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Camera User Guide

- Make sure you read this guide, including the “Safety Precautions” (14) section, 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.
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Before Use

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-13L*
- Battery Charger CB-2LH/CB-2LHE
- Wrist Strap

* Do not peel off the adhesive covering from a battery pack.
- Printed matter is also included.
- A memory card is not included (2).

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.
- The user’s unauthorized photographing or recording (video and/or sound) of people or copyrighted materials may invade the privacy of such people and/or may violate others’ legal rights, including copyright and other intellectual property rights, even when such photographing or recording is intended solely for personal use.
- 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 screen (monitor) is 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.
- When the camera is used over an extended period, it may become warm. This does not indicate damage.

Conventions in This Guide

- 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. Numbers in parentheses indicate the numbers of corresponding controls in “Part Names” (4). Control ring (10) on front
- Shooting modes and on-screen icons and text are indicated in brackets.
- !: Important information you should know
- #: Notes and tips for expert camera use
- ❯: Indicates touch-screen operations
- ❯ 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 symbols ➤ Still Images” and ➤ Movies” below titles indicate how the function is used—whether for still images or movies.
Part Names

(1) Lens
(2) Lamp
(3) Strap mount
(4) Zoom lever
   Shooting [ ] (telephoto) / [ ] (wide angle)
   Playback [ ] (magnify) / [ ] (index)
(5) Mode dial
(6) Shutter button
(7) Power button
(8) Speaker
(9) [ ] (Playback) button
(10) Control ring
(11) Flash
(12) [ ] (Wi-Fi) button
(13) Serial number (Body number)
(14) [ ] (N-Mark)*1
(15) Tripod socket
(16) Memory card/battery cover

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Safety Precautions

- Before using the product, ensure that you read the safety precautions described below. Always ensure that the product is used correctly.
- The safety precautions noted here are intended to prevent you and other persons from being injured or incurring property damage.
- 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 fire the flash near the eyes. It may hurt the eyes.
- Store this equipment out of the reach of children and infants. A strap wound around a child’s neck may result in asphyxiation. If your product uses a power cord, mistakenly winding the cord around a child’s neck may result in asphyxiation.
- Use only recommended power sources.
- Do not disassemble, alter, or apply heat to the product.
- Do not peel off the adhesive covering, if the battery pack has it.
- Avoid dropping or subjecting the product to severe impacts.
- Do not touch the interior of the product if it is broken, such as when dropped.
- Stop using the product immediately if it emits smoke or a strange smell, or otherwise behaves abnormally.
- Do not use organic solvents such as alcohol, benzine, or thinner to clean the product.
- Avoid contact with liquid, and do not allow liquid or foreign objects inside. This could result in electrical shock or fire. If the product gets wet, or if liquid or foreign objects get inside, remove the battery pack/batteries or unplug immediately.
Do not allow the camera to maintain contact with skin for extended periods.

Even if the camera does not feel hot, this may cause low-temperature burns, manifested in redness of the skin or blistering. Use a tripod in hot places, or if you have poor circulation or insensitive skin.

Caution Denotes the possibility of injury.

- When carrying the product 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 places
  These could cause leakage, overheating, or an explosion of the battery pack/batteries, resulting in electrical shock, fire, burns, or other injuries. Overheating and damage may result in electrical shock, fire, burns, or other injuries.
- 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 accessory becomes loose and falls off, it may crack, and the shards of glass may lead to cuts.
● On products that raise and lower the flash automatically, make sure to avoid pinching your fingers with the lowering flash. This could result in injury.

Caution Denotes the possibility of property damage.

● Do not aim the camera at intense light sources, such as the sun on a clear day or an intense artificial light source. Doing so may damage the image sensor or other internal components.

● When using the camera on a sandy beach or at a windy location, be careful not to allow dust or sand to enter the camera.

● On products that raise and lower the flash automatically, do not push the flash down or pry it open. This may cause the product to malfunction.

● Wipe off any dust, grime, or other foreign matter on the flash with a cotton swab or cloth. The heat emitted from the flash may cause foreign matter to smoke or the product to malfunction.

● Remove and store the battery pack/batteries when you are not using the product. Any battery leakage that occurs may cause product damage.

● 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.

● Unplug any battery charger used with the product when not in use. Do not cover with a cloth or other objects when in use. Leaving the unit plugged in for a long period of time may cause it to overheat and distort, resulting in fire.

● Do not leave any dedicated battery packs near pets. Pets biting the battery pack could cause leakage, overheating, or explosion, resulting in product damage or fire.

● If your product uses multiple batteries, do not use batteries that have different levels of charge together, and do not use old and new batteries together. Do not insert the batteries with the + and – terminals reversed. This may cause the product to malfunction.

● 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 body), if your product’s screen closes.

● Do not attach any hard objects to the product. Doing so may cause malfunctions or damage the screen.

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Basic Guide

Basic Operations

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

Touch-Screen Operations

The camera’s touch-screen panel enables intuitive operation simply by touching or tapping the screen.

■ Touching

Touch the screen briefly with your finger.

- This gesture is used to shoot, configure camera functions, and so on.

■ Dragging

Touch the screen and move your finger across it.

- This gesture is used in Playback mode to switch to the next image, or to change the magnified image area, among other operations.

Touch-Screen Operations

The camera’s touch-screen panel enables intuitive operation simply by touching or tapping the screen.

■ Touching

Touch the screen briefly with your finger.

- This gesture is used to shoot, configure camera functions, and so on.

■ Dragging

Touch the screen and move your finger across it.

- This gesture is used in Playback mode to switch to the next image, or to change the magnified image area, among other operations.
Initial Preparations

Prepare for shooting as follows.

Attaching the Strap

- Thread the end of the strap through the strap mount (1), and then pull the other end of the strap through the loop on the threaded end (2).

- The strap can also be attached to the left side of the camera.

Holding the Camera

- Place the strap around your wrist.
- 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.
- After aligning the marks on the battery pack and charger, insert the battery pack by pushing it in (1) and down (2).

2. Charge the battery pack.
- CB-2LH: Flip out the plug (1) and plug the charger into a power outlet (2).
- CB-2LHE: 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.
Inserting the Battery Pack and Your Memory Card

Insert the included battery pack and a memory card (sold separately). Note that before using a memory card that is new or has been formatted in another device, you should format the memory card with this camera (162).

1 Open the cover.
   ● Slide the switch (1) and open the cover (2).

2 Insert the battery pack.
   ● Holding the battery pack with the terminals in the position shown (1), hold the battery lock toward (2) and insert the battery pack toward (3) until the lock clicks shut.
   ● 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.

3 Check your card’s write-protect switch and insert the memory card.
   ● Recording is not possible on memory cards with a write-protect switch when the switch is in the locked position. Move the switch toward (1).
   ● Insert the memory card with the label (2) facing as shown until it clicks into place.
   ● 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.

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

For details on charging time and the number of shots and recording time possible with a fully charged battery pack, see “Power” (212).

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 charge 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.

For guidelines on how many shots or hours of recording can be saved on one memory card, see “Recording” (212).

For details on charging time and the number of shots and recording time possible with a fully charged battery pack, see “Power” (212).

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 charge 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.

For guidelines on how many shots or hours of recording can be saved on one memory card, see “Recording” (212).
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.

1 Turn the camera on.
- Press the power button.
- The [Date/Time] screen is displayed.

2 Set the date and time.
- Touch the item to configure, and then touch [▲][▼] to specify the date and time.
- When finished, press the [●] button.

3 Specify your home time zone.
- Touch [▲][▼] to choose your home time zone.

4 Finish the setup process.
- Press the [●] 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), touch [▲][▼] and choose [▲] in step 2.
Changing the Date and Time

Adjust the date and time as follows.

1. Access the menu screen.
   - Press the [MENU] button.

2. Choose [Date/Time].
   - Touch [1], and then touch [2].
   - Touch [Date/Time], and then press the [OK] button.

3. Change the date and time.
   - Follow step 2 in “Setting the Date and Time” (page 20) to adjust the settings.
   - Press the [MENU] button to close the menu screen.

- 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, 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” (page 20).

Display Language

Change the display language as needed.

1. Enter Playback mode.
   - Press the [DISP] button.

2. Access the setting screen.
   - Press and hold the [DISP] button, and then immediately press the [DISP] button.

3. Set the display language.
   - Touch a display language to choose it, and then press the [OK] button.
   - Once the display language has been set, the setting screen is no longer displayed.

- The current time is displayed if you wait too long in step 2 after pressing the [DISP] button before you press the [MENU] button. In this case, press the [DISP] 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 [FUNC] tab.
- You can also set the display language by touching a language on the screen in step 3 and then touching it again.
Trying the Camera Out

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 [++] (telephoto), and to zoom away from the subject, move it toward [--] (wide angle).

4 Shoot.

1) Focus.
- Press the shutter button lightly, halfway down. The camera beeps twice after focusing, and frames are displayed to indicate image areas in focus.
- If [Raise the flash] is displayed, move the [] 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.
Recording Movies

1) Start recording.
   ● Press the movie button. The camera beeps once as recording begins, and [Rec] is displayed with the elapsed time (1).
   ● Black bars are displayed on the top and bottom edges of the screen, and the subject is slightly enlarged. The black bars indicate image areas not 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 recording.
   ● Press the movie button again to stop recording. The camera beeps twice as recording stops.

Viewing

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

1 Enter Playback mode.
   ● Press the [play] button.
   ● Your last shot is displayed.

2 Choose images.
   ● To view the next image, drag right to left across the screen, and to view the previous image, drag left to right.
   ● To access this screen (Scroll Display mode), quickly drag left or right repeatedly. In this mode, drag across the screen to browse through images.
   ● Press the [play] button to restore single-image display.

   Movies are identified by a [movie] icon. To play movies, go to step 3.
3 Play movies.
- Press the [ ] button, choose [▶], and then press the [ ] button.
- Playback now begins, and after the movie is finished, [ ] is displayed.
- To adjust the volume, quickly drag up or down across the screen during playback.

Erasing 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.
- Drag left or right across the screen to choose an image.

2 Erase the image.
- Press the [ ] button, choose [ ], and then press the [ ] button.
- After [Erase?] is displayed, touch [Erase].
- The current image is now erased.
- To cancel erasure, touch [Cancel].

