

PowerShot G16

Camera User Guide

ENGLISH

- Make sure you read this guide, including the “Safety Precautions” section (📖8), before using the camera.
- Reading this guide will help you learn to use the camera properly.
- Store this guide safely so that you can use it in the future.
- Click the buttons in the lower right to access other pages.
 - ▶ : Next page
 - ◀ : Previous page
 - 📖 : Page before you clicked a link
- To jump to the beginning of a chapter, click the chapter title at right.

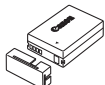
From chapter title pages, you can access topics by clicking their titles.

Package Contents

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



Camera



Battery Pack
NB-10L
(with terminal cover)



Battery Charger
CB-2LC/CB-2LCE



Neck Strap



Getting Started



Warranty Card

- A memory card is not included (M2).

Compatible Memory Cards

The following memory cards (sold separately) can be used, regardless of capacity.

- SD memory cards*1
- SDHC memory cards*1*2
- SDXC memory cards*1*2



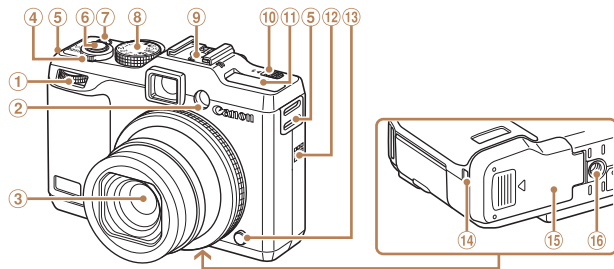
*1 Cards conforming to SD standards. However, not all memory cards have been verified to work with the camera.

*2 UHS-I memory cards are also supported.

Preliminary Notes and Legal Information

- Take and review some test shots initially to make sure the images were recorded correctly. Please note that Canon Inc., its subsidiaries and affiliates, and its distributors are not liable for any consequential damages arising from any malfunction of a camera or accessory, including memory cards, that result in the failure of an image to be recorded or to be recorded in a way that is machine readable.
- Images recorded by the camera are intended for personal use. Refrain from unauthorized recording that infringes on copyright law, and note that even for personal use, photography may contravene copyright or other legal rights at some performances or exhibitions, or in some commercial settings.
- The camera warranty is valid only in the area of purchase. In case of camera problems while abroad, return to the area of purchase before contacting a Canon Customer Support Help Desk.
- Although the LCD monitor and viewfinder are produced under extremely high-precision manufacturing conditions and more than 99.99% of the pixels meet design specifications, in rare cases some pixels may be defective or may appear as red or black dots. This does not indicate camera damage or affect recorded images.
- The LCD monitor may be covered with a thin plastic film for protection against scratches during shipment. If covered, remove the film before using the camera.
- When the camera is used over an extended period, it may become warm. This does not indicate damage.

Part Names and Conventions in This Guide

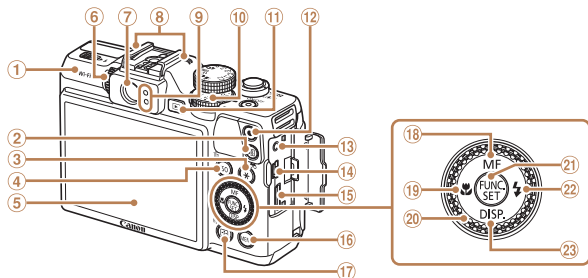


- | | |
|-----------------------------|-----------------------------|
| ① Front dial | ⑧ Mode dial |
| ② Lamp | ⑨ Hot shoe |
| ③ Lens | ⑩ <▶⚡ (Flash up)> switch |
| ④ Zoom lever | ⑪ Flash |
| Shooting: <📷 (telephoto)> / | ⑫ Speaker |
| <📷 (wide angle)> | ⑬ Ring release button |
| Playback: <Q (magnify)> / | ⑭ DC coupler cable port |
| <📷 (index)> | ⑮ Memory card/battery cover |
| ⑤ Strap mount | ⑯ Tripod socket |
| ⑥ Shutter button | |
| ⑦ Power button/lamp | |

- Shooting modes and on-screen icons and text are indicated in brackets.
- ⓘ: Important information you should know
- 📌: Notes and tips for expert camera use
- 📖xx: Pages with related information (in this example, “xx” represents a page number)
- Instructions in this guide apply to the camera under default settings.
- For convenience, all supported memory cards are simply referred to as the “memory card”.
- The tabs shown above titles indicate whether the function is used for still images, movies, or both.

Still Images : Indicates that the function is used when shooting or viewing still images.

Movies : Indicates that the function is used when shooting or viewing movies.



- | | |
|---|--|
| ① Wi-Fi antenna area | ⑬ Remote terminal |
| ② <S> (Shortcut)> button | ⑭ AV OUT (Audio/video output) / DIGITAL terminal |
| ③ <*(AE lock/FE lock)> / <⦿ (Filtering image display)> button | ⑮ HDMI™ terminal |
| ④ <ISO (ISO speed)> / <⌫ (Single-image erase)> button | ⑯ <MENU> button |
| ⑤ Screen (LCD monitor) | ⑰ <[] (AF frame selector)> / <[] (Wi-Fi)> button |
| ⑥ Diopter adjustment dial | ⑱ <MF (Manual focus)> / Up button |
| ⑦ Viewfinder | ⑲ <⌂ (Macro)> / Left button |
| ⑧ Microphone | ⑳ Control dial |
| ⑨ Indicator | ㉑ FUNC./SET button |
| ⑩ Exposure compensation dial | ㉒ <⚡ (Flash)> / Right button |
| ⑪ <⏮ (Playback)> button | ㉓ <DISP. (Display)> / Down button |
| ⑫ Movie button | |



- Turning the control dial is one way to choose setting items, switch images, and perform other operations. Most of these operations are also possible with the <▲><▼><◀><▶> buttons.

- In this guide, icons are used to represent the corresponding camera buttons and dials on which they appear or which they resemble.
- The following camera buttons and controls are represented by icons.

- | | | | |
|-----|------------------------|-----|------------------------|
| <⦿> | Control dial ⑳ on back | <◀> | Left button ⑲ on back |
| <⌫> | Front dial ① on front | <▶> | Right button ㉒ on back |
| <▲> | Up button ⑱ on back | <▼> | Down button ㉓ on back |



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Common Camera Operations

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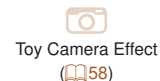
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Safety Precautions

- Before using the product, please ensure that you read the safety precautions described below. Always ensure that the product is used correctly.
- The safety precautions noted on the following pages are intended to prevent injuries to yourself and other persons, or damage to the equipment.
- Be sure to also check the guides included with any separately sold accessories you use.



Warning

Denotes the possibility of serious injury or death.

- **Do not trigger the flash in close proximity to people's eyes.**
Exposure to the intense light produced by the flash could damage eyesight. In particular, remain at least 1 meter (39 inches) away from infants when using the flash.
- **Store this equipment out of the reach of children and infants.**
Strap: Putting the strap around a child's neck could result in asphyxiation.
Date/time battery (if removable): Dangerous if swallowed. If this occurs, contact a doctor immediately.
- **Use only recommended power sources.**
- **Do not attempt to disassemble, alter or apply heat to the product.**
- **Avoid dropping or subjecting the product to severe impacts.**
- **To avoid the risk of injury, do not touch the interior of the product if it has been dropped or otherwise damaged.**
- **Stop using the product immediately if it emits smoke, a strange smell, or otherwise behaves abnormally.**
- **Do not use organic solvents such as alcohol, benzene, or thinner to clean the product.**
- **Do not let the product come into contact with water (e.g. sea water) or other liquids.**

• **Do not allow liquids or foreign objects to enter the camera.**

This could result in electrical shock or fire.

If liquids or foreign objects come into contact with the camera interior, immediately turn the camera off and remove the battery pack/batteries. If the battery charger (for cameras that use one) becomes wet, unplug it from the outlet and consult your camera retailer or a Canon Customer Support Help Desk.

• **Do not look through the viewfinder (if your model has one) at bright light sources, such as the sun on a clear day.**

This could damage your eyesight.

• **Use only the recommended battery pack/batteries.**

• **Do not place the battery pack/batteries near or in direct flame.**

• **If your camera uses a battery charger, note the following precautions.**

- **Unplug the power cord periodically, and using a dry cloth, wipe away any dust and dirt that has collected on the plug, the exterior of the power outlet, and the surrounding area.**
- **Do not handle the power cord with wet hands.**
- **Do not use the equipment in a manner that exceeds the rated capacity of the electrical outlet or wiring accessories. Do not use if the power cord or plug are damaged, or not fully plugged into the outlet.**
- **Do not allow dirt or metal objects (such as pins or keys) to contact the terminals or plug.**

The battery pack/batteries may explode or leak, resulting in electrical shock or fire. This could cause injury and damage the surroundings. In the event that a battery pack leaks and the battery electrolyte contacts eyes, mouth, skin or clothing, immediately flush with water.

• **Turn the camera off in places where camera use is prohibited.**

The electromagnetic waves emitted by the camera may interfere with the operation of electronic instruments and other devices. Exercise adequate caution when using the camera in places where use of electronic devices is restricted, such as inside airplanes and medical facilities.



Caution

Denotes the possibility of injury.

• **When holding the camera by the strap, be careful not to bang it, subject it to strong impacts or shocks, or let it get caught on other objects.**

• **Be careful not to bump or push strongly on the lens.**

This could lead to injury or damage the camera.

• **Be careful not to subject the screen to strong impacts.**

If the screen cracks, injury may result from the broken fragments.

• **When using the flash, be careful not to cover it with your fingers or clothing.**

This could result in burns or damage to the flash.

• **Avoid using, placing or storing the product in the following places:**

- **Places subject to direct sunlight**
- **Places subject to temperatures above 40 °C (104 °F)**
- **Humid or dusty areas**

These could cause leakage, overheating or an explosion of the battery pack/batteries, resulting in electrical shock, fire, burns or other injuries. High temperatures may deform the product.

• **The slideshow transition effects may cause discomfort when viewed for prolonged periods.**

• **When using optional lenses, lens filters, or filter adapters (if applicable), be sure to attach these accessories firmly.**

If the lens becomes loose and falls off, it may crack, and the shards of glass may lead to cuts.

• **On cameras that raise and lower the flash automatically, make sure your finger is out of the way when the flash is lowered, to avoid pinching it.**

This could result in injury.

Caution

Denotes the possibility of damage to the equipment.

- **Do not aim the camera at bright light sources (such as the sun on a clear day).**

Doing so may damage the image sensor.

- **When using the camera on a beach or at a windy location, be careful not to allow dust or sand to enter the camera.**
- **On cameras that raise and lower the flash automatically, do not push the flash down or pry it open.**

This may cause the product to malfunction.

- **In regular use, small amounts of smoke may be emitted from the flash.**

This is due to the high intensity of the flash burning dust and foreign materials stuck to the front of the unit. Please use a cotton swab to remove dirt, dust or other foreign matter from the flash to prevent heat build-up and damage to the unit.

- **Remove and store the battery pack/batteries when you are not using the camera.**

If the battery pack or batteries are left inside the camera, damage caused by leakage may occur.

- **Before you discard the battery pack/batteries, cover the terminals with tape or other insulators.**

Contacting other metal materials may lead to fire or explosions.

- **If your camera is used with a battery charger, keep the charger unplugged when not in use. When charging the battery pack, do not leave it covered with a cloth or put other objects on it.**

Leaving the unit plugged in for a long period of time may cause it to overheat and distort, resulting in fire.

- **Do not leave the battery pack near pets.**

Pets biting the battery pack could cause leakage, overheating or explosion, resulting in fire or damage.

- **If your camera uses multiple batteries, do not use batteries that have different levels of charge together, do not use old and new batteries together, and do not insert the batteries with the + and – terminals reversed.**

This may cause the product to malfunction.

- **Do not sit down with the camera in your pocket.**

Doing so may cause malfunctions or damage the screen.

- **When putting the camera in your bag, ensure that hard objects do not come into contact with the screen. Also close the screen (so that it faces the camera body), if your camera has a screen that closes.**
- **Do not attach any hard objects to the camera.**

Doing so may cause malfunctions or damage the screen.



Basic Guide

Basic information and instructions, from initial preparations to shooting and playback

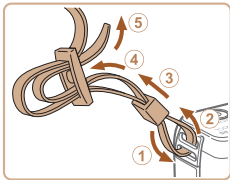
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Initial Preparations

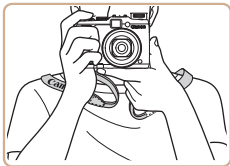
Prepare for shooting as follows.

Attaching the Strap



- Attach the included strap to the camera as shown.
- On the other side of the camera, attach the strap the same way.

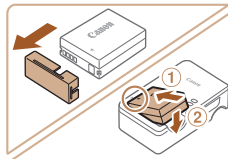
Holding the Camera



- Place the strap around your neck.
- When shooting, keep your arms close to your body and hold the camera securely to prevent it from moving. If you have raised the flash, do not rest your fingers on it.

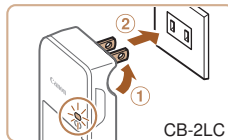
Charging the Battery Pack

Before use, charge the battery pack with the included charger. Be sure to charge the battery pack initially, because the camera is not sold with the battery pack charged.



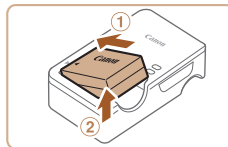
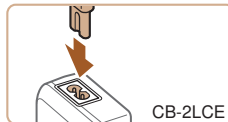
1 Insert the battery pack.

- Remove the cover from the battery, align the ▲ marks on the battery and charger, and insert the battery by pushing it in (①) and down (②).



2 Charge the battery pack.

- **CB-2LC:** Flip out the plug (①) and plug the charger into a power outlet (②).
- **CB-2LCE:** Plug the power cord into the charger, then plug the other end into a power outlet.
- The charging lamp turns orange and charging begins.
- When charging is finished, the lamp turns green.



3 Remove the battery pack.

- After unplugging the battery charger, remove the battery pack by pushing it in (①) and up (②).



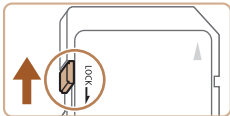
- To protect the battery pack and keep it in optimal condition, do not charge it continuously for more than 24 hours.
- For battery chargers that use a power cord, do not attach the charger or cord to other objects. Doing so could result in malfunction or damage to the product.



- For details on charging time and the number of shots and recording time possible with a fully charged battery pack, see "Number of Shots/Recording Time, Playback Time" (154).
- Charged battery packs gradually lose their charge, even when they are not used. Charge the battery pack on (or immediately before) the day of use. As a visual reminder of the charging status, attach the battery cover with ▲ visible on a charged battery pack and concealed on an uncharged one.
- The charger can be used in areas with 100 – 240 V AC power (50/60 Hz). For power outlets in a different format, use a commercially available adapter for the plug. Never use an electrical transformer designed for traveling, which may damage the battery pack.

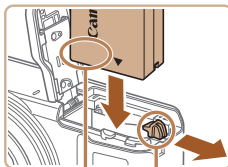
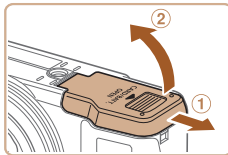
Inserting the Battery Pack and Memory Card

Insert the included battery pack and a memory card (sold separately). Note that before using a new memory card (or a memory card formatted in another device), you should format the memory card with this camera (153).

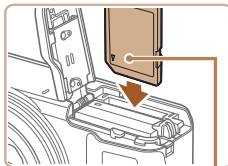


1 Check the card's write-protect tab.

- Recording is not possible on memory cards with a write-protect tab when the tab is in the locked (downward) position. Slide the tab up until it clicks into the unlocked position.



Terminals Battery Lock



Label

2 Open the cover.

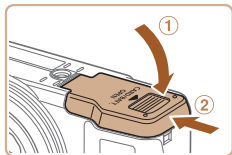
- Slide the cover (1) and open it (2).

3 Insert the battery pack.

- While pressing the battery lock in the direction of the arrow, insert the battery pack as shown and push it in until it clicks into the locked position.
- If you insert the battery pack facing the wrong way, it cannot be locked into the correct position. Always confirm that the battery pack is facing the right way and locks when inserted.

4 Insert the memory card.

- Insert the memory card facing as shown until it clicks into the locked position.
- Make sure the memory card is facing the right way when you insert it. Inserting memory cards facing the wrong way may damage the camera.



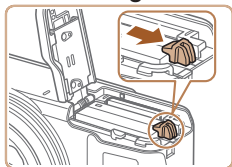
5 Close the cover.

- Lower the cover (①) and hold it down as you slide it, until it clicks into the closed position (②).



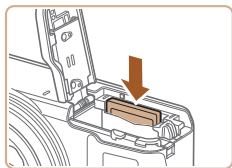
- For guidelines on how many shots or hours of recording can be saved on one memory card, see "Number of 4:3 Shots per Memory Card" (P204).

Removing the Battery Pack and Memory Card



Remove the battery pack.

- Open the cover and press the battery lock in the direction of the arrow.
- The battery pack will pop up.

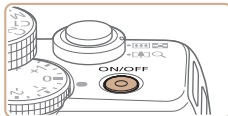


Remove the memory card.

- Push the memory card in until it clicks, and then slowly release it.
- The memory card will pop up.

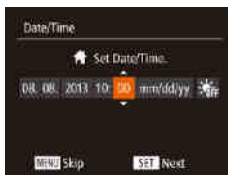
Setting the Date and Time

Set the current date and time correctly as follows if the [Date/Time] screen is displayed when you turn the camera on. Information you specify this way is recorded in image properties when you shoot, and it is used when you manage images by shooting date or print images showing the date. You can also add a date stamp to shots, if you wish (P38).



1 Turn the camera on.

- Press the power button.
- The [Date/Time] screen is displayed.



2 Set the date and time.

- Press the <◀><▶> buttons to choose an option.
- Press the <▲><▼> buttons or turn the <●> dial to specify the date and time.
- When finished, press the <FUNC/SET> button.



3 Set the home time zone.

- Press the <◀><▶> buttons or turn the <●> dial to choose your home time zone.



4 Finish the setup process.

- Press the <FUNC SET> button when finished. After a confirmation message, the setting screen is no longer displayed.
- To turn off the camera, press the power button.



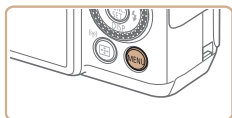
- Unless you set the date, time, and home time zone, the [Date/Time] screen will be displayed each time you turn the camera on. Specify the correct information.



- To set daylight saving time (1 hour ahead), choose [☀️ Off] in step 2 and then choose [☀️ On] by pressing the <▲><▼> buttons or turning the <DISP> dial.

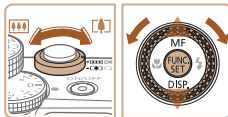
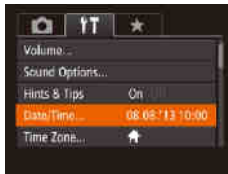
Changing the Date and Time

Adjust the date and time as follows.



1 Access the camera menu.

- Press the <MENU> button.



2 Choose [Date/Time].

- Move the zoom lever to choose the [↑↓] tab.
- Press the <▲><▼> buttons or turn the <DISP> dial to choose [Date/Time], and then press the <FUNC SET> button.

3 Change the date and time.

- Follow step 2 in "Setting the Date and Time" (14) to adjust the settings.
- Press the <MENU> button to close the menu.

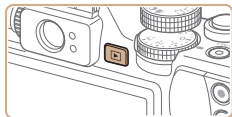


- Date/time settings can be retained for about 3 weeks by the camera's built-in date/time battery (backup battery) after the battery pack is removed.
- The date/time battery will be charged in about 4 hours once you insert a charged battery pack or connect the camera to an AC adapter kit (sold separately, 160), even if the camera is left off.
- Once the date/time battery is depleted, the [Date/Time] screen will be displayed when you turn the camera on. Set the correct date and time as described in "Setting the Date and Time" (14).



Display Language

Change the display language as needed.



1 Enter Playback mode.

- Press the <▶> button.



2 Access the setting screen.

- Press and hold the <FUNC SET> button, and then immediately press the <MENU> button.



- The current time is displayed if you wait too long in step 2 after pressing the <FUNC SET> button before you press the <MENU> button. In this case, press the <FUNC SET> button to dismiss the time display and repeat step 2.
- You can also change the display language by pressing the <MENU> button and choosing [Language] on the [YT] tab.

Trying the Camera Out

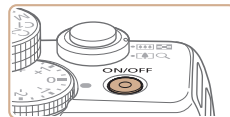
Still Images

Movies

Follow these instructions to turn the camera on, shoot still images or movies, and then view them.

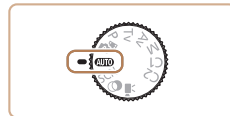
Shooting (Smart Auto)

For fully automatic selection of the optimal settings for specific scenes, simply let the camera determine the subject and shooting conditions.



1 Turn the camera on.

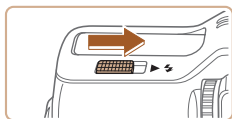
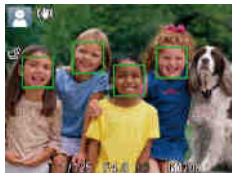
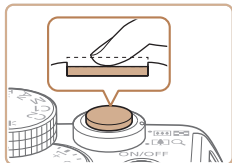
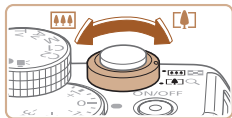
- Press the power button.
- The startup screen is displayed.



2 Enter [AUTO] mode.

- Set the mode dial to [AUTO].
- Aim the camera at the subject. The camera will make a slight clicking noise as it determines the scene.
- Icons representing the scene and image stabilization mode are displayed in the upper left of the screen.
- Frames displayed around any detected subjects indicate that they are in focus.





3 Compose the shot.

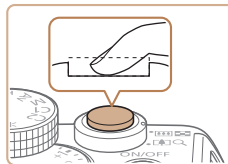
- To zoom in and enlarge the subject, move the zoom lever toward <T> (telephoto), and to zoom away from the subject, move it toward <W> (wide angle).

4 Shoot. Shooting Still Images

① Focus.

- Press the shutter button lightly, halfway down. The camera beeps twice after focusing, and AF frames are displayed to indicate image areas in focus.

- If [Raise the flash] appears on the screen, move the <Flash> switch to raise the flash. It will fire when shooting. If you prefer not to use the flash, push it down with your finger, into the camera.



Elapsed Time



② Shoot.

- Press the shutter button all the way down.
- As the camera shoots, a shutter sound is played, and in low-light conditions when you have raised the flash, it fires automatically.
- Keep the camera still until the shutter sound ends.
- After displaying your shot, the camera will revert to the shooting screen.

Shooting Movies

① Start shooting.

- Press the movie button. The camera beeps once as recording begins, and [●Rec] is displayed with the elapsed time.
- Black bars are displayed on the top and bottom edges of the screen, and the subject is slightly enlarged. These areas will not be recorded.
- Frames displayed around any detected faces indicate that they are in focus.
- Once recording begins, take your finger off the movie button.

② Finish shooting.

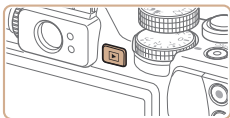
- Press the movie button again to stop shooting. The camera beeps twice as recording stops.



- You can make a short movie of the day (digest movie) just by shooting still images. When the mode dial is set to [A], the camera automatically records a movie clip of the scene immediately before each shot (Hybrid Auto Mode (BOOK 31)).

Viewing

After shooting images or movies, you can view them on the screen as follows.



1 Enter Playback mode.

- Press the [▶] button.
- Your last shot is displayed.



2 Browse through your images.

- To view the previous image, press the [◀] button or turn the [DISP] dial counterclockwise. To view the next image, press the [▶] button or turn the [DISP] dial clockwise.
- Press and hold the [◀▶] buttons to browse through images quickly.



- To access Scroll Display mode, turn the [DISP] dial rapidly. In this mode, turn the [DISP] dial to browse through images.
- To return to single-image display, press the [FUNC/SET] button.

- Movies are identified by a [SET ▶] icon. To play movies, go to step 3.

3 Play movies.

- Press the [FUNC/SET] button to access the movie control panel, choose [▶] (either press the [◀▶] buttons or turn the [DISP] dial), and then press the [FUNC/SET] button again.
- Playback now begins, and after the movie is finished, [SET ▶] is displayed.
- To adjust the volume, press the [▲] < [▼] buttons.



- To switch to Shooting mode from Playback mode, press the shutter button halfway.



Erasing the Images

You can choose and erase unneeded images one by one. Be careful when erasing images, because they cannot be recovered.

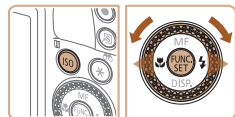
1 Choose an image to erase.

- Press the <◀><▶> buttons or turn the <●> dial to choose an image.



2 Erase the image.

- Press the <🗑> button.
- After [Erase?] is displayed, press the <◀><▶> buttons or turn the <●> dial to choose [Erase], and then press the <FUNC SET> button.
- The current image is now erased.
- To cancel erasure, press the <◀><▶> buttons or turn the <●> dial to choose [Cancel], and then press the <FUNC SET> button.



- You can also erase all images at once (📖114).

Advanced Guide

1

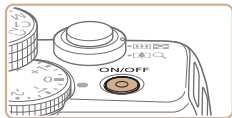
Camera Basics

Practical guide that introduces other camera basics and describes shooting and playback options

On/Off	21	Shooting Modes	23	On-Screen Keyboard	26
Power-Saving Features (Auto Power Down)	21	Shooting Display Options	23	Indicator Display	27
Shutter Button	22	Using the FUNC. Menu	24	Clock	27
Optical Viewfinder	22	Using Menus	25		

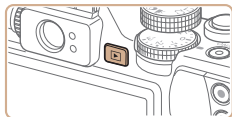


On/Off



Shooting Mode

- Press the power button to turn the camera on and prepare for shooting.
- To turn the camera off, press the power button again.



Playback Mode

- Press the <▶> button to turn the camera on and view your shots.
- To turn the camera off, press the <▶> button again.



- To switch to Playback mode from Shooting mode, press the <▶> button.
- To switch to Shooting mode from Playback mode, press the shutter button halfway (📖22).
- The lens will be retracted after about one minute once the camera is in Playback mode. You can turn the camera off when the lens is retracted by pressing the <▶> button.

Power-Saving Features (Auto Power Down)

As a way to conserve battery power, the camera automatically deactivates the screen (Display Off) and then turns itself off after a specific period of inactivity.

Power Saving in Shooting Mode

The screen is automatically deactivated after about one minute of inactivity. In about two more minutes, the lens is retracted and the camera turns itself off. To activate the screen and prepare for shooting when the screen is off but the lens is still out, press the shutter button halfway (📖22).

Power Saving in Playback Mode

The camera turns itself off automatically after about five minutes of inactivity.



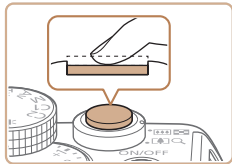
- You can deactivate Auto Power Down and adjust the timing of Display Off, if you prefer (📖152).
- Power saving is not active while the camera is connected to other devices via Wi-Fi (📖124), or when connected to a computer (📖174).



Shutter Button

To ensure your shots are in focus, always begin by holding the shutter button halfway down, and once the subject is in focus, press the button all the way down to shoot.

In this manual, shutter button operations are described as pressing the button *halfway* or *all the way down*.



1 Press halfway. (Press lightly to focus.)

- Press the shutter button halfway. The camera beeps twice, and AF frames are displayed around image areas in focus.



2 Press all the way down. (From the halfway position, press fully to shoot.)

- The camera shoots, as a shutter sound is played.
- Keep the camera still until the shutter sound ends.



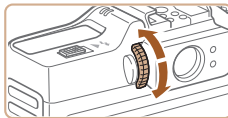
- Images may be out of focus if you shoot without initially pressing the shutter button halfway.
- Length of shutter sound playback varies depending on the time required for the shot. It may take longer in some shooting scenes, and images will be blurry if you move the camera (or the subject moves) before the shutter sound ends.

Optical Viewfinder

To conserve battery power when shooting, you can use the optical viewfinder instead of the screen. Shoot the same way as when using the screen.

1 Deactivate the screen.

- Press the <▼> button several times to turn the screen off (📖23).



2 Adjust the diopter.

- As you look through the optical viewfinder, turn the dial one way or the other so that images look sharp.



- The area visible in the optical viewfinder may differ slightly from the image area in your shots.
- At aspect ratios other than 4:3, the area visible in the optical viewfinder differs from the image area in your shots. Check the settings before shooting.



- The lens may be partially visible through the optical viewfinder at some zoom positions.
- Although the camera automatically focuses on subjects, face detection and focusing is not possible.
- Continuous shooting is not supported in [AUTO] mode, because the camera will not determine the shooting scene.

Shooting Modes

Use the mode dial to access each shooting mode.

Auto Mode / Hybrid Auto Mode

Fully automatic shooting, with camera-determined settings (📖16, 29, 31).

Special Scene Mode

Shoot with optimal settings for specific scenes (📖52).

Creative Filters Mode

Add a variety of effects to images when shooting (📖54).



P, Tv, Av, M, C1, and C2 Modes

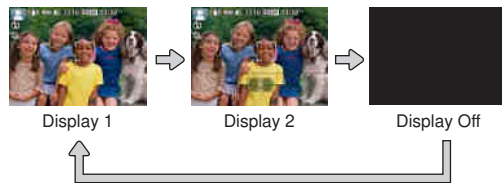
Take a variety of shots using your preferred settings (📖67, 91).

Movie Mode

For shooting movies (📖65). You can also shoot movies when the mode dial is not set to Movie mode, simply by pressing the movie button.

Shooting Display Options

Press the <▼> button to view other information on the screen, or to hide the information. For details on the information displayed, see “On-Screen Information” (📖191).



- Even if the screen is off, it will turn on when you start shooting a movie.



- Screen brightness is automatically increased by the night display function when you are shooting under low light, making it easier to check how shots are composed. However, on-screen image brightness may not match the brightness of your shots. Note that any on-screen image distortion or jerky subject motion will not affect recorded images.
- For playback display options, see “Switching Display Modes” (📖103).



Using the FUNC. Menu

Configure commonly used shooting functions through the FUNC. menu as follows.

Note that menu items and options vary depending on the shooting mode (📖 195 – 197).



1 Access the FUNC. menu.

- Press the <FUNC SET> button.



Menu Items
Options

2 Choose a menu item.

- Press the <▲><▼> buttons to choose a menu item.
- Available options are shown at the bottom of the screen.



3 Choose an option.

- Press the <◀><▶> buttons or turn the <DISP> dial to choose an option.
- Options labeled with a [MENU] icon can be configured by pressing the <MENU> button.
- Options labeled with a [ISO] icon can be configured by pressing the <ISO> button.
- Options labeled with a [ISO] icon can be configured by pressing the <ISO> button.



4 Finish the setup process.

- Press the <FUNC SET> button.
- The screen before you pressed the <FUNC SET> button in step 1 is displayed again, showing the option you configured.

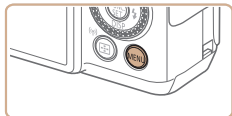


- To undo any accidental setting changes, you can restore the camera's default settings (📖 157).



Using Menus

Configure a variety of camera functions through other menus as follows. Menu items are grouped by purpose on tabs, such as shooting [📷], playback [▶], and so on. Note that available menu items vary depending on the selected shooting or playback mode (📖198 – 202).



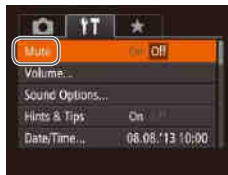
1 Access the menu.

- Press the <MENU> button.



2 Choose a tab.

- Move the zoom lever to choose a tab.
- After you have pressed the <▲><▼> buttons or turned the <🔍> dial to choose a tab initially, you can switch between tabs by pressing the <◀><▶> buttons.



3 Choose a menu item.

- Press the <▲><▼> buttons or turn the <🔍> dial to choose a menu item.
- For menu items with options not shown, first press the <FUNC SET> or <▶> button to switch screens, and then either press the <▲><▼> buttons or turn the <🔍> dial to select the menu item.
- To return to the previous screen, press the <MENU> button.

4 Choose an option.

- Press the <◀><▶> buttons to choose an option.

5 Finish the setup process.

- Press the <MENU> button to return to the screen displayed before you pressed the <MENU> button in step 1.



- To undo any accidental setting changes, you can restore the camera's default settings (📖157).



On-Screen Keyboard

Use the on-screen keyboard to enter information for Face ID (📖40), Wi-Fi connections (📖133), and so on. Note that the length and type of information you can enter varies depending on the function you are using.

Number of Available Characters



Entering Characters

- Press the <▲><▼><◀><▶> buttons or turn the <🌀> dial to choose a character, and then press the <FUNC SET> button to enter it.
- The amount of information you can enter varies depending on the function you are using.

Moving the Cursor

- Choose [<←>] or [<→>] and press the <FUNC SET> button. Alternatively, turn the <🌀> dial.

Entering Line Breaks

- Choose [<↵>] and press the <FUNC SET> button.

Switching Input Modes

- To switch to numbers or symbols, choose [<123>] and press the <FUNC SET> button.
- To switch between uppercase and lowercase letters, choose [<⇧>] and press the <FUNC SET> button.
- Available input modes vary depending on the function you are using.

Deleting Characters

- To delete the previous character, choose [<⌫>] and press the <FUNC SET> button. Alternatively, press the <🗑️> button.
- Holding down the <🗑️> button will delete five characters at a time.

Confirming Input and Returning to the Previous Screen

- Press the <MENU> button.



Indicator Display

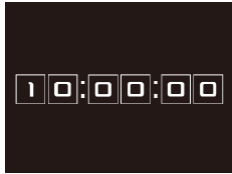
The indicator of the camera (📖 3, 4) lights up or blinks depending on the camera status.

Indicator	Color	Indicator Status	Camera Status
Power Lamp	Green	On	Camera on
Indicator	Green	On	Ready to shoot (when the flash is deactivated)
		Blinking	Recording/reading/transmitting images, shooting long exposures (📖 92, 93), distance warning (📖 185), cannot focus (when the flash is deactivated) (📖 185), or connecting/transmitting via Wi-Fi
	Orange	On	Ready to shoot (when the flash is activated)
		Blinking	Distance warning (📖 185), or cannot focus (when the flash is activated) (📖 185)

- ⚠ • When the indicator blinks green, never turn the camera off, open the memory card/battery cover, or shake or jolt the camera, which may corrupt images or damage the camera or memory card.

Clock

You can check the current time.



- Press and hold the <FUNC/SET> button.
- The current time appears.
- If you hold the camera vertically while using the clock function, it will switch to vertical display. Press the <◀▶> buttons or turn the <DISP> dial to change the display color.
- Press the <FUNC/SET> button again to cancel the clock display.

- ✎ • When the camera is off, press and hold the <FUNC/SET> button, then press the power button to display the clock.

2

Auto Mode / Hybrid Auto Mode

Convenient mode for easy shots with greater control over shooting

Shooting with Camera-Determined

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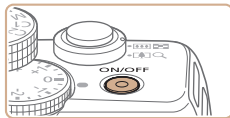
Shooting with Camera-Determined Settings

For fully automatic selection of the optimal settings for specific scenes, simply let the camera determine the subject and shooting conditions.

Still Images

Movies

Shooting (Smart Auto)



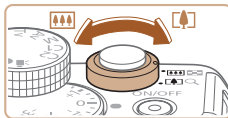
1 Turn the camera on.

- Press the power button.
- The startup screen is displayed.



2 Enter [AUTO] mode.

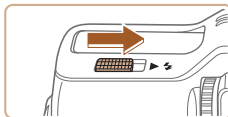
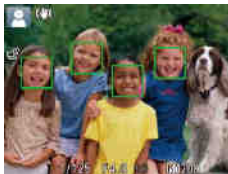
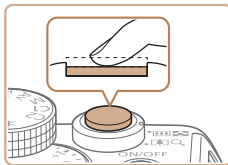
- Set the mode dial to [AUTO].
- Aim the camera at the subject. The camera will make a slight clicking noise as it determines the scene.
- Icons representing the scene and image stabilization mode are displayed in the upper left of the screen (33, 34).
- Frames displayed around any detected subjects indicate that they are in focus.



Zoom Bar



Focus Range (approx.)



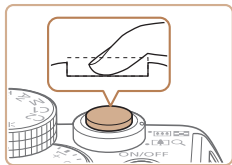
3 Compose the shot.

- To zoom in and enlarge the subject, move the zoom lever toward <[T]> (telephoto), and to zoom away from the subject, move it toward <[W]> (wide angle). (A zoom bar showing the zoom position is displayed.)

4 Shoot. Shooting Still Images

① Focus.

- Press the shutter button halfway. The camera beeps twice after focusing, and AF frames are displayed to indicate image areas in focus.
- Several AF frames are displayed when multiple areas are in focus.
- If [Raise the flash] appears on the screen, move the <[Flash]> switch to raise the flash. It will fire when shooting. If you prefer not to use the flash, push it down with your finger, into the camera.

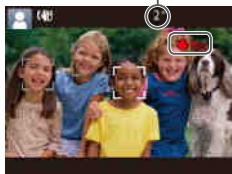


② Shoot.

- Press the shutter button all the way down.
- As the camera shoots, a shutter sound is played, and in low-light conditions when you have raised the flash, it fires automatically.
- Keep the camera still until the shutter sound ends.
- After displaying your shot, the camera will revert to the shooting screen.



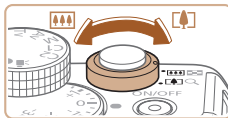
Elapsed Time



Shooting Movies

① Start shooting.

- Press the movie button. The camera beeps once as recording begins, and [●Rec] is displayed with the elapsed time.
- Black bars are displayed on the top and bottom edges of the screen, and the subject is slightly enlarged. These areas will not be recorded.
- Frames displayed around any detected faces indicate that they are in focus.
- Once recording begins, take your finger off the movie button.



② Resize the subject and recompose the shot as needed.

- To resize the subject, repeat the operations in step 3 (p.29). However, note that the sound of camera operations will be recorded.
- When you recompose shots, the focus, brightness, and colors will be automatically adjusted.

③ Finish shooting.

- Press the movie button again to stop shooting. The camera beeps twice as recording stops.
- Recording will stop automatically when the memory card becomes full.



- The flash firing during shots indicates that the camera has automatically attempted to ensure optimal colors in the main subject and background (Multi-area White Balance).




Shooting in Hybrid Auto Mode

You can make a short movie of the day just by shooting still images. The camera records 2 – 4-second clips of scenes before each shot, which are later combined in a digest movie.



1 Enter [] mode.

- Follow step 2 in “Shooting (Smart Auto)” ([book 29](#)) and choose [].


2 Compose the shot.

- Follow steps 3 – 4 in “Shooting (Smart Auto)” ([book 29](#)) to compose the shot and focus.
- For more impressive digest movies, aim the camera at subjects about four seconds before shooting still images.




3 Shoot.

- Follow step 4 in “Shooting (Smart Auto)” ([book 29](#)) to shoot a still image.
- The camera records both a still image and movie clip. The clip, which ends with the still image and a shutter sound, forms a single chapter in the digest movie.




