack recharging, immediately unplug the battery charger from the power outlet to stop the recharging and prevent a fire.

- If the battery pack or back-up battery leaks, changes color, deforms, or emits smoke or fumes, remove it immediately. Be careful not to get burned in the process.

- Prevent any battery leakage from contacting your eyes, skin, and clothing. It can cause blindness or skin problems. If the battery leakage contacts your eyes, skin, or clothing, flush the affected area with lots of clean water without rubbing it. See a physician immediately.

- During the recharging, keep the equipment away from the reach of children. The cord can accidentally choke the child or give an electrical shock.

- 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, blistering or low-temperature contact burns. The use of 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 someone driving a car. It may cause an accident.

- Do not fire the flash near a person's eyes. It may impair the person's vision. When using flash to photograph an infant, keep at least 1 meter/3.3 feet away.

- Before storing the camera or accessory when not in use, remove the battery pack and disconnect the power plug. This is to prevent electrical shock, heat generation, and fire.

- Do not use the equipment where there is flammable gas. This is to prevent an explosion or fire.

- If you drop the equipment and the casing breaks open to expose the internal parts, do not touch the internal parts due to the possibility of 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 the camera from the reach of small children. The neck strap can accidentally choke the child.
- Do not store the equipment in dusty or humid places. This is to prevent fire and electrical shock.
- 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 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 insulation has been damaged.
- Occasionally unplug the power plug and use a dry cloth to clean off the dust around the power outlet. If the surrounding is dusty, humid, or oily, the dust on the power outlet may become moist and short-circuit the outlet to cause a fire.

Preventing Injury or Equipment Damage

- Do not leave equipment inside a car under the hot sun or near a heat source. The equipment may become hot and cause skin burns.
- Do not carry the camera around while it is attached to a tripod. Doing so may cause injury. Also make sure the tripod is sturdy enough to support the camera and lens.
- Do not leave a lens or lens-attached camera under 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 battery-recharging apparatus with a cloth. Doing so may trap heat within and cause the casing to deform or catch fire.
- If you drop the camera in water or if water or metal fragments enter inside the camera, promptly remove the battery pack and back-up battery. This is to prevent fire and electrical shock.
- Do not use or leave the battery pack or back-up battery in a hot environment. Doing so may cause battery leakage or a shorter battery life. The battery pack or back-up battery can also become hot and cause skin burns.
- Do not use paint thinner, benzene, or other organic solvents to clean the equipment. Doing so may cause fire or a health hazard.

If the product does not work properly or requires repair, contact your dealer or your nearest Canon Service Center.

Digital Camera Model DS126471 Systems

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for class B digital devices, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
— Reorient or relocate the receiving antenna.
— Increase the separation between the equipment and receiver.
— Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
— Consult the dealer or an experienced radio/TV technician for help.

The cable with the ferrite core provided with the digital camera must be used with this equipment in order to comply with Class B limits in Subpart B of Part 15 of the FCC rules.

Do not make any changes or modifications to the equipment unless otherwise specified in the manual. If such changes or modifications should be made, you could be required to stop operation of the equipment.

Canon U.S.A., Inc.
One Canon Park, Melville, NY 11747, U.S.A.
Tel No. 1-800-OK-CANON (1-800-652-2666)

CAN ICES-3 (B) / NMB-3 (B)

⚠ When connecting to and using a household power outlet, use only AC Adapter Kit ACK-E12 (rated input: 100-240 V AC 50/60 Hz, rated output: 7.4 V DC). Using anything else can cause fire, overheating, or electrical shock.

IMPORTANT SAFETY INSTRUCTIONS
1. **SAVE THESE INSTRUCTIONS** — This manual contains important safety and operating instructions for Battery Charger LC-E12 & LC-E12E.
2. Before using the charger, read all instructions and cautionary remarks on (1) the charger, (2) the battery pack, and (3) the product using the battery pack.
3. **CAUTION** — To reduce risk of injury, charge only the Battery Pack LP-E12. Other types of batteries may burst, causing personal injury and other damage.
4. Do not expose the charger to rain or snow.
5. Use of an attachment not recommended or sold by Canon may result in fire, electric shock, or personal injury.
6. To reduce risk of damage to electric plug and cord, pull by plug rather than by cord when disconnecting charger.
7. Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
8. Do not operate the charger with damaged cord or plug - replace them immediately.
9. Do not operate the charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to a qualified serviceman.
10. Do not disassemble the charger; take it to a qualified serviceman when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.
11. To reduce risk of electric shock, unplug charger from outlet before attempting any maintenance or cleaning.