- Images can also be erased by using Touch Actions (119).
- You can choose multiple images to erase at once (115).
Advanced Guide

Camera Basics

Other basic operations and more ways to enjoy your camera, including shooting and playback options

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 (26).
- 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 (26).

Power Saving in Playback Mode

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

1. Press halfway. (Press lightly to focus.)
   - Press the shutter button halfway. The camera beeps twice, and 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.

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 guide, shutter button operations are described as pressing the button halfway or all the way down.

- 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.

- You can deactivate Auto Power Down and adjust the timing of Display Off, if you prefer (164).
- Power saving is not active while the camera is connected to other devices via Wi-Fi (132), or when connected to a computer (176).

- 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.
Shooting Modes

Use the mode dial to access each shooting mode.

(1) Auto Mode / Hybrid Auto Mode
- Fully automatic shooting, with camera-determined settings (page 22, page 33, page 36).

(2) Special Scene Mode
- Shoot with settings designed for specific scenes, or add a variety of effects (page 53).

(3) P, Tv, Av, M, and C Modes
- Take a variety of shots using your preferred settings (page 72, page 92).

(4) Movie Mode
- For shooting movies (page 87, page 95).
- 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 [INFO] button to show or hide the grid lines and electronic level.
To configure the on-screen display in greater detail, access [1] tab > [Shooting information display] (page 98).

- Screen brightness is automatically increased by the night view 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” (page 105).
Using the Quick Set Menu

Configure commonly used functions in the \( \text{Q} \) (Quick Set) menu. Note that menu items and options vary depending on the shooting mode (197).

1. Access the \( \text{Q} \) menu.
   - Press the [\( \text{Q} \) button.

2. Choose a menu item.
   - Touch a menu item (1) to choose it.
   - Available options (2) are shown at the bottom of the screen.

3. Choose an option.
   - Drag an option left or right to choose it.
   - Items labeled with a \( \text{MENU} \) icon can be configured by pressing the \( \text{MENU} \) button.
   - Items labeled with a \( \text{INFO} \) icon can be configured by pressing the \( \text{INFO} \) button.

4. Confirm your choice and exit.
   - Press the \( \text{Q} \) button.
   - The screen before you pressed the \( \text{Q} \) button in step 1 is displayed again, showing the option you configured.

Using Touch-Screen Operations to Configure Settings

- To undo any accidental setting changes, you can restore the camera’s default settings (169).
- You can also exit by touching \( \text{Q} \) in the menu.

- Touch \( \text{Q} \) in the upper right of the screen to access the Quick Set menu.
- Touch a menu item and then an option to complete the setting.
- To return to the previous screen, touch the \( \text{Q} \) menu item, or touch the selected option again.
- You can access the screen for options labeled with a \( \text{MENU} \) icon by touching \( \text{MENU} \).
- You can access the screen for options labeled with a \( \text{INFO} \) icon by touching \( \text{INFO} \).

---

1. Access the \( \text{Q} \) menu.
2. Choose a menu item.
3. Choose an option.
4. Confirm your choice and exit.
Using the Menu Screen

Configure a variety of camera functions through the menu screen as follows.

1 Access the menu screen.
   - Press the [MENU] button.

2 Choose a tab.
   - Touch a tab to choose it.
   - Tabs represent functions (1), such as shooting ([]), playback ([]), or settings ([]), or pages within each function (2). Tabs are identified in this guide by combining the function and page, as in [1].
   - Page tabs can also be selected by moving the zoom lever or dragging left or right across the screen.

3 Choose a menu item.
   - Touch an item to choose it, and then press the [OK] button.
   - You can also choose menu items by turning the [] ring.
   - For menu items with options not shown, first press the [OK] button to switch screens, and then touch an item to choose it.
   - To return to the previous screen, press the [MENU] button.

4 Choose an option.
   - Touch an option to choose it.

5 Confirm your choice and exit.
   - Press the [OK] button to confirm your choice and return to the menu item selection screen.
   - 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 (169).
● Available menu items vary depending on the selected shooting or playback mode (200 – 209).
**On-Screen Keyboard**

Use the on-screen keyboard to enter information for Face ID (43), wireless connections (132), and so on. Note that the length and type of information you can enter varies depending on the function you are using.

### Entering Characters
- Touch the key of a character repeatedly to enter the desired character.
- The amount of information you can enter (1) varies depending on the function you are using.

### Moving the Cursor
- Touch [←][→].

### Entering Line Breaks
- Touch [↓].

### Switching Input Modes
- To switch to numbers or symbols, touch [0].
- Touch [={`${}`}] to enter capital letters.

### Deleting Characters
- Touch [×] to delete the previous character.
- Touching and holding [×] will delete five characters at a time.
Indicator Display

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

<table>
<thead>
<tr>
<th>Color</th>
<th>Indicator Status</th>
<th>Camera Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>Blinking</td>
<td>Starting up, recording/reading/transmitting images, shooting long exposures (92, 93), connected to a computer (176), connecting/transmitting via Wi-Fi, or display off (26, 163, 164)</td>
</tr>
<tr>
<td>Orange</td>
<td>On</td>
<td>Charging via a compact power adapter</td>
</tr>
</tbody>
</table>

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

You can check the current time.

- Press and hold the [ ] button.
- The current time appears.
- If you hold the camera vertically while using the clock function, it will switch to vertical display.
- Turn the [ ] ring to change the display color.
- Press the [ ] button again to cancel the clock display.

- When the camera is off, press and hold the [ ] button, then press the power button to display the clock.
Auto Mode / Hybrid Auto Mode

Convenient mode for easy shots with greater control over shooting

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.

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 (37, 38).
   - Frames displayed around any detected subjects indicate that they are in focus.

Still Images  Movies
3 Compose the shot.
- To zoom in and enlarge the subject, move the zoom lever toward \[ \text{[ ]} \] (telephoto), and to zoom away from the subject, move it toward \[ \text{[ ]} \] (wide angle). (A zoom bar (1) showing the zoom position is displayed, along with the range of focus (2).)

4 Shoot.
Shooting Still Images
1) Focus.
- Press the shutter button halfway. The camera beeps twice after focusing, and frames are displayed to indicate image areas in focus.
- Several frames are displayed when multiple areas are in focus.

- If \[ \text{[ ]} \] 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.

Recording Movies
1) Start recording.
- Press the movie button. The camera beeps once as recording begins, and \[ \text{[ ]} \] is displayed with the elapsed time (1).
- Black bars are displayed on the top and bottom edges of the screen, and the subject is slightly enlarged. The black bars indicate image areas not 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. However, note that the sound of camera operations will be recorded. Note that movies shot at zoom factors shown in blue will look grainy.
- When you recompose shots, the focus, brightness, and colors will be automatically adjusted.
3) Finish recording.
- Press the movie button again to stop recording. The camera beeps twice as recording stops.
- Recording will stop automatically when the memory card becomes full.

### 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. Clips recorded in this mode may be included in Story Highlights albums (128).

1. **Enter [ ]** mode.
   - Follow step 2 in “Shooting (Smart Auto)” (33) and choose [ ].

2. **Compose the shot.**
   - Follow steps 3 – 4 in “Shooting (Smart Auto)” (33) 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)” (33) 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.
- Sounds and vibrations from operating the camera will be recorded in digest movies.
- Digest movie image quality is automatically set to [ ] for NTSC or [ ] for PAL and cannot be changed (162).
- Sounds are not played when you press the shutter button halfway or trigger the self-timer (166).
- 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 16 minutes and 40 seconds.
  - The digest movie is protected (113).
  - Daylight saving time (120) or time zone (165) settings are changed.
  - A new folder is created (161).
- Recorded shutter sounds cannot be modified or erased.
- If you prefer to record digest movies without still images, adjust the setting in advance. Choose MENU (29) > [ ] tab > [Digest Type] > [No Stills].
- Individual chapters can be edited (127).
Digest Movie Playback

Display a still image shot in [ ] mode to play the digest movie created on the same day, or specify the date of the digest movie to play (106).

Still Images/Movies

- If the camera makes no operating sounds, it may have been turned on while holding down the [INFO] button. To activate sounds, press the [MENU] button, choose [Mute] on the [?] tab, and then choose [Off].

Still Images

- A blinking [ ] 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” (211).
- The subject may be too close if the camera only beeps once when you press the shutter button halfway. For details on the range of focus (shooting range), see “Lens” (210).
- To reduce red-eye and to assist in focusing, the lamp may be lit 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.
- No shutter sound is played when “Sleeping” and “Sleeping Babies” icons (37) are displayed.
- Although you can shoot again before the shooting screen is displayed, your previous shot may determine the focus, brightness, and colors used.

Movies

- Before movie recording, lower the flash with your finger. During recording, keep your fingers away from the microphone (1). Leaving the flash raised, or 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 recording movies, because sounds made by the camera will be recorded.
- Once movie recording begins, the image display area changes and subjects are enlarged to allow for correction of significant camera shake. To record subjects at the same size shown before recording, follow the steps in “Recording Movies with Subjects at the Same Size Shown before Shooting” (51).
- Audio is recorded in stereo.
- During movie recording, lens operating noises from auto focusing may also be recorded.
Scene Icons

In [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 (\(\text{38}\)).

- The background color of [ ], [ ], [ ], and [ ] is dark blue, and the background color of [ ] is orange.
- For movies, only People, Other Subjects, and Other Close-Range Subjects icons are displayed.
- In [ ] mode, icons are only displayed for People, Shadows on Face, Other Subjects, and Other Close-Range Subjects.
- For self-timer shots, icons are not displayed for the following subjects: moving, smiling, or sleeping people; smiling or sleeping babies; moving children; and other moving subjects.
- Icons are not displayed for smiling or sleeping subjects and moving children in drive modes other than [ ] (\(\text{38}\), \(\text{42}\)).
- Backlit icons are not displayed for moving children and smiling people when the flash is set to [ ].
- Icons for babies (including smiling and sleeping babies) and moving children are displayed when [Face ID] is set to [On] and faces of registered babies (less than two years old) or children (2 – 12 years old) are detected (\(\text{43}\)). Confirm beforehand that the date and time are correct (\(\text{20}\)).

Try shooting in [ ] mode (\(\text{72}\)) 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.