- Battery life is shorter in this mode than in [AUTO] mode, because digest movies are recorded for each shot.
- A digest movie may not be recorded if you shoot a still image immediately after turning the camera on, choosing [] mode, or operating the camera in other ways.
- Camera operating sounds will be recorded in digest movies.



- Digest movie quality is [] and cannot be changed.
- Some camera sounds will be muted. Sounds are not played when you press the shutter button halfway or trigger the self-timer ([book 150](#)).
- Digest movies are saved as separate movie files in the following cases even if they were recorded on the same day in [] mode.
 - The digest movie file size reaches approximately 4 GB, or the total recording time reaches approximately 13 minutes and 20 seconds.
 - The digest movie is protected ([book 111](#)).
 - Daylight saving time ([book 15](#)) or time zone ([book 151](#)) settings are changed.
 - A new folder is created ([book 155](#)).
- Recorded shutter sounds cannot be modified or erased.
- If you prefer to record digest movies without still images, adjust the setting in advance. Press the <MENU> button, and on the [] tab, set [Digest Type] to [No Stills] ([book 25](#)).
- Individual chapters can be edited ([book 123](#)).

Digest Movie Playback

Display a still image shot in [] mode to play a digest movie, or specify the date of the digest movie to play ([book 104](#)).

■ Still Images/Movies



- To activate the screen when the camera is on but the screen is blank in [AUTO] mode, press the <▼> button.
- If the camera is turned on while the <▼> button is held down, the camera will no longer sound. To activate sounds again, press the <MENU> button and choose [Mute] on the [F/T] tab, and then press the <◀><▶> buttons to choose [Off].

■ Still Images



- A blinking [9] icon warns that images are more likely to be blurred by camera shake. In this case, mount the camera on a tripod or take other measures to keep it still.
- If your shots are dark despite the flash firing, move closer to the subject. For details on the flash range, see “Flash Range” (📖205).
- The subject may be too close if the camera only beeps once when you press the shutter button halfway. For details on the focusing range (shooting range), see “Shooting Range” (📖205).
- To reduce red-eye and to assist in focusing, the lamp may be activated when shooting in low-light conditions.
- A blinking [⚡] icon displayed when you attempt to shoot indicates that shooting is not possible until the flash has finished recharging. Shooting can resume as soon as the flash is ready, so either press the shutter button all the way down and wait, or release it and press it again.
- The shutter sound will not be played when the Sleeping and Babies (Sleeping) icons (📖33) are displayed.
- Although you can shoot again before the shooting screen is displayed, your previous shot may determine the focus, brightness, and colors used.



- You can change how long images are displayed after shots (📖49).

■ Movies



- Keep your fingers away from the microphone while shooting movies. Blocking the microphone may prevent audio from being recorded or may cause the recording to sound muffled.

- Avoid touching camera controls other than the movie button when shooting movies, because sounds made by the camera will be recorded.
- Once movie recording begins, a smaller image display area is shown, with the subject enlarged, as a measure when correcting distortion such as rotational camera shake. To shoot subjects at the same size shown before shooting, adjust the image stabilization setting (📖89).



- Audio is recorded in stereo.
- Distorted audio caused by recording when the wind is strong can be reduced. However, the recording may sound unnatural when this option is used when there is no wind. When the wind is not strong, press the <MENU> button, choose [Wind Filter] on the [📷] tab, and then choose [Off] (📖25).



Scene Icons

In **[P]** and **[AUTO]** modes, shooting scenes determined by the camera are indicated by the icon displayed, and corresponding settings are automatically selected for optimal focusing, subject brightness, and color. Depending on the scene, continuous images may be shot (📖34).

	Background	Normal	Backlit	Dark*	Sunsets	Spotlights
Subject						
People						
In Motion					—	
Shadows on Face			—	—	—	—
Smiling				—	—	—
Sleeping				—	—	—
Babies						
Smiling				—	—	—
Sleeping				—	—	—
Children (In Motion)				—	—	—
Other Subjects						
In Motion				—	—	—
At Close Range				—	—	

* Tripod Used

The background color of icons is light blue when the background is a blue sky, dark blue when the background is dark, and gray for all other backgrounds.

The background color of icons is light blue when the background is a blue sky, and gray for all other backgrounds.

- The background color of , , , , and is dark blue, and the background color of is orange.
- When shooting movies, only People, Other Subjects, and At Close Range icons will be displayed.
- When shooting in **[P]** mode, only People, Shadows on Face, Other Subjects, and At Close Range icons will be displayed.
- When shooting with the self-timer, People (In Motion), Smiling, Sleeping, Babies (Smiling), Babies (Sleeping), Children, Other Subjects (In Motion) icons will not be displayed.
- When the drive mode is set to **[□]** (📖34), and when [Hg Lamp Corr.] is set to [On] and scenes are automatically corrected (📖46), Smiling, Sleeping, Babies (Smiling), Babies (Sleeping), and Children icons will not be displayed.
- If the flash is set to **[⚡A]**, the Backlit icons for Smiling and Children will not be displayed.
- Babies, Babies (Smiling), Babies (Sleeping), and Children icons will be displayed when [Face ID] is set to [On], and the face of a registered baby (under two years old) or child (from two to twelve years old) is detected (📖39). Confirm beforehand that the date and time are correct (📖14).



- Try shooting in **[P]** mode (📖67) if the scene icon does not match actual shooting conditions, or if it is not possible to shoot with your expected effect, color, or brightness.

Continuous Shooting Scenes

If you shoot a still image when the following scene icons are displayed, the camera will shoot continuously. If you press the shutter button halfway when one of the icons in the table below is displayed, one of the following icons will be displayed to inform you that the camera will shoot continuous images: [📷], [📷], or [📷].

Smiling (including Babies)	📷: Consecutive images are captured, and the camera analyzes details such as facial expressions to save the image determined to be the best.
Sleeping (including Babies)	📷: Beautiful shots of sleeping faces, created by combining consecutive shots to reduce camera shake and image noise. The AF assist beam will not light up, the flash will not fire, and the shutter sound will not be played.
Children	📷: So you don't miss a photo opportunity of children who move around, the camera will capture three consecutive images for each shot.



- In some scenes, expected images may not be saved, and images may not look as expected.
- Focus, image brightness, and color are determined by the first shot.



- When you want to shoot single images only, press the <[📷]> button, choose [📷] in the menu, and then select [📷].

Image Stabilization Icons

Optimal image stabilization for the shooting conditions is automatically applied (Intelligent IS). Additionally, the following icons are displayed in [📷] and [AUTO] modes.

📷	Image stabilization for still images	📷	Image stabilization for movies, reducing strong camera shake, as when shooting while walking (Dynamic IS)
📷	Image stabilization for still images when panning*	📷	Image stabilization for slow camera shake, such as when shooting movies at telephoto (Powered IS)
📷	Image stabilization for macro shots (Hybrid IS)	📷	No image stabilization, because the camera is mounted on a tripod or held still by other means

* Displayed when you pan, following moving subjects with the camera. When you follow subjects moving horizontally, image stabilization only counteracts vertical camera shake, and horizontal stabilization stops. Similarly, when you follow subjects moving vertically, image stabilization only counteracts horizontal camera shake.



- To cancel image stabilization, set [IS Mode] to [Off] (📷89). In this case, an IS icon is not displayed.
- In [📷] mode, no [📷] icon is displayed.

On-Screen Frames

In **[AUTO]** mode, a variety of frames are displayed once the camera detects subjects you are aiming the camera at.

- A white frame is displayed around the subject (or person's face) determined by the camera to be the main subject, and gray frames are displayed around other detected faces. Frames follow moving subjects within a certain range to keep them in focus.

However, if the camera detects subject movement, only the white frame will remain on the screen.

- When you are pressing the shutter button halfway and the camera detects subject movement, a blue frame is displayed, and the focus and image brightness are constantly adjusted (Servo AF).

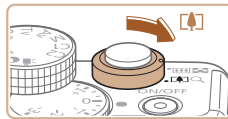


- Try shooting in **[P]** mode (📖 67) if no frames are displayed, if frames are not displayed around desired subjects, or if frames are displayed on the background or similar areas.

Common, Convenient Features

Zooming In Closer on Subjects (Digital Zoom)

When distant subjects are too far away to enlarge using the optical zoom, use digital zoom for up to about 20x enlargement.

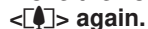


1 Move the zoom lever toward



- Hold the lever until zooming stops.
- Zooming stops at the largest possible zoom factor (before the image becomes noticeably grainy), which is then indicated on the screen.

2 Move the zoom lever toward



- The camera zooms in even closer on the subject.





- Moving the zoom lever will display the zoom bar (which indicates the zoom position). The color of the zoom bar will change depending on the zoom range.
 - White range: optical zoom range where the image will not appear grainy.
 - Yellow range: digital zoom range where the image is not noticeably grainy (ZoomPlus).
 - Blue range: digital zoom range where the image will appear grainy. Because the blue range will not be available at some resolution settings (📖45), the maximum zoom factor can be achieved by following step 1.



- Focal length when optical and digital zoom are combined is as follows (35mm film equivalent).
28 – 560 mm (28 – 140 mm with optical zoom alone)
- To deactivate digital zoom, press the <MENU> button, choose [Digital Zoom] on the [📷] tab, and then choose [Off].

Using the Self-Timer

With the self-timer, you can include yourself in group photos or other timed shots. The camera will shoot about 10 seconds after you press the shutter button.



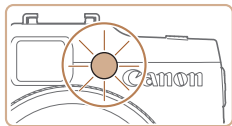
1 Configure the setting.

- Press the <FUNC SET> button, choose [OFF] in the menu, and then choose the [📷] option (📖24).
- Once the setting is complete, [📷] is displayed.

2 Shoot.

- For Still Images: Press the shutter button halfway to focus on the subject, and then press it all the way down.
- For Movies: Press the movie button.





- Once you start the self-timer, the lamp will blink and the camera will play a self-timer sound.
- Two seconds before the shot, the blinking and sound will speed up. (The lamp will remain lit in case the flash fires.)
- To cancel shooting after you have triggered the self-timer, press the **<MENU>** button.
- To restore the original setting, choose [**OFF**] in step 1.

Still Images

Movies

Using the Self-Timer to Avoid Camera Shake

This option delays shutter release until about two seconds after you have pressed the shutter button. If the camera is unsteady while you are pressing the shutter button, it will not affect your shot.



- Follow step 1 in “Using the Self-Timer” (p.36) and choose [**ON**].
- Once the setting is complete, [**ON**] is displayed.
- Follow step 2 in “Using the Self-Timer” (p.36) to shoot.

Customizing the Self-Timer

You can specify the delay (0 – 30 seconds) and number of shots (1 – 10).

Still Images

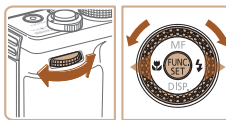
Movies

1 Choose [**ON**].

- Following step 1 in “Using the Self-Timer” (p.36), choose [**ON**] and press the **<SET>** button.

2 Configure the setting.

- Turn the **<WHEEL>** dial to choose the [Delay] time, either press the **<LEFT>** buttons or turn the **<WHEEL>** dial to choose the number of [Shots], and then press the **<FUNC SET>** button.
- Once the setting is complete, [**ON**] is displayed.
- Follow step 2 in “Using the Self-Timer” (p.36) to shoot.



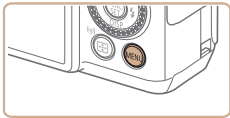
- For movies shot using the self-timer, [Delay] represents the delay before recording begins, but the [Shots] setting has no effect.



- When you specify multiple shots, image brightness and white balance are determined by the first shot. More time is required between shots when the flash fires or when you have specified to take many shots. Shooting will stop automatically when the memory card becomes full.
- When a delay longer than two seconds is specified, two seconds before the shot, the lamp blinking and self-timer sound will speed up. (The lamp will remain lit in case the flash fires.)

Adding a Date Stamp

The camera can add the shooting date to images, in the lower-right corner. However, note that date stamps cannot be edited or removed, so confirm beforehand that the date and time are correct (📖14).



1 Configure the setting.

- Press the <MENU> button, choose [Date Stamp] on the [📷] tab, and then choose the desired option (📖25).
- Once the setting is complete, [📷] is displayed.



2 Shoot.

- As you take shots, the camera adds the shooting date or time to the lower-right corner of images.
- To restore the original setting, choose [Off] in step 1.



- Date stamps cannot be edited or removed.



- Shots taken without adding a date stamp can be printed with one as follows. However, adding a date stamp this way to images that already have one may cause it to be printed twice.
 - Print using printer functions (📖176)
 - Use camera DPOF print settings (📖180) to print
 - Use the software downloaded from the Canon website to print (📖173)

Choosing Subjects to Focus On (Tracking AF)

In [AUTO] mode, shoot after choosing a subject to focus on as follows.



1 Specify Tracking AF.

- Press the <▲> button.
- [📷] is displayed in the center of the screen.

2 Choose a subject to focus on.

- Aim the camera so that [📷] is on the desired subject, and then press the shutter button halfway.
- A blue frame is displayed, and the camera will keep the subject in focus and image brightness adjusted (Servo AF).

3 Shoot.

- Press the shutter button all the way down to shoot.
- Press the <▲> button to cancel Tracking AF.



- Tracking may not be possible when subjects are too small or move too rapidly, or when subject color or brightness matches that of the background too closely.

Using Face ID

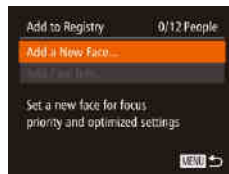
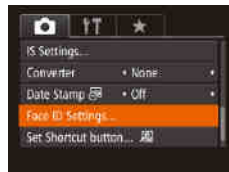
If you register a person ahead of time, the camera will detect that person's face, and prioritize focus, brightness, and color for that person when shooting. In [AUTO] mode, the camera can detect babies and children based on registered birthdays and optimize settings for them when shooting. This function is also useful when searching for a specific registered person among a large number of images (📖106).

Personal Information

- Information such as images of a face (face info) registered with Face ID, and personal information (name, birthday) will be saved on the camera. Additionally, when registered people are detected, their names will be recorded in still images. When using the Face ID function, be careful when sharing the camera or images with others, and when posting images online where many others can view them.
- When disposing of a camera or transferring it to another person after using Face ID, be sure to erase all information (registered faces, names, and birthdays) from the camera (📖44).

Registering Face ID Information

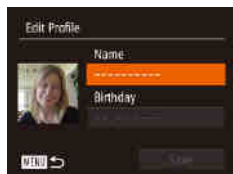
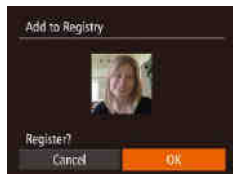
You can register information (face info, names, birthdays) for up to 12 people to use with Face ID.



1 Access the setting screen.

- Press the <MENU> button, choose [Face ID Settings] on the [📷] tab, and then press the <FUNC SET> button (📖25).
- Press the <▲><▼> buttons or turn the <🔍> dial to choose [Add to Registry], and then press the <FUNC SET> button.
- Press the <▲><▼> buttons or turn the <🔍> dial to choose [Add a New Face], and then press the <FUNC SET> button.





2 Register face information.

- Aim the camera so that the face of the person you want to register is inside the gray frame at the center of the screen.
- A white frame on the person's face indicates that the face is recognized. Make sure a white frame is displayed on the face, and then shoot.
- If the face is not recognized, you cannot register face information.
- After [Register?] is displayed, press the <◀><▶> buttons or turn the <FUNC SET> dial to choose [OK], and then press the <FUNC SET> button.
- The [Edit Profile] screen is displayed.



3 Register the person's name and birthday.

- Press the <FUNC SET> button to access the keyboard, and then enter the name (📖26).

- To register a birthday, on the [Edit Profile] screen, choose [Birthday] (either press the <▲><▼> buttons or turn the <FUNC SET> dial), and then press the <FUNC SET> button.
- Press the <◀><▶> buttons to choose an option.
- Press the <▲><▼> buttons or turn the <FUNC SET> dial to specify the date.
- When finished, press the <FUNC SET> button.

4 Save the settings.

- Press the <▲><▼> buttons or turn the <FUNC SET> dial to choose [Save], and then press the <FUNC SET> button.
- After a message is displayed, press the <◀><▶> buttons or turn the <FUNC SET> dial to choose [Yes], and then press the <FUNC SET> button.

5 Continue registering face information.

- To register up to 4 more points of face information (expressions or angles), repeat step 2.
- Registered faces are more easily recognized if you add a variety of face information. In addition to a head-on angle, add a slight side angle, a shot when smiling, and shots inside and outside.



- The flash will not fire when following step 2.
- If you do not register a birthday in step 3, Babies or Children icons (📖33) will not be displayed in [AUTO] mode.



- You can overwrite registered face info, and add face info later if you have not filled all 5 face info slots (📖43).

Shooting

If you register a person ahead of time, the camera will prioritize that person as the main subject, and optimize focus, brightness, and color for that person when shooting.



- When you point the camera toward a subject, the names of up to 3 registered people will be displayed when they are detected.
- Shoot.
- Displayed names will be recorded in still images. Even if people are detected, but their names are not displayed, the names (up to 5 people) will be recorded in the image.



- People other than those registered may be mistakenly detected as the registered person if they share similar facial features.



- Registered people may not be correctly detected if the captured image or scene differs drastically from the registered face information.
- If a registered face is not detected, or not easily detected, overwrite registered information with new face info. Registering face info right before shooting will allow for easier detection of registered faces.
- If a person is mistakenly detected as another person and you continue shooting, you can edit or erase the name recorded in the image during playback (📖108).
- Because faces of babies and children change quickly as they grow, you should update their face info regularly (📖43).
- When the screen is set to off (📖23), names for detected faces are not displayed, but they will be recorded with images.
- Names will still be recorded in images even if you clear the [Shooting Info] check box in [Custom Display] (📖95) on the [📷] tab so that the names are not displayed.
- If you don't want names to be recorded in still images, choose [Face ID Settings] on the [📷] tab, choose [Face ID], and then choose [Off].
- You can check names recorded in images in the playback screen (simple information display) (📖103).
- In [📷] mode, names are not displayed on the shooting screen, but they will be recorded in still images.



Checking and Editing Registered Information



1 Access the [Check/Edit Info] screen.

- Following step 1 in “Registering Face ID Information” (39), choose [Check/Edit Info] and press the <FUNC SET> button.



2 Choose a person to check or edit.

- Press the <▲><▼><◀><▶> buttons or turn the <●> dial to choose the person to check or edit, and then press the <FUNC SET> button.

3 Check or edit the information as needed.

- To check a name or birthday, access the [Edit Profile] screen by pressing the <▲><▼> buttons or turning the <●> dial and then pressing the <FUNC SET> button. On the screen displayed, you can edit names or birthdays as described in step 3 of “Registering Face ID Information” (40).
- To check face information, choose [Face Info List] (either press the <▲><▼> buttons or turn the <●> dial), and then press the <FUNC SET> button. Press the <FUNC SET> button on the screen displayed, choose face information to erase by pressing the <▲><▼><◀><▶> buttons or turning the <●> dial, and then the <FUNC SET> button. After [Erase?] is displayed, choose [OK] (either press the <◀><▶> buttons or turn the <●> dial), and then press the <FUNC SET> button.



- Even if you change names in [Edit Profile], the names recorded in previously shot images will remain the same.



- You can use the software to edit registered names. Some characters entered with the software may not display on the camera, but will be correctly recorded in images.

■ Overwriting and Adding Face Information

You can overwrite existing face information with new face info. You should update face information regularly, especially with babies and children, as their faces change quickly as they grow.

You can also add face information when all 5 face info slots have not been filled.



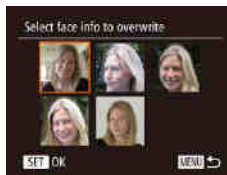
1 Access the [Add Face Info] screen.

- Following step 1 in “Registering Face ID Information” (📖39), choose [Add Face Info] and press the <FUNC SET> button.



2 Choose the name of the person whose face info you want to overwrite.

- Press the <▲><▼><◀><▶> buttons or turn the <🌀> dial to choose the name of a person whose face info you want to overwrite, and then press the <FUNC SET> button.
- If five items of face info have already been registered, a message will be displayed. Choose [OK] (either press the <◀><▶> buttons or turn the <🌀> dial), and then press the <FUNC SET> button.
- If less than five items of face info are registered, go to step 4 to add face information.



3 Choose the face info to overwrite.

- Press the <▲><▼><◀><▶> buttons or turn the <🌀> dial to choose the face info to overwrite, and then press the <FUNC SET> button.

4 Register face information.

- Follow step 2 in “Registering Face ID Information” (📖40) to shoot, and then register the new face information.
- Registered faces are more easily recognized if you add a variety of face information. In addition to a head-on angle, add a slight side angle, a shot when smiling, and shots inside and outside.

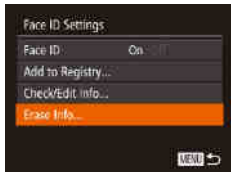


- You cannot add face information if all 5 information slots are filled. Follow the steps above to overwrite face information.
- You can follow the above steps to register new face info when there is at least one slot open; however, you cannot overwrite any face information. Instead of overwriting face info, first erase unwanted existing info (📖42), and then register new face information (📖39) as needed.



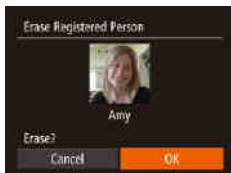
Erasing Registered Information

You can erase information (face info, names, birthdays) registered to Face ID. However, names recorded in previously shot images will not be erased.



1 Access the [Erase Info] screen.

- Follow step 1 in “Registering Face ID Information” (📖39) and choose [Erase Info].



2 Choose the name of the person whose info you want to erase.

- Press the <▲><▼><◀><▶> buttons or turn the <⦿> dial to choose the name of a person to erase, and then press the <FUNC SET> button.
- After [Erase?] is displayed, press the <◀><▶> buttons or turn the <⦿> dial to choose [OK], and then press the <FUNC SET> button.



- If you erase a registered person's info, you will not be able to display their name (📖105), overwrite their info (📖108), or search images for them (📖107).



- You can also erase names in image information (📖109).

Image Customization Features

Still Images

Changing the Aspect Ratio

Change the image aspect ratio (ratio of width to height) as follows.



- Press the <FUNC SET> button, choose [4:3] in the menu, and choose the desired option (📖24).
- Once the setting is complete, the screen aspect ratio will be updated.
- To restore the original setting, repeat this process but choose [4:3].

16:9	Used for display on widescreen HDTVs or similar display devices.
3:2	Same aspect ratio as 35mm film, used for printing images at 5 x 7-inch or postcard sizes.
4:3	Native aspect ratio of the camera screen, also used for display on standard-definition televisions or similar display devices, or for printing images at 3.5 x 5-inch or A-series sizes.
1:1	Square aspect ratio.
4:5	Aspect ratio commonly used for portraits.



- Not available in [📷] mode.

Changing Image Resolution (Size)

Choose from 4 levels of image resolution, as follows. For guidelines on how many shots at each resolution setting can fit on a memory card, see “Number of 4:3 Shots per Memory Card” (204).



- Press the $\langle \text{FUNC SET} \rangle$ button, choose [L] in the menu, and choose the desired option (24).
- The option you configured is now displayed.
- To restore the original setting, repeat this process but choose [L].



Guidelines for Choosing Resolution Based on Paper Size (for 4:3 Images)

A2 (16.5 x 23.4 in.)	L
A3 – A5 (11.7 x 16.5 – 5.8 x 8.3 in.)	M1
5 x 7 in. Postcard 3.5 x 5 in.	M2

- [S]: For e-mailing images.



● Not available in [] mode.

Red-Eye Correction

Red-eye that occurs in flash photography can be automatically corrected as follows.



1 Access the [Built-in Flash Settings] screen.

- Press the $\langle \text{MENU} \rangle$ button, choose [Flash Control] on the [] tab, and then press the $\langle \text{FUNC SET} \rangle$ button (25).

2 Configure the setting.

- Choose [Red-Eye Corr.], and then choose [On] (25).
- Once the setting is complete, [] is displayed.
- To restore the original setting, repeat this process but choose [Off].



- Red-eye correction may be applied to image areas other than eyes (if the camera misinterprets red eye makeup as red pupils, for example).

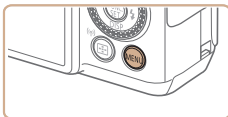


- You can also correct existing images (📖121).
- You can also access the screen in step 2 by holding down the <▶> button for at least one second.
- You can also access the screen in step 2 when the flash is up by pressing the <▶> button and immediately pressing the <MENU> button.

Still Images

Correcting Greenish Image Areas from Mercury Lamps

In [AUTO] mode, subjects or background in shots of evening scenes illuminated by mercury lamps may appear to have a greenish tinge. This greenish tinge can be corrected automatically when shooting, using Multi-area White Balance.



- Press the <MENU> button, choose [Hg Lamp Corr.] on the [📷] tab, and then choose [On] (📖25).
- Once the setting is complete, [📷] is displayed.
- To restore the original setting, repeat this process but choose [Off].



- After you are finished shooting under mercury lamps, you should set [Hg Lamp Corr.] back to [Off]. Otherwise, green hues not caused by mercury lamps may be corrected by mistake.



- Try taking some test shots first to make sure you obtain the desired results.

Movies

Changing Movie Image Quality

4 image quality settings are available. For guidelines on the maximum movie length at each level of image quality that will fit on a memory card, see "Recording Time per Memory Card" (📖205).



- Press the <FUNC SET> button, choose [FHD 30P] in the menu, and choose the desired option (📖24).
- The option you configured is now displayed.
- To restore the original setting, repeat this process but choose [FHD 30P].

Image Quality	Resolution	Frame Rate	Details
FHD 60P	1920 x 1080*	60 fps	For shooting in Full HD [FHD 60P] enables movies with smoother motion
FHD 30P	1920 x 1080*	30 fps	
HD 30P	1280 x 720	30 fps	For shooting in HD
VGA 30P	640 x 480	30 fps	For shooting in standard definition

* Fine Detail Movie Processing (This function quickly processes a large amount of information, making it possible to record even finer details in movies.)



- In [FHD 60P], [FHD 30P], and [HD 30P] modes, black bars displayed on the top and bottom edges of the screen indicate image areas not recorded.

Helpful Shooting Features

Still Images

Movies

Using the Dual Axis Electronic Level

An electronic level can be displayed as a guideline to ensure the camera is level from front to back and left to right.



1 Display the electronic level.

- Press the <▼> button several times to display the electronic level.



Back or Forward
Left or Right

2 Straighten the camera.

- If the camera is tilted, move it so that the red line changes to green.

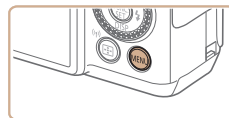


- If the electronic level is not displayed in step 1, press the <MENU> button, and on the [] tab, choose [Custom Display]. Add a [✓] to [LV] or [RV] to choose the electronic level.
- The electronic level is not displayed during movie recording.
- If you hold the camera vertically, the orientation of the electronic level will be updated automatically to match the camera orientation.
- Calibrate the electronic level if it seems ineffective in helping you level the camera (155).

Still Images

Magnifying the Area in Focus

You can check the focus by pressing the shutter button halfway, which will enlarge the portion of the image in focus in the AF frame.



1 Configure the setting.

- Press the <MENU> button, choose [AF-Point Zoom] on the [] tab, and then choose [On] (25).



2 Check the focus.

- Press the shutter button halfway. The face detected as the main subject is now magnified.
- To restore the original setting, choose [Off] in step 1.



- The area in focus will not be magnified when you press the shutter button halfway if a face was not detected, if the person is too close to the camera and their face is too large for the screen, or if the camera detects subject movement.

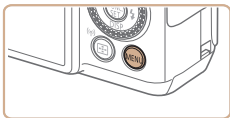


- The display will not magnify when using the digital zoom (📖35), Tracking AF (📖82), or when using a TV as a display (📖163).
- Not available in [📷] mode.

Still Images

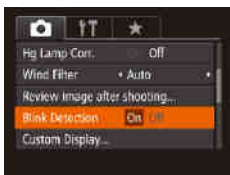
Checking for Closed Eyes

[👁] is displayed when the camera detects that people may have closed their eyes.



1 Configure the setting.

- Press the <MENU> button, choose [Blink Detection] on the [📷] tab, and then choose [On] (📖25).



2 Shoot.

- [👁] flashes when the camera detects a person whose eyes are closed.
- To restore the original setting, choose [Off] in step 1.



- When you have specified multiple shots in [📷] mode, this function is only available for the final shot.
- A frame is displayed around people whose eyes are closed when you have selected [2 sec.], [4 sec.], [8 sec.], or [Hold] in [Display Time] (📖49).
- This feature is not available during continuous shooting in [📷] mode (📖76).

Customizing Camera Operation

Customize shooting functions on the MENU [📷] tab as follows. For instructions on menu functions, see "Using Menus" (📖25).

Still Images

Deactivating the AF-Assist Beam

You can deactivate the lamp that normally lights up to help you focus when you press the shutter button halfway in low-light conditions.



- Press the <MENU> button, choose [AF-assist Beam] on the [📷] tab, and then choose [Off] (📖25).
- To restore the original setting, repeat this process but choose [On].

Deactivating the Red-Eye Reduction Lamp

You can deactivate the red-eye reduction lamp that lights up to reduce red-eye when the flash is used in low-light shots.



1 Access the [Built-in Flash Settings] screen.

- Press the <MENU> button, choose [Flash Control] on the [CAMERA] tab, and then press the <FUNC/SET> button (p. 25).

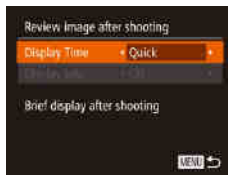
2 Configure the setting.

- Choose [Red-Eye Lamp], and then choose [Off] (p. 25).
- To restore the original setting, repeat this process but choose [On].

Changing the Image Display Style after Shots

You can change how long images are displayed and what information is displayed immediately after shooting.

Changing the Image Display Period after Shots



1 Access the [Review image after shooting] screen.

- Press the <MENU> button, choose [Review image after shooting] on the [CAMERA] tab, and then press the <FUNC/SET> button (p. 25).

2 Configure the setting.

- Press the <▲><▼> buttons or turn the <DISP> dial to choose [Display Time]. Press the <◀><▶> buttons to choose the desired option.
- To restore the original setting, repeat this process but choose [Quick].

Quick	Displays images only until you can shoot again.
2 sec., 4 sec., 8 sec.	Displays images for the specified time. Even while the shot is displayed, you can take another shot by pressing the shutter button halfway again.
Hold	Displays images until you press the shutter button halfway.
Off	No image display after shots.

■ Changing the Screen Displayed after Shots

Change the way images are displayed after shots as follows.



1 Set [Display Time] to [2 sec.], [4 sec.], [8 sec.], or [Hold] (📖49).

2 Configure the setting.

- Press the <▲><▼> buttons or turn the <🔍> dial to choose [Display Info]. Press the <◀><▶> buttons to choose the desired option.
- To restore the original setting, repeat this process but choose [Off].

Off	Displays only the image.
Detailed	Displays shooting details (📖192).



- When [Display Time] (📖49) is set to [Off] or [Quick], [Display Info] is set to [Off] and cannot be changed.
- By pressing the <▼> button while an image is displayed after shooting, you can switch the display information. Note that the settings of [Display Info] are not changed. You can also delete the image, by pressing the <🗑> button.



3

Other Shooting Modes

Shoot more effectively in various scenes, and take shots enhanced with unique image effects or captured using special functions



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Specific Scenes

Choose a mode matching the shooting scene, and the camera will automatically configure the settings for optimal shots.



1 Enter [SCN] mode.

- Set the mode dial to [SCN].

2 Choose a shooting mode.

- Press the $\langle \text{FUNC SET} \rangle$ button, choose $\left[\text{SCN} \right]$ in the menu, and then choose a shooting mode (book 24).

3 Shoot.

Still Images

Movies

Shoot portraits (Portrait)

- Take shots of people with a softening effect.



Still Images

Shoot evening scenes without using a tripod (Handheld NightScene)

- Beautiful shots of evening scenes or portraits with evening scenery in the background, without the need to hold the camera very still (as with a tripod).
- A single image is created by combining consecutive shots, reducing camera shake and image noise.

Still Images

Movies

Shoot underwater (Underwater)

- Natural-colored shots of sea life and underwater scenery, when you use an optional waterproof case (book 162).
- This mode can correct white balance and match the effect of using a commercially available color-compensating filter (book 74).

Still Images

Movies

Shoot with snowy backgrounds (Snow)

- Bright, natural-colored shots of people against snowy backgrounds.





Shoot fireworks (Fireworks)

- Vivid shots of fireworks.



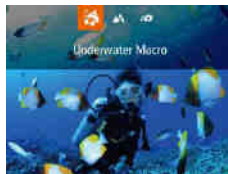
- Subjects appear larger in [P] mode compared to other modes.
- In [P] and [M] modes, shots may look grainy because the ISO speed (p70) is increased to suit the shooting conditions.
- Because the camera will shoot continuously in [P] mode, hold it steady while shooting.
- In [P] mode, excessive camera shake or certain shooting conditions may prevent you from obtaining the desired results.
- In [M] mode, mount the camera on a tripod or take other measures to keep it still and prevent camera shake. Additionally, you should set [IS Mode] to [Off] when using a tripod or other means to secure the camera (p89).



- When you use a tripod for evening scenes, shooting in [AUTO] mode instead of [P] mode will give better results (p29).
- In [M] mode, although no frames are displayed when you press the shutter button halfway, optimal focus is still determined.

Shooting with an Underwater Focusing Range



If focusing is difficult in [M] mode (p52) with a focus range of [A], using a focus range designed for underwater shooting can ensure optimal underwater shots.



1 Configure the setting.

- Follow steps 1 – 2 in “Specific Scenes” (p52) and choose [M].
- Press the <◀> button, choose the desired focus range (either press the <◀><▶> buttons or turn the <DISP> dial), and then press the <FUNC/SET> button.

2 Shoot.

Focusing Range	Description
 Underwater Macro	Take close-ups of sea life, using the digital zoom for even closer shots.
 Quick	Avoid missing unexpected underwater shooting opportunities when shooting subjects some distance away. Especially effective for moving subjects.

Refer to “Shooting Range” (p205) for details on the range of each focus range.



- In [S] mode, optical zoom is set to maximum wide angle.
- In [S] mode, use of digital zoom may cause images to appear grainy at some resolutions (45).
- In [L] mode, subjects at close range may not be in focus. In this case, try setting the focus range to [A].



- [S] and [L] are not available in [Tracking AF] AF frame mode (38).

Image Effects (Creative Filters)

Add a variety of effects to images when shooting.



1 Enter [Q] mode.

- Set the mode dial to [Q].

2 Choose a shooting mode.

- Press the <FUNC SET> button, choose [HDR] in the menu, and then choose a shooting mode (24).

3 Shoot.

Still Images

Movies

Shoot in vivid colors (Super Vivid)

- Shots in rich, vivid colors.





Still Images

Movies

Posterized shots (Poster Effect)

- Shots that resemble an old poster or illustration.



- In [📷] and [🎥] modes, try taking some test shots first, to make sure you obtain the desired results.

Shooting High-Contrast Scenes (High Dynamic Range)

Three consecutive images are captured at different brightness levels each time you shoot, and the camera combines image areas with optimal brightness to create a single image. This mode can reduce the washed-out highlights and loss of detail in shadows that tends to occur in high-contrast shots.

1 Choose [HDR].

- Follow steps 1 – 2 in “Image Effects (Creative Filters)” (📖54) and choose [HDR].

2 Shoot.

- Hold the camera steady as you shoot. When you press the shutter button all the way down, the camera will take three shots and combine them.



- Excessive camera shake or certain shooting conditions may prevent you from obtaining the desired results.



- If excessive camera shake interferes with shooting, mount the camera on a tripod or take other measures to keep it still. Additionally, you should set [IS Mode] to [Off] when using a tripod or other means to secure the camera (📖89).
- Any subject movement will cause images to look blurry.
- There will be a delay before you can shoot again, as the camera processes and combines the images.

Adding Artistic Effects



- Follow steps 1 – 2 in “Image Effects (Creative Filters)” (📖54) and choose [HDR].
- Press the <ISO> button, choose an effect (either press the <◀>>> buttons or turn the <🌀> dial), and then press the <ISO> button again.

Natural	Images are natural and organic.
Art Standard	Images resemble paintings, with subdued contrast.
Art Vivid	Images resemble vivid illustrations.
Art Bold	Images resemble oil paintings, with bold edges.
Art Embossed	Images resemble old photos, with bold edges and dark ambiance.

Shooting with Faded Colors (Nostalgic)

This effect makes colors look faded and images look weathered, as in old photographs. Choose from five effect levels.

1 Choose [📷].

- Follow steps 1 – 2 in “Image Effects (Creative Filters)” (📖54) and choose [📷].

2 Choose an effect level.

- Turn the <🌞> dial to choose an effect level.
- A preview is shown of how your shot will look with the effect applied.

3 Shoot.



- Try taking some test shots first, to make sure you obtain the desired results.



- Colors will look faded on the shooting screen, but the image aging effect is not shown. Review the image in Playback mode to see the effect (📖102).
- The image aging effect is not shown in movies.

Shooting with a Fish-Eye Lens Effect (Fish-Eye Effect)

Shoot with the distorting effect of a fish-eye lens.

1 Choose [📷].

- Follow steps 1 – 2 in “Image Effects (Creative Filters)” (📖54) and choose [📷].

2 Choose an effect level.

- Turn the <🌞> dial to choose an effect level.
- A preview is shown of how your shot will look with the effect applied.

3 Shoot.



- Try taking some test shots first, to make sure you obtain the desired results.

Shots Resembling Miniature Models (Miniature Effect)

Creates the effect of a miniature model, by blurring image areas above and below your selected area.

You can also make movies that look like scenes in miniature models by choosing the playback speed before the movie is recorded. People and objects in the scene will move quickly during playback. Note that sound is not recorded.

1 Choose [📷].

- Follow steps 1 – 2 in “Image Effects (Creative Filters)” (📖 54) and choose [📷].
- A white frame is displayed, indicating the image area that will not be blurred.

2 Choose the area to keep in focus.

- Press the <ISO> button.
- Move the zoom lever to resize the frame, and turn the <🔍> dial to move it.



3 For movies, choose the movie playback speed.

- Turn the <🌓> dial to choose the speed.

4 Return to the shooting screen and shoot.

- Press the <ISO> button to return to the shooting screen, and then shoot.

Playback Speed and Estimated Playback Time (for One-Minute Clips)

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



- The zoom is not available when shooting movies. Be sure to set the zoom before shooting.
- Try taking some test shots first, to make sure you obtain the desired results.



- To switch the orientation of the frame to vertical, press the <◀▶> buttons in step 2. To return the frame to horizontal orientation, press the <▲▼> buttons.
- Holding the camera vertically will change the orientation of the frame.
- Movie image quality is [E-VGA] at an aspect ratio of [4:3] and [E-HD] at an aspect ratio of [16:9] (📖 44). These quality settings cannot be changed.

Shooting with a Toy Camera Effect (Toy Camera Effect)

This effect makes images resemble shots from a toy camera by vignetting (darker, blurred image corners) and changing the overall color.