MAINTENANCE INSTRUCTION
Unless otherwise stated in this manual, there are no user serviceable parts inside. Refer servicing to qualified serviceman.

USA and Canada only:
The Lithium ion/polymer battery that powers the product is recyclable. Please call 1-800-8-BATTERY for information on how to recycle this battery.

For CA, USA only
Included lithium battery contains Perchlorate Material – special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate/ for details.

CAUTION
RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO LOCAL REGULATION.

12

Software Start Guide / Downloading Images to Your Computer

This chapter explains the following:

- Overview of the software for EOS DIGITAL cameras
- How to download and install the software on your computer
- How to download and view the Software Instruction Manual PDFs
- How to download images from the camera to your computer

Software Start Guide

Software Overview

This section explains an overview of various software applications for EOS DIGITAL cameras. 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 EOS Utility to set various camera settings. Also, you can copy background music tracks, such as EOS Sample Music*, to the card.

* Background music can be used when you play a video snapshot album or slide show on your camera.

Digital Photo Professional

This software is recommended for users who mainly shoot RAW images. You can quickly view, edit, process, and print RAW images. You can also edit JPEG images while retaining the original images.

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 processing images.

ImageBrowser EX

You can easily view and play back still photos, MOV movies, and video snapshot albums, edit and print JPEG images, etc.

Note that the software ZoomBrowser EX/ImageBrowser provided with previous cameras does not support still photos and MOV movie files shot with this camera (it is not compatible). Use ImageBrowser EX.

Downloading and Installing the Software

- ● **Do not connect the camera to your computer before you install the software. Otherwise, the software will not be installed properly.**
- ● Even if your computer already has ImageBrowser EX installed, install ImageBrowser EX by following the steps below. It is the latest version with features optimized for your camera. You can also use the auto update feature to add the latest functions.
- ● Even if a previous version of EOS software other than ImageBrowser EX is installed to your computer, install the software by following the steps below. (The newer version will overwrite the previous version.)

1 Download the software.

- ● Connect to the Internet from a computer and access the Canon Web site at the following URL.

    http://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 Click [Easy Installation] and follow the on-screen instructions to install.

- ● For Macintosh, click [**Install**].
- ● If the "Microsoft Silverlight" installation prompt is displayed during installation, install "Microsoft Silverlight".

3 Click [Restart] to restart the computer.

- ● When the computer has restarted, the installation is complete.

Downloading and Viewing the Software Instruction Manual PDFs ▬

Internet connection is required to download the Software Instruction Manual PDFs. Download is not possible in environments with no Internet connection.

1 Download the Software Instruction Manual PDFs.

● Connect to the Internet from a computer and access the Canon Web site at the following URL.

http://www.canon.com/icpd/

● Select your country or region of residence and download the Software Instruction Manual PDFs.
● You do not need to download the ImageBrowser EX Instruction Manual PDF (ImageBrowser EX Guide) since it is included in the software.

2 View the Software Instruction Manual PDFs.
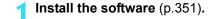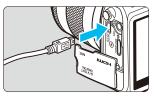
● Double-click a downloaded Software Instruction Manual PDF to open it.
● Adobe Reader (most recent version recommended) must be installed on your computer.
● Adobe Reader can be downloaded free from the Internet.
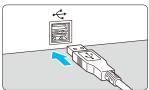
Downloading Images to a Computer

You can use EOS software to download the images in the camera to your computer. There are two ways to do this.

Download by Connecting the Camera to the Computer

1 Install the software (p.351)**.**
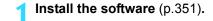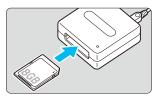
2 Use the provided interface cable to connect the camera to your computer.

- Use the interface cable provided with the camera.
- Connect the cable to the camera's <**DIGITAL**> terminal with the cable plug's < ⟷ > icon facing the back of the camera.
- Connect the cord's plug to the computer's USB terminal.

3 Use EOS Utility to download the images/movies.

- For details, refer to the Software Instruction Manual (PDF).

If [**ϩ2: Wi-Fi**] is set to [**Enable**], the images cannot be downloaded to a computer. Set it to [**Disable**], then connect the interface cable.

Downloading Images with a Card Reader

If you have a commercially-available card reader, you can use it to download images to your computer.

1 **Install the software** (p.351)**.**

2 **Insert the card into the card reader.**

3 **Use EOS software to download the images/movies.**
- ▶ **Use Digital Photo Professional.**
- ▶ **Use ImageBrowser EX.**
- ● For details, refer to the Software Instruction Manual (PDF).

📖 When downloading images/movies from the camera to your computer, if you do not use EOS software and instead use a card reader, copy the DCIM folder on the card to your computer.

MEMO

MEMO

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MEMO

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