### Subject

<table>
<thead>
<tr>
<th>Subject</th>
<th>Background</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Normal</td>
</tr>
<tr>
<td>Moving People</td>
<td>[3]</td>
</tr>
<tr>
<td>Shadows on Face</td>
<td>[2]</td>
</tr>
<tr>
<td>Smiling</td>
<td>[3]</td>
</tr>
<tr>
<td>Sleeping</td>
<td>[2]</td>
</tr>
<tr>
<td>Babies</td>
<td>[3]</td>
</tr>
<tr>
<td>Smiling Babies</td>
<td>[3]</td>
</tr>
<tr>
<td>Moving Children</td>
<td>[3]</td>
</tr>
<tr>
<td>Other Subjects</td>
<td>[2]</td>
</tr>
<tr>
<td>Other Moving Subjects</td>
<td>[3]</td>
</tr>
<tr>
<td>Other Close-Range Subjects</td>
<td>[2]</td>
</tr>
</tbody>
</table>

*1 Tripod used.
*2 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.
*3 The background color of icons is light blue when the background is a blue sky, and gray for all other backgrounds.
Continuous Shooting Scenes

If the icon for one of the following scenes (in table’s left column) is displayed when you shoot a still image, the camera shoots continuously. If the icon for one of the following scenes (in table’s left column) is displayed when you press the shutter button halfway, one of the icons [ ], [ ], or [ ] is displayed to inform you that the camera shoots continuously.

<table>
<thead>
<tr>
<th>Scene (Including Babies)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smiling</td>
<td>Consecutive images are captured, and the camera analyzes details such as facial expressions to save the image determined to be the best.</td>
</tr>
<tr>
<td>Sleeping</td>
<td>Beautiful shots of sleeping faces, created by combining consecutive shots to reduce camera shake and image noise. The AF-assist beam and the flash will not fire, and the shutter sound will not be played.</td>
</tr>
<tr>
<td>Children</td>
<td>So you don’t miss a photo opportunity of children who move around, the camera will capture three consecutive images for each shot.</td>
</tr>
</tbody>
</table>

- 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, touch [ ], choose [ ] in the menu, and then select [ ].

Image Stabilization Icons

Optimal image stabilization for the shooting conditions (Intelligent IS) is automatically applied, and the following icons are displayed.

- [ ] Image stabilization for still images (Normal)
- [ ] Image stabilization for still images when panning (Panning)*
- [ ] Image stabilization for angular camera shake and shift-shake in macro shots (Hybrid IS). For movies, [ ] is displayed and image stabilization is also applied.
- [ ] Image stabilization for movies, reducing strong camera shake, as when recording while walking (Dynamic)
- [ ] Image stabilization for slow camera shake, such as when recording movies at telephoto (Powered)
- [ ] No image stabilization, because the camera is mounted on a tripod or held still by other means. However, during movie recording, [ ] is displayed, and image stabilization to counteract wind or other sources of vibration is used (Tripod IS).

* 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] ([ ] 51). In this case, an IS icon is not displayed.
- [ ] is not available in [ ] mode.
### 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 12x enlargement.

1. **Move the zoom lever toward [•].**
   - Hold the lever until zooming stops.
   - Zooming stops at the largest zoom factor before the image becomes noticeably grainy, which is then indicated on the screen.

2. **Move the zoom lever toward [•] again.**
   - The camera zooms in even closer on the subject.
   - (1) is the current zoom factor.

#### 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 (72) if no frames are displayed, if frames are not displayed around desired subjects, or if frames are displayed on the background or similar areas.

- To choose subjects to focus on, touch the desired subject on the screen. (1) is displayed, and the camera enters Touch AF mode (88). Pressing the shutter button halfway will display a blue frame, and the camera will keep the subject in focus and image brightness adjusted (Servo AF).

- Moving the zoom lever will display the zoom bar (which indicates the zoom position). The zoom bar is color-coded to indicate 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 recording pixel settings (47), the maximum zoom factor can be achieved by following step 1.
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 [ ] button, choose [ ] in the menu, and then choose [ ] (28).
- 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 [ ] button.
- To restore the original setting, press [ ] in step 1.

Shooting at Preset Focal Lengths (Step Zoom)

Shoot at common focal lengths in a range of 28 – 84 mm (35mm film equivalent).

- To change the focal length from 28 to 35 mm, turn the [ ] ring counterclockwise until it clicks. Turn the [ ] ring counterclockwise to zoom in or clockwise to zoom out.

- Step zoom is not available when recording movies even if you turn the [ ] ring.

- When you are using digital zoom (39), you cannot adjust the zoom factor by turning the [ ] ring counterclockwise. However, you can set the focal length to 84 mm by turning it clockwise.

- To deactivate digital zoom, choose MENU (29) > [ ] tab > [Digital Zoom] > [Off].

Using the Self-Timer

Still Images

Movies

Configure the setting.
- Press the [ ] button, choose [ ] in the menu, and then choose [ ] (28).
- Once the setting is complete, [ ] is displayed.

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 [ ] button.
- To restore the original setting, press [ ] in step 1.
Using the Self-Timer to Avoid Camera Shake

Still Images  Movies

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.

1. Follow step 1 in “Using the Self-Timer” (page 40) and choose [ ].
2. Once the setting is complete, [ ] is displayed.
3. Follow step 2 in “Using the Self-Timer” (page 40) to shoot.

Customizing the Self-Timer

Still Images  Movies

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

1. Choose [ ].
   - Following step 1 in “Using the Self-Timer” (page 40), choose [ ] and press the [ ] button.

2. Configure the setting.
   - Touch the delay time or number of shots to choose one of these items.
   - Touch [ ] to choose a value, and then press the [ ] button twice.
   - Once the setting is complete, [ ] is displayed.
   - Follow step 2 in “Using the Self-Timer” (page 40) to shoot.

- For movies recorded using the self-timer, recording begins after your specified delay time, but specifying the number of shots 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.)

- You can also cancel shooting after the timer begins by touching the screen.
### Continuous Shooting

In **AUTO** mode, hold the shutter button all the way down to shoot continuously. For details on the continuous shooting speed, see “Shooting” (211).

1. **Configure the setting.**
   - Press the \( \text{[Q]} \) button, choose \( \text{[\#]} \) in the menu, and then choose \( \text{[\#]} \) or \( \text{[\#]} \) (28).
   - Once the setting is complete, \( \text{[\#]} \) or \( \text{[\#]} \) is displayed.

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

- During continuous shooting, the focus, exposure, and colors are locked at the position/level determined when you pressed the shutter button halfway.
- Cannot be used with the self-timer (40).
- 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.
- With Touch Shutter (42), the camera shoots continuously while you touch the screen. Focus and exposure during continuous shooting remain constant, after they are determined for the first shot.

### Shooting by Touching the Screen (Touch Shutter)

With this option, instead of pressing the shutter button, you can simply touch the screen and release your finger to shoot. The camera will focus on subjects and adjust image brightness automatically.

1. **Enable the touch-shutter function.**
   - Touch \( \text{[\#]} \) and change it to \( \text{[\#]} \).

2. **Shoot.**
   - Touch the subject on the screen to take the picture.
   - The camera shoots, as a shutter sound is played.
   - To cancel touch shutter, choose \( \text{[\#]} \) in step 1.

- You can also configure touch-shutter settings by choosing MENU (29) > \( \text{[\#]} \) tab > [Touch Shutter]. To hide the Touch Shutter setting icon, set [Touch shutter icon] to [Off].
- Even while the shot is displayed, you can prepare for the next shot by touching \( \text{[\#]} \).
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 also enables you to find shots you have taken that include registered people (107).

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 (46).

Registering Face ID Information

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

1. Access the setting screen.

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, touch [OK].
   - The [Edit Profile] screen is displayed.

3. Register the person’s name and birthday.
   - Touch the name text box to access the keyboard, and then enter the name (30).

Using Face ID

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   - 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, touch [OK].
   - The [Edit Profile] screen is displayed.

3. Register the person’s name and birthday.
   - Touch the name text box to access the keyboard, and then enter the name (30).
To register a birthday, on the [Edit Profile] screen, touch the birthday text box.
Touch an option to choose it.
Touch [▲,▼] to specify the date.
When finished, press the [MENU] button.

4 Save the settings.
Touch [Save].
After a message is displayed, touch [Yes].

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 (31) 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).

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

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 people, the names of up to 3 registered people will be displayed when they are detected.
- Shoot.
- Displayed names will be recorded in still images. The names of detected people (maximum total of 5) will be recorded, even if the names are not displayed.

- 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 (110).
- Because faces of babies and children change quickly as they grow, you should update their face info regularly (43).
- Names will still be recorded in images even if you clear the [Shooting Info] check box in “Customizing the Information Displayed” (98) so that the names are not displayed.
- If you don’t want names to be recorded in images, choose [Face ID Settings] on the [2] tab, choose [Face ID], and then choose [Off].
- You can check names recorded in images in the playback screen (simple information display) (105).
- Names recorded in continuous shooting (42) continue to be recorded in the same position as the first shot, even if subjects move.
Checking and Editing Registered Information

1. Access the [Check/Edit Info] screen.
   - Following step 1 in “Registering Face ID Information” (p.43), choose [Check/Edit Info].

2. Choose a person to check or edit their information.
   - Touch the name of the person whose information you want to check or edit.
   - If five items of face info have already been registered, a message will be displayed. Touch [OK].
   - If less than five items of face info are registered, go to step 4 to add face information.

3. Check or edit the information as needed.
   - To check a name or birthday, touch [Edit Profile]. On the screen displayed, you can edit the name or birthday as described in step 3 of “Registering Face ID Information” (p.43).
   - To check face information, touch [Face Info List]. To erase face information, touch [Erase] on the screen displayed, and then touch the face information to erase. After [Erase?] is displayed, touch [OK].

   ● Changing a name in [Edit Profile] will prevent that person’s previous name from being displayed in shots you captured before changing their name.

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” (p.43), choose [Add Face Info].

2. Choose a person to overwrite their face info.
   - Touch the name of the person whose face info you want to overwrite.

3. Choose the face info to overwrite.
   - Touch the face info you want to overwrite.

   ● Changing a name in [Edit Profile] will prevent that person’s previous name from being displayed in shots you captured before changing their name.
4 Register face information.
- Follow step 2 in “Registering Face ID Information” (43) 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 (45), and then register new face information (43) as needed.