1 Choose [📷].

- Follow steps 1 – 2 in “Image Effects (Creative Filters)” (📖54) and choose [📷].

2 Choose a color tone.

- Turn the <🌅> dial to choose a color tone.
- A preview is shown of how your shot will look with the effect applied.

3 Shoot.



Standard	Shots resemble toy camera images.
Warm	Images have a warmer tone than with [Standard].
Cool	Images have a cooler tone than with [Standard].



- Try taking some test shots first, to make sure you obtain the desired results.

Making Subjects Stand Out (Background Defocus)

Two consecutive images are captured each time you shoot and processed into a single image, so that the subject stands out against a blurred background.

1 Choose [📷].

- Follow steps 1 – 2 in “Image Effects (Creative Filters)” (📖54) and choose [📷].

2 Shoot.

- Hold the camera steady as you shoot. When you press the shutter button all the way down, the camera will shoot twice and process the images.
- A blinking [📷] icon indicates that the images could not be processed.



- Excessive camera shake or certain shooting conditions may prevent you from obtaining the desired results.



- For the best results with this effect, try shooting close to the subject, and ensure ample distance between the subject and background.
- There will be a delay before you can shoot again, as the camera processes the images.
- To adjust the effect level, turn the <🌅> dial.

Shooting with a Soft Focus Effect

This function allows you to shoot images as if a soft focus filter were attached to the camera. You can adjust the effect level as desired.

1 Choose [👤].

- Follow steps 1 – 2 in “Image Effects (Creative Filters)” (📖 54) and choose [👤].

2 Choose an effect level.

- Turn the <🌞> dial to choose an effect level.
- A preview is shown of how your shot will look with the effect applied.

3 Shoot.



- Try taking some test shots first, to make sure you obtain the desired results.

Shooting in Monochrome

Shoot images in black and white, sepia, or blue and white.

1 Choose [🖼️].

- Follow steps 1 – 2 in “Image Effects (Creative Filters)” (📖 54) and choose [🖼️].

2 Choose a color tone.

- Turn the <🌞> dial to choose a color tone.
- A preview is shown of how your shot will look with the effect applied.

3 Shoot.



B/W	Black and white shots.
Sepia	Sepia tone shots.
Blue	Blue and white shots.

Special Modes for Other Purposes

Still Images

Auto Shooting after Face Detection (Smart Shutter)

Auto Shooting after Smile Detection

The camera shoots automatically after detecting a smile, even without you pressing the shutter button.



1 Choose [😊].

- Follow steps 1 – 2 in “Specific Scenes” (📖52) and choose [📷], and then press the <ISO> button.
- Press the <◀><▶> buttons or turn the <⦿> dial to choose [😊], and then press the <ISO> button.
- The camera now enters shooting standby mode, and [Smile Detection on] is displayed.

2 Aim the camera at a person.

- Each time the camera detects a smile, it will shoot after the lamp lights up.
- To pause smile detection, press the <▼> button. Press the <▼> button again to resume detection.



- Switch to another mode when you finish shooting, or the camera will continue shooting each time a smile is detected.



- You can also shoot as usual by pressing the shutter button.
- The camera can detect smiles more easily when subjects face the camera and open their mouth wide enough so that teeth are visible.
- To change the number of shots, press the <▲><▼> buttons after choosing [😊] in step 1. [Blink Detection] (📖48) is only available for the final shot.

Still Images

Using the Wink Self-Timer

Aim the camera at a person and press the shutter button all the way down. The camera will shoot about two seconds after a wink is detected.



1 Choose [👁️].

- Follow steps 1 – 2 in “Specific Scenes” (📖52) and choose [📷], and then press the <ISO> button.
- Press the <◀><▶> buttons or turn the <⦿> dial to choose [👁️], and then press the <ISO> button.

2 Compose the shot and press the shutter button halfway.

- Make sure a green frame is displayed around the face of the person who will wink.

3 Press the shutter button all the way down.

- The camera now enters shooting standby mode, and [Wink to take picture] is displayed.
- The lamp blinks and the self-timer sound is played.





4 Face the camera and wink.

- The camera will shoot about two seconds after detecting a wink by the person whose face is inside the frame.
- To cancel shooting after you have triggered the self-timer, press the <MENU> button.



- If the wink is not detected, wink again slowly and deliberately.
- Winking may not be detected if eyes are obscured by hair, a hat, or glasses.
- Closing and opening both eyes at once will also be detected as a wink.
- If winking is not detected, the camera will shoot about 15 seconds later.
- To change the number of shots, press the <▲><▼> buttons after choosing [👁️] in step 1. [Blink Detection] (📖48) is only available for the final shot.
- If no one is in the shooting area when the shutter button is pressed all the way down, the camera will shoot after a person enters the shooting area and winks.

Still Images



2 Compose the shot and press the shutter button halfway.

- Make sure a green frame is displayed around the face you focus on and white frames around other faces.

3 Press the shutter button all the way down.

- The camera now enters shooting standby mode, and [Look straight at camera to start count down] is displayed.
- The lamp blinks and the self-timer sound is played.

4 Join the subjects in the shooting area and look at the camera.

- After the camera detects a new face, the lamp blinking and self-timer sound will speed up. (When the flash fires, the lamp will remain lit.) About two seconds later, the camera will shoot.
- To cancel shooting after you have triggered the self-timer, press the <MENU> button.



- Even if your face is not detected after you join the others in the shooting area, the camera will shoot about 15 seconds later.
- To change the number of shots, press the <▲><▼> buttons after choosing [👁️] in step 1. [Blink Detection] (📖48) is only available for the final shot.

Using the Face Self-Timer

The camera will shoot about two seconds after detecting that the face of another person (such as the photographer) has entered the shooting area (📖82). This is useful when including yourself in group photos or similar shots.



1 Choose [👁️].

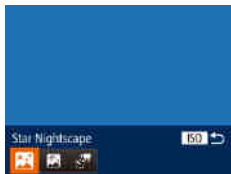
- Follow steps 1 – 2 in “Specific Scenes” (📖52) and choose [👁️], and then press the <ISO> button.
- Press the <◀><▶> buttons or turn the <🔍> dial to choose [👁️], and then press the <ISO> button.

Shooting Starry Skies (Star)

Still Images

Shooting Night Scenes under Starry Skies (Star Nightscape)

Capture impressive shots of starry skies above night scenes. Starlight in the image is automatically enhanced, making starry skies look beautiful.



1 Choose [Star].

- Follow steps 1 – 2 in “Specific Scenes” (p. 52) and choose [Star], and then press the <ISO> button.
- Press the <◀▶> buttons or turn the <DISP> dial to choose [Star], and then press the <FUNC/SET> button.

2 Secure the camera.

- Mount the camera on a tripod or take other measures to keep it still and prevent camera shake.

3 Shoot.



- Optical zoom is set to maximum wide angle and cannot be adjusted.

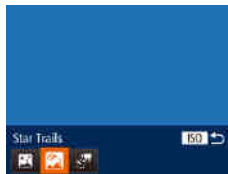


- There will be a delay before you can shoot again, as the camera processes and combines the images.
- To disable image processing that makes stars more prominent, choose MENU ► [Camera] tab ► [Star Emphasis] ► [Off].
- Set [Night Display] to [On] (p. 90) in this mode.
- Switch to manual focus mode (p. 78) to more accurately specify the focal position before shooting.
- This mode can correct white balance and match the effect of using a commercially available color-compensating filter (p. 74).

Still Images

Shooting Star Trails (Star Trails)

Streaks created by the movement of stars through the sky are recorded in a single image. After determining the shutter speed and number of shots, the camera shoots continuously. Each shooting session lasts up to about two hours. Check the battery level in advance.



1 Choose [Star].

- Follow steps 1 – 2 in “Specific Scenes” (p. 52) and choose [Star], and then press the <ISO> button.
- Press the <◀▶> buttons or turn the <DISP> dial to choose [Star], and then press the <FUNC/SET> button.

2 Specify the duration of the shooting session.

- Turn the <DISP> dial to choose the shooting duration.

3 Secure the camera.

- Mount the camera on a tripod or take other measures to keep it still.



4 Shoot.

- Press the shutter button all the way down. [Busy] is displayed briefly, and then shooting begins.
- Do not disturb the camera while shooting.
- To cancel shooting, press the shutter button all the way down again.



- If the camera runs out of battery power, shooting stops and a composite image created from the images up to that point is saved.
- Optical zoom is set to maximum wide angle and cannot be adjusted.

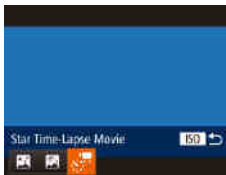


- There will be a delay before you can shoot again, as the camera processes and combines the images.
- Set [Night Display] to [On] (p90) in this mode.
- Switch to manual focus mode (p78) to more accurately specify the focal position before shooting.
- This mode can correct white balance and match the effect of using a commercially available color-compensating filter (p74).

Shooting Movies of Star Movement (Star Time-Lapse Movie)

Still images are captured continuously over a specified duration and combined to create a movie. The camera shoots once each minute, and no sound is recorded.

Stars move quickly during playback, so you can view their movement in a short time. Each shooting session lasts up to about two hours, and many shots are taken. Check the battery level and memory card space in advance.



1 Choose [].

- Follow steps 1 – 2 in “Specific Scenes” (p52) and choose [], and then press the <ISO> button.
- Press the <◀>>>> buttons or turn the <•> dial to choose [], and then press the <FUNC SET> button.

2 Specify the duration of the shooting session.

- Turn the <☀> dial to choose the shooting duration.

3 Secure the camera.

- Mount the camera on a tripod or take other measures to keep it still.



4 Check the brightness.

- Press the shutter button all the way down to shoot a single still image.
- Switch to Playback mode (📖101) and check image brightness.
- To adjust brightness, turn the exposure compensation dial and change the exposure level. Check brightness again by taking another shot.

5 Shoot.

- Press the movie button. [Busy] is displayed briefly, and then shooting begins.
- The indicator blinks throughout the shooting session.
- Do not disturb the camera while shooting.
- To cancel shooting, press the movie button again.
- The camera operates in Eco mode (📖152) while shooting.

Estimated Shooting and Playback Times

Session Time	Playback Time
[120']	Approx. 8 sec.
[90']	Approx. 6 sec.
[60']	Approx. 4 sec.



- If the camera runs out of battery power or memory card space, shooting stops and a movie created from the images up to that point is saved.
- Maximum available shooting duration varies depending on free space on the memory card.
- Optical zoom is set to maximum wide angle and cannot be adjusted.



- There will be a delay before you can shoot again, as the camera processes the images.
- To save each shot collected before the movie is created, choose MENU ► [📷] tab ► [Save 📷Stills] ► [On]. Note that these individual images are managed as a single group, and during playback, only the first image is displayed. To indicate that the image is part of a group, [SET 📷] is displayed in the upper left of the screen. If you erase a grouped image (📖114), all images in the group are also erased. Be careful when erasing images.
- Set [Night Display] to [On] (📖90) in this mode.
- Switch to manual focus mode (📖78) to more accurately specify the focal position before shooting.
- This mode can correct white balance and match the effect of using a commercially available color-compensating filter (📖74).



Shooting Various Movies

Shooting Movies in [P] Mode



1 Enter [P] mode.

- Set the mode dial to [P].
- Black bars are displayed on the top and bottom edges of the screen, and the subject is slightly enlarged. These areas will not be recorded.

2 Configure the settings to suit the movie (193 – 201).

3 Shoot.

- Press the movie button.
- To stop movie recording, press the movie button again.

Locking or Changing Image Brightness before Shooting

Before shooting, you can lock the exposure or change it in 1/3-stop increments within a range of -3 to +3.



1 Lock the exposure.

- Press the <[*]> button to lock the exposure. The exposure shift bar is displayed.
- To unlock the exposure, press the <[*]> button again.

2 Adjust the exposure.

- Turn the <[M]> dial to adjust the exposure, as you watch the screen.

3 Shoot (65).

Shooting Super Slow Motion Movies

You can shoot fast-moving subjects for playback later in slow motion. Note that sound is not recorded.

1 Choose [📷].

- Set the mode dial to [📷].
- Press the <FUNC SET> button, choose [📷] in the menu, and then choose [📷] (📖24).



2 Choose a frame rate.

- Press the <FUNC SET> button, choose [QVGA 240P] in the menu, and choose the desired frame rate (📖24).
- The option you configured is now displayed.



3 Shoot (📖65).

- A bar showing the elapsed time is displayed. Maximum clip length is approx. 30 sec.

Frame Rate	Image Quality	Playback Time (For a 30-sec. Clip)
240P 240 fps	QVGA (320 x 240)	Approx. 4 min.
120P 120 fps	EVGA (640 x 480)	Approx. 2 min.



- Zooming is not available during recording, even if you move the zoom lever.
- Focus, exposure, and color are determined when you press the movie button.



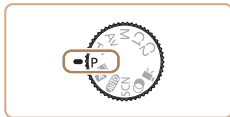
- When you play the movie (📖102), it will be played back in slow motion.
- You can change the playback speed of movies by using the software (📖173).



4

P Mode

More discerning shots, in your preferred shooting style



- Instructions in this chapter apply to the camera with the mode dial set to **[P]** mode.
- **[P]**: Program AE; AE: Auto Exposure
- Before using a function introduced in this chapter in modes other than **[P]**, make sure the function is available in that mode (📖 193 – 201).

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Shooting in Program AE ([P] Mode)

You can customize many function settings to suit your preferred shooting style.



- 1 Enter [P] mode.**
 - Set the mode dial to [P].
- 2 Customize the settings as desired (68 – 90), and then shoot.**



- If adequate exposure cannot be obtained when you press the shutter button halfway, shutter speeds and aperture values are displayed in orange. In this case, try adjusting the ISO speed (70) or activating the flash (if subjects are dark, 85), which may enable adequate exposure.
- Movies can be recorded in [P] mode as well, by pressing the movie button. However, some FUNC. (24) and MENU (25) settings may be automatically adjusted for movie recording.
- For details on the shooting range in [P] mode, see “Shooting Range” (205).

Image Brightness (Exposure)

Adjusting Image Brightness (Exposure Compensation)

The standard exposure set by the camera can be adjusted in 1/3-stop increments, in a range of –3 to +3.

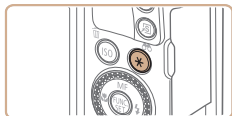


- As you watch the screen, turn the exposure compensation dial to adjust brightness.
- The correction level you specified is now displayed.



Locking Image Brightness / Exposure (AE Lock)

Before shooting, you can lock the exposure, or you can specify focus and exposure separately.



1 Lock the exposure.

- Aim the camera at the subject to shoot with the exposure locked, and then press the <★> button.
- [★] is displayed, and the exposure is locked.

2 Compose the shot and shoot.

- After one shot, AE is unlocked and [★] is no longer displayed.



- AE: Auto Exposure
- After the exposure is locked, you can adjust the combination of shutter speed and aperture value by turning the <P> dial (Program Shift).

Changing the Metering Method

Adjust the metering method (how brightness is measured) to suit shooting conditions as follows.



- Press the <P> button, choose [] in the menu, and choose the desired option (24).
- The option you configured is now displayed.

[] Evaluative	For typical shooting conditions, including backlit shots. Automatically adjusts exposure to match the shooting conditions.
[] Center Weighted Avg.	Determines the average brightness of light across the entire image area, calculated by treating brightness in the central area as more important.
[] Spot	Metering restricted to within the [] (Spot AE Point frame). You can also link the Spot AE Point frame to the AF frame (70).

Linking the Spot AE Point Frame to the AF Frame



1 Set the metering method to [C•].

- Follow the steps in “Changing the Metering Method” (869) to choose [C•].

2 Configure the setting.

- Press the <MENU> button, choose [Spot AE Point] on the [C•] tab, and then choose [AF Point] (825).
- The Spot AE Point frame will now be linked to the movement of the AF frame (881).



- Not available when [AF Frame] is set to [Face AiAF] (882) or [Tracking AF] (882).

Changing the ISO Speed



- Press the <ISO> button, turn the <ISO> dial to choose the ISO speed, and then press the <MENU> button.
- The option you configured is now displayed.

AUTO	Automatically adjusts the ISO speed to suit the shooting mode and conditions.	
80, 100, 125, 160, 200	Low ↑ ↓ High	For shooting outdoors in fair weather.
250, 320, 400, 500, 640, 800		For shooting in cloudy conditions, or at twilight.
1000, 1250, 1600, 2000, 2500, 3200, 4000, 5000, 6400, 8000, 10000, 12800		For shooting night scenes, or in dark rooms.



- To view the automatically set ISO speed when the camera is set to [AUTO], press the shutter button halfway.
- Although choosing a lower ISO speed may reduce image graininess, there may be a greater risk of subject blurriness in some shooting conditions.
- Choosing a higher ISO speed will increase shutter speed, which may reduce subject blurriness and increase the flash range. However, shots may look grainy.



Adjusting ISO Auto Settings

When the camera is set to [AUTO], maximum ISO speed can be specified in a range of [400] – [12800], and sensitivity can be specified in a range of three levels.

1 Access the setting screen.

- Press the <MENU> button, choose [ISO Auto Settings] on the [CAMERA] tab, and then press the <FUNC SET> button (📖25).



2 Configure the setting.

- Choose a menu item to configure, and then choose the desired option (📖25).



- You can also access the [ISO Auto Settings] screen when the ISO speed setting screen (📖70) is displayed, by pressing the <MENU> button.

Changing the Noise Reduction Level (High ISO NR)

You can choose from 3 levels of noise reduction: [Standard], [High], [Low]. This function is especially effective when shooting at high ISO speeds.



- Press the <MENU> button, choose [High ISO NR] on the [CAMERA] tab, and then choose the desired option (📖25).



- Not available with [RAW] or [RAW+JPEG] (📖88).

Auto Exposure Bracketing (AEB Shooting)

Three consecutive images are captured at different exposure levels (standard exposure, underexposure, and then overexposure) each time you shoot. You can adjust the amount of underexposure and overexposure (relative to standard exposure) from -2 to +2 stops in 1/3-stop increments.



1 Choose [AEB].

- Press the button, choose [AEB] in the menu, and then choose [AEB] (24).



2 Configure the setting.

- Press the button, and then adjust the setting by pressing the buttons or turning the dial.



- AEB shooting is only available in [S] mode (86).
- Continuous shooting (76) is not available in this mode.



- If exposure compensation is already in use (68), the value specified for that function is treated as the standard exposure level for this function.
- You can also access the setting screen of step 2 by pressing the button when the exposure compensation screen (68) is displayed.
- Three shots are taken, regardless of any quantity specified in [C] (37).
- In [Blink Detection] mode (48), this function is only available for the final shot.

Correcting Image Brightness (i-Contrast)

Before shooting, excessively bright or dark image areas (such as faces or backgrounds) can be detected and automatically adjusted to the optimal brightness.

To avoid washed-out highlights, specify Dynamic Range Correction. To preserve image detail in shadows, specify Shadow Correct.



- Under some shooting conditions, correction may be inaccurate or may cause images to appear grainy.



- You can also correct existing images (120).
- You can customize camera operation so that turning the or dial adjusts DR Correction or Shadow Correct settings (96).

Dynamic Range Correction (DR Correction)

Tone down bright image areas, which might otherwise look washed out, as follows.



- Press the $\langle \text{FUNC/SET} \rangle$ button, choose $[\text{DR}]$ in the menu, and choose the desired option (book 24).

Option	Details	Available ISO Speed (book 70)
$[\text{OFF}]$	—	
$[\text{AUTO}]$	Automatic adjustment to prevent washed-out highlights	AUTO, 80 – 12800
$[\text{700%}]$	Tone down highlights by about 200% relative to the brightness level of $[\text{OFF}]$.	AUTO, 160 – 3200
$[\text{400%}]$	Tone down highlights by about 400% relative to the brightness level of $[\text{OFF}]$.	AUTO, 320 – 3200



- ISO speed (book 70) will be adjusted to a speed within the supported range if you have specified a value outside the supported range indicated here.

Shadow Correct

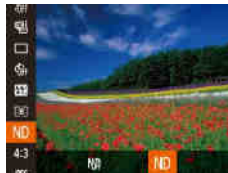
Automatically preserve image detail in shadows as follows.



- Press the $\langle \text{FUNC/SET} \rangle$ button, choose $[\text{SC}]$ in the menu, and then choose $[\text{AUTO}]$ (book 24).
- Once the setting is complete, $[\text{SC}]$ is displayed.

Using the ND Filter

To shoot at slower shutter speeds and smaller aperture values, use the ND filter, which reduces light intensity to 1/8 the actual level (equivalent to 3 stops).



- Press the $\langle \text{FUNC/SET} \rangle$ button, choose $[\text{ND}]$ in the menu, and then choose $[\text{ND}]$ (book 24).



- Mount the camera on a tripod or take other measures to keep it still and prevent camera shake. Additionally, you should set $[\text{IS Mode}]$ to $[\text{Off}]$ when using a tripod or other means to secure the camera (book 89).



- ND: Neutral Density

Color and Continuous Shooting

Still Images










Movies

Adjusting White Balance

By adjusting white balance (WB), you can make image colors look more natural for the scene you are shooting.



- Press the $\langle \text{FUNC SET} \rangle$ button, choose $[\text{WB}]$ in the menu, and choose the desired option (📖74).
- The option you configured is now displayed.

	Auto	Automatically sets the optimal white balance for the shooting conditions.
	Day Light	For shooting outdoors in fair weather.
	Cloudy	For shooting in cloudy conditions, in the shade, or at twilight.
	Tungsten	For shooting under ordinary incandescent (tungsten) lighting and similarly colored fluorescent lighting.
	Fluorescent	For shooting under warm-white (or similarly colored) or cool-white fluorescent lighting.
	Fluorescent H	For shooting under daylight fluorescent and similarly colored fluorescent lighting.
	Flash	For shooting with the flash.
	Underwater	Sets the optimal white balance for shooting underwater. Tones down blues to produce natural-looking colors overall.
	Custom	For manually setting a custom white balance (📖74).

Still Images

Movies

Custom White Balance

For image colors that look natural under the light in your shot, adjust white balance to suit the light source where you are shooting. Set the white balance under the same light source that will illuminate your shot.



- Follow the steps in “Adjusting White Balance” (📖74) to choose $[\text{WB}]$ or $[\text{WB}]$.
- Aim the camera at a plain white subject, so that the entire screen is white. Press the $\langle \text{ISO} \rangle$ button.
- The tint of the screen changes once the white balance data has been recorded.



- Colors may look unnatural if you change camera settings after recording white balance data.

Still Images

Movies

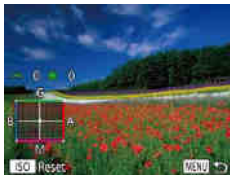
Manually Correcting White Balance

You can manually correct white balance. This adjustment can match the effect of using a commercially available color temperature conversion filter or color-compensating filter.



1 Configure the setting.

- Follow the steps in “Adjusting White Balance” (📖74) to choose the white balance option.
- Turn the $\langle \text{WB} \rangle$ dial to adjust the correction level for B and A.
- Once the setting is complete, $[\text{WB}]$ is displayed.



2 Configure advanced settings.

- To configure more advanced settings, press the **<MENU>** button and turn the **<W/B>** or **<C/B>** dial to adjust the correction level.
- To reset the correction level, press the **<RESET>** button.
- Press the **<MENU>** button to complete the setting.



- The camera will retain white balance correction levels even if you switch to another white balance option in step 1, but correction levels will be reset if you record custom white balance data.



- B: blue; A: amber; M: magenta; G: green
- One level of blue/amber correction is equivalent to about 7 mireds on a color temperature conversion filter. (Mired: Color temperature unit representing color temperature conversion filter density)
- You can customize camera operation so that the B and A adjustment screen can be accessed simply by turning the **<W/B>** dial (p96).

Changing Image Color Tones (My Colors)

Change image color tones as desired, such as converting images to sepia or black and white.



- Press the **<FUNC SET>** button, choose **[OFF]** in the menu, and choose the desired option (p24).
- The option you configured is now displayed.

OFF My Colors Off	—
V Vivid	Emphasizes contrast and color saturation, making images sharper.
N Neutral	Tones down contrast and color saturation for subdued images.
Se Sepia	Creates sepia tone images.
BW B/W	Creates black and white images.
P Positive Film	Combines the effects of Vivid Blue, Vivid Green, and Vivid Red to produce intense yet natural-looking colors resembling images on positive film.
L Lighter Skin Tone	Lightens skin tones.
D Darker Skin Tone	Darkens skin tones.
B Vivid Blue	Emphasizes blues in images. Makes the sky, ocean, and other blue subjects more vivid.
G Vivid Green	Emphasizes greens in images. Makes mountains, foliage, and other green subjects more vivid.
R Vivid Red	Emphasizes reds in images. Makes red subjects more vivid.
C Custom Color	Adjust contrast, sharpness, color saturation, and other qualities as desired (p76).



- White balance (📖74) cannot be set in [A_s] or [A_W] modes.
- With [A_L] and [A_D] modes, colors other than people's skin tone may change. These settings may not produce the expected results with some skin tones.

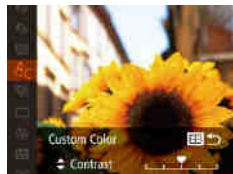
Still Images

Movies



Custom Color

Choose the desired level of image contrast, sharpness, color saturation, red, green, blue, and skin tones in a range of 1 – 5.



1 Access the setting screen.

- Follow the steps in “Changing Image Color Tones (My Colors)” (📖75) to choose [A_C], and then press the <F:3> button.

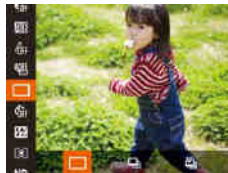
2 Configure the setting.

- Press the <▲><▼> buttons to choose an option, and then specify the value by pressing the <◀><▶> buttons or turning the <DISP> dial.
- For stronger/more intense effects (or darker skin tones), adjust the value to the right, and for weaker/lighter effects (or lighter skin tones), adjust the value to the left.
- Press the <F:3> button to complete the setting.



Continuous Shooting

Hold the shutter button all the way down to shoot continuously. For details on the continuous shooting speed, see “Continuous Shooting Speed” (📖205).



1 Configure the setting.

- Press the <F:3> button, choose [] in the menu, and choose the desired option (📖24).
- The option you configured is now displayed.

2 Shoot.

- Hold the shutter button all the way down to shoot continuously.

Mode	Description
Continuous	Continuous shooting, with the focus and exposure determined when you press the shutter button halfway.
Continuous Shooting AF*	Continuous shooting and focusing. [AF Frame] is set to [Center] and cannot be changed.

* In [📖53] mode (📖53), manual focus mode (📖78), or when AF is locked (📖85), [AF] is changed to [LV].



- Cannot be used with the self-timer (📖36) or [Blink Detection] (📖48).
- Shooting may stop momentarily or continuous shooting may slow down depending on shooting conditions, camera settings, and the zoom position.
- As more shots are taken, shooting may slow down.
- Shooting may slow down if the flash fires.

Still Images



- When using Face ID (📖39), the location in the image where the name is recorded will be determined in the first shot, and will be recorded in the same place for further shots.

■ Images Displayed during Playback

Each set of images shot continuously in [P], [Tv], [Av], or [M] mode is managed as a single group, and only the first image in that group will be displayed. To indicate that the image is part of a group, [SET] is displayed in the upper left of the screen.



- If you erase a grouped image (📖114), all images in the group are also erased. Be careful when erasing images.



- Grouped images can be played back individually (📖108) and ungrouped (📖108).
- Protecting (📖111) a grouped image will protect all images in the group.
- Grouped images can be viewed individually when played back using Image Search (📖106) or Smart Shuffle (📖110). In this case, images are temporarily ungrouped.
- These actions are not available for grouped images: magnifying (📖109), editing Face ID information (📖108), tagging as favorites (📖117), editing (📖118 – 121), printing (📖176), setting up individual image printing (📖181), or adding to a photobook (📖182). To do these things, either view grouped images individually (📖108) or cancel grouping (📖108) first.



Shooting Range and Focusing

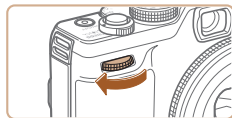
Still Images

Movies



Shooting at Preset Focal Lengths (Step Zoom)

You can shoot at preset focal lengths of 28, 35, 50, 85, 100 or 140 mm (35mm film equivalent). This is convenient when you want to shoot at the angle of view of those focal lengths.



1 Assign [ZOOM] to the <🔍> dial (📖96).

2 Choose a focal length.

- Turn the <🔍> dial clockwise until it clicks to change the focal length from 28 mm to 35 mm. Keep turning the <🔍> dial to increase the focal length, which changes to 50, 85, 100, and 140 mm at each click.



- Step zoom is not available when shooting movies even if you turn the <🔍> dial.

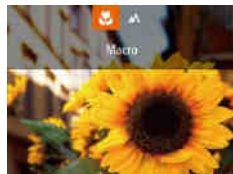


- When using the digital zoom (📖35), turning the <🔍> dial clockwise will not change the zoom factor. However, turning the <🔍> dial counterclockwise will set the focal length to 140 mm.



Shooting Close-Ups (Macro)

To restrict the focus to subjects at close range, set the camera to [M]. For details on the focusing range, see “Shooting Range” (205).



- Press the <M> button, choose [M] (either press the <M> buttons or turn the <M> dial), and then press the <FUNC SET> button.
- Once the setting is complete, [M] is displayed.



- If the flash fires, vignetting may occur.
- Be careful to avoid damaging the lens.



- To prevent camera shake, try mounting the camera on a tripod and shooting with the camera set to [M] (37).

Shooting in Manual Focus Mode

When focusing is not possible in AF mode, use manual focus. You can specify the general focal position and then press the shutter button halfway to have the camera determine the optimal focal position near the position you specified. For details on the focusing range, see “Shooting Range” (205).



1 Choose [MF].

- Press the <MF> button, and then press the <FUNC SET> button.
- [MF] and the MF indicator are displayed.



MF Indicator

2 Specify the general focal position.

- Referring to the on-screen MF indicator bar (which shows the distance and focal position) and the magnified display area, press the <MF> buttons or turn the <M> dial to specify the general focal position, and then press the <FUNC SET> button.
- To adjust the magnification, press the <MF> button.
- Move the focusing frame as needed (81).

3 Fine-tune the focus.

- Press the shutter button halfway to have the camera fine-tune the focal position (Safety MF).
- To cancel manual focus, press the <◀▶> button.



- When you focus manually, the AF frame mode (📖81) is [FlexiZone] and AF frame size (📖81) is [Normal], and these settings cannot be changed.
- Focusing is possible when using the digital zoom (📖35) or digital tele-converter (📖80), or when using a TV as a display (📖165), but the magnified display will not appear.



- To focus more accurately, try attaching the camera to a tripod to stabilize it.
- To hide or enlarge the magnified display area, press the <MENU> button and adjust the [MF-Point Zoom] settings on the [📷] tab as needed (📖25).
- To deactivate automatic focus fine-tuning when the shutter button is pressed halfway, press the <MENU> button and set [Safety MF] on the [📷] tab to [Off] (📖25).

■ Easily Identifying the Focus Area (MF Peaking)

Edges of subjects in focus are displayed in color to make manual focusing easier. You can adjust the colors and the sensitivity (level) of edge detection as needed.



1 Access the setting screen.

- Press the <MENU> button, choose [MF Peaking Settings] on the [📷] tab, and then choose [On] (📖25).

2 Configure the setting.

- Choose a menu item to configure, and then choose the desired option (📖25).



- Colors displayed for MF peaking are not recorded in your shots.

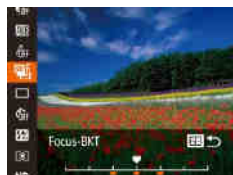
Focus Bracketing (Focus-BKT Mode)

Three consecutive images are captured each time you shoot, with the first one at the focal distance you set manually and the others at farther and nearer focal positions determined by presets. The distance from your specified focus can be set in three levels.



1 Choose [MENU].

- Press the button, choose [MENU] in the menu, and then choose [MENU] (p24).



2 Configure the setting.

- Press the button, and then adjust the setting by pressing the buttons or turning the dial.



- Focus bracketing is only available in [AF] mode (p86).
- Continuous shooting (p76) is not available in this mode.



- You can also access the setting screen in step 2 by pressing the button in step 2 of "Shooting in Manual Focus Mode" (p78).
- Three shots are taken, regardless of any quantity specified in [C] (p37).
- In [Blink Detection] mode (p48), this function is only available for the final shot.

Digital Tele-Converter

The focal length of the lens can be increased by approximately 1.5x or 2.0x. This can reduce camera shake because the shutter speed is faster than it would be if you zoomed (including using digital zoom) in to the same zoom factor.



- Press the button, choose [Digital Zoom] on the [CAMERA] tab, and then choose the desired option (p25).
- The view is enlarged and the zoom factor is displayed on the screen.



- The digital tele-converter cannot be used with digital zoom (p35) or AF-point zoom (p47).



- The respective focal lengths when using [1.5x] and [2.0x] are 42.0 – 210.0 mm and 56.0 – 280.0 mm (35mm film equivalent).
- The shutter speed may be equivalent when you move the zoom lever all the way toward for maximum telephoto, and when you zoom in to enlarge the subject to the same size following step 2 in "Zooming In Closer on Subjects (Digital Zoom)" (p35).

Changing the AF Frame Mode

Change the AF (auto focus) frame mode to suit the shooting conditions as follows.



- Press the <MENU> button, choose [AF Frame] on the [CAMERA] tab, and then choose the desired option (📖25).

FlexiZone/Center

One AF frame is displayed. Effective for reliable focusing. With [FlexiZone], you can move and resize the AF frame (📖81).



- A yellow AF frame is displayed with [!] if the camera cannot focus when you press the shutter button halfway.



- To compose shots so that subjects are positioned at the edge or in a corner, first aim the camera to capture the subject in an AF frame, and then hold the shutter button halfway down. As you continue to hold the shutter button halfway, recompose the shot as desired, and then press the shutter button all the way down (Focus Lock).

Moving and Resizing AF Frames (FlexiZone)

When you want to change the position or size of the AF frame, set the AF frame mode to [FlexiZone] (📖81).



1 Prepare to move the AF frame.

- Press the <AF-ON> button. The AF frame turns orange.

2 Move and resize the AF frame.

- Turn the <AF-ON> dial to move the AF frame, or press the <▲><▼><◀><▶> buttons to move it by a smaller amount.
- To return the AF frame to the original position in the center, keep the <AF-ON> button held down.
- To reduce the AF frame size, press the <MENU> button. Press it again to restore it to the original size.

3 Finish the setup process.

- Press the <AF-ON> button.

Face AiAF

- Detects people's faces, and then sets the focus, exposure (evaluative metering only), and white balance ([WB] only).
- After you aim the camera at the subject, a white frame is displayed around the person's face determined by the camera to be the main subject, and up to two gray frames are displayed around other detected faces.
- When the camera detects movement, frames will follow moving subjects, within a certain range.
- After you press the shutter button halfway, up to nine green frames are displayed around faces in focus.



- If faces are not detected, or when only gray frames are displayed (without a white frame), up to nine green frames are displayed in the areas in focus when you press the shutter button halfway.
- If faces are not detected when Servo AF (83) is set to [On], the AF frame is displayed in the center of the screen when you press the shutter button halfway.
- Examples of faces that cannot be detected:
 - Subjects that are distant or extremely close
 - Subjects that are dark or light
 - Faces in profile, at an angle, or partly hidden
- The camera may misinterpret non-human subjects as faces.
- No AF frames are displayed if the camera cannot focus when you press the shutter button halfway.

Choosing Subjects to Focus On (Tracking AF)

Shoot after choosing a subject to focus on as follows.

1 Choose [Tracking AF].

- Follow the steps in "Changing the AF Frame Mode" (81) to choose [Tracking AF].
- [] is displayed in the center of the screen.

2 Choose a subject to focus on.

- Aim the camera so that [] is on the desired subject, and then press the <[]> button.
- When the subject is detected, the camera beeps and [] is displayed. Even if the subject moves, the camera will continue to track the subject within a certain range.
- If no subject is detected, [] is displayed.
- To cancel tracking, press the <[]> button again.



3 Shoot.

- Press the shutter button halfway. [F] changes to a blue [F], which follows the subject as the camera continues to adjust the focus and exposure (Servo AF) (📖83).
- Press the shutter button all the way down to shoot.
- Even after your shot, [F] is still displayed and the camera continues to track the subject.



- [Servo AF] (📖83) is set to [On] and cannot be changed.
- Tracking may not be possible when subjects are too small or move too rapidly, or when subject color or brightness matches that of the background too closely.
- [AF-Point Zoom] on the [📷] tab is not available.
- [👤] is not available.



- The camera can detect subjects even if you press the shutter button halfway without pressing the [F] button. After your shot, [F] is displayed in the center of the screen.
- If [Face ID] is set to [On], names will not display when registered people are detected, but the names will be recorded in the still images (📖39). However, a name will display if the subject chosen to focus on is the same as a person detected with Face ID.

Shooting with Servo AF

This mode helps avoid missing shots of subjects in motion, because the camera continues to focus on the subject and adjust the exposure as long as you press the shutter button halfway.



1 Configure the setting.

- Press the <MENU> button, choose [Servo AF] on the [📷] tab, and then choose [On] (📖25).

2 Focus.

- The focus and exposure are maintained where the blue AF frame is displayed while you are pressing the shutter button halfway.



- Focusing may not be possible in some shooting conditions.
- In low-light conditions, Servo AF may not be activated (AF frames may not turn blue) when you press the shutter button halfway. In this case, the focus and exposure are set according to the specified AF frame mode.
- If adequate exposure cannot be obtained, shutter speeds and aperture values are displayed in orange. Release the shutter button, and then press it halfway again.
- AF lock shooting is not available.
- [AF-Point Zoom] on the [📷] tab is not available.
- Not available when using the self-timer (📖36).

Changing the Focus Setting

You can change default camera operation of constantly focusing on subjects it is aimed at, even when the shutter button is not pressed. Instead, you can limit camera focusing to the moment you press the shutter button halfway.



- Press the **<MENU>** button, choose [Continuous AF] on the **[CAMERA]** tab, and then choose [Off] (82).

On	Helps avoid missing sudden photo opportunities, because the camera constantly focuses on subjects until you press the shutter button halfway.
Off	Conserves battery power, because the camera does not focus constantly.

Choosing a Person to Focus On (Face Select)

You can shoot after choosing a specific person's face to focus on.



1 Prepare the camera for Face Select.

- Set the AF frame to [Face AiAF] (82).

2 Enter Face Select mode.

- Aim the camera at the person's face and press the **<AE-L/AF-L>** button.
- After [Face Select : On] is displayed, a face frame **[]** is displayed around the face detected as the main subject.
- Even if the subject moves, the face frame **[]** follows the subject within a certain range.
- If a face is not detected, **[]** is not displayed.

3 Choose the face to focus on.

- To switch the face frame **[]** to another detected face, press the **<AE-L/AF-L>** button.
- After you have switched the face frame to all detected faces, [Face Select : Off] is displayed, and the specified AF frame mode screen is displayed again.



4 Shoot.

- Press the shutter button halfway. After the camera focuses, [] changes to [].
- Press the shutter button all the way down to shoot.