Erasing Registered Information

You can erase information (face info, names, and 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” (43) and choose [Erase Info].

2 Choose a person to erase their information.
- Touch the name of the person to erase.
- After [Erase?] is displayed, touch [OK].

- If you erase a registered person’s info, you will not be able to display their name (106), overwrite their info (110), or search for images that include them (107).
- You can also erase names in image information (111).
### Image Customization Features

#### Changing the Aspect Ratio

**Still Images**

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

- Press the 
  button, choose 
  in the menu, and choose the desired option (28).
- Once the setting is complete, the screen aspect ratio will be updated.
- To restore the original setting, repeat this process but choose [3:2].

<table>
<thead>
<tr>
<th>16:9</th>
<th>Used for display on widescreen HDTVs or similar display devices.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:2</td>
<td>Native aspect ratio of the camera screen. Same aspect ratio as 35mm film, used for printing images at 5 x 7-inch or postcard sizes.</td>
</tr>
<tr>
<td>4:3</td>
<td>Used for display on standard-definition televisions or similar display devices. Also used for printing images at 3.5 x 5-inch or A-series sizes.</td>
</tr>
<tr>
<td>1:1</td>
<td>Square aspect ratio.</td>
</tr>
</tbody>
</table>

- Not available in [ ] mode.
- You can also configure this setting by choosing MENU (29) > [ ] tab > [Still Image Aspect Ratio].

### Changing Image Quality

**Still Images**

Choose from 7 combinations of size (number of pixels) and compression (image quality). Also specify whether to capture images in RAW format (48). For guidelines on how many of each kind of image can fit on a memory card, see “Recording” (212).

- Press the 
  button, choose 
  in the menu, and choose the desired option (28).
- The option you configured is now displayed.
- To restore the original setting, repeat this process but choose [ ].

| L    | A2 (16.5 x 23.4 in.) |
| M    | A3 (11.7 x 16.5 in.) |
| S1   | A4 (8.3 x 11.7 in.)  |
| S2   | 3.5 x 5 in., 5 x 7 in., Postcard |

- [ ] and [ ] indicate different levels of image quality depending on the extent of compression. At the same size (number of pixels), [ ] offers higher image quality. Although [ ] images have slightly lower image quality, more fit on a memory card. Note that [ ]-size images are of [ ] quality.
- Not available in [ ] mode.
- You can also configure this setting by choosing MENU (29) > [ ] tab > [Image quality].

When deciding the number of pixels based on print size, use the following table as a guide for images with a 3:2 aspect ratio.
Capturing in RAW Format

The camera can capture images in JPEG and RAW format.

| JPEG Images | 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 Images | “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 process it on this camera (3124) or use the Digital Photo Professional application (175) to convert images to ordinary JPEG or TIFF files. Images can be adjusted with minimal loss of image quality. |

- Press the [ ] button, and then choose [ ] in the menu (28).
- To capture in RAW format only, choose the [ ] option.
- To capture images in both JPEG and RAW format simultaneously, choose the JPEG image quality, and then press the [ ] button. A [ ] mark is displayed next to [RAW]. To undo this setting, follow the same steps and remove the [ ] mark next to [RAW].

For details on the relationship between the number of recording pixels and the number of shots that will fit on a card, see “Recording” (212).
- The file extension for JPEG images is .JPG, and the extension for RAW images is .CR2.

Using the Menu

- Press the [MENU] button, choose [Image quality] on the [1] tab, and then press the [ ] button (29).
- To capture in RAW format at the same time, choose [ ] under [RAW]. Note that only JPEG images are captured when [−] is selected.
- In [JPEG], choose the number of pixels and compression ratio. Note that only RAW images are captured when [−] is selected.
- When finished, press the [ ] button to return to the menu screen.

- [RAW] and [JPEG] cannot both be set to [−].

- When transferring RAW images (or RAW and JPEG images recorded together) to a computer, always use the dedicated software (175).
- Digital zoom (39) is not available when capturing images in RAW format.
- Digital zoom (39) is not available when capturing images in RAW format.
Changing Movie Image Quality

Adjust movie image quality (image size and frame rate). The frame rate indicates how many frames are recorded per second, which is determined automatically based on the NTSC or PAL setting (162). For guidelines on the total recording time for movies at each level of image quality that will fit on a memory card, see “Recording” (1212).

- Press the [ ] button, choose the movie quality menu item, and then choose the desired option (128).
- The option you configured is now displayed.

For PAL Video

<table>
<thead>
<tr>
<th>Image Quality</th>
<th>Number of Recording Pixels</th>
<th>Frame Rate</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920 x 1080</td>
<td>50.00 fps</td>
<td>For shooting in Full HD.</td>
<td></td>
</tr>
<tr>
<td>1920 x 1080</td>
<td>25.00 fps</td>
<td>For shooting in HD.</td>
<td></td>
</tr>
<tr>
<td>1280 x 720</td>
<td>25.00 fps</td>
<td>For shooting in standard definition.</td>
<td></td>
</tr>
<tr>
<td>640 x 480</td>
<td>25.00 fps</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Available in [ ] or [ ] mode.

For NTSC Video

<table>
<thead>
<tr>
<th>Image Quality</th>
<th>Number of Recording Pixels</th>
<th>Frame Rate</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920 x 1080</td>
<td>59.94 fps</td>
<td>For shooting in Full HD.</td>
<td></td>
</tr>
<tr>
<td>1920 x 1080</td>
<td>29.97 fps</td>
<td>For shooting in HD.</td>
<td></td>
</tr>
<tr>
<td>1280 x 720</td>
<td>29.97 fps</td>
<td>For shooting in standard definition.</td>
<td></td>
</tr>
<tr>
<td>640 x 480</td>
<td>29.97 fps</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Available in [ ] or [ ] mode.

After repeated recording in [ ] or [ ] mode, movie recording at that level of quality may be temporarily unavailable (even if you press the movie button) until the camera has cooled down. To continue recording in [ ] or [ ] mode instead, touch [Yes] after the notification message is displayed. Otherwise, turn the camera off and wait a while for it to cool down before you resume recording.

- Black bars (displayed on the left and right in [ ] and [ ] modes and on the top and bottom in [ ], [ ], [ ], [ ], [ ], [ ], and [ ] modes) indicate image areas not recorded.
- You can also configure this setting by choosing MENU (129) > [ ] tab > [Movie rec. size].
Helpful Shooting Features

Using the Electronic Level

An electronic level can be displayed on the screen when shooting as a guideline to determine if the camera is level.

1 Display the electronic level.
   - Press the [INFO] button to display the electronic level.

2 Level the camera as needed.
   - Level the camera so that the center of the electronic level is green.

   - If the electronic level is not displayed in step 1, press the [MENU] button and check the setting in [1] tab > [Shooting information display].
   - The electronic level is not displayed during movie recording.
   - Calibrate the electronic level if it seems ineffective in helping you level the camera (163).
   - Not available in [ ] mode.

Deactivating Auto Level

Auto leveling keeps movies straight. To cancel this feature, choose [Disable].

- Press the [MENU] button, choose [Auto level] on the [4] tab, and then press the [ ] button (29).
- Choose [Disable] (29).

- Once recording begins, the display area narrows, and subjects are enlarged (51).
Changing the IS Mode Settings

Deactivating Image Stabilization

When the camera is held still (as when shooting from a tripod), you should set image stabilization to [Off] to deactivate it.

1 Access the setting screen.

2 Configure the setting.
   - Touch [IS Mode], and then choose an option (29).

<table>
<thead>
<tr>
<th>Continuous</th>
<th>Optimal image stabilization for the shooting conditions is automatically applied (Intelligent IS) (38).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>Deactivates image stabilization.</td>
</tr>
</tbody>
</table>

Recording Movies with Subjects at the Same Size Shown before Shooting

Normally, once movie recording begins, the image display area changes and subjects are enlarged to allow for image straightening and correction of significant camera shake.

To record movies with subjects at the same size shown before shooting, you can reduce image stabilization and cancel Auto Level.

- Set [Auto level] to [Disable] as described in “Deactivating Auto Level” (50).
- Follow step 1 in “Deactivating Image Stabilization” (51) to access the [IS Settings] screen.
- Choose [Dynamic IS], and then choose [Low] (29).

- You can also set [IS Mode] to [Off], so that subjects are recorded at the same size shown before shooting.
- [Dynamic IS] is not available when [IS Mode] is set to [Off] (51).
- Only [Standard] is available when the movie quality is "Fine/Normal" (NTSC) or "Fine/Standard" (PAL).
Customizing Camera Operation

Customize shooting functions on the [ ] tab of the menu screen as follows.
For instructions on menu functions, see “Using the Menu Screen” (p.29).

Preventing the AF-Assist Beam from Firing

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

1. Press the [ ] button, choose [AF-assist beam firing] on the [ ] tab, and then choose [Disable].
2. To restore the original setting, repeat this process but choose [Enable].

Preventing the Red-Eye Reduction Lamp from Lighting Up

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. Press the [ ] button, choose [Flash settings] on the [ ] tab, and then press the [ ] button.

2. Configure the setting.
   1. Choose [Red-Eye Lamp], and then choose [Off].
   2. 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 after shots.

1. Press the [ ] button, choose [Image review] on the [ ] tab, and then choose the desired option.
2. To restore the original setting, repeat this process but choose [2 sec.].

- 2 sec.,
- 4 sec.,
- 8 sec.
- Hold
- Off

Displays images for the specified time. Even while the shot is displayed, you can take another shot by pressing the shutter button halfway again.

Displays images until you press the shutter button halfway.

No image display after shots.

- By pressing the [ ] button while an image is displayed after shooting, you can switch the display information.
**Other Shooting Modes**

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

1. **Enter [SCN] mode.**
   - Set the mode dial to [SCN].

2. **Choose a shooting mode.**
   - Touch [ ], and then touch [ ] or drag up or down on the screen to choose a shooting mode.
   - To confirm your choice, touch [OK].

3. **Shoot.**
   - **Shooting Portraits (Portrait)**
     - Take shots of people with a softening effect.
Shooting Evening Scenes without Using a Tripod (Handheld Night Scene)

- 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.

Shooting Fireworks (Fireworks)

- Vivid shots of fireworks.