- When [Face ID] is set to [On], names of any registered people detected are not displayed when you have selected another, unregistered face to focus on. However, their names will be recorded in the still images (39).

Still Images

Movies

Shooting with the AF Lock

The focus can be locked. After you lock the focus, the focal position will not change even when you release your finger from the shutter button.



1 Lock the focus.

- With the shutter button pressed halfway, press the <▲> button.
- The focus is now locked, and [MF] and the MF indicator are displayed.
- To unlock the focus, hold the shutter button halfway down and press the <▲> button again.

2 Compose the shot and shoot.

Flash

Still Images

Changing the Flash Mode

You can change the flash mode to match the shooting scene. For details on the flash range, see "Flash Range" (205).



1 Raise the flash.

- Move the <▶▶> switch.

2 Configure the setting.

- Press the <▶> button, choose a flash mode (either press the <◀> buttons or turn the <●> dial), and then press the <FUNC SET> button.
- The option you configured is now displayed.



- The setting screen cannot be accessed by pressing the <▶> button when the flash is lowered. Move the <▶▶> switch to raise the flash, then configure the setting.

[A] Auto

Fires automatically in low-light conditions.

[] On

Fires for each shot.

[] Slow Synchro

Fires to illuminate the main subject (such as people) while shooting at a slower shutter speed to illuminate backgrounds out of flash range.



- In [4/5] mode, mount the camera on a tripod or take other measures to keep it still and prevent camera shake. Additionally, you should set [IS Mode] to [Off] when using a tripod or other means to secure the camera (89).
- In [4/5] mode, even after the flash fires, ensure that the main subject does not move until the shutter sound is finished playing.



[Flash] Off

For shooting without the flash.



- If a blinking [Flash] icon is displayed when you press the shutter button halfway in low-light conditions, mount the camera on a tripod or take other measures to keep it still.

Adjusting the Flash Exposure Compensation

Just as with regular exposure compensation (68), you can adjust the flash exposure from -2 to +2 stops, in 1/3-stop increments.



- Raise the flash, press the <P> button and immediately turn the <Flash> dial to choose the compensation level, and then press the <FUNC SET> button.
- The correction level you specified is now displayed.

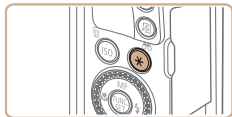


- When there is a risk of overexposure, the camera automatically adjusts the shutter speed or aperture value during the flash shots to reduce washed-out highlights and shoot at optimal exposure. However, you can deactivate automatic adjustment of the shutter speed and aperture value by accessing MENU (25) and choosing [Flash Control] ► [Safety FE] ► [Off].
- You can also configure the flash exposure compensation by choosing [Flash] in the FUNC. menu (24), or by accessing MENU (25) and choosing [Flash Control] ► [Flash Exp. Comp].
- You can also access the [Built-in Flash Settings] MENU screen (25) as follows (except when an optional external flash is mounted).
 - Press and hold the <P> button for at least one second.
 - When the flash is up, press the <P> button and immediately press the <MENU> button.



Shooting with the FE Lock

Just as with the AE lock (📖 69), you can lock the exposure for the flash shots.



1 Raise the flash and set it to [⚡] (📖 85).

2 Lock the flash exposure.

- Aim the camera at the subject to shoot with the exposure locked, and then press the <✳> button.
- The flash fires, and when [✳] is displayed, the flash output level is retained.

3 Compose the shot and shoot.

- After one shot, FE is unlocked and [✳] is no longer displayed.



• FE: Flash Exposure

Changing the Flash Timing

Change the timing of the flash and shutter release as follows.



1 Access the setting screen.

- Press the <MENU> button, choose [Flash Control] on the [📷] tab, and then press the <⏏> button (📖 25).

2 Configure the setting.

- Choose [Shutter Sync.], and then choose the desired option (📖 25).

1st-curtain	The flash fires immediately after the shutter opens.
2nd-curtain	The flash fires immediately before the shutter closes.

Shooting RAW Images

RAW images are “raw” (unprocessed) data, recorded with essentially no loss of image quality from the camera’s internal image processing. Use Digital Photo Professional (📖173) to adjust RAW images as desired with minimal loss of image quality.



- Press the <FUNC/SET> button, choose [JPEG] in the menu, and choose the desired option (📖24).

JPEG

Records JPEG images. JPEG images are processed in the camera for optimal image quality and compressed to reduce file size. However, the compression process is irreversible, and images cannot be restored to their original, unprocessed state. Image processing may also cause some loss of image quality.

RAW

Records RAW images. RAW images are “raw” (unprocessed) data, recorded with essentially no loss of image quality from the camera’s image processing. The data cannot be used in this state for viewing on a computer or printing. You must first use the software (Digital Photo Professional) to convert images to ordinary JPEG or TIFF files. Images can be adjusted with minimal loss of image quality. For details on resolution and the number of shots that will fit on a card, see “Number of 4:3 Shots per Memory Card” (📖204).

RAW+JPEG

Records two images, both a RAW image and a JPEG image, for each shot. The JPEG image can be viewed on a computer or printed without using the software.



- When transferring RAW images (or RAW and JPEG images recorded together) to a computer, always use the dedicated software (📖173).
- Digital zoom (📖35), date stamps (📖38), and red-eye reduction (📖45) are set to [Off] in [RAW] and [RAW+JPEG] modes. Additionally, noise reduction level (📖71), i-Contrast (📖72) and My Colors (📖75) cannot be configured.



- The file extension for JPEG images is .JPG, and the extension for RAW images is .CR2.

Other Settings

Still Images

Changing the Compression Ratio (Image Quality)

Choose from two compression ratios, [S] (Super Fine) and [F] (Fine), as follows. For guidelines on how many shots at each compression ratio can fit on a memory card, see “Number of 4:3 Shots per Memory Card” (204).



- Press the <FUNC/SET> button, choose [F] in the menu, and choose the desired option (24).

Changing the IS Mode Settings



1 Access the setting screen.

- Press the <MENU> button, choose [IS Settings] on the [CAMERA] tab, and then press the <FUNC/SET> button (25).

2 Configure the setting.

- Choose [IS Mode], and then choose the desired option (25).

Continuous	Optimal image stabilization for the shooting conditions is automatically applied (Intelligent IS) (34).
Shoot Only*	Image stabilization is active only at the moment of shooting.
Off	Deactivates image stabilization.

* The setting is changed to [Continuous] for movie recording.

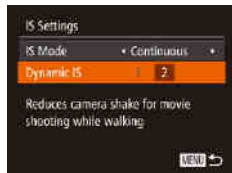


- If image stabilization cannot prevent camera shake, mount the camera on a tripod or take other measures to hold it still. In this case, set [IS Mode] to [Off].



Shooting Movies with Subjects at the Same Size Shown before Shooting

During movie recording, a smaller image display area is shown, with the subject enlarged, as a measure when correcting other distortion such as rotational camera shake. To shoot subjects at the same size shown before shooting, you can disable this image stabilization.



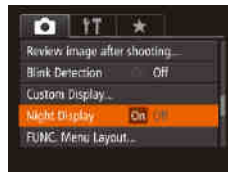
- Follow the steps in “Changing the IS Mode Settings” (📖89) to access the [IS Settings] screen.
- Choose [Dynamic IS], and then choose [2] (📖34).



- You can also set [IS Mode] to [Off], so that subjects are recorded at the same size shown before shooting.

Switching the Color of Shooting-Screen Information

Information displayed on the shooting screen and menus can be changed to a color suitable for shooting under low-light conditions. Enabling this setting is useful in modes such as [📷] (📖62).



- Press the <MENU> button, choose [Night Display] on the [📷] tab, and then choose [On] (📖25).

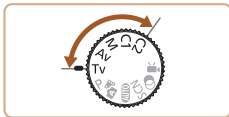


- The color is not adjusted in Playback mode.

5

Tv, Av, M, C1, and C2 Mode

Take smarter, more sophisticated shots, and customize the camera for your shooting style



- Instructions in this chapter apply to the camera as set to the respective mode.

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Specific Shutter Speeds ([Tv] Mode)

Set your preferred shutter speed before shooting as follows. The camera automatically adjusts the aperture value to suit your shutter speed.

For details on available shutter speeds, see "Shutter Speed" (p206).

1 Enter [Tv] mode.

- Set the mode dial to [Tv].

2 Set the shutter speed.

- Turn the <☀> dial to set the shutter speed.



Shutter Speed (sec.)	Available ISO Speed (p70)
15 – 1.3	AUTO, 80 – 3200
1 – 1/4000	AUTO, 80 – 12800



- With shutter speeds of 1.3 seconds or slower, there will be a delay before you can shoot again, as images are processed to remove noise.
- When shooting at low shutter speeds on a tripod, you should set [IS Mode] to [Off] (p89).
- Maximum shutter speed with the flash is 1/2000 second. If you specify a faster speed, the camera will automatically reset the speed to 1/2000 second before shooting.
- Orange display of aperture values when you press the shutter button halfway indicates that the settings deviate from standard exposure. Adjust the shutter speed until the aperture value is displayed in white, or use safety shift (p93).
- Images shot at high ISO speeds may look grainy.



- [Tv]: Time value
- You can customize camera operation so that turning the <☀> dial changes the shutter speed (p96).

Specific Aperture Values ([Av] Mode)

Set your preferred aperture value before shooting as follows. The camera automatically adjusts the shutter speed to suit your aperture value.

For details on available aperture values, see "Aperture" (📖206).

1 Enter [Av] mode.

- Set the mode dial to [Av].

2 Set the aperture value.

- Turn the <☀> dial to set the aperture value.



- Orange display of shutter speeds when you press the shutter button halfway indicates that the settings deviate from standard exposure. Adjust the aperture value until the shutter speed is displayed in white, or use safety shift (see below).



- [Av]: Aperture value (size of the opening made by the iris in the lens)
- To avoid exposure problems in [Tv] and [Av] modes, you can have the camera automatically adjust the shutter speed or aperture value, even when standard exposure cannot otherwise be obtained. Press the <MENU> button and set [Safety Shift] on the [📷] tab to [On] (📖25). However, safety shift is disabled when the flash fires.
- You can customize camera operation so that turning the <☀> dial changes the aperture value (📖96).

Specific Shutter Speeds and Aperture Values ([M] Mode)

Follow these steps before shooting to set your preferred shutter speed and aperture value to obtain the desired exposure.

For details on available shutter speeds and aperture values, see "Shutter Speed" (📖206) and "Aperture" (📖206).

1 Enter [M] mode.

- Set the mode dial to [M].

2 Configure the setting.

- Turn the <☀> dial to set the shutter speed, and turn the <🔍> dial to set the aperture value.
- An exposure level mark based on your specified value is shown on the exposure level indicator for comparison to the standard exposure level.
- The exposure level mark is shown in orange when the difference from standard exposure exceeds 2 stops.



Shutter Speed

Standard Exposure Level

Exposure Level Indicator

Exposure Level Mark



Shutter Speed (sec.)	Available ISO Speed (📖70)
250 – 40	80
30 – 1.3	80 – 3200
1 – 1/4000	80 – 12800



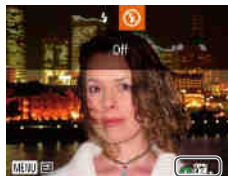
- After you set the shutter speed or aperture value, the exposure level may change if you adjust the zoom or recompose the shot.
- Screen brightness may change depending on your specified shutter speed or aperture value. However, screen brightness remains the same when the flash is up and the mode is set to [⚡].
- Use a sufficiently charged battery when shooting with the shutter speed set from 40 to 250 seconds, because the longer shooting time shortens battery life more than other shooting methods.
- To have both the shutter speed and aperture value automatically adjusted to obtain standard exposure, hold the shutter button halfway and press the <⌘> button. Note that standard exposure may not be possible with some settings.
- Images shot at high ISO speeds may look grainy.



- [M]: Manual
- Calculation of standard exposure is based on the specified metering method (96).
- The battery level indicated is based on estimated battery consumption under the current shutter speed setting. Changing the shutter speed may cause this level to be updated.
- You can customize camera operation so that turning the <⌘> dial adjusts the shutter speed and turning the <⌘> dial adjusts the aperture value (96).

Adjusting the Flash Output

Choose from the three flash levels in [M] mode.



1 Enter [M] mode.

- Set the mode dial to [M].

2 Configure the setting.

- Raise the flash, press the <▶> button and immediately turn the <⌘> dial to choose the flash level, and then press the <⌘> button.
- Once the setting is complete, the flash output level is displayed.
[⚡.]: low, [⚡.⌘]: medium, [⚡.⌘⌘]: high



- You can also set the flash level by choosing [⚡] in the FUNC. menu (24), or by accessing MENU (25) and choosing [📷] tab ▶ [Flash Control] ▶ [Flash Output].
- You can set the flash level in [Tv] or [Av] mode by accessing MENU (25) and choosing [📷] tab ▶ [Flash Control] ▶ [Flash Mode] ▶ [Manual].
- You can also access the [Built-in Flash Settings] MENU screen as follows (except when an optional external flash is mounted).
 - Press and hold the <▶> button for at least one second.
 - When the flash is up, press the <▶> button and immediately press the <MENU> button.

Customization for Shooting Styles

Still Images

Movies

Customizing Display Information

Set the number of custom displays (📖23) and what information is displayed in each display when the <▼> button is pressed in shooting screen.



1 Access the setting screen.

- Press the <MENU> button, choose [Custom Display] on the [📷] tab, and then press the <FUNC SET> button (📖25).

2 Choose [LCD/Viewfinder].

- Press the <▲><▼><◀><▶> buttons or turn the <🔍> dial, and then press the <FUNC SET> button to configure custom displays [📷], [📺] or [📷] which are displayed when the <▼> button is pressed.
- Press the <FUNC SET> button to add [📷] ([📷]), [📺], or [📷] to custom displays so that they do not display when the <▼> button is pressed.
- Note that [📷] cannot be applied to [LCD/Viewfinder] custom display currently in use.

3 Configure the setting.

- Press the <▲><▼><◀><▶> buttons or turn the <🔍> dial to choose an item, and then press the <FUNC SET> button. Items you choose for display are labeled with [✓].
- Selected items (labeled with a [✓]) will be included in display.

Shooting Info	Displays shooting information (📖191).
Grid Lines	Displays a reference grid.
Electronic Level	Displays the electronic level (📖47).
Histogram	Displays a histogram (📖103) in [P], [Tv], [Av], and [M] modes.



- Settings will not be saved if you press the shutter button halfway and return to the shooting screen from the custom display settings screen.
- Grayed-out items can also be specified, but they may not be displayed in some shooting modes.



- Grid lines are not recorded in your shots.



Assigning Functions to the Front Dial and Control Dial

Assign commonly used functions to the front dial and control dial, by shooting mode.



1 Access the setting screen.

- Press the <MENU> button, choose [Set Func.] on the [CAMERA] tab, and then press the <FUNC. SET> button (book 25).

2 Configure the setting.

- Press the <◀><▶> buttons to choose an item.
- To configure the settings, press the <▲><▼> buttons, choose an item (either press the <▲><▼><◀><▶> buttons or turn the <DISP> dial), and then turn the <DISP> dial to change the function.

Assignable Functions

Functions you can assign to the front dial and control dial vary depending on shooting mode. On the setting screen, you can assign aspect ratio switching (book 44), ISO speed (book 70), dynamic range correction (book 73), shadow correction (book 73), white balance correction (book 74), step zooming (book 77), or manual focusing (book 78) in modes indicated by ★ in the following table.


Item		Shooting Mode			
		M	Av	Tv	P
Front Dial 1		Tv	Av	Tv	★
		Av, ★	★	★	★
Front Dial 2		Av	Av	Tv	★
		Tv, ★	★	★	★
Front Dial 3		Av, Tv	Av	Tv	★
		★	★	★	★
Control Dial		★	★	★	★
		Av, Tv	Av	Tv	★

• [Av]: aperture value (book 93); [Tv]: shutter speed (book 92)






- When multiple functions are assigned to the <DISP> dial, press the <ISO> button to switch between them.
- Selecting [Front Dial 3] enables you to adjust Program Shift (book 69), ISO Speed (book 70), and Manual Focus (book 78) on relevant setting screens by using <DISP> dial.

Convenient Control Using the or Movie Button

You can quickly and easily activate functions that you assign to the  or movie button.



1 Access the setting screen.

- Press the **<MENU>** button, choose [Set Shortcut button] or [Set  button] on the  tab, and then press the **<FUNC SET>** button ( 25).














2 Configure the setting.

- Press the **<▲>****<▼>****<◀>****<▶>** buttons or turn the **<DISP>** dial to choose a function to assign, and then press the **<FUNC SET>** button.

3 Use the assigned function as needed.

- To activate an assigned function, press the button you assigned it to.



- To restore default settings, choose [] in [Set Shortcut button] or [] in [Set  button].
- Icons labeled with [] indicate that the function is not available in the current shooting mode or under current function conditions.
- With [] or [], each press of the assigned button records white balance data ( 74), and the white balance setting changes to [] or [].
- With [AFL], each press of the assigned button adjusts and locks the focus. [AFL] is then displayed.
- With [], pressing the assigned button deactivates screen display. To restore the display, do any of the following.
 - Press any button (other than the power button)
 - Hold the camera in another orientation
 - Raise or lower the flash
- You can still record movies in [], [] or [] mode even if you assign a function to the movie button.



Customizing the FUNC. Menu (FUNC. Menu Layout)

The display of FUNC. menu items can be customized. Functions not shown on this menu will be available on the [CAMERA] tab of the menu screen.

Still Images

Movies

Choosing Items to Include in the Menu



1 Access the setting screen.

- Press the <MENU> button, choose [FUNC. Menu Layout] on the [CAMERA] tab, and then press the <FUNC SET> button (p25).

2 Choose icons to include in the menu.

- Press the <▲><▼><◀><▶> buttons or turn the <DISP> dial and then press the <FUNC SET> button to choose icons to include in the FUNC. menu. Selected icons are marked with a [✓].
- Selected items (labeled with a [✓]) will be included in display.
- Items without a [✓] will be available on the [CAMERA] tab of the menu screen.



3 Configure the setting.

- Press the <MENU> button, choose [OK] (either press the <◀><▶> buttons or turn the <DISP> dial), and then press the <FUNC SET> button.



- The screen in step 2 can also be accessed by holding down the <FUNC SET> button when the FUNC. menu is displayed.
- Items that you remove from the FUNC. menu, add to My Menu (p100), and then add to the FUNC. menu again will be removed from My Menu.

Rearranging Menu Items



1 Access the setting screen.

- On the screen in step 2 of "Choosing Items to Include in the Menu" (p98), press the <DISP> button.
- Press the <FUNC SET> or <▶> button to choose an icon to move. Press the <▲><▼> buttons or turn the <DISP> dial to choose the new position, and then press the <FUNC SET> or <◀> button.

2 Configure the setting.

- Press the <MENU> button, choose [OK] (either press the <◀><▶> buttons or turn the <DISP> dial), and then press the <FUNC SET> button.

Saving Shooting Settings

Save commonly used shooting modes and your configured function settings for reuse. To access saved settings later, simply turn the mode dial to **[C1]** or **[C2]**. Even settings that are usually cleared when you switch shooting modes or turn the camera off (such as self-timer settings) can be retained this way.

Settings that can be saved

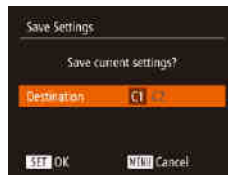
- Shooting modes (**[P]**, **[Tv]**, **[Av]**, and **[M]**)
- Items set in **[P]**, **[Tv]**, **[Av]**, or **[M]** modes (📖68 – 94)
- Shooting menu settings
- Zoom positions
- Manual focus positions (📖78)
- My Menu settings (📖100)



1 Enter a shooting mode with settings you want to save, and change the settings as desired.

2 Configure the setting.

- Press the **<MENU>** button, choose [Save Settings] on the **[📷]** tab, and then press the **<FUNC/SET>** button.



3 Save the settings.

- Press the **<◀>▶>** buttons or turn the **<📷>** dial to choose the destination, and then press the **<FUNC/SET>** button.

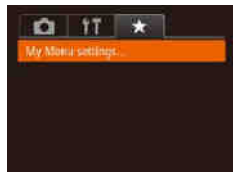
- ! • To edit saved settings (except their shooting mode), choose **[C1]** or **[C2]**, change the settings, and then repeat steps 2 – 3. These setting details are not applied in other shooting modes.

- ✎ • To clear information you have saved to **[C1]** or **[C2]** and restore default values, turn the mode dial to **[C1]** or **[C2]** and choose [Reset All] (📖157).



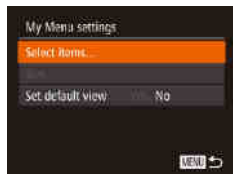
Saving Commonly Used Shooting Menu Items (My Menu)

You can save up to five commonly used shooting menu items on the [★] tab. By customizing the [★] tab, you can access to these items quickly from a single screen.



1 Access the setting screen.

- Press the <MENU> button, choose [My Menu settings] on the [★] tab, and then press the <FUNC SET> button (25).



2 Configure the setting.

- Press the <▲><▼> buttons or turn the <DISP> dial to choose [Select items], and then press the <FUNC SET> button.
- Choose up to five menu items to save (either press the <▲><▼> buttons or turn the <DISP> dial), and then press the <FUNC SET> button.
- [✓] is displayed.
- To cancel saving, press the <FUNC SET> button. [✓] is no longer displayed.
- Press the <MENU> button.



3 Rearrange menu items, as needed.

- Press the <▲><▼> buttons or turn the <DISP> dial to choose [Sort], and then press the <FUNC SET> button.
- Choose a menu item to move (either press the <▲><▼> buttons or turn the <DISP> dial), and then press the <FUNC SET> button.
- Press the <▲><▼> buttons or turn the <DISP> dial to change the order, and then press the <FUNC SET> button.
- Press the <MENU> button.



- Grayed-out items in step 2 can also be specified, but they may not be available in some shooting modes.



- To make My Menu immediately accessible by pressing the <MENU> button in Shooting mode, choose [Set default view] and press the <◀><▶> buttons to choose [Yes].



6

Playback Mode

Have fun reviewing your shots, and browse or edit them in many ways

- To prepare the camera for these operations, press the <▶> button to enter Playback mode.



- It may not be possible to play back or edit images that were renamed or already edited on a computer, or images from other cameras.

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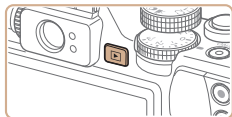
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Viewing

After shooting images or movies, you can view them on the screen as follows.



1 Enter Playback mode.

- Press the button.
- Your last shot is displayed.



2 Browse through your images.

- To view the previous image, press the button or turn the dial counterclockwise. To view the next image, press the button or turn the dial clockwise.
- Press and hold the < buttons to browse through images quickly.



- To access Scroll Display mode, turn the dial rapidly. In this mode, turn the dial to browse through images.
- To return to single-image display, press the button.
- To browse images grouped by shooting date, press the < buttons in Scroll Display mode.



Volume Indicator

- Movies are identified by a icon. To play movies, go to step 3.

3 Play movies.

- To start playback, press the button to access the movie control panel, choose (either press the < buttons or turn the dial), and then press the button again.

4 Adjust the volume.

- Press the < buttons to adjust the volume.
- To adjust the volume when the volume indicator is no longer displayed, press the < buttons.

5 Pause playback.

- To pause or resume playback, press the button.
- After the movie is finished, is displayed.





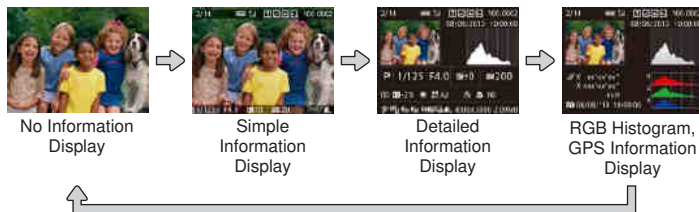
- To switch to Shooting mode from Playback mode, press the shutter button halfway.
- To deactivate Scroll Display, press the <MENU> button, choose [Scroll Display] on the [INFO] tab, and then choose [Off].
- If you prefer to have the most recent shot displayed when you enter Playback mode, press the <MENU> button, and on the [INFO] tab, choose [Resume] and then [Last shot].
- To change the transition shown between images, press the <MENU> button, choose [Transition Effect] on the [INFO] tab, and then choose the desired effect.

Still Images

Movies

Switching Display Modes

Press the <▼> button to view other information on the screen, or to hide the information. For details on the information displayed, see “Playback (Detailed Information Display)” (192).



Still Images

Movies

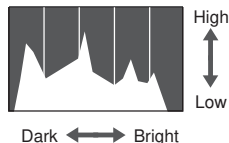
Overexposure Warning (for Image Highlights)

Washed-out highlights in the image flash on the screen in detailed information display (103).

Still Images

Movies

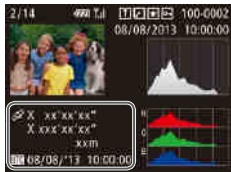
Histogram



- The graph in detailed information display (103) is a histogram showing the distribution of brightness in the image. The horizontal axis represents the degree of brightness, and the vertical axis, how much of the image is at each level of brightness. Viewing the histogram is a way to check exposure.
- The histogram can also be accessed while shooting (95, 191).



RGB Histogram, GPS Information Display



- The RGB histogram shows the distribution of shades of red, green, and blue in an image. The horizontal axis represents R, G, or B brightness, and the vertical axis, how much of the image is at that level of brightness. Viewing this histogram enables you to check image color characteristics.
- Using a smartphone connected to the camera via Wi-Fi, you can geotag images on the camera, adding information such as latitude, longitude, and elevation (146). You can review this information in the GPS information display.
- Latitude, longitude, elevation, and UTC (shooting date and time) are listed from top to bottom.



- [---] is shown instead of numerical values for items not available on your smartphone or items not recorded correctly.



- UTC: Coordinated Universal Time, essentially the same as Greenwich Mean Time
- GPS information display is not available for images that lack this information.

Viewing Short Movies Created When Shooting Still Images (Digest Movies)

View digest movies recorded automatically in [SET] mode (31) on a day of still image shooting as follows.



1 Choose an image.

- Choose a still image labeled with [SET] and press the button.

2 Play the movie.

- Press the <<>> buttons or turn the dial to choose [OK].
- The movie recorded automatically on the day of still image shooting is played back, from the beginning.



- After a moment, [SET] will no longer be displayed when you are using the camera with information display deactivated (103).



■ Viewing by Date

Digest movies can be viewed by date.



1 Choose a movie.

- Press the <MENU> button, choose [List/Play Digest Movies] on the [▶] tab, and then choose a date (📖25).

2 Play the movie.

- Press the <FUNC SET> button to start playback.

Still Images

■ Checking People Detected in Face ID

If you switch the camera to simple information display mode (📖103), the names of up to five detected people registered in Face ID (📖39) will be displayed.



- Press the <▼> button several times until simple information display is activated, and then press the <◀><▶> buttons or turn the <●> dial to choose an image.
- Names will be displayed on detected people.



- If you do not want names to display on images shot using Face ID, press the <MENU> button, choose [Face ID Info] on the [▶] tab, and then set [Name Display] to [Off].

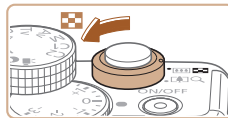
■ Browsing and Filtering Images

Still Images

Movies

■ Navigating through Images in an Index

By displaying multiple images in an index, you can quickly find the images you are looking for.



1 Display images in an index.

- Move the zoom lever toward <☒> to display images in an index. Moving the lever again will increase the number of images shown.
- To display fewer images, move the zoom lever toward <Q>. Fewer images are shown each time you move the lever.

2 Choose an image.

- Turn the <●> dial to scroll through the images.
- Press the <▲><▼><◀><▶> buttons to choose an image.
- An orange frame is displayed around the selected image.
- Press the <FUNC SET> button to view the selected image in single-image display.



- To deactivate the 3D display effect (shown if you hold down the <▲><▼> buttons or turn the <●> dial rapidly), press the <MENU> button, and on the [▶] tab, set [Index Effect] to [Off].



Finding Images Matching Specified Conditions

Find desired images quickly on a memory card full of images by filtering image display according to your specified conditions. You can also protect (📁111) or delete (📁114) these images all at once.

★ Favorites	Displays images tagged as favorites (📁117).
🕒 Shot Date	Displays the images shot on a specific date.
👤 People	Displays images with detected faces.
📷 Still image/Movie	Displays still images, movies, or movies shot in [📷] mode (📁31).
😊 Name	Displays images of a registered person (📁39).

Filtering Display by [★], [🕒], [👤], or [📷]



1 Choose the first condition for image display or navigation.

- In single-image display, press the <🔍> button, and then press the <▲><▼> buttons to choose a display filter.
- When [★] or [👤] is selected, you can view only images matching this condition by pressing the <◀><▶> buttons or turning the <🔍> dial. To perform an action for all of these images together, press the <FUNC SET> button and go to step 3.



2 Choose the second condition and check the images found.

- Press the <◀><▶> buttons to choose another condition. Once you turn the <🔍> dial, you can view the images narrowed down by your conditions.
- To cancel this mode, press the <MENU> button.
- To switch to filtered image display, press the <FUNC SET> button and go to step 3.

3 View the filtered images.

- Images matching your conditions are displayed in yellow frames. To view only these images, press the <◀><▶> buttons, or turn the <🔍> dial.
- To cancel filtered display, press the <🔍> button.



- When the camera has found no corresponding images for some conditions, those conditions will not be available.



- To show or hide information, press the <▼> button in step 3.
- Options for viewing the images found (in step 3) include "Navigating through Images in an Index" (📁105), "Magnifying Images" (📁109), and "Viewing Slideshows" (📁110). You can protect, erase, or print all images found or add them to a photobook by choosing [Select All Images in Search] in "Protecting Images" (📁111), "Erasing Multiple Images at Once" (📁114), "Adding Images to the Print List (DPOF)" (📁180), or "Adding Images to a Photobook" (📁182).
- If you edit images and save them as new images (📁118 – 121), a message is displayed, and the images that were found are no longer shown.

Filtering Display by [F5]

1 Choose [F5].

- Following step 1 in “Filtering Display by [F1], [F2], [F3], or [F4]” (p.106), choose [F5] and press the <FUNC SET> button.

2 Choose a person.

- Press the <▲><▼><◀><▶> buttons to choose a person, and then press the <FUNC SET> button.



3 View the filtered images.

- Follow step 3 in “Filtering Display by [F1], [F2], [F3], or [F4]” (p.106) to view the images.



- [F5] is not available unless people are registered (p.39).

Using the Front Dial to Filter by [F6] or [F7] or Jump by [F8] or [F9]

Jump to Favorites	Displays images tagged as favorites (p.117).
Jump Shot Date	Jumps to the first image in each group of images that were shot on the same date.
Jump 10 Images	Jumps by 10 images at a time.
Jump 100 Images	Jumps by 100 images at a time.



1 Choose a condition.

- Choose a condition (or jump method) in single-image display by turning the <☀> dial and then pressing the <▲><▼> buttons.

2 View images matching your specified condition, or jump by the specified amount.

- Turn the <☀> dial to view only images matching the condition or jump by the specified number of images forward or back.



- Turning the <☀> dial when browsing images in index display will jump to the previous or next image according to the jump method chosen in single-image display. However, if you have chosen [F8] or [F9], the jump method will be switched to [F7].




Viewing Individual Images in a Group

Grouped images (either from continuous shooting (📖76) in [P], [Tv], [Av], or [M] mode (📖67, 92, or 93) or individual still images saved as source data in [S] mode (📖63)) are generally displayed together, but they can also be viewed individually.



1 Choose a grouped image.

- Press the <◀>>> buttons or turn the <⦿> dial to choose an image labeled with [SET] , and then press the <FUNC SET> button.



2 View images in the group individually.

- Pressing the <◀>>> buttons or turning the <⦿> dial will display only images in the group.
- Pressing the <⦿> button will display [Display all images]. Press <FUNC SET> to cancel group playback.



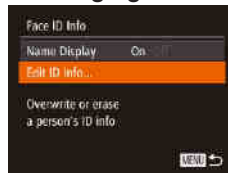
- During group playback (step 2), you can browse through images quickly “Navigating through Images in an Index” (📖105) and magnify them “Magnifying Images” (📖109). By choosing [All Images in Group] for “Protecting Images” (📖111), “Erasing Multiple Images at Once” (📖114), “Adding Images to the Print List (DPOF)” (📖180), or “Adding Images to a Photobook” (📖182), all images in the group can be manipulated at once.
- To ungroup images so that they are displayed only as single still images, press the <MENU> button, choose [Group Images] on the [▶] tab, and then choose [Off] (📖25). However, grouped images cannot be ungrouped during individual playback.

Editing Face ID Information

If you notice that a name is incorrect during playback, you can change it or erase it.

However, you cannot add names for people who are not detected by Face ID (names are not displayed), and for people whose names have been erased.

Changing Names

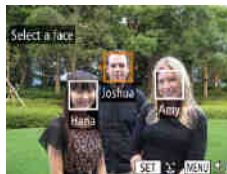


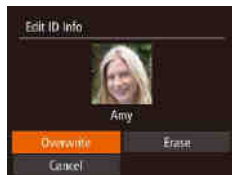
1 Access the setting screen.

- Press the <MENU> button and choose [Face ID Info] on the [▶] tab (📖25).
- Press the <▲><▼> buttons or turn the <⦿> dial to choose [Edit ID Info], and then press the <FUNC SET> button.

2 Choose an image.

- Following the procedure in “Checking People Detected in Face ID” (📖105), choose an image and press the <⦿> button.
- An orange frame is displayed around the selected face. When multiple names are displayed in an image, press the <◀>>> buttons or turn the <⦿> dial to choose the name to change, and then press the <FUNC SET> button.





3 Choose the editing option.

- Press the <▲><▼><◀><▶> buttons or turn the <⦿> dial to choose [Overwrite], and then press the <FUNC SET> button.

4 Choose the name of the person to overwrite with.

- Follow step 2 in “Overwriting and Adding Face Information” (109) to choose the name of the person you want to overwrite with.

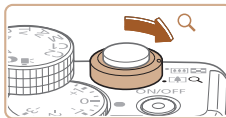
Erasing Names

- Following step 3 in “Changing Names” (109), choose [Erase] and press the <FUNC SET> button.
- After [Erase?] is displayed, press the <◀><▶> buttons or turn the <⦿> dial to choose [OK], and then press the <FUNC SET> button.

Image Viewing Options

Still Images

Magnifying Images



Approximate Position of Displayed Area

1 Magnify an image.

- Moving the zoom lever toward <Q> will zoom in and magnify the image. You can magnify images up to about 10x by continuing to hold the zoom lever.
- To zoom out, move the zoom lever toward <◻>. You can return to single-image display by continuing to hold it.

2 Move the display position and switch images as needed.

- To move the display position, press the <▲><▼><◀><▶> buttons.
- To switch to other images while zoomed, turn the <⦿> dial.



- You can return to single-image display from magnified display by pressing the <MENU> button.
- You can check the focus when [SET] is displayed by pressing the <FUNC SET> button to enlarge the AF frame position (Focus Check). Press the <FUNC SET> button repeatedly to enlarge any other AF frames displayed.



Viewing Slideshows

Automatically play back images from a memory card as follows.



1 Access the setting screen.

- Press the <MENU> button, and then choose [Slideshow] on the [▶] tab (📖25).



2 Configure the setting.

- Choose a menu item to configure, and then choose the desired option (📖25).

3 Start automatic playback.

- Press the <▲><▼> buttons or turn the <⦿> dial to choose [Start], and then press the <FUNC SET> button.
- The slideshow will start after [Loading image] is displayed for a few seconds.
- Press the <MENU> button to stop the slideshow.



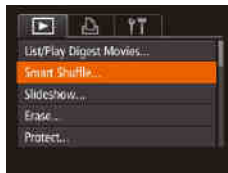
- The camera's power-saving functions (📖21) are deactivated during slideshows.



- To pause or resume slideshows, press the <FUNC SET> button.
- You can switch to other images during playback by pressing the <◀><▶> buttons or turning the <⦿> dial. For fast-forward or fast-rewind, hold the <◀><▶> buttons down.

Auto Playback of Related Images (Smart Shuffle)

Based on the current image, the camera offers four images that you may wish to view. After you choose to view one of those images, the camera offers four more images. This is an enjoyable way to play back images in an unexpected order. Try this feature after you have taken many shots, in many kinds of scenes.



1 Choose Smart Shuffle.

- Press the <MENU> button, choose [Smart Shuffle] on the [▶] tab, and then press the <FUNC SET> button (📖25).
- Four candidate images are displayed.



2 Choose an image.

- Press the <▲><▼><◀><▶> buttons to choose the image you want to view next.
- Your chosen image is displayed in the center, surrounded by the next four candidate images.
- For full-screen display of the center image, press the <FUNC SET> button. To restore the original display, press the <FUNC SET> button again.
- Press the <MENU> button to restore single-image display.



- Only still images shot with this camera are played back using Smart Shuffle.
- Smart Shuffle is not available in the following cases:
 - There are less than 50 shots taken with this camera
 - An unsupported image is currently displayed
 - Images are shown in filtered display (📖106)
 - During group playback (📖108)



Protecting Images

Protect important images to prevent accidental erasure by the camera (📖114).

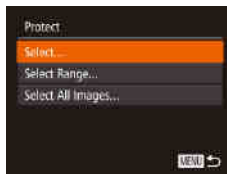


Choosing a Selection Method



1 Access the setting screen.

- Press the <MENU> button and choose [Protect] on the [📺] tab (📖25).



2 Choose a selection method.

- Choose a menu item and an option as desired (📖25).
- To return to the menu screen, press the <MENU> button.



- Protected images on a memory card will be erased if you format the card (📖153, 154).




- Protected images cannot be erased using the camera's erasure function. To erase them this way, first cancel protection.








Choosing Images Individually


1 Choose [Select].

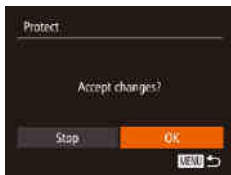
- Following step 2 in “Choosing a Selection Method” (111), choose [Select] and press the  button.

2 Choose an image.

- Press the   buttons or turn the  dial to choose an image, and then press the  button. [On] is displayed.
- To cancel selection, press the  button again. [On] is no longer displayed.
- Repeat this process to specify other images.

3 Protect the image.


- Press the  button. A confirmation message is displayed.
- Press the   buttons or turn the  dial to choose [OK], and then press the  button.




- Images will not be protected if you switch to Shooting mode or turn the camera off before finishing the setup process in step 3.





Selecting a Range

1 Choose [Select Range].



- Following step 2 in “Choosing a Selection Method” (111), choose [Select Range] and press the  button.

2 Choose a starting image.

- Press the  button.

- Press the   buttons or turn the  dial to choose an image, and then press the  button.

3 Choose an ending image.

- Press the  button to choose [Last image], and then press the  button.





- Press the <◀>>> buttons or turn the <⦿> dial to choose an image, and then press the <FUNC SET> button.
- Images before the first image cannot be selected as the last image.



4 Protect the images.

- Press the <▼> button to choose [Protect], and then press the <FUNC SET> button.



- You can also choose the first or last image by turning the <⦿> dial when the top screen in steps 2 and 3 is displayed.



Specifying All Images at Once

1 Choose [Select All Images].

- Following step 2 in "Choosing a Selection Method" (111), choose [Select All Images] and press the <FUNC SET> button.

2 Protect the images.

- Press the <▲><▼> buttons or turn the <⦿> dial to choose [Protect], and then press the <FUNC SET> button.



- To cancel protection for groups of images, choose [Unlock] in step 4 of "Selecting a Range" or in step 2 of "Specifying All Images at Once".



Erasing Images

You can choose and erase unneeded images one by one. Be careful when erasing images, because they cannot be recovered. However, protected images (📖111) cannot be erased.

1 Choose an image to erase.

- Press the <◀> buttons or turn the <🔍> dial to choose an image.

2 Erase the image.

- Press the <🗑️> button.
- After [Erase?] is displayed, press the <◀> buttons or turn the <🔍> dial to choose [Erase], and then press the <FUNC SET> button.
- The current image is now erased.
- To cancel erasure, press the <◀> buttons or turn the <🔍> dial to choose [Cancel], and then press the <FUNC SET> button.

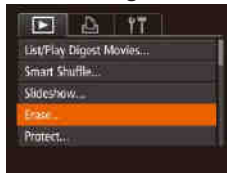


- Pressing the <🗑️> button while [RAW+JPEG] images are displayed will give you the option of choosing [Erase RAW], [Erase JPEG], or [Erase RAW+JPEG] for deletion.

Erasing Multiple Images at Once

You can choose multiple images to erase at once. Be careful when erasing images, because they cannot be recovered. However, protected images (📖111) cannot be erased.

Choosing a Selection Method



1 Access the setting screen.

- Press the <MENU> button, and then choose [Erase] on the [📺] tab (📖25).

2 Choose a selection method.

- Choose a menu item and an option as desired (📖25).
- To return to the menu screen, press the <MENU> button.

■ Choosing Images Individually

1 Choose [Select].

- Following step 2 in “Choosing a Selection Method” (📖 114), choose [Select] and press the <FUNC SET> button.

2 Choose an image.

- Once you choose an image following step 2 in “Choosing Images Individually” (📖 112), [✓] is displayed.
- To cancel selection, press the <FUNC SET> button again. [✓] is no longer displayed.
- Repeat this process to specify other images.

3 Erase the image.

- Press the <MENU> button. A confirmation message is displayed.
- Press the <◀> buttons or turn the <DISP> dial to choose [OK], and then press the <FUNC SET> button.



■ Selecting a Range

1 Choose [Select Range].

- Following step 2 in “Choosing a Selection Method” (📖 114), choose [Select Range] and press the <FUNC SET> button.

2 Choose images.

- Follow steps 2 – 3 in “Selecting a Range” (📖 112) to specify images.

3 Erase the images.

- Press the <▼> button to choose [Erase], and then press the <FUNC SET> button.



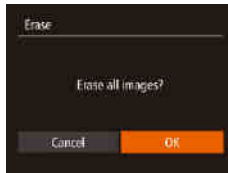
■ Specifying All Images at Once

1 Choose [Select All Images].

- Following step 2 in “Choosing a Selection Method” (📖 114), choose [Select All Images] and press the <FUNC SET> button.

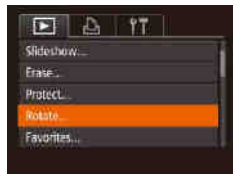
2 Erase the images.

- Press the <◀> buttons or turn the <DISP> dial to choose [OK], and then press the <FUNC SET> button.



Rotating Images

Change the orientation of images and save them as follows.



1 Choose [Rotate].

- Press the <MENU> button and choose [Rotate] on the [REVIEW] tab (116).



2 Rotate the image.

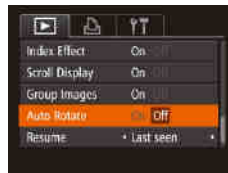
- Press the <◀▶> buttons or turn the <DISP> dial to choose an image.
- The image is rotated 90° each time you press the <DISP> button.
- To return to the menu screen, press the <MENU> button.



- Movies with an image quality of [FHD 60P], [FHD 30P], or [HD 30P] cannot be rotated.
- Rotation is not possible when [Auto Rotate] is set to [Off] (116).

Deactivating Auto Rotation

Follow these steps to deactivate automatic image rotation, which rotates images based on the current camera orientation.



- Press the <MENU> button, choose [Auto Rotate] on the [REVIEW] tab, and then choose [Off] (116).



- Images cannot be rotated (116) when you set [Auto Rotate] to [Off]. Additionally, images already rotated will be displayed in the original orientation.
- In Smart Shuffle (110) mode, even if [Auto Rotate] is set to [Off], images shot vertically will be displayed vertically, and rotated images will be displayed in the rotated orientation.

Tagging Images as Favorites

You can organize images by tagging them as favorites. By choosing a category in filtered playback, you can restrict the following operations to all of those images.

- Viewing (102), Viewing Slideshows (110), Protecting Images (111), Erasing Images (114), Adding Images to the Print List (DPOF) (180), Adding Images to a Photobook (182)



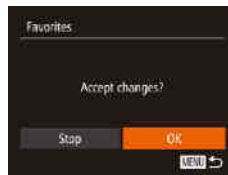
1 Choose [Favorites].

- Press the <MENU> button and choose [Favorites] on the [] tab (25).



2 Choose an image.

- Press the <◀>>> buttons or turn the <DISP> dial to choose an image, and then press the <FUNC SET> button. [★] is displayed.
- To untag the image, press the <FUNC SET> button again. [★] is no longer displayed.
- Repeat this process to choose additional images.



3 Finish the setup process.

- Press the <MENU> button. A confirmation message is displayed.
- Press the <◀>>> buttons or turn the <DISP> dial to choose [OK], and then press the <FUNC SET> button.



- Images will not be tagged as favorites if you switch to Shooting mode or turn the camera off before finishing the setup process in step 3.



- Favorite images will have a three-star rating (★★★☆☆) when transferred to computers running Windows 8, Windows 7, or Windows Vista. (Does not apply to movies or RAW images.)

Convenient Control Using the <S> Button

You can quickly and easily activate functions that you assign to the <S> button.



1 Choose [Set Shortcut button].

- Press the <MENU> button, and then choose [Set Shortcut button] on the [P] tab (p. 25).

2 Configure the setting.

- Press the <◀▶> buttons or turn the <DISP> dial to choose a function to assign, and then press the <FUNC SET> button.

3 Use the assigned function as needed.

- Press the <S> button to activate the assigned function.



- To restore default settings, choose [S].
- When [P] is assigned and you press the <S> button while the camera is not connected to the printer, the image is designated for printing and will be printed once the printer is connected.

Editing Still Images



- Image editing (p. 118 – 121) is only available when the memory card has sufficient free space.

Resizing Images

Save a copy of images at a lower resolution.



1 Choose [Resize].

- Press the <MENU> button and choose [Resize] on the [P] tab (p. 25).

2 Choose an image.

- Press the <◀▶> buttons or turn the <DISP> dial to choose an image, and then press the <FUNC SET> button.

3 Choose an image size.

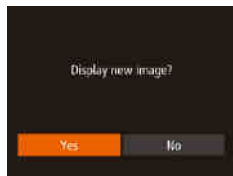
- Press the <◀▶> buttons or turn the <DISP> dial to choose the size, and then press the <FUNC SET> button.
- [Save new image?] is displayed.



4 Save the new image.

- Press the <◀▶> buttons or turn the <DISP> dial to choose [OK], and then press the <FUNC SET> button.
- The image is now saved as a new file.





5 Review the new image.

- Press the <MENU> button. [Display new image?] is displayed.
- Press the <◀▶> buttons or turn the <DISP> dial to choose [Yes], and then press the <FUNC SET> button.
- The saved image is now displayed.



- Editing is not possible for images shot at a resolution of [S] (book 45) or saved as [S] in step 3.
- RAW images cannot be edited.

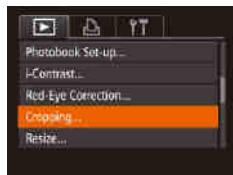


- Images cannot be resized to a higher resolution.

Still Images

Cropping

You can specify a portion of an image to save as a separate image file.



1 Choose [Cropping].

- Press the <MENU> button, and then choose [Cropping] on the [▶] tab (book 25).

2 Choose an image.

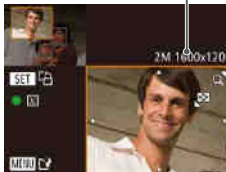
- Press the <◀▶> buttons or turn the <DISP> dial to choose an image, and then press the <FUNC SET> button.

Cropping Area



Preview of Image After Cropping

Resolution After Cropping



3 Adjust the cropping area.

- A frame is displayed around the portion of the image to be cropped.
- The original image is shown in the upper left, and a preview of the image as cropped is shown in the lower right.
- To resize the frame, move the zoom lever.
- To move the frame, press the <▲><▼><◀><▶> buttons.
- To change the frame orientation, press the <FUNC SET> button.
- Faces detected in the image are enclosed in gray frames in the upper-left image. To crop the image based on this frame, turn the <DISP> dial to switch to the other frame.
- Press the <MENU> button.

4 Save as a new image and review.

- Follow steps 4 – 5 in “Resizing Images” (book 118 – 119).



- Editing is not possible for images shot at a resolution of [S] (book 45) or resized to [S] (book 118).
- RAW images cannot be edited.

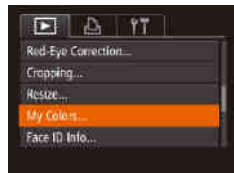


- Images supported for cropping will have the same aspect ratio after cropping.
- Cropped images will have a lower resolution than uncropped images.
- If you crop still images shot using Face ID (book 39), only the names of the people left in the cropped image will remain.



Changing Image Color Tones (My Colors)

You can adjust image colors and then save the edited image as a separate file. For details on each option, see “Changing Image Color Tones (My Colors)” (p. 75).



1 Choose [My Colors].

- Press the <MENU> button, and then choose [My Colors] on the [P] tab (p. 25).

2 Choose an image.

- Press the <◀▶> buttons or turn the <DISP> dial to choose an image, and then press the <FUNC SET> button.

3 Choose an option.

- Press the <◀▶> buttons or turn the <DISP> dial to choose an option, and then press the <FUNC SET> button.

4 Save as a new image and review.

- Follow steps 4 – 5 in “Resizing Images” (p. 118 – 119).



- Image quality of pictures you repeatedly edit this way will be a little lower each time, and you may not be able to obtain the desired color.
- Colors of RAW images cannot be edited.



- The color of images edited using this function may vary slightly from the color of images shot using My Colors (p. 75).

Correcting Image Brightness (i-Contrast)

Excessively dark image areas (such as faces or backgrounds) can be detected and automatically adjusted to the optimal brightness. Insufficient overall image contrast is also automatically corrected, to make subjects stand out better. Choose from four correction levels, and then save the image as a separate file.



1 Choose [i-Contrast].

- Press the <MENU> button, and then choose [i-Contrast] on the [P] tab (p. 25).

2 Choose an image.

- Press the <◀▶> buttons or turn the <DISP> dial to choose an image, and then press the <FUNC SET> button.

3 Choose an option.

- Press the <◀▶> buttons or turn the <DISP> dial to choose an option, and then press the <FUNC SET> button.

4 Save as a new image and review.

- Follow steps 4 – 5 in “Resizing Images” (p. 118 – 119).



- For some images, correction may be inaccurate or may cause images to appear grainy.
- Images may look grainy after repeated editing using this function.
- RAW images cannot be edited this way.

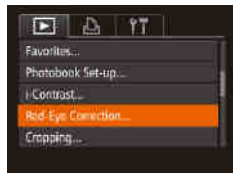




- If [Auto] does not produce the expected results, try correcting images using [Low], [Medium], or [High].

Correcting Red-Eye

Automatically corrects images affected by red-eye. You can save the corrected image as a separate file.



1 Choose [Red-Eye Correction].

- Press the <MENU> button, and then choose [Red-Eye Correction] on the [▶] tab (📖25).

2 Choose an image.

- Press the <◀><▶> buttons or turn the <⦿> dial to choose an image.

3 Correct the image.

- Press the <FUNC SET> button.
- Red-eye detected by the camera is now corrected, and frames are displayed around corrected image areas.
- Enlarge or reduce images as needed. Follow the steps in “Magnifying Images” (📖109).



4 Save as a new image and review.

- Press the <▲><▼><◀><▶> buttons or turn the <⦿> dial to choose [New File], and then press the <FUNC SET> button.
- The image is now saved as a new file.
- Follow step 5 in “Resizing Images” (📖119).

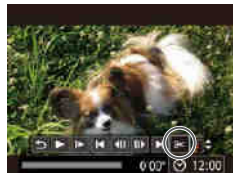


- Some images may not be corrected accurately.
- To overwrite the original image with the corrected image, choose [Overwrite] in step 4. In this case, the original image will be erased.
- Protected images cannot be overwritten.
- RAW images cannot be edited this way.
- Red-eye correction can be applied to JPEG images shot in [📷*], but the original image cannot be overwritten.



Editing Movies

You can cut movies to remove unneeded portions at the beginning or end.



Movie Editing Panel



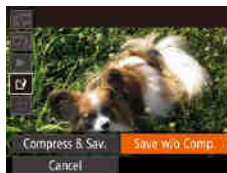
Movie Editing Bar

1 Choose [F6].

- Following steps 1 – 5 in “Viewing” (□ 102), choose [F6] and press the <FUNC> button.
- The movie editing panel and editing bar are now displayed.

2 Specify portions to cut.

- Press the <▲><▼> buttons to choose [⏏] or [⏏].
- To view the portions you can cut (identified by [⏏] on the screen), press the <◀><▶> buttons or turn the <⦿> dial to move [⏏]. Cut the beginning of the movie (from [⏏]) by choosing [⏏], and cut the end of the movie by choosing [⏏].
- If you move [⏏] to a position other than a [⏏] mark, in [⏏] the portion before the nearest [⏏] mark on the left will be cut, while in [⏏] the portion after the nearest [⏏] mark on the right will be cut.



3 Review the edited movie.

- Press the <▲><▼> buttons to choose [▶], and then press the <FUNC> button. The edited movie is now played.
- To edit the movie again, repeat step 2.
- To cancel editing, press the <▲><▼> buttons to choose [⏏]. Press the <FUNC> button, choose [OK] (either press the <◀><▶> buttons or turn the <⦿> dial), and then press the <FUNC> button again.

4 Save the edited movie.

- Press the <▲><▼> buttons to choose [▶], and then press the <FUNC> button.
- Press the <▲><▼><◀><▶> buttons or turn the <⦿> dial to choose [New File], and then press the <FUNC> button.
- The movie is now saved as a new file.
- Choose [Save w/o Comp.], and then press the <FUNC> button.



- To overwrite the original movie with the cut one, choose [Overwrite] in step 4. In this case, the original movie will be erased.
- If the memory card lacks sufficient space, only [Overwrite] will be available.
- Movies may not be saved if the battery pack runs out while saving is in progress.
- When editing movies, you should use a fully charged battery pack or an AC adapter kit (sold separately, 160).

Reducing File Sizes

Movie file sizes can be reduced by compressing movies as follows.



- On the screen in step 2 of “Editing Movies”, choose []. Choose [New File], and then press the button.
- Choose [Compress & Sav.], and then press the button.



- Compressed movies are saved in [] format.
- [] movies cannot be compressed.
- Edited movies cannot be saved in compressed format when you choose [Overwrite].
- However, you can compress and save edited movies as new files by choosing [Compress & Sav.].

Editing Digest Movies

Individual chapters (clips) (31) recorded in [] mode can be erased, as needed. Be careful when erasing clips, because they cannot be recovered.



1 Select the clip to erase.

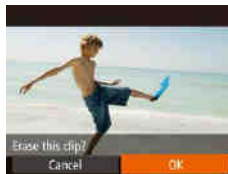
- Follow steps 1 – 2 in “Viewing Short Movies Created When Shooting Still Images (Digest Movies)” (104) to play a movie created in [] mode, and then press the button to access the movie control panel.
- Press the or buttons or turn the dial to choose [] or [], and then press the button.

2 Choose [].

- Press the or buttons or turn the dial to choose [], and then press the button.
- The selected clip is played back repeatedly.

3 Confirm erasure.

- Press the or buttons or turn the dial to choose [OK], and then press the button.
- The clip is erased, and the short movie is overwritten.



- [] is not displayed if you select a clip when the camera is connected to a printer.

7

Wi-Fi Functions

Send images wirelessly from the camera to a variety of compatible devices, and use the camera with Web services

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What You Can Do with Wi-Fi

This camera is an approved Wi-Fi®* product. You can wirelessly connect to and send images to the following devices and services.

Note that, in this chapter, wireless LAN functions other than Wi-Fi may be referred to as Wi-Fi.

* Wi-Fi is a brand name that indicates interoperability certification of wireless LAN devices.



Connecting to Web Services

Images can be sent to social network services and other Web services via CANON iIMAGE GATEWAY*. Unsent images on the camera can also be sent automatically to a computer or Web service via CANON iIMAGE GATEWAY.

* CANON iIMAGE GATEWAY is an online photo service available to those who have purchased this product.



Connecting to a Smartphone

Send images to smartphones and tablet computers that have Wi-Fi functions. You can also geotag your shots from a connected smartphone or tablet.

For convenience in this manual, smartphones, tablets, and other compatible devices are collectively referred to as “smartphones”.



Connecting to Another Camera

Use the Wi-Fi function to send images between Canon-brand, compact digital cameras.



Connecting to a Computer

Use the software to wirelessly send images from the camera to a computer.



Connecting to a Printer

Send images wirelessly to a PictBridge-compatible printer (supporting DPS over IP) to print them.



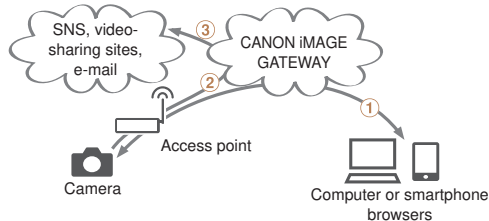
- Before using Wi-Fi, be sure to read “Wi-Fi (Wireless LAN) Precautions” (📖210) and “Security Precautions” (📖211).

Preparing to Share Images via Wi-Fi

Sending images via Wi-Fi requires some initial preparation on the camera and target devices. Preparations and methods of sending images vary depending on the destination.

Note that before using Wi-Fi (📖133), you will need to register a camera nickname on the camera.

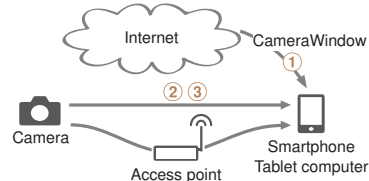
Uploading Images to Web Services



- ① Register Web services (📖127)
- ② Connect via an access point (📖134)
- ③ Send images (📖142)*

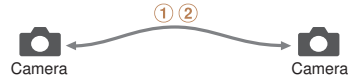
* You can send images to a computer or Web service (📖145).

Sending Images to a Smartphone



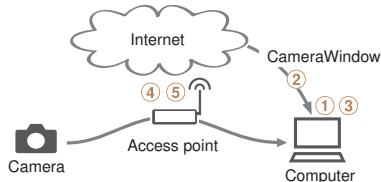
- ① Install CameraWindow on a smartphone (📖130)
- ② Connect directly (📖139) or via an access point (📖134)
- ③ Send images (📖142)

Sending Images to Another Camera



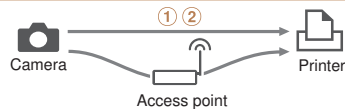
- ① Connect to another camera (📖141)
- ② Send images (📖142)

Sending Images to a Computer



- ① Check your computer environment (📖131)
- ② Install CameraWindow on a computer (📖131)
- ③ Configure the computer for a Wi-Fi connection (Windows only, 📖133)
- ④ Connect via an access point (📖134)
- ⑤ Save images to a computer (📖144)

Printing Images Wirelessly



- ① Connect directly (📖139) or via an access point (📖134)
- ② Print images (📖176)

Registering Web Services

Use a smartphone or computer to add to the camera Web services that you want to use.

- A smartphone or computer with a browser and Internet connection is required to complete camera settings for CANON iMAGE GATEWAY and other Web services.
- Check the CANON iMAGE GATEWAY website for details on browser (Microsoft Internet Explorer, etc.) requirements, including settings and version information.
- For information on countries and regions where CANON iMAGE GATEWAY is available, visit the Canon website (<http://www.canon.com/cig/>).
- You must have an account with Web services other than CANON iMAGE GATEWAY if you desire to use them. For further details, check the websites for each Web service you want to register.
- Separate ISP connection and access point fees may be applicable.



Registering CANON iMAGE GATEWAY

After linking the camera and CANON iMAGE GATEWAY, add CANON iMAGE GATEWAY as a destination Web service on the camera.



1 Log in to CANON iMAGE GATEWAY and access the camera settings page.

- From a computer or smartphone, access <http://www.canon.com/cig/> and visit the CANON iMAGE GATEWAY site for your region.
- Access the camera settings page.
- Once the login screen is displayed, enter your user name and password to log in. If you do not have a CANON iMAGE GATEWAY account, follow the instructions to complete member registration (free of charge).

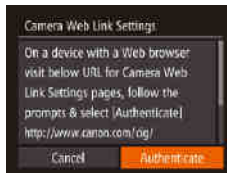
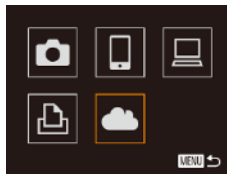


2 Choose your camera model.

- On this camera model, [☁] is displayed in the Wi-Fi menu.
- Once you choose the model, a page is displayed for entering the authentication code. On this page in step 9, you will enter the authentication code displayed on the camera after steps 3 – 8.

3 Access the Wi-Fi menu.

- On the camera, access the Wi-Fi menu (📖 133).



4 Choose [☁].

- Press the <▲><▼><◀><▶> buttons or turn the <⦿> dial to choose [☁], and then press the <FUNC SET> button.

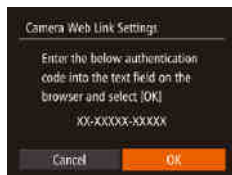
5 Establish a connection with the access point.

- Press the <◀><▶> buttons or turn the <⦿> dial to choose [Authenticate], and then press the <FUNC SET> button.






6 Choose an access point.

- Press the <▲><▼> buttons or turn the <⦿> dial to choose a network (access point), and then press the <FUNC SET> button.









7 Enter the access point password.

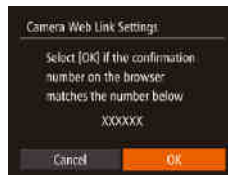
- Press the  button to access the keyboard, and then enter the password (📖135).
- Press the   buttons or turn the  dial to choose [Next], and then press the  button.

8 Choose [Auto] and establish the connection.








- Press the   buttons or turn the  dial to choose [Auto], and then press the  button.
- Once the camera is connected to CANON iMAGE GATEWAY via the access point, an authentication code is displayed.

9 Enter the authentication code.

- On the smartphone or computer, enter the authentication code displayed on the camera and go to the next step.
- A six-digit confirmation number is displayed.



10 Check the confirmation numbers and complete the setup process.

- Make sure the confirmation number on the camera matches the number on the smartphone or computer.
- Press the   buttons or turn the  dial to choose [OK], and then press the  button.
- Complete the setup process on the smartphone or computer.
-  (📖145) and CANON iMAGE GATEWAY are now added as destinations, and the  icon changes to .
- A message is displayed on the smartphone or computer to indicate that this process is finished. To add other Web services, follow the procedure in "Registering Other Web Services" (📖130) from step 2.

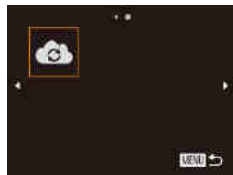


- You can connect to WPS-compatible access points by choosing [WPS Connection] in step 6. For details, see steps 6 – 8 in "Connecting to WPS-Compatible Access Points" (📖136).



Registering Other Web Services

You can also add Web services besides CANON iMAGE GATEWAY to the camera. Note that CANON iMAGE GATEWAY must be registered on the camera first (📖128).



1 Access the Web service settings screen.

- Follow step 1 in “Registering CANON iMAGE GATEWAY” (📖128) to log in to CANON iMAGE GATEWAY, and then access the Web service settings screen.

2 Configure the Web service you want to use.

- Follow the instructions displayed on the smartphone or computer to set up the Web service.

3 Choose [📶].

- Access the Wi-Fi menu (📖133), choose [📶] (either press the <▲><▼><◀><▶> buttons or turn the <📶> dial), and then press the <🔍> button.
- The Web service settings are now updated.



- If any configured settings change, follow these steps again to update the camera settings.

Installing CameraWindow on a Smartphone

Before connecting your camera to a smartphone, first install the free dedicated application, CameraWindow, on your smartphone.



1 Connect the smartphone to a network.

2 Install CameraWindow.

- For an iPhone, iPad, or iPod touch, download and install CameraWindow from the App Store.
- For an Android device, download and install CameraWindow from Google Play.
- After installation, use the camera to establish a connection with the smartphone (📖134, 139).



- For details on this application (supported smartphones and included functions), refer to the Canon website.



Preparing to Register a Computer

Prepare to register a computer. To save images to the computer wirelessly, you must install CameraWindow.

Checking Your Computer Environment

The camera can connect via Wi-Fi to computers running the following operating systems. For detailed system requirements and compatibility information, including support in new operating systems, visit the Canon website.

Operating System	Windows	Macintosh
	Windows 8 Windows 7 SP1	Mac OS X 10.6.8 Mac OS X 10.7 Mac OS X 10.8.2 or later



- Windows 7 Starter and Home Basic editions are not supported.
- Windows 7 N (European version) and KN (South Korean version) require a separate download and installation of Windows Media Feature Pack.

For details, check the following website.

<http://go.microsoft.com/fwlink/?LinkId=159730>

Installing the Software

Windows 7 and Mac OS X 10.6 are used here for the sake of illustration.

What you will need:

- Computer
- USB cable (camera end: Mini-B)*

* A USB cable is not included. Although you can install the software without using a cable, some features will not be added.

1 Download the software.

- With a computer connected to the Internet, access <http://www.canon.com/icpd/>.
- Access the site for your country or region.
- Download the software.

2 Begin the installation.

- Click [Easy Installation] and follow the on-screen instructions to complete the installation process.

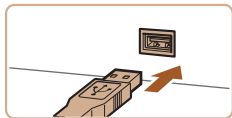
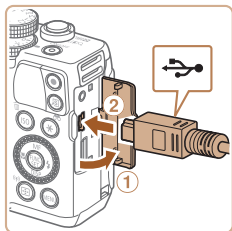




3 When a message is displayed prompting you to connect the camera, choose whether to connect or not.

When Connecting the Camera to the Computer

- With the camera turned off, open the cover (①). With the smaller plug of the USB cable in the orientation shown, insert the plug fully into the camera terminal (②).



- Insert the larger plug of the USB cable in the computer's USB port. For details about USB connections on the computer, refer to the computer user manual.
- Turn the camera on, and follow the on-screen instructions to complete the installation process.

Without Connecting the Camera

- Select [Install without connecting the device] and follow the on-screen instructions to complete the installation process.



4 Install the files.

- Installation may take some time, depending on computer performance and the Internet connection.
- Click [Finish] or [Restart] on the screen after installation.
- After installation when the camera is connected to the computer, turn the camera off before disconnecting the cable.



- Using the software, you can update to the latest version, and download new functions via the Internet (some software excluded).
- The first time you connect the camera to the computer, drivers will be installed, so it may take a few minutes until camera images are accessible.
- Because the content and functions of software vary according to the camera model, if you have several cameras, you must use each camera to update to its latest version of the software.



Configuring the Computer for a Wi-Fi Connection (Windows Only)

On a computer running Windows, configure the following settings before connecting the camera to the computer wirelessly.



1 Confirm that the computer is connected to the access point.

- For instructions on checking your network connection, refer to the computer user manual.

2 Configure the setting.

- Click in the following order: [Start] menu ► [All Programs] ► [Canon Utilities] ► [CameraWindow] ► [Wi-Fi connection setup].
- In the application that opens, follow the on-screen instructions and configure the setting.



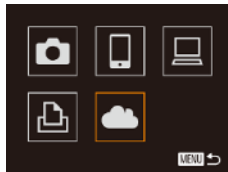
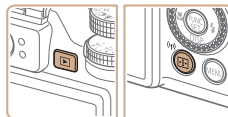
- The following Windows settings are configured when you run the utility in step 2.
 - Turn on media streaming.
This will enable the camera to see (find) the computer to access via Wi-Fi.
 - Turn on network discovery.
This will enable the computer to see (find) the camera.
 - Turn on ICMP (Internet Control Message Protocol).
This allows you to check the network connection status.
 - Enable Universal Plug & Play (UPnP).
This will enable network devices to detect each other automatically.
- Some security software may prevent you from completing the settings as described here. Check the settings of your security software.

Accessing the Wi-Fi Menu

Initial Connection via Wi-Fi

To start with, register a camera nickname.

This nickname will be displayed on the screen of target devices when connecting to other devices via Wi-Fi.



1 Access the Wi-Fi menu.

- Press the <▶> button to turn the camera on.
- Press the <Fn> button.

2 Enter a nickname.

- Press the <Fn> button to access the keyboard, and then enter a nickname (26).
- Up to 16 characters can be used.
- Press the <▲><▼> buttons or turn the <DIAL> dial to choose [OK], and then press the <Fn> button.
- The Wi-Fi menu is displayed.





- When connecting wirelessly to any device other than a computer, a memory card must be inserted in the camera. Additionally, the memory card must contain images in order for you to access Web services or connect to a smartphone or printer wirelessly.
- To change the camera's nickname, choose [Wi-Fi Settings] on the [↑↑] tab, and then choose [Change Device Nickname].
- Nicknames beginning with a space cannot be entered in step 2. If you attempt to do this and press the <MENU> button on the keyboard screen, a message will be displayed. Press the <FUNC SET> button to access the keyboard, and then enter a new nickname.

After the Initial Wi-Fi Connection

- Once you have connected to devices via Wi-Fi, recent destinations will be listed first when you access the Wi-Fi menu by pressing the <Ⓜ> button. You can easily connect again by pressing the <▲><▼> buttons to choose the device name and then pressing the <FUNC SET> button.
- To add a new device, display the device selection screen by pressing the <◀><▶> buttons, and then configure the setting.



- If you prefer not to display recent target devices, press the <MENU> button, and on the [↑↑] tab, choose [Wi-Fi Settings] ► [Target History] ► [Off].

Connecting via an Access Point

Connect to your access point via Wi-Fi as follows.
Also refer to the access point user manual.

Confirming Access Point Compatibility

Confirm that the Wi-Fi router or base station conforms to the Wi-Fi standards in "Specifications" (203).

If you are already using Wi-Fi, confirm the following items. For instructions on checking network settings, refer to the access point user manual.



- If system administrator status is needed to adjust network settings, contact the system administrator for details.
- These settings are very important for network security. Exercise adequate caution when changing these settings.



Check sheet

Network name (SSID/ESSID) The SSID or ESSID for the access point you use. Also called the “access point name” or “network name”.	
Network authentication / data encryption (encryption method / encryption mode) The method for encrypting data during wireless transmission.	<ul style="list-style-type: none"> ○ None ○ WEP (open system authentication) ○ WPA-PSK (TKIP) ○ WPA-PSK (AES) ○ WPA2-PSK (TKIP) ○ WPA2-PSK (AES)
Password (encryption key / network key) The key used when encrypting data during wireless transmission. Also called the “encryption key” or “network key”.	
Key index (transmit key) The key set when WEP is used for network authentication / data encryption.	<ul style="list-style-type: none"> ○ 1

Connection methods vary depending on whether the access point supports Wi-Fi Protected Setup (WPS) or not. Refer to the user manual provided with your access point to check if it supports WPS.



- A router is a device that creates a network (LAN) structure for connecting multiple computers. A router that contains an internal Wi-Fi function is called a “Wi-Fi router”.
- This guide refers to all Wi-Fi routers and base stations as “access points”.
- If you use MAC address filtering on your Wi-Fi network, be sure to add the camera’s MAC address to your access point. You can check your camera’s MAC address by choosing the [f] tab, [Wi-Fi Settings], and then [Check MAC Address].

Connecting to WPS-Compatible Access Points

WPS makes it easy to complete settings when connecting devices over Wi-Fi. You can use either Push Button Configuration Method or PIN Method for settings on a WPS supported device.

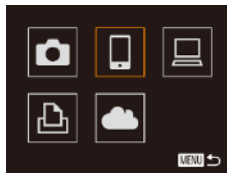
1 Confirm that the target device is connected to the access point.

- This step is not required when connecting to Web services.
- For instructions on checking the connection, refer to the device and access point user manuals.

2 Access the Wi-Fi menu (133).

3 Choose the target device.

- Choose the target device (either press the <▲><▼><◀><▶> buttons or turn the <⦿> dial), and then press the <F1> button.
- To connect to a smartphone, choose [📱].
- To connect to a computer, choose [💻].
- To connect to a printer, choose [🖨️].
- To connect to a Web service, choose the service icon. If multiple recipients or sharing options are used with a Web service, choose the desired item on the [Select Recipient] screen (either press the <▲><▼> buttons or turn the <⦿> dial), and then press the <F1> button.





4 Choose [Add a Device].

- Press the <▲><▼> buttons or turn the <●> dial to choose [Add a Device], and then press the <FUNC SET> button.

5 To connect to a smartphone or printer: Choose [Switch Network].

- When the [Waiting to connect] screen is displayed (139), choose [Switch Network] (either press the <◀><▶> buttons or turn the <●> dial), and then press the <FUNC SET> button.



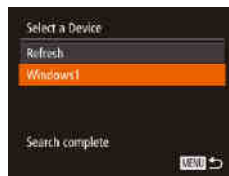
6 Choose [WPS Connection].

- Press the <▲><▼> buttons or turn the <●> dial to choose [WPS Connection], and then press the <FUNC SET> button.



7 Choose [PBC Method].

- Press the <▲><▼> buttons or turn the <●> dial to choose [PBC Method], and then press the <FUNC SET> button.



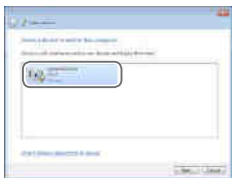
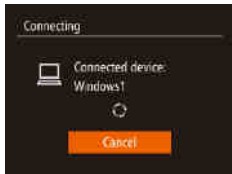
8 Establish the connection.

- On the access point, hold down the WPS connection button for a few seconds.
- On the camera, press the <FUNC SET> button.
- The camera will connect to the access point.
- If you have selected [□], [📄], or [💻] in step 3, devices connected to the access point are listed on the [Select a Device] screen displayed next.
- If you have selected a Web service in step 3, go to step 11.

9 To connect to a smartphone, printer, or computer: Choose the target device.

- Press the <▲><▼> buttons or turn the <●> dial to choose the computer name, and then press the <FUNC SET> button.
- If you have selected a smartphone, printer, or Macintosh computer, go to step 11.





10 If you have selected a computer running Windows in step 9 for the first time: Install a driver.

- When the screen at left is displayed on the camera, click the Start menu on the computer, click [Control Panel], and then click [Add a device].
- Double-click the connected camera icon.
- Driver installation will begin.
- After driver installation is complete, and the camera and computer connection is enabled, the AutoPlay screen will be displayed. Nothing will be displayed on the camera screen.



11 Send or print the images.

- The screen displayed when the devices are connected varies depending on the target device.
- When the camera is connected to a smartphone or Web service, an image transfer screen is displayed. For instructions on sending images, see "Sending Images" (142).
- When the camera is connected to a computer, the camera screen is blank. Follow the steps in "Saving Images to a Computer" (144) to save images to the computer.
- When the camera is connected to a printer, you can print by following the same steps as for printing via USB. For details, see "Printing Images" (176).



- If you chose [PIN Method] in step 7, a PIN code will be displayed on the screen. Be sure to set this code in the access point. Choose a device in the [Select a Device] screen. For further details, refer to the user manual included with your access point.
- To add multiple destinations, repeat this procedure from the first step.



Previous Access Points

You can reconnect to any previous access points automatically by following step 4 in “Connecting to WPS-Compatible Access Points” (136).

- To reconnect to the access point, confirm that the target device is already connected to it, and then follow the procedure from step 9. Note that this step is not required when connecting to Web services.
- To switch access points, choose [Switch Network] on the screen displayed when you establish a connection, and then follow the procedure from step 6.

Connecting to Access Points in the List

1 View the listed access points.

- View the listed networks (access points) as described in steps 1 – 5 of “Connecting to WPS-Compatible Access Points” (135 – 136).

2 Choose an access point.

- Press the <▲><▼> buttons or turn the <●> dial to choose a network (access point), and then press the <FUNC SET> button.



3 Enter the access point password.

- Press the <FUNC SET> button to access the keyboard, and then enter the password (135).
- Press the <▲><▼> buttons or turn the <●> dial to choose [Next], and then press the <FUNC SET> button.

4 Choose [Auto].

- Press the <▲><▼> buttons or turn the <●> dial to choose [Auto], and then press the <FUNC SET> button.
- If you selected [TV], [PC], or [Laptop] as the target device, see “Connecting to WPS-Compatible Access Points”, starting with step 9 (136).
- If you selected a Web service as the destination, see “Connecting to WPS-Compatible Access Points”, starting with step 11 (137).

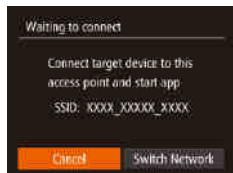
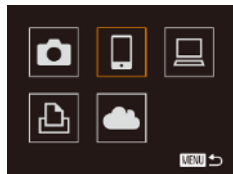


- To determine the access point password, check on the access point itself or refer to the user manual.
- Up to 16 access points will be displayed. If no access points are detected, choose [Manual Settings] in step 2 to manually set an access point. Follow on-screen instructions and enter an SSID, security settings, and a password.
- When you use an access point that you have already connected to for connecting to another device, [*] is displayed for the password in step 3. To use the same password, choose [Next] (either press the <▲><▼> buttons or turn the <●> dial) and press the <FUNC SET> button.

Connecting without an Access Point

When connecting to a smartphone or printer via Wi-Fi, you can use the camera as an access point (Camera Access Point mode) instead of using another access point.

Similarly, no access point is used in camera-to-camera connections (141).



1 Access the Wi-Fi menu (133).

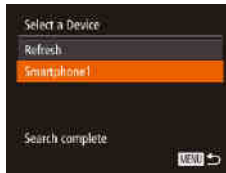
2 Choose the target device.

- Choose the target device (either press the <▲><▼><◀><▶> buttons or turn the <⦿> dial), and then press the <FUNC SET> button.
- To connect to a smartphone, choose [📱].
- To connect to a printer, choose [🖨️].

3 Choose [Add a Device].

- Press the <▲><▼> buttons or turn the <⦿> dial to choose [Add a Device], and then press the <FUNC SET> button.

- The camera's SSID is displayed.



4 On the target device, connect to the network identified on the camera.

- In the smartphone or printer's Wi-Fi setting menu, choose the SSID (network name) displayed on the camera.