- Subjects appear larger in [ ] mode compared to other modes.
- In [ ] mode, shots may look grainy because the ISO speed is increased to suit the shooting conditions.
- Because the camera will shoot continuously in [ ] mode, hold it steady while shooting.
- In [ ] mode, excessive motion blur or certain shooting conditions may prevent you from obtaining the desired results.
- In [ ] 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.

- When you use a tripod for evening scenes, shooting in [ ] mode instead of [ ] mode will give better results.
- You can also choose the shooting mode by accessing MENU > [ ] tab > [Rec. Mode].
- In [ ] mode, although no frames are displayed when you press the shutter button halfway, optimal focus is still determined.
Applying Special Effects

Add a variety of effects to images when shooting.

- Conveying a Sense of Speed by Blurring the Background (Panning)

By panning, you can blur the background to convey a sense of speed. The camera will detect and correct subject blurring, so the subject will remain relatively clear and sharp.

1. **Choose [ ]**.
   - Follow steps 1 – 2 in “Specific Scenes” (53) and choose [ ].

2. **Shoot**.
   - Before shooting, press the shutter button halfway as you move the camera so that it follows the subject.
   - Keep the moving subject centered on the screen, and press the shutter button all the way down.
   - Even after you have pressed the shutter button fully, continue moving the camera to follow the subject.

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

- Excessive motion blur or certain shooting conditions may prevent you from obtaining the desired results.

- To adjust the effect level, turn the [ ] ring.
- For best results, hold the camera securely in both hands, with your elbows close to your body, and rotate your whole body to follow the subject.
- This feature is more effective for subjects moving horizontally, such as cars or trains.

- 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 tend to occur in high-contrast shots.

1. **Choose [ ]**.
   - Follow steps 1 – 2 in “Specific Scenes” (53) and choose [ ].

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 motion blur or certain shooting conditions may prevent you from obtaining the desired results.
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 “Specific Scenes” (p. 53) and choose [ ].

2. Choose an effect level.
   - Turn the [ ] ring 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.

Adding Artistic Effects

- Follow steps 1 – 2 in “Specific Scenes” (p. 53) and choose [ ].
- Turn the [ ] ring to choose an effect.
- A preview is shown of how your shot will look with the effect applied.

<table>
<thead>
<tr>
<th>Natural</th>
<th>Images are natural and organic.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Standard</td>
<td>Images resemble paintings, with subdued contrast.</td>
</tr>
<tr>
<td>Art Vivid</td>
<td>Images resemble vivid illustrations.</td>
</tr>
<tr>
<td>Art Bold</td>
<td>Images resemble oil paintings, with bold edges.</td>
</tr>
<tr>
<td>Art Embossed</td>
<td>Images resemble old photos, with bold edges and dark ambiance.</td>
</tr>
</tbody>
</table>
Shots Resembling Oil Paintings (Art Bold Effect)

Make subjects look more substantial, like subjects in oil paintings.

1. Choose [ ].
   - Follow steps 1 – 2 in “Specific Scenes” (page 53) and choose [ ].

2. Choose an effect level.
   - Turn the [ ] ring to choose an effect level.
   - A preview is shown of how your shot will look with the effect applied.

3. Shoot.

Shots Resembling Watercolors (Water Painting Effect)

Soften colors, for photos resembling watercolor paintings.

1. Choose [ ].
   - Follow steps 1 – 2 in “Specific Scenes” (page 53) and choose [ ].

2. Choose an effect level.
   - Turn the [ ] ring to choose an effect level.
   - A preview is shown of how your shot will look with the effect applied.

3. Shoot.

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 “Specific Scenes” (page 53) 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 [ ] button.
   - Move the zoom lever to resize the frame, and touch the screen or drag the white frame up or down to move it.

3. For movies, choose the movie playback speed.
   - On the screen in step 2, turn the [ ] ring to choose the speed.

4. Return to the shooting screen and shoot.
   - Press the [ ] button to return to the shooting screen, and then shoot.
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 “Specific Scenes” (53) and choose [ ].

2. Choose a color tone.
   - Turn the [ ] ring to choose a color tone.
   - A preview is shown of how your shot will look with the effect applied.

3. Shoot.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>Shots resemble toy camera images.</td>
</tr>
<tr>
<td>Warm</td>
<td>Images have a warmer tone than with [Standard].</td>
</tr>
<tr>
<td>Cool</td>
<td>Images have a cooler tone than with [Standard].</td>
</tr>
</tbody>
</table>

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

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

<table>
<thead>
<tr>
<th>Speed</th>
<th>Playback Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>5x</td>
<td>Approx. 12 sec.</td>
</tr>
<tr>
<td>10x</td>
<td>Approx. 6 sec.</td>
</tr>
<tr>
<td>20x</td>
<td>Approx. 3 sec.</td>
</tr>
</tbody>
</table>

Movies are played back at 30 fps.
Making Subjects Stand Out (Background Defocus)

You can shoot subjects so that they stand out from the background. Two consecutive images are captured with settings optimized for background defocus. The background is defocused through lens effects and subject- and scene-based image processing.

1 Choose [模式].
   - Follow steps 1 – 2 in “Specific Scenes” (53) and choose [模式].

2 Shoot.
   - Hold the camera steady as you shoot. Two consecutive images are captured when you press the shutter button all the way down.
   - A blinking [模式] icon indicates that the images could not be processed.

3 Shoot.
   - Try taking some test shots first, to make sure you obtain the desired results.
   - Excessive motion blur or certain shooting conditions may prevent you from obtaining the desired results.
   - For the best results with background defocusing, try shooting close to the subject, and ensure ample distance between the subject and background.
   - There may be a delay after shooting before you can shoot again.
   - To adjust the effect level, turn the [模式] ring.

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 [模式].
   - Follow steps 1 – 2 in “Specific Scenes” (53) and choose [模式].

2 Choose an effect level.
   - Turn the [模式] ring 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 (Grainy B/W)

Take monochrome pictures with a gritty, rough feeling.

1 **Choose [8].**
   - Follow steps 1 – 2 in “Specific Scenes” (153) and choose [8].

2 **Choose an effect level.**
   - Turn the [8] ring to choose an effect level.
   - A preview is shown of how your shot will look with the effect applied.

3 **Shoot.**

Shooting Starry Skies (Star)

**Shooting People against Starry Skies (Star Portrait)**

Capture beautiful shots of people against starry skies. After initially firing the flash to capture the person, the camera shoots twice without flash. The three images are combined into a single image and processed to make the stars more prominent. For details on the flash range, see “Flash” (211).

1 **Choose [9].**
   - Follow steps 1 – 2 in “Specific Scenes” (153) and choose [9], and then press the [INFO.] button.
   - Touch [9], and then press the [INFO.] button.
   - Zoom is set to maximum wide angle and cannot be adjusted.

2 **Raise the flash.**

3 **Secure the camera.**
   - Mount the camera on a tripod or take other measures to keep it still.
4 Shoot.
- Press the shutter button. The flash fires as the camera takes the first shot.
- The second and third shots are now taken, without firing the flash.

5 Have the person stay still until the lamp blinks.
- The person you are shooting should stay still until the lamp blinks three times after the third shot, which may take up to about two seconds.
- All the shots are combined to create a single image.

- Under some shooting conditions, images may not look as expected.
- For better shots, have the person stand away from illumination such as street lights, and make sure the flash is raised.
- There will be a delay before you can shoot again, as the camera processes the images.
- To avoid blurry shots, make sure the person you shoot in steps 4 – 5 stays still.

- For easier viewing, try choosing MENU > 2 tab > [Night Display] > [On] (163) before shooting.
- To adjust subject brightness, try changing the flash exposure compensation (190).
- To adjust background brightness, try changing the exposure compensation (73). However, images may not look as expected under some shooting conditions, and the person should stay still in steps 4 – 5, which may take up to about 15 seconds.
- To capture more stars and brighter starlight, choose MENU (29) > 6 tab > [Star Portrait Settings] > [Star Visibility] > [Prominent]. However, images may not look as expected under some shooting conditions, and the person should stay still in steps 4 – 5, which may take up to about 8 seconds.
- To make stars brighter, choose MENU (29) > 6 tab > [Star Emphasis] > [Sharp]. To emphasize the bright stars in a starry sky, set [Star Emphasis] to [Soft]. This setting can produce eye-catching shots by enlarging bright stars while de-emphasizing dimmer stars. To disable starlight processing, select [Off].
- You can also choose the shooting mode by choosing in steps 1 – 2 of “Specific Scenes” (53), touching INFO to access the setting screen, touching (c), and then touching the same option or INFO.
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 [ ].
   - Follow steps 1 – 2 in “Specific Scenes” (53) and choose [ ], and then press the [INFO.] button.
   - Touch [ ], and then press the [ ] button.
   - Zoom is set to maximum wide angle and cannot be adjusted.

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

3 Shoot.
   - There will be a delay before you can shoot again, as the camera processes the 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. A shooting session can last up to about two hours. Check the battery level in advance.

1 Choose [ ].
   - Follow steps 1 – 2 in “Specific Scenes” (53) and choose [ ], and then press the [INFO.] button.
   - Touch [ ], and then press the [ ] button.
   - Zoom is set to maximum wide angle and cannot be adjusted.
2 Specify the duration of the shooting session.
- Turn the \( \text{[ }] \) ring 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. \([\text{Busy}]\) 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. Note that cancellation may take up to about 30 seconds.

- If the camera runs out of battery power, shooting stops and a composite image created from the images up to that point is saved.
- There will be a delay before you can shoot again, as the camera processes the images.

- For easier viewing, try choosing MENU > \( \text{[}] \) tab > [Night Display] > [On] \((= 163)\) before shooting.
- Try switching to manual focus mode \((= 82)\) to more accurately specify the focal position before shooting.

- You can also choose the shooting mode by choosing \( \text{[}] \) in steps 1 – 2 of “Specific Scenes” \((= 53)\), touching \([\text{INFO}]\), to access the setting screen, touching \( \text{[]} \), and then touching the same option or \( \text{[INFO]}\).

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

By recording a time-lapse movie that combines images shot at a specified interval, you can create movies with fast-moving stars. You can adjust the shooting interval and recording duration as needed. Note that each session takes a long time, and requires many shots. Check the battery level and memory card space in advance.