5 For a smartphone connection: Start CameraWindow on the smartphone.

- The first time CameraWindow starts up, register a smartphone nickname for display on the camera.
- Once the smartphone is recognized on the camera, the device connection screen will be displayed on the camera.

6 Choose the target device.

- Choose the target device name (either press the <▲><▼> buttons or turn the <⦿> dial), and then press the <FUNC SET> button.





7 For a smartphone connection: Adjust the privacy setting.

- Press the <◀><▶> buttons or turn the <ⓘ> dial to choose [Yes], and then press the <FUNC/SET> button.
- You can now use the smartphone to receive images sent from the camera, or to geotag images on the camera (📖146).

8 Send or print the images.

- The screen displayed when the devices are connected varies depending on the target device.
- When the camera is connected to a smartphone, an image transfer screen is displayed. For instructions on sending images, see “Sending Images” (📖142).
- When the camera is connected to a printer, you can print by following the same steps as for printing via USB. For details, see “Printing Images” (📖176).



- ! • All images in the camera can be viewed from the connected smartphone when you choose [Yes] in step 7. To keep camera images private, so that they cannot be viewed from the smartphone, choose [No] in step 7.
- To change privacy settings for smartphones added to the list, choose the smartphone whose settings you want to change from [Edit a Device] in step 3, and then choose [View Settings].



- To add multiple devices, repeat this procedure from the first step.
- For better security, you can require password input on the screen in step 3 by accessing MENU and choosing [↑↑] tab ► [Wi-Fi Settings] ► [Password] ► [On]. In this case, in the password field on the device in step 4, enter the password displayed on the camera.



Previous Access Points

You can reconnect to any previous access points automatically by following step 3 in “Connecting without an Access Point” (📖139).

- To use the camera as an access point, choose [Switch Network] on the screen displayed when you establish a connection, and then choose [Set Camera As Access Point].
- When reconnecting via a previous access point, connect the target device to the access point in step 4.
- To switch access points, choose [Switch Network] on the screen displayed when you establish a connection, and then follow the procedure in “Connecting to WPS-Compatible Access Points” from step 6 (📖136).



Connecting to Another Camera

Connect two cameras via Wi-Fi and send images between them as follows.



- Only Canon-brand cameras equipped with a Wi-Fi function can be connected to wirelessly. Even Canon-brand cameras that support Eye-Fi cards cannot be connected to if they do not have a Wi-Fi function. You cannot connect to PowerShot SD430 DIGITAL ELPH WIRELESS/DIGITAL IXUS WIRELESS cameras with this camera.

1 Access the Wi-Fi menu (133).

2 Choose camera.

- Press the <▲><▼><◀><▶> buttons or turn the <⬤> dial to choose [📷], and then press the <FUNC SET> button.

3 Choose [Add a Device].

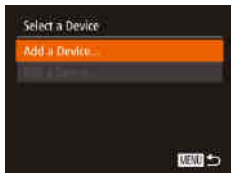
- Press the <▲><▼> buttons or turn the <⬤> dial to choose [Add a Device], and then press the <FUNC SET> button.
- Follow steps 1 – 3 on the target camera too.
- Camera connection information will be added when [Start connection on target camera] is displayed on both camera screens.



- When the target camera has been added successfully, the image transfer screen will be displayed. Proceed to “Sending Images” (142).



- To add multiple cameras, repeat the above procedures starting from step 1.
- Once a camera is added, the camera name will be displayed on the screen in step 3. To connect to a camera again, simply choose the camera name from the list.



Sending Images

Send images wirelessly to destinations registered on the camera as follows. Note that when images are sent to a computer, the computer is used instead of the camera (144).

Sending Images Individually



1 Choose an image.

- Turn the dial to choose an image to send.

2 Send the image.

- Press the buttons to choose [Send this image], and then press the button.
- When uploading to YouTube, read the terms of service, choose [I Agree], and press the button.
- Image transfer will begin. The screen darkens during image transfer.
- After images are uploaded to a Web service, [OK] is displayed. Press the button to return to the playback screen.
- After sending images to a camera or smartphone, [Transfer completed] will be displayed, and the display will return to the image transfer screen.



- For movies that you do not compress (123), a separate, compressed file is sent instead of the original file. Note that this may delay transmission, and the file cannot be sent unless there is enough space for it on the memory card.



- Keep your fingers or other objects off the Wi-Fi antenna area (4). Covering this may decrease the speed of your image transfers.
- Depending on the condition of the network you are using, it may take a long time to send movies. Be sure to keep an eye on the camera battery level.
- When sending movies to smartphones, note that the supported image quality varies depending on the smartphone. For details, refer to the smartphone user manual.
- To disconnect from the camera, press the **<MENU>** button, choose [OK] on the confirmation screen (either press the buttons or turn the dial), and then press the button. You can also use the smartphone to end the connection.
- On the screen, wireless signal strength is indicated by the following icons. high, medium, low, weak
- Sending images to Web services will take less time when resending images you have already sent that are still on the CANON IMAGE GATEWAY server.

Choosing the Image Resolution (Size)

On the image transfer screen, choose by pressing the buttons, and then press the button. On the next screen, choose the resolution by pressing the buttons, and then press the button.

- To send images at original size, select [No] as the resizing option.
- Choosing **[M2]** or **[S]** will resize images that are larger than the selected size before sending.



- Movies cannot be resized.

Sending Multiple Images



1 Choose [Select and send].

- Press the <◀><▶> buttons to choose [Select and send], and then press the <FUNC SET> button.



2 Choose images.

- Press the <▲><▼><◀><▶> buttons to choose an image to send, and then press the <FUNC SET> button. [✓] is displayed.
- To cancel selection, press the <FUNC SET> button again. [✓] is no longer displayed.
- Repeat this process to choose additional images.
- After you finish choosing images, press the <MENU> button.

3 Send the images.

- Press the <◀><▶> buttons or turn the <DISP> dial to choose [Send], and then press the <FUNC SET> button.



- Up to 50 images can be sent together at once. Only one movie can be sent.
- Movies up to five minutes (or digest movies up to 13 minutes) can be sent.
- Web services may limit the number of images you can send. For details, refer to the Web service you are using.
- You can also choose images in step 2 by moving the zoom lever twice toward <Q> to access single-image display and then pressing the <◀><▶> buttons or turning the <DISP> dial.
- In step 3, you can choose the desired resolution (size) of your images before sending (📖45).

Adding Comments

Using the camera, you can add comments to images that you send to e-mail addresses, social networking services, etc. The number of characters and symbols that can be entered may differ depending on the Web service.



1 Access the screen for adding comments.

- Press the <▲><▼><◀><▶> buttons to choose [📝], and then press the <FUNC SET> button.

2 Add a comment (📖26).

3 Send the image.

- Follow the steps in “Sending Images Individually” (📖142) to send the image.



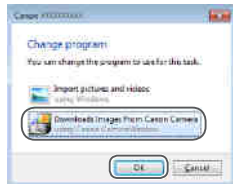
- When a comment is not entered, the comment set in CANON IMAGE GATEWAY is automatically sent.



Saving Images to a Computer

When sending images to a computer, use the computer instead of the camera.

Windows 7 and Mac OS X 10.6 are used here for the sake of illustration. For other functions, refer to the help system of the relevant software (some software excluded).



1 Display CameraWindow.

- In Windows, access CameraWindow by clicking [Downloads Images From Canon Camera].
- On a Macintosh computer, CameraWindow is automatically displayed when a Wi-Fi connection is established between the camera and computer.



2 Import images.

- Click [Import Images from Camera], and then click [Import Untransferred Images].
- Images are now saved to the Pictures folder on the computer, in separate folders named by date.
- Click [OK] in the screen that is displayed after image import is complete. For instructions on viewing images on a computer, refer to "Software Instruction Manual" (173).



- Movies will take longer to import since the file size is larger than still images.
- To disconnect from the camera, turn off the camera.
- You can also specify to save all images or only selected images to the computer, and you can change the destination folder. Refer to "Software Instruction Manual" (173) for details.
- In Windows 7, if the screen in step 2 is not displayed, click the [Wi-Fi] icon in the taskbar.
- If CameraWindow is not displayed when using a Macintosh computer, click the [CameraWindow] icon in the Dock.
- Although you can save images to a computer simply by connecting your camera to the computer without using the software, the following limitations apply.
 - It may take a few minutes after you connect the camera to the computer until camera images are accessible.
 - Images shot in vertical orientation may be saved in horizontal orientation.
 - RAW images (or JPEG images recorded with RAW images) may not be saved.
 - Image protection settings may be cleared from images saved to a computer.
 - Some problems may occur when saving images or image information, depending on the operating system version, the software in use, or image file sizes.
 - Some functions provided by the software may not be available, such as movie editing.



Sending Images Automatically (Image Sync)

Images on the memory card that have not been transferred already can be sent to a computer or Web services via CANON iMAGE GATEWAY. Note that images cannot be sent only to Web services.

Initial Preparations

Install and configure the software on the destination computer.



1 Install the software.

- Install the software on a computer connected to the Internet (📖131).

2 Register the camera.

- Windows: In the taskbar, right-click [📷], and then click [Add new camera].
- Macintosh: In the menu bar, click [📷], and then click [Add new camera].
- Choose a source camera from one of the cameras listed, which are linked to CANON iMAGE GATEWAY (📖128).
- Once the camera is registered and ready to receive images, the icon changes to [📷].

3 Choose the type of images to send (only when sending movies with images).

- Press the <MENU> button, and then choose [Wi-Fi Settings] on the [🔼🔽] tab (📖25).
- Press the <▲><▼> buttons to choose [Image Sync], and then press the <◀><▶> buttons to choose [Stills/Movies].



- To choose a Web service as the destination, follow the steps in "Registering Other Web Services" (📖130) to update the camera settings.



Sending Images

Images sent from the camera are automatically saved to the computer. If the computer that you intend to send images to is turned off, the images will be stored temporarily on the CANON IMAGE GATEWAY server. Stored images are regularly erased, so make sure to turn on the computer and save the images.

- Follow the steps in “Connecting to WPS-Compatible Access Points” (📖135) to choose [📶].
- Once the connection is established, the images are sent.
- When the images have been sent successfully to the CANON IMAGE GATEWAY server, [📶] is displayed on the screen.
- Images are automatically saved to the computer when you turn it on.
- Images are automatically sent to Web services from the CANON IMAGE GATEWAY server, even if the computer is off.



- When sending images, you should use a fully charged battery pack or an AC adapter kit (sold separately, 📖160).



- Even if images were imported to the computer through a different method, any images not sent to the computer via CANON IMAGE GATEWAY will be sent to the computer.
- Sending is faster when the destination is a computer on the same network as the camera, because images are sent via the access point instead of CANON IMAGE GATEWAY. Note that images stored on the computer are sent to CANON IMAGE GATEWAY, so the computer must be connected to the Internet.

Geotagging Images on the Camera

GPS data recorded on a smartphone using the dedicated CameraWindow application (📖130) can be added to images on the camera. Images are tagged with information including the latitude, longitude, and elevation.



- Before shooting, make sure the date and time and your home time zone are set correctly. (See “Setting the Date and Time” (📖14).) Additionally, in [Time Zone] (📖151), specify any shooting destinations that are in other time zones.
- The smartphone you will use for geotagging must be authorized to view the images on the camera (📖140).
- Others may be able to locate or identify you by using location data in your geotagged still images or movies. Be careful when sharing these images with others, as when posting images online where many others can view them.



Editing or Erasing Wi-Fi Settings

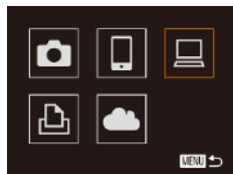
Edit or erase Wi-Fi settings as follows.

Editing Connection Information

1 Access the Wi-Fi menu (133).

2 Choose a device to edit.

- Press the <▲><▼><◀><▶> buttons or turn the <●> dial to choose the icon of the device to edit, and then press the <FUNC SET> button.



3 Choose [Edit a Device].

- Press the <▲><▼> buttons or turn the <●> dial to choose [Edit a Device], and then press the <FUNC SET> button.



4 Choose a device to edit.

- Press the <▲><▼> buttons or turn the <●> dial to choose the device to edit, and then press the <FUNC SET> button.



5 Choose an item to edit.

- Press the <▲><▼> buttons or turn the <●> dial to choose an item to edit, and then press the <FUNC SET> button.
- The items you can change depend on what device or service the camera will access.

Configurable Items	Connection				
					Web Services
[Change Device Nickname] (147)	○	○	○	○	—
[View Settings] (140)	—	○	—	—	—
[Erase Connection Info] (148)	○	○	○	○	—

○ : Configurable — : Not configurable

Changing a Device Nickname

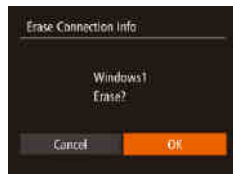
You can change the device nickname (display name) that is displayed on the camera.



- Following step 5 in “Editing Connection Information” (147), choose [Change Device Nickname] and press the <FUNC SET> button.
- Select the input field and press the <FUNC SET> button. Use the keyboard displayed to enter a new nickname (26).

Erasing Connection Information

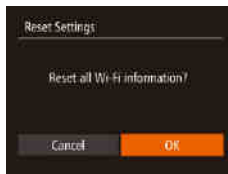
Erase connection information (information about devices that you have connected to) as follows.



- Following step 5 in “Editing Connection Information” (147), choose [Erase Connection Info] and press the button.
- After [Erase?] is displayed, press the buttons or turn the dial to choose [OK], and then press the button.
- The connection information will be erased.

Returning the Wi-Fi Settings to Default

Return the Wi-Fi settings to default if you transfer ownership of the camera to another person, or dispose of it.



1 Choose [Wi-Fi Settings].

- Press the button, and then choose [Wi-Fi Settings] on the tab (25).

2 Choose [Reset Settings].

- Press the buttons or turn the dial to choose [Reset Settings], and then press the button.

3 Restore the default settings.

- Press the buttons or turn the dial to choose [OK], and then press the button.
- The Wi-Fi settings are now reset.



- Resetting the Wi-Fi settings will also clear all Web service settings. Be sure that you want to reset all Wi-Fi settings before using this option.
- To reset other settings (aside from Wi-Fi) to defaults, choose [Reset All] in the tab (157).



8

Setting Menu

Customize or adjust basic camera functions for greater convenience

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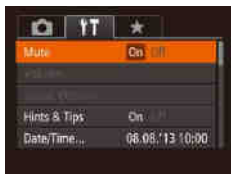


Adjusting Basic Camera Functions

Functions can be configured on the [F1] tab. Customize commonly used functions as desired, for greater convenience (📖25).

Silencing Camera Operations

Silence camera sounds and movies as follows.



- Choose [Mute], and then choose [On].



- Operation can also be silenced by holding down the <▼> button as you turn the camera on.
- Sound is not played during movies (📖102) if you mute camera sounds. To restore sound during movies, press the <▲> button. Adjust volume with the <▲><▼> buttons, as needed.

Adjusting the Volume

Adjust the volume of individual camera sounds as follows.



- Choose [Volume], and then press the <FUNC SET> button.
- Choose an item, and then press the <◀><▶> buttons to adjust the volume.

Customizing Sounds

Customize camera operating sounds as follows.



- Choose [Sound Options], and then press the <FUNC SET> button.
- Choose an item, and then press the <◀><▶> buttons to choose an option.

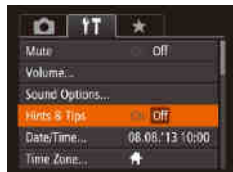


- The shutter sound in digest movies recorded in [A] mode (📖31) cannot be changed.



Hiding Hints and Tips

Hints and tips are normally shown when you choose FUNC. (📖24) or MENU (📖25) items. If you prefer, you can deactivate this information.



- Choose [Hints & Tips], and then choose [Off].

Date and Time

Adjust the date and time as follows.



- Choose [Date/Time], and then press the <FUNC SET> button.
- Press the <◀><▶> buttons to choose an option, and then adjust the setting, either by pressing the <▲><▼> buttons or turning the <DISP> dial.

World Clock

To ensure that your shots will have the correct local date and time when you travel abroad, simply register the destination in advance and switch to that time zone. This convenient feature eliminates the need to change the Date/Time setting manually.

Before using the world clock, be sure to set the date and time and your home time zone, as described in "Setting the Date and Time" (📖14).



1 Specify your destination.

- Choose [Time Zone], and then press the <FUNC SET> button.
- Press the <▲><▼> buttons or turn the <DISP> dial to choose [✈ World], and then press the <FUNC SET> button.
- Press the <◀><▶> buttons or turn the <DISP> dial to choose the destination.
- To set daylight saving time (1 hour ahead), press the <▲><▼> buttons to choose [☀].
- Press the <DISP> button.



2 Switch to the destination time zone.

- Press the <▲><▼> buttons or turn the <DISP> dial to choose [✈ World], and then press the <MENU> button.
- [✈] is now shown on the shooting screen (📖191).



- Adjusting the date or time while in [✈] mode (📖15) will automatically update your [🏠 Home] time and date.

Lens Retraction Timing

The lens is normally retracted for safety about one minute after you press the  button in Shooting mode (191). To have the lens retracted immediately after you press the  button, set the retraction timing to [0 sec.].



- Choose [Lens Retract], and then choose [0 sec.].

Using Eco Mode

This function allows you to conserve battery power in Shooting mode. When the camera is not in use, the screen quickly darkens to reduce battery consumption.



1 Configure the setting.

- Choose [Eco Mode], and then choose [On].
- [ECO] is now shown on the shooting screen (191).
- The screen darkens when the camera is not used for approximately two seconds; approximately ten seconds after darkening, the screen turns off. The camera turns off after approximately three minutes of inactivity.




2 Shoot.

- To activate the screen and prepare for shooting when the screen is off but the lens is still out, press the shutter button halfway.

Power-Saving Adjustment

Adjust the timing of automatic camera and screen deactivation (Auto Power Down and Display Off, respectively) as needed (21).



- Choose [Power Saving], and then press the  button.
- After choosing an item, press the   buttons to adjust it as needed.



- To conserve battery power, you should normally choose [On] for [Auto Power Down] and [1 min.] or less for [Display Off].



- The [Display Off] setting is applied even if you set [Auto Power Down] to [Off].
- These power-saving functions are not available when you have set Eco mode (152) to [On].

Screen Brightness

Adjust screen brightness as follows.



- Choose [LCD Brightness], and then press the <◀><▶> buttons to adjust the brightness.



- For maximum brightness, press and hold the <▼> button for at least one second when the shooting screen is displayed or when in single-image display. (This will override the [LCD Brightness] setting on the [F1] tab.) To restore the original brightness, press and hold the <▼> button again for at least one second or restart the camera.

Start-Up Screen

Customize the start-up screen shown after you turn the camera on as follows.



- Choose [Start-up Image], and then press the <FUNC/SET> button.
- Press the <◀><▶> buttons or turn the <DISP> dial to choose an option.

Formatting Memory Cards

Before using a new memory card or a card formatted in another device, you should format the card with this camera.

Formatting erases all data on a memory card. Before formatting, copy images on the memory card to a computer, or take other steps to back them up.

1 Access the [Format] screen.

- Choose [Format], and then press the <FUNC/SET> button.

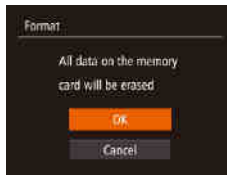
2 Choose [OK].

- Press the <▲><▼> buttons to choose [Cancel], choose [OK] (either press the <◀><▶> buttons or turn the <DISP> dial), and then press the <FUNC/SET> button.



3 Format the memory card.

- To begin the formatting process, press the <▲><▼> buttons or turn the <DISP> dial to choose [OK], and then press the <FUNC/SET> button.
- When formatting is finished, [Memory card formatting complete] is displayed. Press the <FUNC/SET> button.



- Formatting or erasing data on a memory card only changes file management information on the card and does not erase the data completely. When transferring or disposing of memory cards, take steps to protect personal information if necessary, as by physically destroying cards.



- The total card capacity indicated on the formatting screen may be less than the advertised capacity.

Low-Level Formatting

Perform low-level formatting in these cases: [Memory card error] is displayed, the camera is not working correctly, card image reading/writing is slower, continuous shooting is slower, or movie recording suddenly stops. Low-level formatting erases all data on a memory card. Before low-level formatting, copy images on the memory card to a computer, or take other steps to back them up.



- On the screen in step 1 of "Formatting Memory Cards" (153), press the <▲><▼> buttons or turn the <●> dial to choose [Low Level Format], and then press the <◀><▶> buttons to select this option. A [✓] icon is displayed.
- Follow steps 2 – 3 in "Formatting Memory Cards" (153) to continue with the formatting process.



- Low-level formatting takes longer than "Formatting Memory Cards" (153), because data is erased from all storage regions of the memory card.
- You can cancel low-level formatting in progress by choosing [Stop]. In this case, all data will be erased, but the memory card can be used normally.



File Numbering

Your shots are automatically numbered in sequential order (0001 – 9999) and saved in folders that store up to 2,000 images each. You can change how the camera assigns file numbers.



- Choose [File Numbering], and then choose an option.

Continuous	Images are numbered consecutively (until the 9999th shot is taken/saved) even if you switch memory cards.
Auto Reset	Image numbering is reset to 0001 if you switch memory cards, or when a new folder is created.



- Regardless of the option selected in this setting, shots may be numbered consecutively after the last number of existing images on newly inserted memory cards. To start saving shots from 0001, use an empty (or formatted (153)) memory card.
- Refer to "Software Instruction Manual" (173) for information on the card folder structure and image formats.



Date-Based Image Storage

Instead of saving images in folders created each month, you can have the camera create folders each day you shoot to store shots taken that day.



- Choose [Create Folder], and then choose [Daily].
- Images will now be saved in folders created on the shooting date.

Metric / Non-Metric Display

Change the unit of measurement shown in the zoom bar (📖29), the MF indicator (📖78), GPS information for elevation (📖146), and elsewhere from m/cm to ft/in as needed.



- Choose [Units], and then choose [ft/in].

Electronic Level Calibration

Calibrate the electronic level if it seems ineffective in helping you level the camera.



1 Make sure the camera is level.

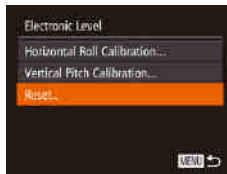
- Place the camera on a flat surface, such as a table.

2 Calibrate the electronic level.

- Choose [Electronic Level], and then press the $\langle \text{FUNC SET} \rangle$ button.
- To adjust left/right tilt, choose [Horizontal Roll Calibration], and to adjust forward/backward tilt, choose [Vertical Pitch Calibration], followed by the $\langle \text{FUNC SET} \rangle$ button. A confirmation message is displayed.
- Choose [OK], and then press the $\langle \text{FUNC SET} \rangle$ button.

Resetting the Electronic Level

Restore the electronic level to its original state as follows. Note that this is not possible unless you have calibrated the electronic level.



- Choose [Electronic Level], and then press the $\langle \text{FUNC SET} \rangle$ button.
- Choose [Reset], and then press the $\langle \text{FUNC SET} \rangle$ button.
- Once the electronic level has been reset, the menu screen is displayed again.

Setting Copyright Information to Record in Images

To record the author's name and copyright details in images, set this information beforehand as follows.



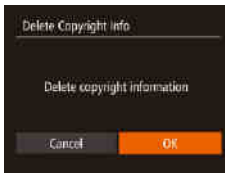
- Choose [Copyright Info], and then press the button.
- Press the buttons or turn the dial to choose [Enter Author's Name] or [Enter Copyright Details]. Press the button to access the keyboard, and enter the name (156).
- Press the button. When [Accept changes?] is displayed, choose [Yes] (either press the buttons or turn the dial), and then press the button.
- The information set here will now be recorded in images.



- To check the information entered, choose [Display Copyright Info] on the screen above, and then press the button.
- You can also use the software (173) to enter, change, and delete copyright information. Some characters entered with the software may not display on the camera, but will be correctly recorded in images.
- You can check copyright information recorded in images by using the software, once you save the images to a computer.

Deleting All Copyright Information

You can delete both the author's name and copyright details at the same time as follows.



- Follow the steps in "Setting Copyright Information to Record in Images" (156) and choose [Delete Copyright Info].
- Press the buttons or turn the dial to choose [OK], and then press the button.



- The copyright info already recorded in images will not be deleted.

Checking Certification Logos

Some logos for certification requirements met by the camera can be viewed on the screen. Other certification logos are printed in this guide, on the camera packaging, or on the camera body.











- Choose [Certification Logo Display], and then press the button.




Display Language

Change the display language as needed.






- Choose [Language] , and then press the  button.
- Press the ><><>< buttons or turn the  dial to choose a language, and then press the  button.



- You can also access the [Language] screen in Playback mode by pressing and holding the  button and immediately pressing the <MENU> button.

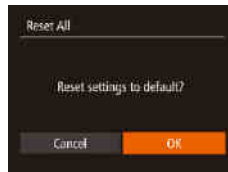
Adjusting Other Settings

The following settings can also be adjusted on the [F1] tab.


- [Video System]  165
- [Ctrl via HDMI]  164
- [Wi-Fi Settings]  124

Restoring Defaults





If you accidentally change a setting, you can restore default camera settings.

















1 Access the [Reset All] screen.

- Choose [Reset All], and then press the  button.

2 Restore default settings.

- Press the >< buttons or turn the  dial to choose [OK], and then press the  button.
- Default settings are now restored.



- The following functions are not restored to default settings.
 - Information registered using Face ID  39
 - [F1] tab settings [Date/Time]  151, [Time Zone]  151 [Language]   157, and [Video System]  165
 - Custom white balance data you have recorded  74
 - Shooting mode chosen in [SCN]  52 or [Q]  54 mode
 - Exposure compensation  68 setting
 - Movie mode  65
 - Wi-Fi settings  124
 - Calibrated value for the electronic level  155
 - Copyright information  156



9

Accessories

Enjoy the camera in more ways with optional Canon accessories and other compatible accessories sold separately

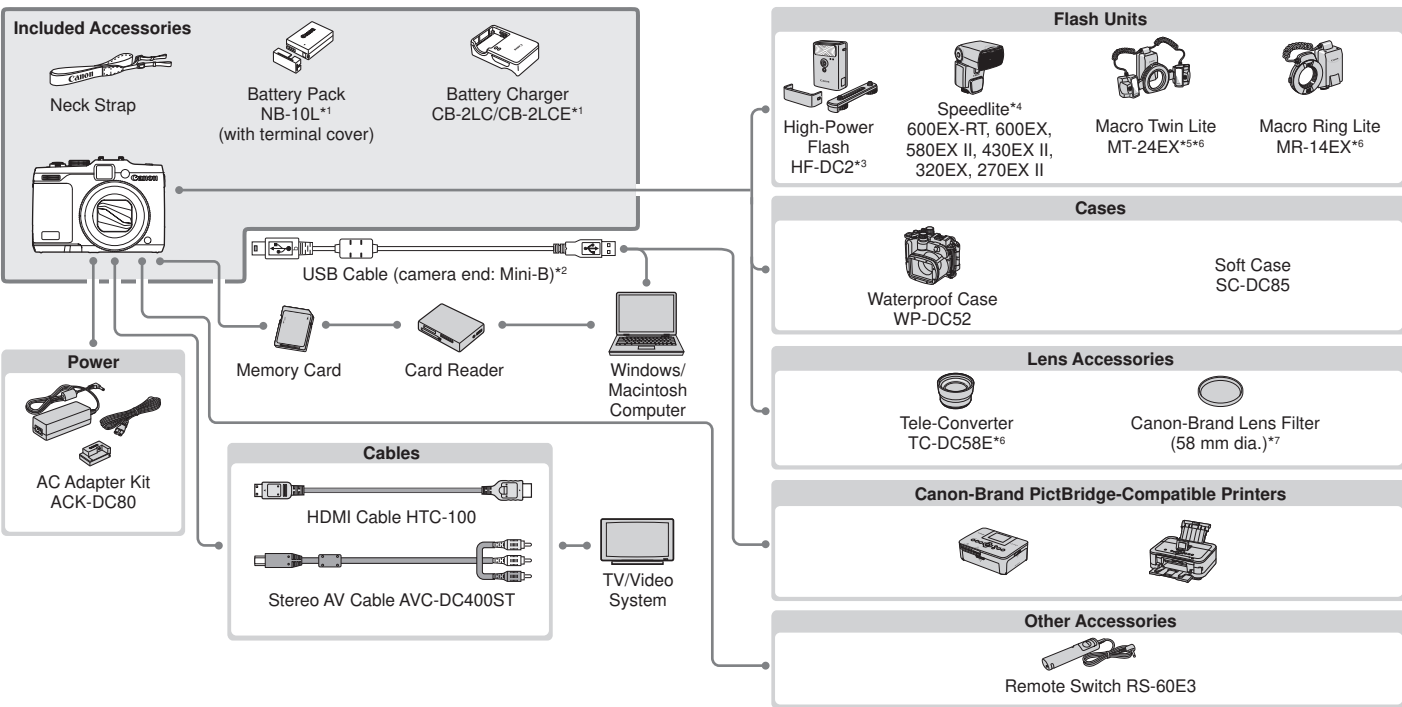
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System Map



*1 Also available for purchase separately.

*2 A genuine Canon accessory is also available (Interface Cable IFC-400PCU).

*3 High-Power Flash HF-DC1 also supported.

*4 These accessories are also supported: Speedlite 580EX, 430EX, 270EX, and 220EX, Speedlite Transmitter ST-E2, Speedlite Bracket SB-E2, and Off-Camera Shoe Cord OC-E3.

*5 Requires Bracket BKT-DC1 and Off-Camera Shoe Cord OC-E3.

*6 Requires Conversion Lens Adapter LA-DC58L.

*7 Requires Filter Adapter FA-DC58D.

Use of genuine Canon accessories is recommended.

This product is designed to achieve excellent performance when used with genuine Canon accessories.

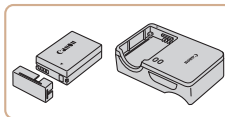
Canon shall not be liable for any damage to this product and/or accidents such as fire, etc., caused by the malfunction of non-genuine Canon accessories (e.g., a leakage and/or explosion of a battery pack). Please note that this warranty does not apply to repairs arising out of the malfunction of non-genuine Canon accessories, although you may request such repairs on a chargeable basis.

Note that availability varies by area, and some accessories may no longer be available.

Optional Accessories

The following camera accessories are sold separately. Note that availability varies by area, and some accessories may no longer be available.

Power Supplies

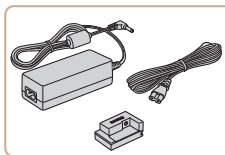


Battery Pack NB-10L

- Rechargeable lithium-ion battery

Battery Charger CB-2LC/CB-2LCE

- Charger for Battery Pack NB-10L



AC Adapter Kit ACK-DC80

- For powering the camera using household power. Recommended when using the camera over extended periods, or when connecting the camera to a printer or computer. Cannot be used to charge the battery pack in the camera.



- The battery charger and AC adapter kit can be used in areas with 100 – 240 V AC power (50/60 Hz).
- For power outlets in a different format, use a commercially available adapter for the plug. Never use an electrical transformer designed for traveling, which may damage the battery pack.



Flash Units



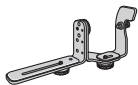
High-Power Flash HF-DC2

- External flash for illuminating subjects that are out of range of the built-in flash. High-Power Flash HF-DC1 can also be used.



Speedlite 600EX-RT, 600EX, 580EX II, 430EX II, 320EX, 270EX II

- Shoe-mounted flash unit that enables many styles of flash photography. Speedlite 580EX, 430EX, 270EX, and 220EX are also supported.



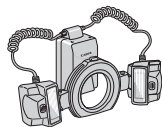
Speedlite Bracket SB-E2

- Prevents unnatural shadows next to subjects during vertical shooting. Includes Off-Camera Shoe Cord OC-E3.



Speedlite Transmitter ST-E2

- Enables wireless control of slave Speedlite flash units (except Speedlite 220EX/270EX).



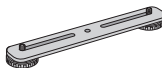
Macro Twin Lite MT-24EX Macro Ring Lite MR-14EX

- External macro flash unit that enables many styles of macro flash photography. Requires Conversion Lens Adapter LA-DC58L, Off-Camera Shoe Cord OC-E3, and Bracket BKT-DC1 (all sold separately) for attachment to the camera. Requires Conversion Lens Adapter LA-DC58L (sold separately) for attachment to the camera.



Off-Camera Shoe Cord OC-E3

- Used to attach a Macro Twin Lite flash to the camera.

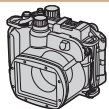


Bracket BKT-DC1

- Used to attach a Macro Twin Lite flash to the camera.

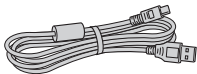


Other Accessories



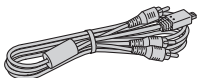
Soft Case SC-DC85

- Protects the camera from dust and scratches.
Handle with care to prevent leather discoloration.



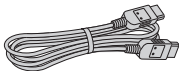
Waterproof Case WP-DC52

- For underwater photography at depths of up to 40 meters (130 ft.). Also useful for shooting in the rain, at the beach, or on ski slopes.



Stereo AV Cable AVC-DC400ST

- Connect the camera to a TV to enjoy playback on the larger TV screen.



HDMI Cable HTC-100

- For connecting the camera to an HDMI input of a high-definition TV.



Tele-Converter TC-DC58E

- Optional lens attached to the camera to increase the focal length by a factor of approximately 1.4x.



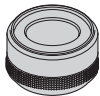
Conversion Lens Adapter LA-DC58L

- Adapter required to attach the Tele-converter or Macro Ring Lite/Macro Twin Lite flash to the camera.



Remote Switch RS-60E3

- Enables remote shutter button operation (pressing the button halfway or all the way down).



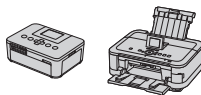
Filter Adapter FA-DC58D

- Adapter required when mounting a 58 mm filter.

Canon Lens Filter (58 mm dia.)

- Protects the lens and enables a variety of shooting effects.

Printers



Canon-Brand PictBridge-Compatible Printers

- Printing images without a computer is possible by connecting the camera to a Canon-brand PictBridge-compatible printer.

For details, visit your nearest Canon retailer.

Using Optional Accessories

Playback on a TV

By connecting the camera to a TV, you can view your shots on the larger screen of the TV.

For details on connection or how to switch inputs, refer to the TV manual.



- Some information may not be displayed on the TV (192).

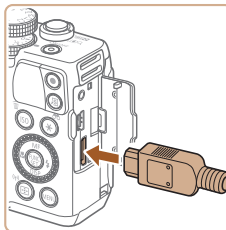
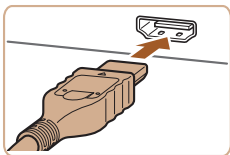
Playback on a High-Definition TV

Connecting the camera to an HDTV with the HDMI Cable HTC-100 (sold separately) enables you to view your shots on the larger screen of the TV. Movies shot at a resolution of [FHD 60P], [FHD 30P], or [HD 30P] can be viewed in high definition.

1 Make sure the camera and TV are off.

2 Connect the camera to the TV.

- On the TV, insert the cable plug fully into the HDMI input as shown.



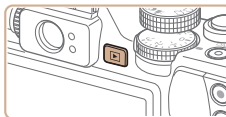
- On the camera, open the terminal cover and insert the cable plug fully into the camera terminal.

3 Turn the TV on and switch to video input.

- Switch the TV input to the video input you connected the cable to in step 2.

4 Turn the camera on.

- Press the <▶> button to turn the camera on.
- Images from the camera are now displayed on the TV. (Nothing is displayed on the camera screen.)
- When finished, turn off the camera and TV before disconnecting the cable.



- Camera operating sounds are not played while the camera is connected to an HDTV.

■ Controlling the Camera with a TV Remote

Connecting the camera to an HDMI CEC-compatible TV enables playback (including slideshow playback) using the TV remote control. Depending on the TV, you may need to adjust some TV settings. For details, refer to the TV manual.



1 Configure the setting.

- Press the <MENU> button, choose [Ctrl via HDMI] on the [fT] tab, and then choose [Enable] (163).

2 Connect the camera to the TV.

- Follow steps 1 – 2 in “Playback on a High-Definition TV” (163) to connect the camera to the TV.

3 Display images.

- Turn on the TV. On the camera, press the <▶> button.
- Images from the camera are now displayed on the TV. (Nothing is displayed on the camera screen.)

4 Control the camera with the TV remote.

- Press the <◀><▶> buttons on the remote to browse images.
- To display the camera control panel, press the OK/Select button. Select control panel options by pressing the <◀><▶> buttons to choose an option, and then pressing the OK/Select button again.

■ Camera Control Panel Options Shown on the TV

	Return	Closes the menu.
	Group Playback	Displays sets of images, either from continuous shooting (76) in [P], [Tv], [Av], or [M] mode (67, 92, or 93) or individual still images saved as source data in [s] mode (63). (Only displayed when a grouped image is selected.)
	Play Movie	Starts movie playback. (Only displayed when a movie is selected.)
	Slideshow	Starts slideshow playback. To switch images during playback, press the <◀><▶> buttons on the remote control.
	Index Playback	Displays multiple images in an index.
	DISP. Change Display	Switches display modes (103).



- Pressing buttons, such as the <MENU> button, on the camera will switch control to the camera itself, which will prevent remote control until you return to single-image display.
- The camera may not always respond correctly even if the remote is for an HDMI CEC-compatible TV.



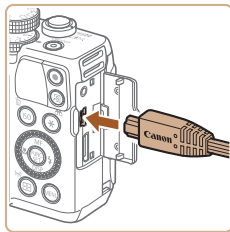
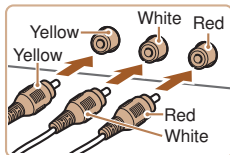
■ Playback on a Standard-Definition TV

Connecting the camera to a TV with the Stereo AV Cable AVC-DC400ST (sold separately) enables you to view your shots on the larger screen of the TV as you control the camera.

1 Make sure the camera and TV are off.

2 Connect the camera to the TV.

- On the TV, insert the cable plugs fully into the video inputs as shown.



- On the camera, open the terminal cover and insert the cable plug fully into the camera terminal.

3 Display images.

- Follow steps 3 – 4 in “Playback on a High-Definition TV” (163) to display images.



- Correct display is not possible unless the camera video output format (NTSC or PAL) matches the TV format. To change the video output format, press the <MENU> button and choose [Video System] on the [11] tab.



- When the camera and TV are connected, you can also shoot while previewing shots on the larger screen of the TV. To shoot, follow the same steps as when using the camera screen. However, AF-Point Zoom (47), MF-Point Zoom (79), MF Peaking (79) and Night Display (90) are not available.



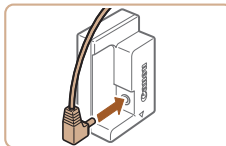
Powering the Camera with Household Power

Powering the camera with AC Adapter Kit ACK-DC80 (sold separately) eliminates the need to monitor the remaining battery level.

1 Make sure the camera is off.

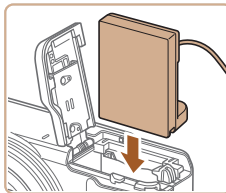
2 Connect the adapter to the coupler.

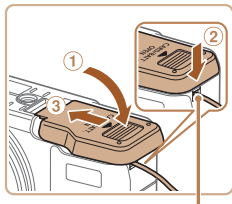
- Insert the adapter plug fully into the coupler.



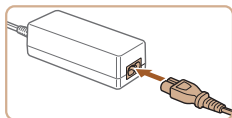
3 Insert the coupler.

- Follow step 2 in “Inserting the Battery Pack and Memory Card” (13) to open the cover, and then insert the coupler as shown until it locks into place.





Coupler Cable Port



- Lower the cover (①), keeping the coupler cable in the coupler cable port (②).
- Slide the cover (③) until it clicks into place.

4 Connect the power cord.

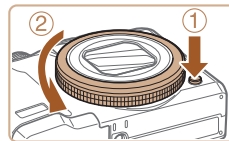
- Insert one end of the power cord into the compact power adapter, and then plug the other end into a power outlet.
- Turn the camera on and use it as desired.
- When finished, turn the camera off and unplug the power cord from the outlet.



- Do not disconnect the adapter or unplug the power cord while the camera is still on. This may erase your shots or damage the camera.
- Do not attach the adapter or adapter cord to other objects. Doing so could result in malfunction or damage to the product.

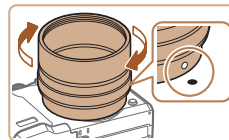
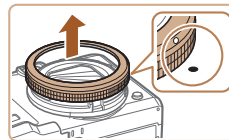
Using a Tele-Converter (Sold Separately)

Attaching Tele-converter TC-DC58E and Conversion Lens Adapter LA-DC58L (both sold separately) enables you to use a focal length of 1.4x.



1 Remove the ring.

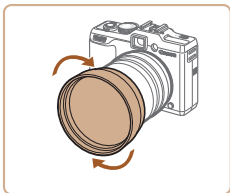
- Make sure the camera is off.
- Hold down the ring release button (①) and turn the ring in the direction of the arrow (②).
- Align the ○ mark on the ring with the ● mark on the camera, and then lift the ring off.



2 Attach the conversion lens adapter.

- Align the ○ mark on the conversion lens adapter with the ● mark on the camera, and then turn the adapter in the direction of the arrows until it locks.
- To remove the adapter, hold down the ring release button and turn the adapter in the opposite direction.





3 Attach the tele-converter lens.

- Turn the lens in the direction of the arrow to attach it securely to the camera.



4 Specify the converter in the camera settings.

- Turn the camera on.
- Press the <MENU> button and choose [Converter] on the [CAMERA] tab. Press the <LEFT><RIGHT> buttons to choose [TC-DC58E].
- There is no need to adjust the converter setting when [IS Mode] is set to [Off].
- After removing the converter, always return the converter setting to [None].

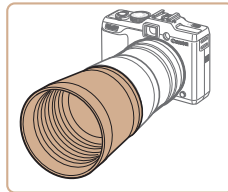
- ! Vignetting may occur (especially in the lower right) when the built-in flash is used.
- Set the camera to maximum telephoto when using the tele-converter. At other zoom positions, vignetting may occur.
- Use the LCD monitor to compose shots. The view through the viewfinder may be partially obstructed by vignetting.
- Before use, remove all dust or debris from the conversion lens with a lens blower brush.

Still Images

Movies

Using a Lens Hood

Attaching the lens hood included with Tele-converter TC-DC58E (sold separately) can reduce the effect of extraneous light outside the angle of view when shooting backlit subjects, or when the camera is aimed toward a bright light source.



- Fit the lens hood over the tele-converter as shown and attach it securely.
- When the lens hood will not be used, attach it inverted.



- Vignetting may occur if you use the built-in flash when the lens hood is attached.

Still Images

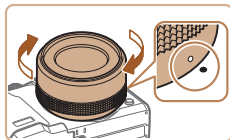
Movies

Using Lens Filters (Sold Separately)

Attaching a lens filter to the camera protects the lens and allows you to shoot with various effects. To attach a lens filter, you will need Filter Adapter FA-DC58D (sold separately).

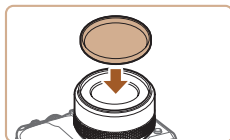
1 Remove the ring.

- Follow step 1 in "Using a Tele-Converter (Sold Separately)" (166) to remove the ring.



2 Attach the filter adapter.

- Align the ○ mark on the filter adapter with the ● mark on the camera, and then turn the adapter in the direction of the arrows until it locks in place.
- To remove the adapter, turn off the camera, hold down the ring release button, and turn the adapter in the opposite direction.



3 Attach a filter.

- Attach the filter to the camera in the direction of the arrow.



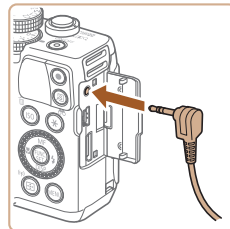
- We recommend the use of genuine Canon filters (58 mm dia.).
- When not using auto focus to shoot, set the manual focus option [Safety MF] to [On].
- If you use the built-in flash with the filter adapter attached, portions of the image may appear darker.
- When using the filter adapter, be sure to use only one filter at a time. Attaching multiple filters, or accessories such as a heavy lens, may cause the attachments to fall off and become damaged.
- Do not grip the filter adapter tightly.
- Remove the filter adapter when not using a filter.



- The filter adapter and a lens hood cannot be attached to the camera at the same time.

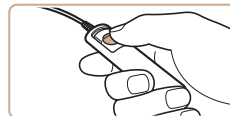
Using a Remote Switch (Sold Separately)

An optional Remote Switch RS-60E3 can be used to avoid camera shake that may otherwise occur when pressing the shutter button directly. This optional accessory is convenient when shooting at slow shutter speeds.



1 Connect the remote switch.

- Make sure the camera is off.
- Open the terminal cover and insert the remote switch plug.



2 Shoot.

- To shoot, press the release button on the remote switch.



- Bulb photography (long exposures) is not supported.



Using an External Flash (Sold Separately)

More sophisticated flash photography is possible with an optional Speedlite EX series flash. For movie shooting using an LED light, the optional Speedlite 320EX flash is available.



- This camera does not support some Speedlite EX series functions.
- Wireless operation of the Speedlite 600EX-RT is not supported.
- Non-EX series Canon flash units may not fire correctly or may not fire at all, in some cases.
- Use of non-Canon flash units (especially high-voltage flash units) or flash accessories may prevent normal camera operation and may damage the camera.



- Also refer to the Speedlite EX series manual for additional information.

Speedlite EX Series

These optional flash units can provide bright lighting and meet a variety of flash photography needs.



1 Attach the flash.

- Make sure the camera is off, and then attach the flash unit to the hot shoe.

2 Turn the flash on, and then turn the camera on.

- A red [⚡] icon is now displayed.
- The flash pilot lamp will light up when the flash is ready.



3 Choose shooting mode [P], [Tv], [Av], or [M].

- Flash settings can only be configured in these modes. In other modes, the flash is adjusted and fired automatically, as needed.

4 Set the white balance to [⚡] (174).

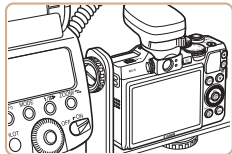
5 Configure the external flash.

- Press the <MENU> button, choose [Flash Control] on the [⚡] tab, and then press the <FUNC/SET> button.
- Options already set on the flash itself are displayed.
- Press the <▲><▼> buttons or turn the <DISP> dial to choose an item, and then adjust the setting by pressing the <◀><▶> buttons.
- Available items vary depending on the shooting mode and the flash attached (172).



- Settings for the built-in flash cannot be configured while a Speedlite EX series flash is attached, because that setting screen is no longer accessible.
- You can also access the setting screen by pressing the <▶> button for at least one second.
- Flash settings in [⚡] shooting mode can be configured just as they are in [P] mode.
- 600EX-RT/580EX II only: [Flash Control] is not available if the external flash has been set up for stroboscopic flash.
- 320EX only: Auto LED lighting is only available in low-light movie recording or in Movie mode. In this case, the [⚡] icon is shown.

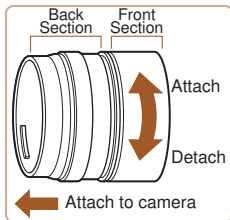
Using Speedlite Bracket SB-E2 (Sold Separately)



- Using the optional Speedlite Bracket SB-E2 can help prevent unnatural shadows next to subjects during vertical shooting.

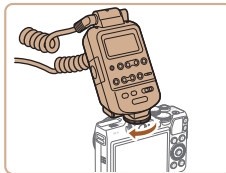
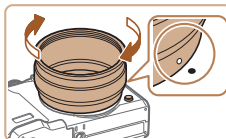
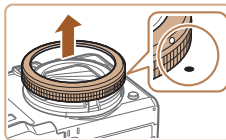
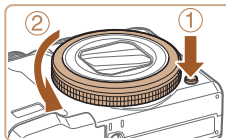
Macro Ring Lite MR-14EX

This optional flash unit enables many styles of macro flash photography. Requires Conversion Lens Adapter LA-DC58L (sold separately) for attachment to the camera.



1 Prepare the conversion lens adapter.

- Rotate the conversion lens adapter in the direction indicated by the arrow to separate the front and back sections.
- Only the back section is used to attach the Macro Ring Lite MR-14EX or Macro Twin Lite MT-24EX.



2 Remove the ring.

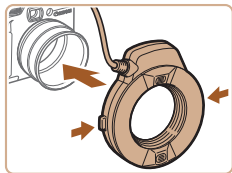
- Make sure the camera is off.
- Hold down the ring release button (1) and turn the ring in the direction of the arrow (2).
- Align the ○ mark on the ring with the ● mark on the camera, and then lift the ring off.

3 Attach the back section of the conversion lens adapter.

- Align the ○ mark on the back section with the ● mark on the camera, and then turn the adapter in the direction of the arrows until it locks in place.
- To remove the adapter, hold down the ring release button and turn the adapter in the opposite direction.

4 Attach the controller to the camera.

- Attach the control component of the macro ring lite to the hot shoe on top of the camera.



5 Attach the flash unit to the conversion lens adapter.

- Press the release buttons on both sides of the macro ring lite in and attach the macro ring lite to the conversion lens adapter.

6 Choose shooting mode [P], [Tv], [Av], or [M].

- Flash settings can only be configured in these modes. In other modes, the flash is adjusted and fired automatically, as needed.

7 Set the white balance to [⚡] (📖74).

8 Enter [🌸] mode (📖78).

9 Set [ND Filter] to [On] (📖73).

10 Configure the external flash.

- Follow step 5 in “Speedlite EX Series” (📖169) to adjust the settings.



- Keep cords (from the macro ring lite or the off-camera shoe cord) away from flash heads.
- When using a tripod, adjust the position of the legs to prevent the flash heads from coming into contact with the legs.
- Use the screen to compose shots, because the viewfinder cannot be used with these accessories attached.

Macro Twin Lite MT-24EX

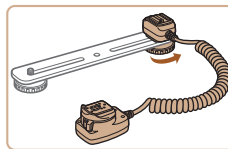
This optional flash unit enables many styles of macro flash photography. Requires the Conversion Lens Adapter LA-DC58L, Off-Camera Shoe Cord OC-E3, and Bracket BKT-DC1 (all sold separately) for attachment to the camera.

1 Remove the ring and attach the back section of the conversion lens adapter.

- Follow steps 1 – 3 in “Macro Ring Lite MR-14EX” (📖170) to remove the ring, and then attach the back section of the conversion lens adapter.

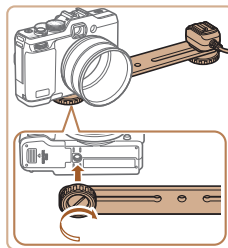
2 Attach the off-camera shoe cord to the bracket.

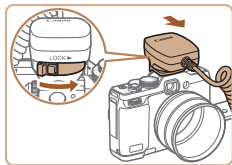
- Slide the bracket screw to the outer end of the bracket. Align the bracket screw with the tripod socket of the off-camera shoe cord, and then tighten the screw to secure it.



3 Attach the bracket to the camera.

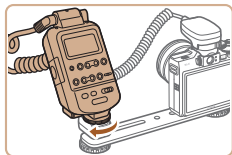
- Slide the other bracket screw to the outer end of the bracket. Align the bracket screw with the tripod socket on the bottom of the camera, and then tighten the screw to secure it.





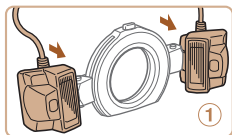
4 Attach the off-camera shoe cord to the camera.

- Attach the camera connection component of the off-camera shoe cord to the hot shoe on top of the camera.



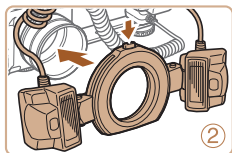
5 Attach the controller to the off-camera shoe cord.

- Attach the controller for the macro twin lite to the flash connection component of the off-camera shoe cord.



6 Attach the flash unit to the conversion lens adapter.

- Attach each flash head to the respective mount (①). Press the release button on the top of the ring in and attach the ring to the conversion lens adapter (②).



7 Configure the external flash and settings on the camera.

- Follow steps 6 – 10 in “Macro Ring Lite MR-14EX” (171) to configure the settings.



- Keep cords (from the macro twin lite or the off-camera shoe cord) away from flash heads.
- When using a tripod, adjust the position of the legs to prevent the flash heads from coming into contact with the legs or bracket.
- Use the screen to compose shots, because the viewfinder cannot be used with these accessories attached.

Still Images

Camera Settings Available with an External Flash (Sold Separately)

The following items are available in **[P]**, **[Tv]**, **[Av]**, or **[M]** mode. In other shooting modes, only **[Red-Eye Corr.]** and **[Red-Eye Lamp]** can be configured. (With autoflash control, the flash always fires.) However, external flash units do not fire in modes that the built-in flash does not fire (193).

Item	Options	Shooting Mode			
		P	Tv	Av	M
Flash Mode	Auto*1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	–
	Manual*2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flash Exp. Comp*3	–3 to +3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	–
Flash Output*4	1/128*5 to 1/1 (in 1/3-stop increments)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shutter Sync.	1st-curtain/2nd-curtain/Hi-speed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Slow Synchro	On	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Off	<input type="radio"/>	–	<input type="radio"/>	–
Wireless Func.*6	On/Off	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Red-Eye Corr.	On/Off	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Red-Eye Lamp	On/Off	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Safety FE*7	On	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	–
	Off	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clear Flash Settings*8		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*1 E-TTL mode is used for the flash.

*2 M mode is used for the flash.

In **[M]** shooting mode, E-TTL mode is also available for the flash. In this case, when the flash fires, flash exposure compensation set on the flash is applied to the flash output level set on the camera.

*3 Can be configured only when [Flash Mode] is [Auto] and flash exposure compensation set on the flash is [+0]. When you adjust flash exposure compensation on 600EX-RT, 600EX, 580EX II, or 430EX II Speedlites, the camera display will be updated accordingly.

*4 Can be configured when [Flash Mode] is [Manual]. Linked to settings on the flash unit.

*5 1/64 for Speedlite 430EX II/430EX/320EX/270EX II/270EX, Macro Ring Lite MR-14EX, and Macro Twin Lite MT-24EX.

*6 For options other than On/Off, configure the setting on the flash unit itself. Not available with Speedlite 430EX II/320EX/270EX II/270EX, Macro Ring Lite MR-14EX, or Macro Twin Lite MT-24EX. When this item is set to [On], [Shutter Sync.] cannot be set to [2nd-curtain]. (If [Shutter Sync.] is set to [2nd-curtain], it will be changed to [1st-curtain].)

*7 Can only be configured when [Flash Mode] is [Auto].

*8 Restores all default settings. You can also restore defaults for [Slow Synchro], [Safety FE], [Red-Eye Corr.], and [Red-Eye Lamp] by using [Reset All] on the **[Fn]** tab on the camera (**157**).



- Flash settings in **[M]** shooting mode can be configured just as they are in **[P]** mode.
- In **[AUTO]** shooting mode, icons representing Smiling, Sleeping, Babies (Smiling), Babies (Sleeping), and Children shooting scenes determined by the camera are not displayed, and the camera does not shoot continuously (**34**).

Using the Software

The software available for download from the Canon website is introduced below, with instructions for installation and saving images to a computer.

Software

After downloading the software from the Canon website and installing it, you can do the following things on your computer.

CameraWindow

- Import images and change camera settings

ImageBrowser EX

- Manage images: view, search, and organize
- Print and edit images

Digital Photo Professional

- Browse, process and edit RAW images



- Internet access is required, and any ISP account charges and access fees must be paid separately.

Software Instruction Manual

Refer to the instruction manual when using the software. The manual can be accessed from the help system of software (some software excluded).



Computer Connections via a Cable

Checking Your Computer Environment

The software can be used on the following computers. For detailed system requirements and compatibility information, including support in new operating systems, visit the Canon website.

Operating System*	Windows	Macintosh
	Windows 8	Mac OS X 10.6
	Windows 7 SP1	Mac OS X 10.7
	Windows Vista SP2	Mac OS X 10.8
	Windows XP SP3	

* When sending images to a computer via Wi-Fi, check the system requirements in "Checking Your Computer Environment" (131).



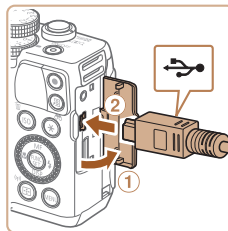
- Check the Canon website for the latest system requirements, including supported OS versions.

Installing the Software

For software installation instructions, see "Installing the Software" (131).

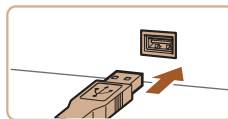
Saving Images to a Computer

Windows 7 and Mac OS X 10.6 are used here for the sake of illustration. For other functions, refer to the help system of the relevant software (some software excluded).

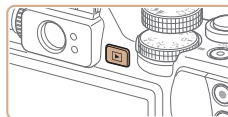


1 Connect the camera to the computer.

- With the camera turned off, open the cover (1). With the smaller plug of the USB cable in the orientation shown, insert the plug fully into the camera terminal (2).



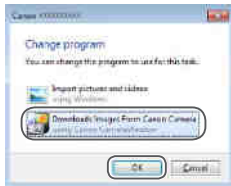
- Insert the larger plug of the USB cable in the computer's USB port. For details about USB connections on the computer, refer to the computer user manual.



2 Turn the camera on to access CameraWindow.

- Press the <▶> button to turn the camera on.
- On a Macintosh computer, CameraWindow is displayed when a connection is established between the camera and computer.





CameraWindow



- For Windows, follow the steps introduced below.
- In the screen that displays, click the [] link to modify the program.

- Choose [Downloads Images From Canon Camera] and then click [OK].

- Double-click [].

3 Save the images to the computer.

- Click [Import Images from Camera], and then click [Import Untransferred Images].
- Images are now saved to the Pictures folder on the computer, in separate folders named by date.
- After images are saved, close CameraWindow, press the <▶> button to turn the camera off, and unplug the cable.
- For instructions on viewing images on a computer, refer to "Software Instruction Manual" (173).



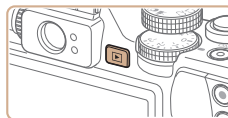
- In Windows 7, if the screen in step 2 is not displayed, click the [] icon in the taskbar.
- To start CameraWindow in Windows Vista or XP, click [Downloads Images From Canon Camera] on the screen displayed when you turn the camera on in step 2. If CameraWindow is not displayed, click the [Start] menu and choose [All Programs] ► [Canon Utilities] ► [CameraWindow] ► [CameraWindow].
- On a Macintosh computer, if CameraWindow is not displayed after step 2, click the [CameraWindow] icon in the Dock (the bar at the bottom of the desktop).
- Although you can save images to a computer simply by connecting your camera to the computer without using the software, the following limitations apply.
 - It may take a few minutes after you connect the camera to the computer until camera images are accessible.
 - Images shot in vertical orientation may be saved in horizontal orientation.
 - RAW images (or JPEG images recorded with RAW images) may not be saved.
 - Image protection settings may be cleared from images saved to a computer.
 - Some problems may occur when saving images or image information, depending on the operating system version, the software in use, or image file sizes.
 - Some functions provided by the software may not be available, such as movie editing.



Printing Images

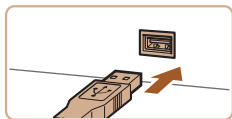
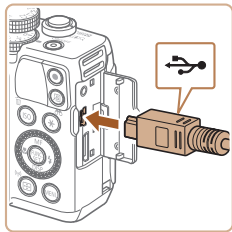
Your shots can easily be printed by connecting the camera to a printer. On the camera, you can specify images to set up batch printing, prepare orders for photo development services, and prepare orders or print images for photobooks.

A Canon SELPHY CP series compact photo printer is used here for the sake of illustration. Screens displayed and available functions vary by printer. Also refer to the printer manual for additional information.



Easy Print

Easily print your shots by connecting the camera to a PictBridge-compatible printer (sold separately) with the USB cable.



1 Make sure the camera and printer are off.

2 Connect the camera to the printer.

- Open the cover. Holding the smaller cable plug in the orientation shown, insert the plug fully into the camera terminal.
- Connect the larger cable plug to the printer. For other connection details, refer to the printer manual.

3 Turn the printer on.

4 Turn the camera on.

- Press the button to turn the camera on.

5 Choose an image.

- Press the buttons or turn the dial to choose an image.

6 Access the printing screen.

- Press the button.

7 Print the image.

- Press the buttons or turn the dial to choose [Print], and then press the button.
- Printing now begins.
- To print other images, repeat the above procedures starting from step 5 after printing is finished.
- When you are finished printing, turn the camera and printer off and disconnect the cable.



- For Canon-brand PictBridge-compatible printers (sold separately), see "Printers" (162).
- RAW images cannot be printed.



Configuring Print Settings



1 Access the printing screen.

- Follow steps 1 – 6 in “Easy Print” (📖176) to access the screen at left.

2 Configure the settings.

- Press the <▲><▼> buttons or turn the <⦿> dial to choose an item, and then choose an option by pressing the <◀><▶> buttons.

	Default	Matches current printer settings.
	Date	Prints images with the date added.
	File No.	Prints images with the file number added.
	Both	Prints images with both the date and file number added.
	Off	–
	Default	Matches current printer settings.
	Off	–
	On	Uses information from the time of shooting to print under optimal settings.
	Red-Eye 1	Corrects red-eye.
	No. of Copies	Choose the number of copies to print.
Cropping	–	Specify a desired image area to print (📖177).
Paper Settings	–	Specify the paper size, layout, and other details (📖178).

Cropping Images before Printing

By cropping images before printing, you can print a desired image area instead of the entire image.



1 Choose [Cropping].

- After following step 1 in “Configuring Print Settings” (📖177) to access the printing screen, choose [Cropping] and press the <FUNC SET> button.
- A cropping frame is now displayed, indicating the image area to print.

2 Adjust the cropping frame as needed.

- To resize the frame, move the zoom lever.
- To move the frame, press the <▲><▼><◀><▶> buttons.
- To rotate the frame, turn the <⦿> dial.
- When finished, press the <FUNC SET> button.

3 Print the image.

- Follow step 7 in “Easy Print” (📖176) to print.



- Cropping may not be possible at small image sizes, or at some aspect ratios.
- Dates may not be printed correctly if you crop images shot with [Date Stamp] selected.

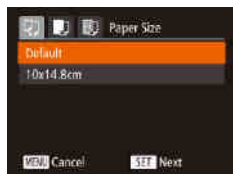


Choosing Paper Size and Layout before Printing



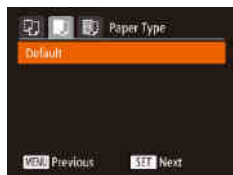
1 Choose [Paper Settings].

- After following step 1 in “Configuring Print Settings” (177) to access the printing screen, choose [Paper Settings] and press the button.



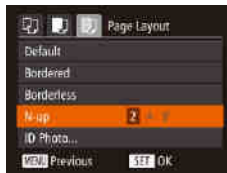
2 Choose a paper size.

- Press the or turn the to choose an option, and then press the button.



3 Choose a type of paper.

- Press the or turn the to choose an option, and then press the button.



4 Choose a layout.

- Press the or turn the to choose an option.
- When choosing [N-up], press the to specify the number of images per sheet.
- Press the button.

5 Print the image.

Available Layout Options

Default	Matches current printer settings.
Bordered	Prints with blank space around the image.
Borderless	Borderless, edge-to-edge printing.
N-up	Choose how many images to print per sheet.
ID Photo	Prints images for identification purposes. Only available for images with a resolution of L and an aspect ratio of 4:3.
Fixed Size	Choose the print size. Choose from 3.5 x 5 in., postcard, or wide-format prints.



Printing ID Photos



1 Choose [ID Photo].

- Following steps 1 – 4 in “Choosing Paper Size and Layout before Printing” (178), choose [ID Photo] and press the button.

2 Choose the long and short side length.

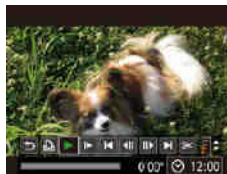
- Press the or turn the dial to choose an item. Choose the length by pressing the , and then press the .

3 Choose the printing area.

- Follow step 2 in “Cropping Images before Printing” (177) to choose the printing area.

4 Print the image.

Printing Movie Scenes



1 Access the printing screen.

- Follow steps 1 – 6 in “Easy Print” (176) to choose a movie. The screen at left is displayed.
- Press the or turn the dial to choose , and then press the button. The screen at left is displayed.

2 Choose a printing method.

- Press the or turn the dial to choose , and then press the to choose the printing method.

3 Print the image.

Movie Printing Options

Single	Prints the current scene as a still image.
Sequence	Prints a series of scenes, a certain interval apart, on a single sheet of paper. You can also print the folder number, file number, and elapsed time for the frame by setting [Caption] to [On].



- To cancel printing in progress, press the .
- [ID Photo] and [Sequence] cannot be chosen on Canon-brand PictBridge-compatible printers from CP720/CP730 and earlier models.



Adding Images to the Print List (DPOF)

Batch printing (182) and ordering prints from a photo development service can be set up on the camera. Choose up to 998 images on a memory card and configure relevant settings, such as the number of copies, as follows. The printing information you prepare this way will conform to DPOF (Digital Print Order Format) standards.



- RAW images cannot be included in print list.

Configuring Print Settings

Specify the printing format, whether to add the date or file number, and other settings as follows. These settings apply to all images in the print list.



- Press the <MENU> button, and then choose [Print Settings] on the [P] tab. Choose and configure items as desired (25).

Print Type	Standard	One image is printed per sheet.
	Index	Smaller versions of multiple images are printed per sheet.
	Both	Both standard and index formats are printed.
Date	On	Images are printed with the shooting date.
	Off	—
File No.	On	Images are printed with the file number.
	Off	—
Clear DPOF data	On	All image print list settings are cleared after printing.
	Off	—



- Not all of your DPOF settings may be applied in printing by the printer or photo development service, in some cases.
- [!] may be displayed on the camera to warn you that the memory card has print settings that were configured on another camera. Changing the print settings using this camera may overwrite all previous settings.
- Setting [Date] to [On] may cause some printers to print the date twice.



- Specifying [Index] will prevent you from choosing [On] for both [Date] and [File No.] at the same time.
- Index printing is not available on some Canon-brand PictBridge-compatible printers (sold separately).
- The date is printed in a format matching setting details in [Date/Time] on the [Y] tab (14).



Setting Up Printing for Individual Images



1 Choose [Select Images & Qty.].

- Press the <MENU> button, choose [Select Images & Qty.] on the [P] tab, and then press the <FUNC/SET> button.

2 Choose an image.

- Press the <◀>>>> buttons or turn the <DISP> dial to choose an image, and then press the <FUNC/SET> button.
- You can now specify the number of copies.
- If you specify index printing for the image, it is labeled with a [✓] icon. To cancel index printing for the image, press the <FUNC/SET> button again. [✓] is no longer displayed.

3 Specify the number of prints.

- Press the <▲>>>> buttons or turn the <DISP> dial to specify the number of prints (up to 99).
- To set up printing for other images and specify the number of prints, repeat steps 2 – 3.
- Printing quantity cannot be specified for index prints. You can only choose which images to print, by following step 2.
- When finished, press the <MENU> button to return to the menu screen.

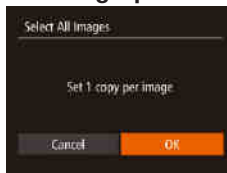


Setting Up Printing for a Range of Images



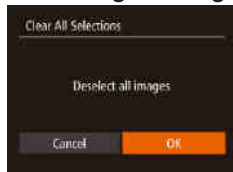
- Following step 1 in “Setting Up Printing for Individual Images” (181), choose [Select Range] and press the <FUNC/SET> button.
- Follow steps 2 – 3 in “Selecting a Range” (112) to specify images.
- Press the <▲>>>> buttons to choose [Order], and then press the <FUNC/SET> button.

Setting Up Printing for All Images



- Following step 1 in “Setting Up Printing for Individual Images” (181), choose [Select All Images] and press the <FUNC/SET> button.
- Press the <◀>>>> buttons or turn the <DISP> dial to choose [OK], and then press the <FUNC/SET> button.

Clearing All Images from the Print List



- Following step 1 in “Setting Up Printing for Individual Images” (181), choose [Clear All Selections] and press the button.
- Press the buttons or turn the dial to choose [OK], and then press the button.

Printing Images Added to the Print List (DPOF)

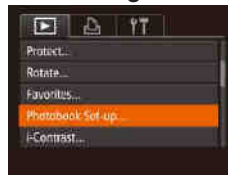


- When images have been added to the print list (180 – 181), the screen at left is displayed after you connect the camera to a PictBridge-compatible printer. Press the buttons to choose [Print now], and then simply press the button to print the images in the print list.
- Any DPOF print job that you temporarily stop will be resumed from the next image.

Adding Images to a Photobook

Photobooks can be set up on the camera by choosing up to 998 images on a memory card and importing them into the software on your computer, where they are stored in their own folder. This is convenient when ordering printed photobooks online or printing photobooks with your own printer.

Choosing a Selection Method



- Press the **<MENU>** button, choose [Photobook Set-up] on the tab, and then choose how you will select images.



- may be displayed on the camera to warn you that the memory card has print settings that were configured on another camera. Changing the print settings using this camera may overwrite all previous settings.



- After importing images to your computer, also refer to “Software Instruction Manual” (173) and the printer manual for further information.

Adding Images Individually



1 Choose [Select].

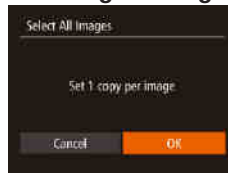
- Following the procedure in “Choosing a Selection Method” (182), choose [Select] and press the button.



2 Choose an image.

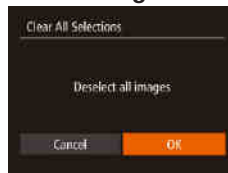
- Press the <> buttons or turn the dial to choose an image, and then press the button.
- [✓] is displayed.
- To remove the image from the photobook, press the button again. [✓] is no longer displayed.
- Repeat this process to specify other images.
- When finished, press the <MENU> button to return to the menu screen.

Adding All Images to a Photobook



- Following the procedure in “Choosing a Selection Method” (182), choose [Select All Images] and press the button.
- Press the <> buttons or turn the dial to choose [OK], and then press the button.

Removing All Images from a Photobook



- Following the procedure in “Choosing a Selection Method” (182), choose [Clear All Selections] and press the button.
- Press the <> buttons or turn the dial to choose [OK], and then press the button.

10

Appendix

Helpful information when using the camera

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Troubleshooting

If you think there is a problem with the camera, first check the following. If the items below do not solve your problem, contact a Canon Customer Support Help Desk.

Power

Nothing happens when the power button is pressed.

- Confirm that the battery pack is charged (📖12).
- Confirm that the battery pack is inserted facing the correct way (📖13).
- Confirm that the memory card/battery cover is fully closed (📖14).
- Dirty battery terminals reduce battery performance. Try cleaning the terminals with a cotton swab and reinserting the battery pack a few times.

The battery pack runs out of power quickly.

- Battery performance decreases at low temperatures. Try warming the battery pack a little by putting it in your pocket, for example, ensuring that the terminals do not touch any metal objects.
- If these measures do not help and the battery pack still runs out of power soon after charging, it has reached the end of its life. Purchase a new battery pack.

The lens is not retracted.

- Do not open the memory card/battery cover while the camera is on. Close the cover, turn the camera on, and then turn it off again (📖14).

The battery pack is swollen.

- Battery swelling is normal and does not pose any safety concerns. However, if battery swelling prevents the battery pack from fitting in the camera, contact a Canon Customer Support Help Desk.

Display on a TV

Camera images look distorted or not displayed on a TV (📖165).

Shooting

Cannot shoot.

- In Playback mode (📖101), press the shutter button halfway (📖22).

Nothing is displayed (📖32).

Strange display on the screen under low light (📖23).

Strange display on the screen when shooting.

Note that the following display problems are not recorded in still images but are recorded in movies.

- The screen may flicker and horizontal banding may appear under fluorescent or LED lighting.

No date stamp is added to images.

- Configure the [Date Stamp] (📖38) setting (📖38). Note that date stamps are not added to images automatically, merely because you have configured the [Date/Time] setting (📖14).
- Date stamps are not added in shooting modes (📖201) in which this setting cannot be configured (📖38).

[📖] flashes on the screen when the shutter button is pressed, and shooting is not possible (📖32).

[📖] is displayed when the shutter button is pressed halfway (📖32).

- Set [IS Mode] to [Continuous] (📖89).
- Raise the flash and set the flash mode to [📖] (📖85).
- Increase the ISO speed (📖70).
- Mount the camera on a tripod or take other measures to keep it still. In this case, you should set [IS Mode] to [Off] (📖89).

Shots are out of focus.

- Press the shutter button halfway to focus on subjects before pressing it all the way down to shoot (📖22).
- Make sure subjects are within focusing range (📖205).
- Set [AF-assist Beam] to [On] (📖48).
- Confirm that unneeded functions such as macro are deactivated.
- Try shooting with focus lock or AF lock (📖81, 85).

No AF frames are displayed and the camera does not focus when the shutter button is pressed halfway.

- To have AF frames displayed and the camera focus correctly, try composing the shot with higher-contrast subject areas centered before you press the shutter button halfway. Otherwise, try pressing the shutter button halfway repeatedly.

Subjects in shots look too dark.

- Raise the flash and set the flash mode to [⚡] (📖85).
- Adjust brightness by using exposure compensation (📖68).
- Adjust contrast by using i-Contrast (📖72, 120).
- Use AE lock or spot metering (📖69).

Subjects look too bright, highlights are washed-out.

- Lower the flash and set the flash mode to [☀] (📖29).
- Adjust brightness by using exposure compensation (📖68).
- Use AE lock or spot metering (📖69).
- Reduce the lighting on subjects.

Shots look too dark despite the flash firing (📖32).

- Shoot within flash range (📖205).
- Adjust brightness by using flash exposure compensation or changing the flash output level (📖86, 94).
- Increase the ISO speed (📖70).

Subjects in flash shots look too bright, highlights are washed-out.

- Shoot within flash range (📖205).
- Lower the flash and set the flash mode to [☀] (📖29).
- Adjust brightness by using flash exposure compensation or changing the flash output level (📖86, 94).

White dots or similar image artifacts appear in flash shots.

- This is caused by light from the flash reflecting off dust or airborne particles.

Shots look grainy.

- Lower the ISO speed (📖70).
- High ISO speeds in some shooting modes may cause grainy images (📖53).

Subjects are affected by red-eye (📖45).

- Set [Red-Eye Lamp] to [On] (📖49) to activate the red-eye reduction lamp (📖3) in flash shots. For best results, have subjects look at the red-eye reduction lamp. Also try increasing the lighting in indoor scenes and shooting at closer range.
- Edit images using red-eye correction (📖121).

Recording to the memory card takes too long, or continuous shooting is slower.

- Use the camera to perform low-level formatting of the memory card (📖154).

Shooting settings or FUNC. menu settings are not available.

- Available setting items vary by shooting mode. Refer to “Functions Available in Each Shooting Mode”, “FUNC. Menu”, and “Shooting Tab Menu” (📖193 – 201).

The Babies or Children icon does not display.

- The Babies and Children icons will not display if the birthday is not set in face information (📖39). If the icons still do not display even when you set the birthday, re-register face information (📖39), or make sure that the date/time are set correctly (📖151).

Cannot shoot planetarium stars well in [🌌] mode.

- Shoot actual starry skies instead.

Shooting Movies

The elapsed time shown is incorrect, or recording is interrupted.

- Use the camera to format the memory card, or switch to a card that supports high-speed recording. Note that even if the elapsed time display is incorrect, the length of movies on the memory card corresponds to the actual recording time (📖153, 205).

[🔴] is displayed and shooting stops automatically.

The camera's internal memory buffer filled up as the camera could not record to the memory card quickly enough. Try one of the following measures.

- Use the camera to perform low-level formatting of the memory card (📖154).
- Lower the image quality (📖46).
- Switch to a memory card that supports high-speed recording (📖205).

Zooming is not possible.

- Zooming is not possible in [📷] mode (📖62).
- Zooming is not possible when shooting movies in [🎥] (📖57) and [🎥] (📖66) modes.

Subjects look distorted.

- Subjects that pass in front of the camera quickly may look distorted. This is not a malfunction.

Playback

Playback is not possible.

- Image or movie playback may not be possible if a computer is used to rename files or alter the folder structure. Refer to "Software Instruction Manual" (📖173) for details on folder structure and file names.

Playback stops, or audio skips.

- Switch to a memory card that you have performed low-level formatting on with the camera (📖154).
- There may be brief interruptions when playing movies copied to memory cards that have slow read speeds.
- When movies are played on a computer, frames may be dropped and audio may skip if computer performance is inadequate.

Sound is not played during movies.

- Adjust the volume (📖102) if you have activated [Mute] (📖150) or the sound in the movie is faint.
- No sound is played for movies shot in [🎥] (📖57), [🎥] (📖63), or [🎥] (📖66) mode because audio is not recorded in these modes.

Memory Card

The memory card is not recognized.

- Restart the camera, with the memory card in it (📖21).

Computer

Cannot transfer images to a computer.

When attempting to transfer images to the computer via a cable, try reducing the transfer speed as follows.

- Press the <▶> button to enter Playback mode. Hold the <MENU> button down as you press the <▲> and <⏏> buttons at the same time. On the next screen, press the <◀><▶> buttons to choose [B], and then press the <⏏> button.

Wi-Fi

Cannot access the Wi-Fi menu by pressing the <⏏> button.

- The Wi-Fi menu is not available in Shooting mode. Switch to Playback mode and try again.
- The Wi-Fi menu cannot be accessed during group playback or filtered image display according to specified conditions. Cancel group or filtered image playback.
- The Wi-Fi menu cannot be accessed while the camera is connected to a printer, computer, or TV via a cable. Disconnect the cable.

Cannot add a device/destination.