1 Choose \( \text{[}] \).
- Follow steps 1 – 2 in “Specific Scenes” \((= 53)\) and choose \( \text{[]} \), and then press the \([\text{INFO}]\) button.
- Touch \( \text{[]} \), and then press the \( \text{[]} \) button.
- Zoom is set to maximum wide angle and cannot be adjusted.

2 Configure movie settings.
- Touch \( \text{[]} \).
- Touch an item, and then choose the desired option.

- Still Images
- Movies

1 Choose \( \text{[]} \).
- Follow steps 1 – 2 in “Specific Scenes” \((= 53)\) and choose \( \text{[]} \), and then press the \([\text{INFO}]\) button.
- Touch \( \text{[]} \), and then press the \( \text{[]} \) button.
- Zoom is set to maximum wide angle and cannot be adjusted.

2 Configure movie settings.
- Touch \( \text{[]} \).
- Touch an item, and then choose the desired option.
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 (103) and check image brightness.
- To adjust the brightness, turn the [4] ring on the shooting screen and change the exposure level. Check brightness again by taking another shot.

5 Shoot.
- Press the movie button. Recording begins, and the indicator on the back of the camera blinks.
- Do not disturb the camera while shooting.
- To cancel shooting, press the movie button again. Note that cancellation may take up to about 30 seconds.
- The camera operates in Eco mode (163) while shooting.

---

### Item Options Details

<table>
<thead>
<tr>
<th>Item</th>
<th>Options</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Save Stills</td>
<td>Enable, Disable</td>
<td>You can choose to save each shot collected before the movie is created. Note that when [Enable] is selected, [Effect] is not available.</td>
</tr>
<tr>
<td>Effect</td>
<td></td>
<td>Choose movie effects, such as star trails.</td>
</tr>
<tr>
<td>Shot Interval</td>
<td>15 sec., 30 sec., 1 min.</td>
<td>Choose the interval between each shot.</td>
</tr>
<tr>
<td>Frame Rate</td>
<td>(NTSC), (PAL)</td>
<td>Choose the movie frame rate.</td>
</tr>
<tr>
<td>Shooting Time</td>
<td>60 min., 90 min., 120 min., Unlimited</td>
<td>Choose the length of the recording session. To record until the battery runs out, choose [Unlimited].</td>
</tr>
<tr>
<td>Auto exposure</td>
<td>Lock to 1st shot, For each shot</td>
<td>Choose whether exposure is determined by the first shot or adjusted for each shot.</td>
</tr>
</tbody>
</table>
● Sound is not recorded.


You can also access the screen in step 2 by choosing MENU (29) > [8] tab > [Star Time-Lapse Movie Setting].

● Images saved with [Save Stills] set to [Enable] 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, [ ] is displayed in the upper left of the screen. If you erase a grouped image (115), all images in the group are also erased. Be careful when erasing images.

● Grouped images can be played back individually (109) and ungrouped (109).

● Protecting (113) a grouped image will protect all images in the group.

● Grouped images can be viewed individually when played back using Image Search (107). In this case, images are temporarily ungrouped.

● The following actions are not available for grouped images: magnifying (111), tagging as favorites (118), editing (120), printing (177), setting up individual image printing (182), or adding to a photobook (183). To do these things, either view grouped images individually (109) or cancel grouping (1109) first.

● Try switching to manual focus mode (82) to more accurately specify the focal position before shooting.

● You can also choose the shooting mode by choosing [ ] in steps 1 – 2 of “Specific Scenes” (53), touching [INFO] to access the setting screen, touching [ ], and then touching the same option or [INFO].

<table>
<thead>
<tr>
<th>Interval between Shots</th>
<th>Frame Rate NTSC</th>
<th>PAL</th>
<th>Playback Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 sec.</td>
<td>16 sec.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 sec.</td>
<td>8 sec.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 sec.</td>
<td>8 sec.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 sec.</td>
<td>4 sec.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 min.</td>
<td>4 sec.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 min.</td>
<td>2 sec.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Estimated playback time based on shooting interval and frame rate (for a one-hour session)
Adjusting Colors

Colors can be manually adjusted in [2] mode.

1 Choose a shooting mode.

2 Choose color adjustment.

3 Adjust the setting.
   - Turn the [2] ring to adjust the correction level for B and A, and then press the [2] button.
   - Once the setting is complete, [2] is displayed.

   - B represents blue and A, amber.
   - Skin tones remain the same when you adjust colors in [2] mode.
   - Advanced settings can be accessed by pressing the [MENU] button when the screen in step 2 is displayed (78).

   - You can also choose the correction level by touching or dragging the bar in step 2.

---

Adjusting the Focus

Automatically adjust the focus to suit starry skies.

1 Choose a shooting mode.

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

3 Frame the stars to capture.
   - Touch [2], and then touch [Refine starfocus].
   - Tilt the camera so that the stars to capture are inside the frame displayed.

4 Adjust the focus.
   - Press the [2] button. [Adjusting star focus] is displayed, and adjustment begins.
   - Adjustment may take up to about 15 seconds. Do not move the camera until [Adjustment completed] is displayed.
   - Press the [2] button.

5 Shoot (62, 62, 63).

   - The focus may not be adjusted under the following conditions. In this case, try again from step 3.
     - There is a bright light source
     - Airplanes or other light sources or clouds crossed the sky

   - If adjustment fails, focus returns to the original position.
Recording Various Movies

Recording Movies in [Movie] Mode

1 Enter [Movie] mode.
- Set the mode dial to [Movie].
- Touch [Movie], and then choose [Movie].
- To confirm your choice, touch [OK].
- Black bars are displayed on the top and bottom edges of the screen, and the subject is slightly enlarged. The black bars indicate image areas not recorded.

2 Configure the settings to suit the movie (1195).

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

You can also choose the shooting mode by accessing MENU (129) > [ ] tab > [Rec. Mode].

Locking or Changing Image Brightness before Recording

You can lock the exposure before or during recording or adjust it in 1/3-stop increments within a range of −3 to +3 stops.

1 Lock the exposure.
- Touch [ ] to lock the exposure.
- To unlock the exposure, touch [ ] again.

2 Adjust the exposure.
- Turn the [ ] ring to adjust the exposure, as you watch the screen.

3 Shoot (67).
Disabling Auto Slow Shutter

Auto slow shutter can be disabled if movement in movies is rough. However, under low light, movies may look dark.

- Press the [MENU] button, choose [Auto slow shutter] on the [tab, and then choose [A-SLOW OFF] (29).
- To restore the original setting, repeat this process but choose [A-SLOW ON].

Correcting Severe Camera Shake

Counteract severe camera shake, such as when recording while moving. The portion of images displayed changes more than for [Standard], and subjects are further enlarged.

- Follow the steps in “Recording Movies with Subjects at the Same Size Shown before Shooting” (29) to choose [High].

- [Dynamic IS] is not available when [IS Mode] is set to [Off].
- Only [Standard] is available when the movie quality is [FHD] (NTSC) or [FHD] (PAL).

Sound Settings

Deactivating the Wind Filter

Noise caused by strong wind can be reduced. However, the recording may sound unnatural when this option is used when there is no wind. In this case, you can deactivate the wind filter.

- Press the [MENU] button, choose [Wind Filter] on the [tab, and then press the [button (29).
- Choose [Off] (29).
Using the Attenuator

Set to [Auto] to reduce audio distortion by automatically activating and deactivating the attenuator to suit shooting conditions. The attenuator can also be set to [On] or [Off] manually.


Choose an option as desired (29).

Recording Short Clips

Apply playback effects to brief clips of a few seconds, such as fast motion, slow motion, or replay. Clips recorded in this mode may be included in Story Highlights albums (128).

1 Enter [ ] mode.
   - Set the mode dial to [ ].
   - Touch [ ], and then choose [ ].
   - To confirm your choice, touch [OK].
   - Black bars displayed on the top and bottom edges of the screen indicate image areas not recorded.

2 Specify the shooting time and playback effect.
   - Press the [INFO] button.
   - Turn the [ ] ring to set the shooting time (4 – 6 sec.).
   - After pressing the [INFO] button, set the playback effect (69) by turning the [ ] ring.

3 Shoot (67).
   - A bar showing the elapsed time is displayed.

Playback Effects

- 2x Playback in fast motion
- 1x Playback at normal speed
- 1/2x Playback in slow motion
- Normal playback with the last two seconds rewound and played again in slow motion

Recording Time-Lapse Movies (Time-Lapse Movie)

Time-lapse movies combine images that are shot automatically at a specified interval. Any gradual changes of the subject (such as changes in a landscape) are played back in fast motion. You can adjust the shooting interval and number of shots.

1 Choose [ ].
   - Set the mode dial to [ ].
   - Touch [ ], and then choose [ ].
   - To confirm your choice, touch [OK].
   - Black bars displayed on the top and bottom edges of the screen indicate image areas not recorded.
Configure movie settings.
- Press the [INFO] button.
- Choose an item, choose the desired option, and press the [MENU] button.

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

Shoot.
- To start recording, press the movie button.
- Do not disturb the camera while shooting.
- To cancel shooting, press the movie button again.
- The camera operates in Eco mode (163) while shooting.

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shooting scene</td>
<td>Choose from three types of scenes.</td>
</tr>
<tr>
<td>Interval/ Shots</td>
<td>Choose the shooting interval (in seconds) and total number of shots.</td>
</tr>
<tr>
<td>Exposure</td>
<td>Choose whether exposure is determined by the first shot or adjusted for each shot.</td>
</tr>
<tr>
<td>Review image</td>
<td>Display the previous shot for up to 2 seconds.</td>
</tr>
<tr>
<td>Time required</td>
<td>Length of the recording session. Varies depending on the shooting interval and number of shots.</td>
</tr>
<tr>
<td>Playback time</td>
<td>Playback time of the movie created from captured still images.</td>
</tr>
</tbody>
</table>

- Sound is not recorded.
- Focus remains constant during shooting, after it is determined for the first shot.
- The movie quality is [ ] and cannot be changed.
- The time-lapse movie frame rate is automatically set to [ ] for NTSC or [ ] for PAL and cannot be changed (162).
- You can also configure this setting by choosing MENU > [7] tab > [Time-lapse movie settings].

Fast-moving subjects may look distorted in movies.
Recording iFrame Movies

Record movies that can be edited with iFrame-compatible software or devices.

1 Choose [ ].

- Set the mode dial to [ ].
- Touch [ ], and then choose [ ].
- To confirm your choice, touch [OK].
- Black bars displayed on the top and bottom edges of the screen indicate image areas not recorded.

2 Shoot (67).

- iFrame is a video format developed by Apple Inc.
- The movie quality is [ ] (for NTSC) or [ ] (for PAL) (49, 49) and cannot be changed.
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 (195).

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 (73 – 91), and then shoot.

- If the optimum exposure cannot be obtained when you press the shutter button halfway, the shutter speed and aperture value are displayed in orange. In this case, try adjusting the ISO speed (74) or activating the flash (if subjects are dark, 89), which may enable optimum exposure.
- Movies can be recorded in [P] mode as well, by pressing the movie button. However, some Q menu (28) and MENU (29) settings may be automatically adjusted for movie recording.

Still Images  Movies

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Advanced Guide
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Auto Mode / Hybrid Auto Mode
Other Shooting Modes
P Mode
Tv, Av, M, and C Mode
Playback Mode
Wireless Features
Setting Menu
Accessories
Appendix
Index
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.

1. Lock the exposure.
   - Aim the camera at the subject to shoot with the exposure locked, and then touch [ ].
   - [ ] is displayed, and the exposure is locked.
   - To unlock AE, touch [ ] again. [ ] is no longer displayed.

2. Compose the shot and shoot.

Changing the Metering Method

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

1. Press the [ ] button, choose [ ] in the menu, and choose the desired option ( ).
2. The option you configured is now displayed.
### Changing the ISO Speed

**Still Images**

Set the ISO speed to [AUTO] for automatic adjustment to suit the shooting mode and conditions. Otherwise, set a higher ISO speed for higher sensitivity, or a lower value for lower sensitivity.

- Touch [ISO], and then choose the ISO speed (either touch [ISO] or turn the [ISO] ring).
- The option you configured is now displayed.

#### To view the automatically determined ISO speed when you have set the ISO speed 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 and camera shake in some shooting conditions.
- The faster shutter speed used at higher ISO speeds reduces subject and camera shake and increases the flash range. However, shots may look grainy.
- You can also set the ISO speed by accessing MENU (29) > [ISO] tab > [ISO speed] > [ISO Speed].

### Linking the Spot AE Point Frame to the AF Frame

<table>
<thead>
<tr>
<th>Spot AE Point Frame to the AF Frame</th>
<th>Still Images</th>
<th>Movies</th>
</tr>
</thead>
</table>

1. **Set the metering method to [Spot AE Point] (Spot AE Point frame).**
   - Follow the steps in “Changing the Metering Method” (73) to choose [Spot AE Point].

2. **Configure the setting.**
   - The Spot AE Point frame will now be linked to the movement of the AF frame (85).

- Not available when [AF method] is set to [Tracking] (85).
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.
   - Choose [ISO Auto Settings] and press the [OK] button.

2 Configure the setting.
   - Choose a menu item to configure, and then choose the desired option (29).

Changing the Noise Reduction Level (High ISO speed NR)

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

1 Choose [ ].
   - Press the [MENU] button, choose [High ISO speed NR] on the [6] tab, and then choose the desired option (29).

2 Configure the setting.
   - Press the [INFO] button, and then specify a value by touching or dragging the bar on the setting screen.

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 [ ].

2 Configure the setting.
   - Press the [INFO] button, and then specify a value by touching or dragging the bar on the setting screen.

   - AEB shooting is only available in [ ] mode (89).
   - Continuous shooting (42) is not available in this mode.

   - If exposure compensation is already in use (73), 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 [INFO] button when the exposure compensation screen (73) is displayed.
   - Three shots are taken, regardless of any quantity specified in [ ] (41).
Adjusting Auto ND Filter Settings

For optimal brightness in the scenes you shoot, Auto ND filter reduces light intensity to 1/8 the actual level, by an amount equivalent to three stops. Choosing [ND] enables you to reduce the shutter speed and aperture value.

Press the [ND] button, choose [ND] in the menu, and choose the desired option (28).

The option you configured is now displayed.

When selecting ND, 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 (51).

ND: Neutral Density

Auto Correction of Brightness and Contrast (Auto Lighting Optimizer)

Correct brightness and contrast automatically to avoid images that are too dark or lack contrast.


This feature may increase noise under some shooting conditions. When the effect of Auto Lighting Optimizer is too strong and images become too bright, set it to [Low] or [Disable]. Images may still be bright or the effect of exposure compensation may be weak under a setting other than [Disable] if you use a darker setting for exposure compensation or flash exposure compensation. For shots at your specified brightness, set this feature to [Disable].

To keep the Auto Lighting Optimizer disabled in [ ] and [ ] mode, touch [ ] on the Auto Lighting Optimizer setting screen to add a [ ] mark to [Disable during man expo].

 Shooting Bright Subjects (Highlight Tone Priority)

Improve gradation in bright image areas to avoid loss of detail in subject highlights.


With [D+], ISO speed can be set to [AUTO] or in a range of 250 – 6400. Auto Lighting Optimizer is also disabled, in this case.
Image Colors

Capturing Natural Colors (White Balance)

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

1. Press the [MENU] button, choose [WB] in the menu, and choose the desired option (p. 28).
2. The option you configured is now displayed.

2. Shoot a white object.
   - Press the [ ] button, choose [ ] in the menu, and choose the desired option (p. 28).
   - Focus manually and shoot (p. 82).

3. Choose [Custom WB].
   - Choose [Custom WB] on the [ ] tab, and then press the [ ] button.
   - The custom white balance selection screen will appear.

4. Load the white data.
   - Select your image from step 1, press the [ ] button, and then touch [OK].
   - Touch [OK] on the confirmation screen.
   - Press the [ ] button to close the menu.

5. Choose [ ].
   - Follow the steps in “Capturing Natural Colors (White Balance)” (p. 77) to choose [ ].
Manually Correcting White Balance

You can 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 “Capturing Natural Colors (White Balance)” (p. 77) to choose [WB].
- Turn the [ ] ring to adjust the correction level for B and A.
- Once the setting is complete, [WB] is displayed.

2 Configure advanced settings.
- To configure more advanced settings, press the [MENU] button and adjust the correction level (either turn the [ ] ring or touch or drag the frame).
- To reset the correction level, press the [INFO.] button.
- Press the [ ] button to complete the setting.

- Any correction level you set is retained even if you change the white balance option in step 1.

- Shots in step 1 that are too bright or dark may prevent you from setting the white balance correctly.
- A message is displayed if you specify an image in step 3 that is not suitable for loading white data. Choose [Cancel] to choose a different image. Choose [OK] to use that image for loading white data, but note that it may not produce a suitable white balance.
- If [Unselectable image.] is displayed in step 3, choose [OK] to clear the message and specify another image.
- If [Set WB to [ ]] is displayed in step 3, press the [WB] button to return to the menu screen, and then choose [WB].

- Instead of a white object, a gray chart or 18% gray reflector (commercially available) can produce a more accurate white balance.
- The current white balance and related settings are disregarded when you shoot in step 1.

- B: blue; A: amber; M: magenta; G: green
- One level of blue/amber correction is equivalent to about 5 mireds on a color temperature conversion filter. (Mired: Color temperature unit representing color temperature conversion filter density)
- You can also configure this setting by choosing MENU (29) > [ ] tab > [WB correction].
- You can also choose the correction level by touching or dragging the bar in step 1 or the frame in step 2.
- You can also access the screen in step 2 by touching [ ] in step 1.
- You can also choose the correction level by touching or dragging the bar in step 1 or the frame in step 2.
- You can also access the screen in step 2 by touching [MENU] in step 1.
- On the screen in step 2, you can touch [INFO.] to restore the original level and touch [MENU] to return to the previous screen.

- Shots in step 1 that are too bright or dark may prevent you from setting the white balance correctly.
- A message is displayed if you specify an image in step 3 that is not suitable for loading white data. Choose [Cancel] to choose a different image. Choose [OK] to use that image for loading white data, but note that it may not produce a suitable white balance.
- If [Unselectable image.] is displayed in step 3, choose [OK] to clear the message and specify another image.
- If [Set WB to [ ]] is displayed in step 3, press the [WB] button to return to the menu screen, and then choose [WB].

- Instead of a white object, a gray chart or 18% gray reflector (commercially available) can produce a more accurate white balance.
- The current white balance and related settings are disregarded when you shoot in step 1.

- B: blue; A: amber; M: magenta; G: green
- One level of blue/amber correction is equivalent to about 5 mireds on a color temperature conversion filter. (Mired: Color temperature unit representing color temperature conversion filter density)
- You can also configure this setting by choosing MENU (29) > [ ] tab > [WB correction].
- You can also choose the correction level by touching or dragging the bar in step 1 or the frame in step 2.
- You can also access the screen in step 2 by touching [ ] in step 1.
- You can also choose the correction level by touching or dragging the bar in step 1 or the frame in step 2.
- You can also access the screen in step 2 by touching [MENU] in step 1.
- On the screen in step 2, you can touch [INFO.] to restore the original level and touch [MENU] to return to the previous screen.
Manually Setting White Balance Color Temperature

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

- Follow the steps in “Capturing Natural Colors (White Balance)” (77) to choose the [K].
- When finished, press the [INFO] button.

You can also configure this setting by choosing MENU (29) > [Rec] tab > [White balance] > [K].
Color temperature can be set at 100 K increments in a range of 2,500 – 10,000 K.

Customizing Colors (Picture Style)

Choose a Picture Style with color settings that express moods or subjects well. Eight Picture Styles are available, and each can be further customized.

Press the [B] button, choose [P] in the menu, and choose the desired option (28).