- A total of 20 items of connection information can be added to the camera. Erase unneeded connection information from the camera first, and then add new devices/destinations (📖147).
- Use a computer or smartphone to register Web services (📖127).
- To add a smartphone, first install the dedicated application CameraWindow on your smartphone (📖130).
- To add a computer, first install the CameraWindow application on your computer. Also check your computer and Wi-Fi environment and settings (📖131, 133, 134).
- Do not use the camera near sources of Wi-Fi signal interference, such as microwave ovens, Bluetooth devices, or other equipment operating on the 2.4 GHz band.
- Bring the camera closer to the other device you are trying to connect to (such as the access point), and make sure there are no objects between the devices.

Cannot connect to the access point.

- Confirm that the access point channel is set to a channel supported by the camera (📖204). Note that instead of auto channel assignment, it is advisable to specify a supported channel manually.



Cannot send images.

- The destination device has insufficient storage space. Increase the storage space on the destination device and resend the images.
- The write-protect tab of the memory card in the destination camera is set to the locked position. Slide the write-protect tab to the unlocked position.
- RAW images cannot be sent. In [RAW] mode, only the JPEG images are sent.
- Images cannot be sent to CANON iMAGE GATEWAY or other Web services if you move or rename image files or folders on the computer that received images sent using Image Sync via an access point (📖145). Before moving or renaming these image files or folders on the computer, make sure the images have already been sent to CANON iMAGE GATEWAY or other Web services.

Cannot resize images for sending.

- Images cannot be resized to be bigger than the resolution setting of their original size.
- Movies cannot be resized.

Images take a long time to send./The wireless connection is disrupted.

- Multiple images may take a long time to send. Try resizing the image to [M2] or [S] to reduce sending time (📖142).
- Movies may take a long time to send.
- Do not use the camera near sources of Wi-Fi signal interference, such as microwave ovens, Bluetooth devices, or other equipment operating on the 2.4 GHz band. Note that images may take a long time to send even when [Wi-Fi] is displayed.
- Bring the camera closer to the other device you are trying to connect to (such as the access point), and make sure there are no objects between the devices.
- When sending images to a computer from a memory card with a large amount of images (approximately 1,000), the connection may be disrupted. Import any necessary images to a computer, and then reduce the number of images on the memory card by erasing unnecessary images.

Want to erase Wi-Fi connection information before disposing of the camera or giving it to someone else.

- Reset the Wi-Fi settings (📖148).

On-Screen Messages

If an error message is displayed, respond as follows.

No memory card

- The memory card may be inserted facing the wrong way. Reinsert the memory card facing the correct way (📖13).

Memory card locked

- The write-protect tab of the memory card is set to the locked position. Switch the write-protect tab to the unlocked position (📖13).

Cannot record!

- Shooting was attempted without a memory card in the camera. To shoot, insert a memory card facing the correct way (📖13).

Memory card error (📖154)

- If the same error message is displayed even after you have formatted a supported memory card (📖2) and have inserted it facing the correct way (📖13), contact a Canon Customer Support Help Desk.

Insufficient space on card

- There is not enough free space on the memory card to shoot (📖29, 51, 67, 91) or edit images (📖118 – 121). Either erase unneeded images (📖114) or insert a memory card with enough free space (📖13).

Charge the battery (📖12)

No Image.

- The memory card does not contain any images that can be displayed.

Protected! (📖111)

Unidentified Image/Incompatible JPEG/Image too large./Cannot play back MOV

- Unsupported or corrupt images cannot be displayed.
- It may not be possible to display images that were edited or renamed on a computer, or images shot with another camera.



**Cannot magnify!/Cannot play back this content in Smart Shuffle/
Cannot rotate/Cannot modify image/Cannot modify/Cannot assign to
category/Unselectable image./No identification information**

- The following functions may be unavailable for images that were renamed or already edited on a computer, or images shot with another camera. Note that starred (*) functions are not available for movies.
Edit ID Info* (📖108 – 109), Magnify* (📖109), Smart Shuffle* (📖110), Rotate (📖116), Favorites (📖117), Edit* (📖118 – 121), Print List* (📖180), and Photobook Set-up* (📖182).
- Grouped images cannot be processed (📖77).

Invalid selection range

- When specifying a range for image selection (📖112, 115, 181), you attempted to choose an initial image that was after the final image, or vice-versa.

Exceeded selection limit

- More than 998 images were selected for Print List (📖180) or Photobook Set-up (📖182). Choose 998 images or less.
- Print List (📖180) or Photobook Set-up (📖182) settings could not be saved correctly. Reduce the number of selected images and try again.
- You attempted to choose more than 500 images in Protect (📖111), Erase (📖114), Favorites (📖117), Print List (📖180), or Photobook Set-up (📖182).

Communication error

- An excessive amount of images (approx. 1,000) on the memory card prevented printing or image transfer to a computer. To transfer the images, use a commercially available USB card reader. To print, insert the memory card directly into the printer card slot.

Naming error!

- The folder could not be created or images could not be recorded, because the highest supported folder number (999) for storing images on the card has been reached and the highest supported image number (9999) for images in folders has been reached. On the [🔢] tab, change [File Numbering] to [Auto Reset] (📖154), or format the memory card (📖153).

Lens Error

- This error may occur if the lens is held while it is moving, or when the camera is used in dusty or sandy locations.
- Frequent display of this error message may indicate camera damage. In this case, contact a Canon Customer Support Help Desk.

A camera error was detected (error number)

- If this error message is displayed immediately after a shot, the image may not have been saved. Switch to Playback mode to check for the image.
- Frequent display of this error message may indicate camera damage. In this case, write down the error number (Exx) and contact a Canon Customer Support Help Desk.

File Error

- Correct printing (📖176) may not be possible for photos from other cameras or images that have been altered using computer software, even if the camera is connected to the printer.

Print error

- Check the paper size setting (📖178). If this error message is displayed when the setting is correct, restart the printer and complete the setting on the camera again.

Ink absorber full

- Contact a Canon Customer Support Help Desk to request assistance with ink absorber replacement.

Wi-Fi

Connection failed

- No access points were recognized. Check the access point settings (📖134).
- A device could not be found. Turn the camera off and on again, and retry the connection.
- Check the device you want to connect to and make sure it is ready for connection.

Cannot determine access point

- The WPS buttons on numerous access points were pressed simultaneously. Try reconnecting again.



No access points found

- Check to make sure that the access point is turned on.
- When connecting to an access point manually, make sure that you entered the correct SSID.

Incorrect password/Incorrect Wi-Fi security settings

- Check the access point security settings (📖 134).

IP address conflict

- Reset the IP address so that it does not conflict with another.

Disconnected/Receiving failed/Sending failed

- You may be in an environment where Wi-Fi signals are obstructed.
- Avoid using the camera's Wi-Fi function around microwave ovens, Bluetooth devices, and other devices that operate on the 2.4 GHz band.
- Bring the camera closer to the other device you are trying to connect to (such as the access point), and make sure there are no objects between the devices.
- Check the connected device to make sure it is not experiencing errors.

Sending failed

Memory card error

- If the same error message is displayed even when you have inserted a formatted memory card facing the correct way, contact a Canon Customer Support Help Desk.

Receiving failed

Insufficient space on card

- There is not enough free space on the memory card in the target camera to receive images. Erase images to create space on the memory card, or insert a memory card with sufficient space.

Receiving failed

Memory card locked

- The write-protect tab of the memory card in the camera to receive the images is set to the locked position. Slide the write-protect tab to the unlocked position.

Receiving failed

Naming error!

- When the highest folder number (999), and the highest image number (9999) have been reached on the receiving camera, images cannot be received.

Insufficient space on server

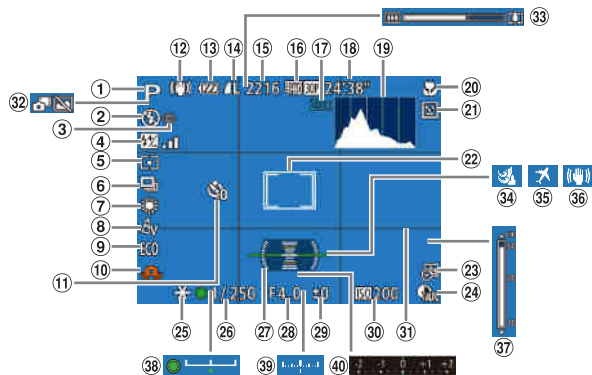
- Delete unnecessary images uploaded to CANON iMAGE GATEWAY to create space.
- Save the images sent via Image Sync (📖 145) to your computer.

Check network settings

- Check to make sure your computer can connect to the Internet with the current network settings.

On-Screen Information

Shooting (Information Display)



- ① Shooting mode (193), Scene icon (33)
- ② Flash mode (85), LED light (169)
- ③ Red-eye correction (45)
- ④ Flash exposure compensation / Flash output level (86, 94)
- ⑤ Metering method (69), ND filter (73), Shadow correction (73)
- ⑥ Drive mode (76), AEB shooting (72), Focus bracketing (80)
- ⑦ White balance (74), Mercury lamp correction (46)
- ⑧ My Colors (75)
- ⑨ Eco mode (152)
- ⑩ Camera shake warning (32)
- ⑪ Self-timer (36)
- ⑫ IS mode icon (34)
- ⑬ Battery level (191)
- ⑭ Still image compression (89), Resolution (45)

- ⑮ Recordable shots (204)
- ⑯ Movie resolution (46)
- ⑰ Digital zoom magnification (35), Digital tele-converter (80)
- ⑱ Remaining time (205)
- ⑲ Histogram (103)
- ⑳ Focusing range (53, 78), Manual focus (78), AF lock (85)
- ㉑ Blink detection (48)
- ㉒ AF frame (81), Spot AE point frame (69)
- ㉓ Date stamp (38)
- ㉔ DR correction (73)
- ㉕ AE lock (69), FE lock (87)
- ㉖ Shutter speed (92, 93)
- ㉗ Electronic level (47)
- ㉘ Aperture value (93)
- ㉙ Exposure compensation level (68)
- ㉚ ISO speed (70)
- ㉛ Grid lines (95)
- ㉜ Hybrid Auto mode (31)
- ㉝ Zoom bar (29)
- ㉞ Wind filter (32)
- ㉟ Time zone (151)
- ㊱ Image stabilization (89)
- ㊲ MF indicator (78)
- ㊳ Exposure shift bar (65)
- ㊴ Exposure level (93)
- ㊵ Exposure compensation bar (68)

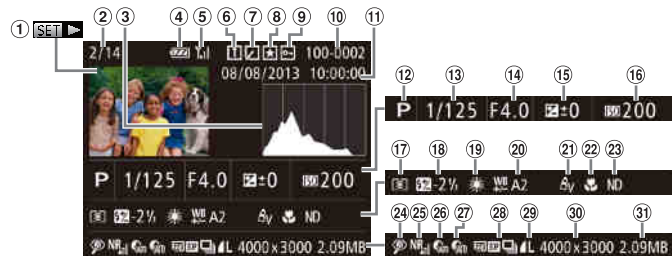
Battery Level

An on-screen icon or message indicates the battery charge level.

Display	Details
	Sufficient charge
	Slightly depleted, but sufficient
	Nearly depleted—charge the battery pack soon
[Charge the battery]	Depleted—charge the battery pack immediately



Playback (Detailed Information Display)



- | | | |
|--|---|---|
| ① Movies (129, 102) | ⑬ Shutter speed (92, 93) | ⑳ White balance correction (74), Mercury lamp correction (46) |
| ② Current image no. / Total no. of images | ⑭ Aperture value (93) | ㉑ My Colors (75, 120) |
| ③ Histogram (103) | ⑮ Exposure compensation level (68), Exposure shift level (65) | ㉒ Focusing range (53, 78), Manual focus (78) |
| ④ Battery level (191) | ⑯ ISO speed (70), Playback speed (57) | ㉓ ND filter (73) |
| ⑤ Wi-Fi signal strength (142) | ⑰ Metering method (69) | ㉔ Red-eye correction (45, 121) |
| ⑥ Image Sync (145) | ⑱ Flash output level (94), Flash exposure compensation (86) | ㉕ High ISO NR (71) |
| ⑦ Image editing (118 – 121), Movie compression (123) | ⑲ White balance (74) | ㉖ DR correction (73) |
| ⑧ Favorites (117) | | ㉗ Shadow correction (73) |
| ⑨ Protection (111) | | |
| ⑩ Folder number - File number (154) | | |
| ⑪ Shooting date/time (14) | | |
| ⑫ Shooting mode (193) | | |

- | | | |
|--|---|--|
| ㉘ Group playback (108), Image quality / Frame rate (movies) (46, 66) | ㉙ Compression (image quality) (89) / Resolution (45), Digest movies (104), RAW (88), MP4 (movies) | ㉚ Still images: Resolution (204) Movies: Playback time (205) |
| | | ㉛ File size |



- Some information may not be displayed when viewing images on a TV (163).

Summary of Movie Control Panel in “Viewing” (102)

⏮	Exit
▶	Play
⏭	Slow Motion (To adjust the playback speed, press the <◀> buttons or turn the <◀> dial. No sound is played.)
⏮	Skip Backward* or Previous Clip (123) (To continue skipping backward, keep holding down the <◀> button.)
⏮	Previous Frame (For fast-rewind, keep holding down the <◀> button.)
⏭	Next Frame (For fast-forward, keep holding down the <▶> button.)
⏭	Skip Forward* or Next Clip (123) (To continue skipping forward, keep holding down the <▶> button.)
✂	Edit (122)
🗑	Erase Clip (displayed when a digest movie is selected (123))
🖨	Shown when the camera is connected to a PictBridge-compatible printer (176).

* Displays the frame approx. 4 sec. before or after the current frame.



- During movie playback, you can skip back or forward (or to the previous or next clip) by pressing the <◀> buttons.

Functions and Menu Tables

Functions Available in Each Shooting Mode

Shooting Mode		SCN																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
		C2	C1	M	Av	Tv	P		AUTO																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					

*1 Options vary depending on the assigned shooting mode.

○ Available or set automatically. – Not available.

*2 Not available, but switches to [Fn] in some cases.

*3 FE lock not available in [Fn] flash mode.

*4 In modes other than [Fn], AE lock and Exposure shift are only available when shooting movies.



Shooting Mode	C2	C1	M	Av	Tv	P		AUTO	SCN																																
Function																																									
Move AF Frame (📖81)	*1	*1	O	O	O	O	–	–	–	–	–	–	O	O	O	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–									
Resize AF Frame (📖81)	*1	*1	O	O	O	O	–	–	O	–	–	–	–	–	–	–	O	O	–	–	O	–	–	O	–	O	O	O	O	O	O	O									
Face Select (📖84)	O	O	O	O	O	O	O	O	O	O	O	O	–	–	–	–	O	–	O	O	–	–	O	O	O	O	O	O	O	O	O	O									
Set Tracking AF Subject (📖82)	O	O	O	O	O	O	–	O	O	–	–	–	–	–	–	O	O	–	–	O	–	–	–	–	–	O	O	O	O	O	O	–									
Screen Display (📖23)																																									
Display Off	*1	*1	O	O	O	O	–	O	O	–	–	–	O	O	O	–	–	O	O	–	–	–	–	–	–	–	–	–	–	–	–	–									
Display 1	*1	*1	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O									
Display 2	*1	*1	O	O	O	O	O	O	O	–	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O									

*1 Options vary depending on the assigned shooting mode.

O Available or set automatically. – Not available.



FUNC. Menu

Shooting Mode		SCN																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
		C2	C1	M	Av	Tv	P		AUTO																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

*1 Options vary depending on the assigned shooting mode.

O Available or set automatically. – Not available.

*2 Advanced settings not available.

*3 White balance is not available.

*4 Set in a range of 1 – 5: contrast, sharpness, color saturation, red, green, blue, and skin tone.



Function	Shooting Mode										SCN																		
	C2	C1	M	Av	Tv	P	AE	AUTO	AF	AF-ON	AF-ON	AF-ON	AF-ON	AF-ON	AF-ON	AF-ON	AF-ON	AF-ON	AF-ON	AF-ON	AF-ON	AF-ON	AF-ON	AF-ON	AF-ON	AF-ON	AF-ON	AF-ON	AF-ON
Image Type (88)	JPEG	RAW	RAW	RAW	RAW	RAW	RAW	RAW	RAW	RAW	RAW	RAW	RAW	RAW	RAW	RAW	RAW	RAW	RAW	RAW	RAW	RAW	RAW	RAW	RAW	RAW	RAW	RAW	RAW
Resolution (45)	L	M1	M2	S																									
Compression (89)	S																												
Movie Quality (46, 66)	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P
	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P	FHD 60P
	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P	HD 60P
	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P
	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P	4K 60P

*1 Options vary depending on the assigned shooting mode.

*2 Synchronizes with the aspect ratio setting and is automatically set (57).

○ Available or set automatically. – Not available.



Shooting Tab Menu

Function	Shooting Mode										SCN																			
	C2	C1	M	Av	Tv	P		AUTO																						
AF Frame (81)																														
Face AiAF	*1	*1	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Tracking AF	*1	*1	O	O	O	O	–	*2	O	–	–	–	–	–	–	O	O	–	–	O	–	–	–	–	–	O	O	O	O	–
FlexiZone/Center*3	*1	*1	O	O	O	O	–	–	O	–	–	–	O	O	O	–	O	O	O	–	O	O	–	O	–	O	O	O	O	O
Digital Zoom (35)																														
Standard	*1	*1	O	O	O	O	O	O	O	O	O	O	–	–	–	–	O	O	O	–	–	–	–	–	–	–	–	–	O	–
Off	*1	*1	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
1.5/2.0x	*1	*1	O	O	O	O	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
AF-Point Zoom (47)																														
On	*1	*1	O	O	O	O	–	O	O	O	O	O	–	–	–	–	O	O	–	–	O	–	–	–	–	–	O	O	O	–
Off	*1	*1	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Servo AF (83)																														
On	*1	*1	O	O	O	O	–	–	O	–	–	–	–	–	–	–	O	O	–	–	O	–	–	–	–	–	O	O	O	–
Off	*1	*1	O	O	O	O	O	*4	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Continuous AF (84)																														
On	*1	*1	O	O	O	O	O	O	O	O	O	O	–	–	–	O	O	O	–	O	O	O	O	O	O	O	O	O	O	O
Off	*1	*1	O	O	O	O	–	–	O	–	–	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	–
AF-assist Beam (48)																														
On	*1	*1	O	O	O	O	O	O	O	O	O	O	–	–	–	O	–	O	–	O	O	O	O	O	O	O	O	O	O	O
Off	*1	*1	O	O	O	O	O	O	O	–	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
MF-Point Zoom (79)																														
Off	*1	*1	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
2x/4x	*1	*1	O	O	O	O	–	–	O	–	–	–	O	O	O	–	O	O	–	–	O	–	–	–	–	–	O	O	O	–

*1 Options vary depending on the assigned shooting mode.

*2 Only available by pressing the <▲> button (38).

*3 [FlexiZone] in [P], [Tv], [Av], and [M] modes, otherwise [Center].

*4 [On] when subject movement is detected.

O Available or set automatically. – Not available.



Shooting Mode		SCN																		Function
		C2	C1	M	Av	Tv	P	☐	AUTO	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Safety MF (☐79)																				
On		*1	*1	○	○	○	○	–	–	○	–	–	–	○	○	○	○	○	○	○
Off		*1	*1	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
MF Peaking Settings (☐79)																				
Peaking	On/Off	*1	*1	○	○	○	○	–	–	○	–	–	–	○	○	○	○	○	○	○
Level	High/Low	*1	*1	○	○	○	○	–	–	○	–	–	–	○	○	○	○	○	○	○
Color	Red/Blue/Yellow	*1	*1	○	○	○	○	–	–	○	–	–	–	○	○	○	○	○	○	○
Flash Control (☐45, 49, 86, 87, 94)																				
Flash Mode	Auto	*1	*1	–	○	○	○	○	○	○	○	○	○	–	–	–	○	○	○	○
	Manual	*1	*1	○	○	○	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Flash Exp. Comp		*1	*1	–	○	○	○	–	–	–	–	–	–	–	–	–	–	–	–	–
Flash Output		*1	*1	○	○	○	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Shutter Sync.	1st-curtain	*1	*1	○	○	○	○	○	○	○	○	○	○	–	–	○	○	○	○	○
	2nd-curtain	*1	*1	○	○	○	○	–	–	–	–	–	–	–	–	–	–	–	–	–
Red-Eye Corr.	On	*1	*1	○	○	○	○	○	○	○	○	○	○	–	–	○	○	○	○	○
	Off	*1	*1	○	○	○	○	○	○	○	○	○	○	–	–	○	○	○	○	○
Red-Eye Lamp	On/Off	*1	*1	○	○	○	○	○	○	○	○	○	○	–	–	○	○	○	○	○
	On	*1	*1	–	○	○	○	○	○	○	○	○	○	–	–	○	○	○	○	○
	Off	*1	*1	○	○	○	○	–	–	–	–	–	–	–	–	–	–	–	–	–
ISO Auto Settings (☐71)																				
Max ISO Speed		*1	*1	–	○	○	○	–	–	–	–	–	–	–	–	–	–	–	–	–
Rate of Change		*1	*1	–	○	–	○	–	–	–	–	–	–	–	–	–	–	–	–	–
High ISO NR (☐71)																				
Low/Standard/High		*1	*1	○	○	○	○	–	–	–	–	–	–	–	–	–	–	–	–	–
Hg Lamp Corr. (☐46)																				
On/Off		–	–	–	–	–	–	○	–	–	–	–	–	–	–	–	–	–	–	–
Spot AE Point (☐69)																				
Center/AF Point		*1	*1	○	○	○	○	–	–	–	–	–	–	–	–	–	–	–	–	–

*1 Options vary depending on the assigned shooting mode.

○ Available or set automatically. – Not available.

[illegible]

○ Available or set automatically. – Not available.

🔧 Set Up Tab Menu

Item	Ref. Page	Item	Ref. Page
Mute	📖150	File Numbering	📖154
Volume	📖150	Create Folder	📖155
Sound Options	📖150	Units	📖155
Hints & Tips	📖151	Electronic Level	📖155
Date/Time	📖14	Video System	📖165
Time Zone	📖151	Ctrl via HDMI	📖164
Lens Retract	📖152	Wi-Fi Settings	📖124
Eco Mode	📖152	Copyright Info	📖156
Power Saving	📖21, 152	Certification Logo Display	📖156
LCD Brightness	📖153	Language 🗣️	📖16
Start-up Image	📖153	Reset All	📖157
Format	📖153, 154		

★ My Menu Tab Menu

Item	Ref. Page
My Menu settings	📖100

🎬 Playback Tab Menu

Item	Ref. Page	Item	Ref. Page
List/Play Digest Movies	📖105	Resize	📖118
Smart Shuffle	📖110	My Colors	📖120
Slideshow	📖110	Face ID Info	📖105
Erase	📖114	Transition Effect	📖103
Protect	📖111	Index Effect	📖105
Rotate	📖116	Scroll Display	📖103
Favorites	📖117	Group Images	📖108
Photobook Set-up	📖182	Auto Rotate	📖116
i-Contrast	📖120	Resume	📖103
Red-Eye Correction	📖121	Set Shortcut button	📖118
Cropping	📖119		

🖨️ Print Tab Menu

Item	Ref. Page	Item	Ref. Page
Print	—	Select All Images	📖181
Select Images & Qty.	📖181	Clear All Selections	📖182
Select Range	📖181	Print Settings	📖180



Handling Precautions

- The camera is a high-precision electronic device. Avoid dropping it or subjecting it to strong impact.
- Never bring the camera near magnets, motors, or other devices that generate strong electromagnetic fields, which may cause malfunction or erase image data.
- If water droplets or dirt adheres to the camera or screen, wipe with a dry soft cloth, such as an eyeglass cloth. Do not rub hard or apply force.
- Never use cleaners containing organic solvents to clean the camera or screen.
- Use a blower brush to remove dust from the lens. If cleaning is difficult, contact a Canon Customer Support Help Desk.
- To prevent condensation from forming on the camera after sudden temperature changes (when the camera is transferred from cold to warm environments), put the camera in an airtight, resealable plastic bag and let it gradually adjust to the temperature before removing it from the bag.
- If condensation does form on the camera, stop using it immediately. Continuing to use the camera in this state may damage it. Remove the battery pack and memory card, and wait until the moisture has evaporated before resuming use.
- Before long-term battery storage, use up the battery pack's remaining charge, remove it from the camera, and store it in a plastic bag or similar container. Storing a partially charged battery pack over extended periods (about a year) may shorten its life or affect performance.

Specifications

Camera Effective Pixels (Max.)	Approx. 12.1 million pixels
Lens Focal Length	5x zoom: 6.1 (W) – 30.5 (T) mm (35mm film equivalent: 28 (W) – 140 (T) mm)
Viewfinder	Real-image type optical zoom viewfinder Dioptic Adjustment Range: -3.0 to $+1.0$ m ⁻¹ (dpt) Coverage: Approx. 80%
LCD Monitor	3.0-type color TFT LCD Effective Pixels: Approx. 922,000 dots
File Format	Design rule for Camera File system, DPOF (version 1.1) compliant
Data Type	Still Images: Exif 2.3 (JPEG), RAW (CR2 (Canon Original)) Movies: MP4 (Video: H.264; Audio: MPEG2 AAC-LC (stereo))
Interface	Hi-speed USB HDMI output Analog audio output (stereo) Analog video output (NTSC/PAL)
Power Source	Battery Pack NB-10L AC Adapter Kit ACK-DC80
Dimensions (Based on CIPA Guidelines)	108.8 x 75.9 x 40.3 mm (4.28 x 2.99 x 1.59 in.)
Weight (Based on CIPA Guidelines)	Approx. 356 g (approx. 12.56 oz.; including the battery pack and memory card) Approx. 314 g (approx. 11.08 oz.; camera body only)



Wi-Fi Functions

Standards	IEEE802.11b/g/n* *2.4 GHz band only
Transmission Methods	OFDM modulation (IEEE 802.11g/n) DSSS modulation (IEEE 802.11b)
Communication Modes	Infrastructure mode*1, Ad hoc mode*2 *1 Supports Wi-Fi Protected Setup *2 Wi-Fi Certified IBSS
Supported Channels	1 – 11 (PC2035/PC2059) or 1 – 13 (PC2010) Model numbers indicated in parentheses (P210)
Security	WEP, WPA-PSK (AES/TKIP), WPA2-PSK (AES/TKIP)

Number of Shots/Recording Time, Playback Time









Number of Shots	Screen On	Approx. 360
	Screen Off	Approx. 770
	Eco Mode On	Approx. 480
Movie Recording Time*1	Screen On	Approx. 1 hour
Continuous Shooting*2	Screen On	Approx. 1 hour, 40 minutes
Playback Time		Approx. 7 hours

*1 Time under default camera settings, when normal operations are performed, such as shooting, pausing, turning the camera on and off, and zooming.

*2 Time available when shooting the maximum movie length (until recording stops automatically) repeatedly.

- The number of shots that can be taken is based on measurement guidelines of the Camera & Imaging Products Association (CIPA).
- Under some shooting conditions, the number of shots and recording time may be less than mentioned above.
- Number of shots/time with a fully charged battery pack.

Number of 4:3 Shots per Memory Card

Recording Pixels	Compression Ratio	Number of Shots per Memory Card (Approx. shots)	
		8 GB	32 GB
L (Large) 12M/4000x3000		1379	5568
		2192	8850
M1 (Medium 1) 6M/2816x2112		2431	9814
		3721	15020
M2 (Medium 2) 2M/1600x1200		7442	30040
		12927	52176
S (Small) 0.3M/640x480		27291	110150
		40937	165225
RAW Images 4000x3000	–	446	1804

- The values in the table are measured according to Canon standards and may change depending on the subject, memory card and camera settings.
- The values in the table are based on 4:3 aspect ratio. If the aspect ratio is changed (P44), more images can be shot because the data size per image will be smaller than with 4:3 images. However, since [M2] 16:9 images have a setting of 1920 x 1080 pixels, their data size will be larger than 4:3 images.

Recording Time per Memory Card

Image Quality	Recording Time per Memory Card	
	8 GB	32 GB
FHD 60P	30 min. 03 sec.	2 hr. 01 min. 27 sec.
FHD 30P	43 min. 29 sec.	2 hr. 55 min. 43 sec.
HD 30P	2 hr. 03 min. 55 sec.	8 hr. 20 min. 32 sec.
VGA 30P	5 hr. 14 min. 34 sec.	21 hr. 10 min. 33 sec.

- The values in the table are measured according to Canon standards and may change depending on the subject, memory card and camera settings.
- Recording will automatically stop when the clip file size reaches 4 GB, or when the recording time reaches approximately 29 minutes and 59 seconds when shooting in [FHD 60P], [FHD 30P] or [HD 30P], or approximately 1 hour when shooting in [VGA 30P].
- Recording may stop even if the maximum clip length has not been reached on some memory cards. SD Speed Class 6 or higher memory cards are recommended.

Flash Range

Maximum wide angle ()	50 cm – 7.0 m (1.6 – 23 ft.)
Maximum telephoto ()	50 cm – 4.5 m (1.6 – 15 ft.)

Shooting Range

Shooting Mode	Focusing Range	Maximum Wide Angle ()	Maximum Telephoto ()
AUTO	–	1 cm – infinity (0.4 in. – infinity)	40 cm – infinity (1.3 ft. – infinity)
Other modes		5 cm – infinity (2.0 in. – infinity)	40 cm – infinity (1.3 ft. – infinity)
		1 – 50 cm (0.4 in. – 1.6 ft.)	–
	MF*	1 cm – infinity (0.4 in. – infinity)	40 cm – infinity (1.3 ft. – infinity)
		1 – 50 cm (0.4 in. – 1.6 ft.)	–
		1.5 – 20 m (4.9 – 66 ft.)	1.5 – 20 m (4.9 – 66 ft.)

* Not available in some shooting modes.

Continuous Shooting Speed

Continuous Shooting Mode	Speed
	Approx. 12.2 shots/sec. Approx. 9.3 shots/sec.*
	Approx. 5.7 shots/sec.
	Approx. 5.9 shots/sec.

* From the sixth shot.

- Based on Canon testing standards, using a 8 GB UHS-I memory card. Note that the number of shots will vary depending on subjects, the brand of memory card, and other factors.

Shutter Speed

[AUTO] mode, automatically set range	1 – 1/4000 sec.
Available values in [Tv] or [M] mode (sec.)*	250, 200, 160, 125, 100, 80, 60, 50, 40, 30, 25, 20, 15, 13, 10, 8, 6, 5, 4, 3.2, 2.5, 2, 1.6, 1.3, 1, 0.8, 0.6, 0.5, 0.4, 0.3, 1/4, 1/5, 1/6, 1/8, 1/10, 1/13, 1/15, 1/20, 1/25, 1/30, 1/40, 1/50, 1/60, 1/80, 1/100, 1/125, 1/160, 1/200, 1/250, 1/320, 1/400, 1/500, 1/640, 1/800, 1/1000, 1/1250, 1/1600, 1/2000, 1/2500, 1/3200, 1/4000

* In [**Tv**] mode, shutter speeds of 20 seconds or slower are not available.

Aperture

f/number	f/1.8 – f/8.0 (W), f/2.8 – f/8.0 (T)
Available values in [Av] mode*	f/1.8, f/2.0, f/2.2, f/2.5, f/2.8, f/3.2, f/3.5, f/4.0, f/4.5, f/5.0, f/5.6, f/6.3, f/7.1, f/8.0

* Depending on the zoom position, some aperture values may not be available.

Battery Pack NB-10L

Type:	Rechargeable lithium-ion battery
Nominal Voltage:	7.4 V DC
Nominal Capacity:	920 mAh
Charging Cycles:	Approx. 300 times
Operating Temperatures:	0 – 40 °C (32 – 104 °F)
Dimensions:	32.5 x 45.4 x 15.1 mm (1.28 x 1.79 x 0.59 in.)
Weight:	Approx. 41 g (approx. 1.45 oz.)

Battery Charger CB-2LC/CB-2LCE

Rated Input:	100 – 240 V AC (50/60 Hz) 16 VA (100 V) – 22 VA (240 V), 0.18 A (100 V) – 0.12 A (240 V)
Rated Output:	8.4 V DC, 0.7 A
Charging Time:	Approx. 1 hour 50 min. (when using NB-10L)
Charge Indicator:	Charging: orange / Fully charged: green (two indicators)
Operating Temperatures:	5 – 40 °C (41 – 104 °F)

Tele-Converter TC-DC58E (Sold Separately)

Zoom Factor:	1.4x
Lens Construction:	5 elements in 3 groups
Thread Diameter:	58 mm*
Max. Diameter x Length:	φ69.0 x 36.5 mm (φ2.72 x 1.44 in.)
Weight:	Approx. 165 g (approx. 5.8 oz.)

* Requires Conversion Lens Adapter LA-DC58L.

Conversion Lens Adapter LA-DC58L (Sold Separately)

Camera Mount:	Bayonet
Thread Diameter:	58 mm
Max. Diameter x Length:	φ63.8 x 54.8 mm (φ2.51 x 2.16 in.)
Weight:	Approx. 36 g (approx. 1.3 oz.)

Filter Adapter FA-DC58D (Sold Separately)

Max. Diameter x Length:	φ66.0 x 46.7 mm (φ2.60 x 1.84 in.)
Weight:	Approx. 58 g (approx. 2.0 oz.)

Bracket BKT-DC1 (Sold Separately)

Dimensions (Max.):	220.0 x 32.0 x 19.0 mm (8.66 x 1.26 x 0.75 in.)
Weight:	Approx. 90 g (approx. 3.2 oz.)

- All data is based on tests by Canon.
- Camera specifications or appearance are subject to change without notice.



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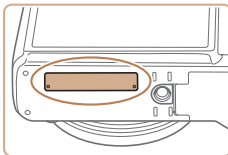
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Wi-Fi (Wireless LAN) Precautions

- The camera's model number is PC2035/PC2059/PC2010. To identify your model, check the label on the bottom of the camera for a number beginning with *PC*. The built-in WLAN module model is written below.



Country/Region of Purchase	WLAN Module Model
U.S.A., Canada, Taiwan	WM222
Other	WM218

- Countries and Regions Permitting WLAN Use
 - Use of WLAN is restricted in some countries and regions, and illegal use may be punishable under national or local regulations. To avoid violating WLAN regulations, visit the Canon website to check where use is allowed.
Note that Canon cannot be held liable for any problems arising from WLAN use in other countries and regions.
- Doing any of the following may incur legal penalties:
 - Altering or modifying the product
 - Removing the certification labels from the product
- According to foreign exchange and foreign trade law regulations, export permission (or service transaction permission) from the Japanese government is necessary to export strategic resources or services (including this product) outside Japan.
- Because this product includes American encryption software, it falls under U.S. Export Administration Regulations, and cannot be exported to or brought into a country under U.S. trade embargo.

- Be sure to make notes of the wireless LAN settings you use.
The wireless LAN settings saved to this product may change or be erased due to incorrect operation of the product, the effects of radio waves or static electricity, or accident or malfunction. Be sure to make notes of wireless LAN settings as a precaution. Please note that Canon accepts no responsibility for direct or indirect damages or loss of earnings resulting from a degradation or disappearance of content.
- When transferring this product to another person, disposing of it, or sending it for repair, be sure to note the wireless LAN settings and reset the product to its default settings (erase settings) if necessary.
- Canon will not make compensation for damages resulting from loss or theft of the product.
Canon accepts no responsibility for damages or loss resulting from unauthorized access or use of target devices registered on this product due to loss or theft of the product.
- Be sure to use the product as directed in this guide.
Be sure to use the wireless LAN function of this product within the guidelines noted in this guide. Canon accepts no responsibility for damages or loss if the function and product are used in ways other than as described in this guide.
- Do not use the wireless LAN function of this product near medical equipment or other electronic equipment.
Use of the wireless LAN function near medical equipment or other electronic equipment may affect operation of those devices.



Radio Wave Interference Precautions

- This product may receive interference from other devices that emit radio waves. To avoid interference, be sure to use this product as far away as possible from such devices, or avoid using the devices at the same time as this product.

Complies with
IDA Standards
DB00671

This product is installed with the WLAN Module which is certified to standards set by IDA Singapore.

Security Precautions

Because Wi-Fi uses radio waves to transmit signals, security precautions more stringent than when using a LAN cable are required. Keep the following points in mind when using Wi-Fi.

- Only use networks you are authorized to use.

This product searches for Wi-Fi networks in the vicinity and displays the results on the screen. Networks you are not authorized to use (unknown networks) may also be displayed. However, attempting to connect to or using such networks could be regarded as unauthorized access. Be sure to use only networks you are authorized to use, and do not attempt to connect to other unknown networks.

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

- Transmission monitoring
Third parties with malicious intent may monitor Wi-Fi transmissions and attempt to acquire the data you are sending.

- Unauthorized network access

Third parties with malicious intent may gain unauthorized access to the network you are using to steal, modify, or destroy information. Additionally, you could fall victim to other types of unauthorized access such as impersonation (where someone assumes an identity to gain access to unauthorized information) or springboard attacks (where someone gains unauthorized access to your network as a springboard to cover their tracks when infiltrating other systems).

To prevent these types of problems from occurring, be sure to thoroughly secure your Wi-Fi network.

Only use this camera's Wi-Fi function with a proper understanding of Wi-Fi security, and balance risk and convenience when adjusting security settings.



The camera can print to PictBridge-compatible printers via Wi-Fi. PictBridge technical standards make it easy to connect digital cameras, printers, and other devices directly. Additionally, a new standard called DPS over IP enables PictBridge connections in network environments, and the camera is also compatible with this standard.

CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO LOCAL REGULATION.



Battery Charger CB-2LC

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.



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.

FCC/IC Notice

Model: PC2035 (including WLAN Module Model WM222, FCC ID: AZD222)

The available scientific evidence does not show that any health problems are associated with using low power wireless devices. There is no proof, however, that these low power wireless devices are absolutely safe. Low power Wireless devices emit low levels of radio frequency energy (RF) in the microwave range while being used. Whereas high levels of RF can produce health effects (by heating tissue), exposure to low-level RF that does not produce heating effects causes no known adverse health effects. Many studies of low-level RF exposures have not found any biological effects. Some studies have suggested that some biological effects might occur, but such findings have not been confirmed by additional research. This model has been tested and found to comply with FCC/IC radiation exposure limits set forth for an uncontrolled equipment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65 and RSS-102 of the IC radio frequency (RF) Exposure rules.

This device complies with Part 15 of FCC Rules and Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

Battery Charger CB-2LCE

The adapter can be used with a power supply between 100 and 240 V AC.

Contact your Canon dealer for information about plug adapter for overseas use.

For U.S.A. customers only: For areas where 120 V AC power is not used, you will need a special plug adapter.

For only United States

Use a UL listed, 1.8-3m(6-10ft), Type SPT-2 or NTSPT-2, AWG no.18 power supply cord, rated for 125V 7A, with a non-polarized NEMA 1-15P plug rated for 125V 15A.

FCC Notice

(Digital Camera, Model PC2035 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, New York 11747, U.S.A.

Tel No. 1-800-OK-CANON (1-800-652-2666)

Canadian Radio Interference Regulations

CAN ICES-3 (B)/NMB-3 (B)

To ensure proper operation of this product, use of genuine Canon accessories is recommended.

For CA, USA only

Included lithium battery contains Perchlorate Material - special handling may apply.
See www.dtsc.ca.gov/hazardouswaste/perchlorate/ for details.

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