<table>
<thead>
<tr>
<th>Picture Style</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto</td>
<td>The color tone will be adjusted automatically to suit the scene. The colors will look vivid, especially for blue skies, greenery, and sunsets in nature, outdoor, and sunset scenes.</td>
</tr>
<tr>
<td>Standard</td>
<td>The image looks vivid, sharp, and crisp. Suitable for most scenes.</td>
</tr>
<tr>
<td>Portrait</td>
<td>For smooth skin tones. The image looks softer. Suited for close-up portraits. To modify skin tones, adjust [Color tone] (80).</td>
</tr>
<tr>
<td>Landscape</td>
<td>For vivid blues and greens, and very sharp and crisp images. Effective for impressive landscapes.</td>
</tr>
<tr>
<td>Fine Detail</td>
<td>For detailed rendering of fine subject contours and subtle textures. Makes images slightly more vivid.</td>
</tr>
<tr>
<td>Neutral</td>
<td>For retouching later on a computer. Makes images subdued, with lower contrast and natural color tones.</td>
</tr>
<tr>
<td>Faithful</td>
<td>For retouching later on a computer. Faithfully reproduces the actual colors of subjects as measured in daylight with a color temperature of 5200K. Makes images subdued, with lower contrast.</td>
</tr>
<tr>
<td>Monochrome</td>
<td>Creates black and white images.</td>
</tr>
<tr>
<td>User Def.</td>
<td>Add a new style based on presets such as [Portrait] or [Landscape] or a Picture Style file, and then adjust it as needed (79).</td>
</tr>
</tbody>
</table>

- Default [Auto] settings are used for [ ], [ ], and [ ] until you add a Picture Style.
- You can also configure this setting by accessing MENU (29) > [Rec] tab > [Picture Style].
**Customizing Picture Styles**

Customize these Picture Style settings as needed.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strength</strong></td>
<td>Adjust the level of edge enhancement. Choose lower values to soften (blur) subjects, or higher values to sharpen them.</td>
</tr>
<tr>
<td><strong>Fineness</strong></td>
<td>Indicates the edge thinness that enhancement applies to. Choose lower values for more enhanced details.</td>
</tr>
<tr>
<td><strong>Threshold</strong></td>
<td>Contrast threshold between edges and surrounding image areas, which determines edge enhancement. Choose lower values to enhance edges that do not stand out much from surrounding areas. Note that with lower values, noise may also be emphasized.</td>
</tr>
<tr>
<td><strong>Contrast</strong></td>
<td>Adjust the contrast. Choose lower values to decrease the contrast, or higher values to increase it.</td>
</tr>
<tr>
<td><strong>Saturation</strong></td>
<td>Adjust the intensity of colors. Choose lower values to make colors faded, or higher values to make them deeper.</td>
</tr>
<tr>
<td><strong>Color tone</strong></td>
<td>Adjust skin color tone. Choose lower values to produce redder hues, or higher values to produce yellower hues.</td>
</tr>
</tbody>
</table>

*1 Not available with [0x0].

*2 Only available with [0x0].

---

**Filter effect**

- **N:** Normal black-and-white image with no filter effects.
- **Ye:** The blue sky will look more natural, and the white clouds will look crisper.
- **Or:** The blue sky will look slightly darker. The sunset will look more brilliant.
- **R:** The blue sky will look quite dark. Fall leaves will look crisper and brighter.
- **G:** Skin tones and lips will appear muted. Green tree leaves will look crisper and brighter.

**Toning effect**

Choose from the following monochrome hues: [N:None], [S:Sepia], [B:Blue], [P:Purple], or [G:Green].

---

1. **Access the setting screen.**
   - Choose a Picture Style as described in "Customizing Colors (Picture Style)" (79).
   - Press the [INFO] button.

2. **Configure the setting.**
   - Press the [INFO] button, and then adjust settings by touching or dragging on the setting screen.
   - To undo any changes, press the [INFO] button.
Saving Customized Picture Styles

Save presets (such as [ ] or [ ]) that you have customized as new styles. You can create several Picture Styles with different settings for parameters such as sharpness or contrast.

1 Select a user-defined style number.
   - Choose [ ], [ ], or [ ] as described in “Customizing Colors (Picture Style)” (79).
   - Press the INFO button.

2 Select a style to modify.
   - Touch or drag on the setting screen to choose a Picture Style to modify.

3 Customize the style.
   - Touch the setting screen to choose an item to modify, and then customize it by touching or dragging the bar.
   - When finished, press the INFO button.

- Using the CameraWindow application (175), you can also add Picture Styles saved on a computer to the camera. For instructions, refer to the CameraWindow Help.

- You can also choose a Picture Style to modify by touching INFO in step 1.

Shooting Range and Focusing

Shooting Close-Ups (Macro)

To restrict the focus to subjects at close range, set the camera to [ ]. For details on the range of focus, see “Lens” (210).

- Press the INFO button, choose [ ] in the menu, and then choose [ ] (28).
- Once the setting is complete, [ ] is displayed.

- If the flash fires, vignetting may occur.

- To prevent camera shake, try mounting the camera on a tripod and shooting with the camera set to [ ] (41).
Shooting in Manual Focus Mode

Still Images  Movies

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 range of focus, see “Lens” (p. 210).

1 Choose [MF].
   ● Touch [AF].
   [MF] and the MF indicator are displayed.

2 Specify the general focal position.
   ● Referring to the on-screen MF indicator (1, which shows the distance and focal position) and the magnified display, touch [△][▼] to specify the general focal position, and then press the [INFO] button.
   ● To adjust the magnification, press the [INFO] button.
   ● During magnified display, you can move the focusing frame by dragging on the screen.

3 Fine-tune the focus.
   ● Press the shutter button halfway or touch [AF] to have the camera fine-tune the focal position (Safety MF).
   ● To cancel manual focus, touch [MF].

   ● When you focus manually, the AF method (p. 84) is [1-point AF] and AF frame size (p. 85) is [Normal], and these settings cannot be changed.
   ● Focusing is possible when using the digital zoom (p. 39) or digital tele-converter (p. 84), but the magnified display will not appear.

   ● To focus more accurately, try attaching the camera to a tripod to stabilize it.
   ● You can enlarge or hide the magnified display area by adjusting MENU (p. 29) > [4] tab > [MF-Point Zoom] settings.
   ● To deactivate automatic focus fine-tuning when the shutter button is pressed halfway, choose MENU (p. 29) > [4] tab > [Safety MF] > [Off].

   ● You can lock the focus during movie recording by touching [AF]. [MF] is then displayed.
**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.**

2. **Configure the setting.**
   - Choose a menu item to configure, and then choose the desired option (29).

   - 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 [ ]**.

2. **Configure the setting.**
   - Press the [INFO] button, and then specify a value by touching or dragging the bar on the setting screen.

   - Focus bracketing is only available in [S] mode (89).
   - Continuous shooting (42) is not available in this mode.

   - You can also access the setting screen in step 2 by pressing the [MENU] button in step 2 of “Shooting in Manual Focus Mode” (82).
   - Three shots are taken, regardless of any quantity specified in (41).

   - You can also configure this setting by touching or dragging the bar on the screen in step 2 to specify a value, touching [INFO], and then touching [MENU].

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

The focal length of the lens can be increased by approximately 1.6x 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 [MENU] button, choose [Digital Zoom] on the [2] tab, and then choose the desired option (29).
- The view is enlarged and the zoom factor is displayed on the screen.

- The shutter speed may be equivalent when you move the zoom lever all the way toward [L] 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)” (39).

Choosing the AF Method

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

- Press the [AF] button, choose [AF] in the menu, and choose the desired option (28).

- You can also configure this setting by accessing MENU (29) > [3] tab > [AF method].

1-point AF

The camera focuses using a single AF frame. Effective for reliable focusing. You can also move the frame by touching the screen (88).

- 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 (1-point AF)

When you want to change the position or size of the AF frame, set the AF method to [1-point AF].

1 **Move the AF frame.**
   - Touch the screen. An AF frame is displayed in orange where you touched (Touch AF).
   - To return the AF frame to the original position in the center, press the [MENU] button.

2 **Resize the AF frame.**
   - To reduce the AF frame size, turn the [3] ring. Turn it again to restore it to the original size.

3 **Finish the setup process.**
   - Press the [INFO.] button.

   - AF frames are displayed at normal size when you use the digital zoom (39) or digital tele-converter (84), and in manual focus mode (82).
   - You can also link the Spot AE Point frame to the AF frame (74).
   - You can also configure the AF frame size by pressing the [MENU] button and choosing [AF Frame Size] on the [3] tab (29).

- On the screen in step 1, you can also move the AF frame by touching the screen, restore the AF frame to the original position by touching [MENU], or exit the setting by touching [INFO].

### +Tracking

- Detects people’s faces, and then sets the focus, exposure (evaluative metering only), and white balance (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.

- When no faces are detected, or when only gray frames are displayed (without a white frame), pressing the shutter button halfway will display green frames in the areas in focus. Note that the maximum number of frames depends on the aspect ratio (47) setting.
- If no faces are detected in Servo AF (86) mode, 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.
### 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 [ ] button, choose [ONE SHOT] in the menu, and then choose [SERVO].

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 method.
   - Continuous shooting (42) is slower in Servo AF mode.
   - If optimum exposure cannot be obtained, the shutter speed and aperture value are displayed in orange. Release the shutter button, and then press it halfway again.
   - AF lock shooting is not available.
   - Not available when using the self-timer (40).
   - Using the self-timer (40) will restrict the AF mode to [ONE SHOT].

   - To have the camera keep adjusting the focus during continuous shooting (42), specify Servo AF with [AF method] set to [1-point AF].
   - You can also configure this setting by accessing MENU (29) > [ ] tab > [AF operation].

### 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.

1. **Configure the setting.**
   - Press the [MENU] button, choose [Continuous AF] on the [ ] tab, and then choose [Off] (29).

### Fine-Tuning the Focus

You can fine-tune the focus after autofocusing by turning the control ring.

1. **Configure the setting.**
   - Press the [MENU] button, choose [AF+MF] on the [ ] tab, and then choose [On] (29).
2 Focus.
- Press the shutter button halfway to focus on the subject, and continue holding the button halfway down.

3 Fine-tune the focus.
- Turn the [ ] ring. Referring to the on-screen MF indicator (which shows the distance and focal position) and the magnified display, turn the [ ] ring to adjust the focus.
- To enlarge or reduce the magnified display, press the [INFO] button.
- To cancel focusing, release the shutter button.

4 Shoot.
- Press the shutter button all the way down to shoot.

   - Cannot be used with Servo AF (86).

Choosing a Person to Focus On (Face Select)

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

1 Set the AF method to [ ]+Tracking (84).
2 Assign [ ] to the movie button (98).

3 Enter Face Select mode.
- Aim the camera at the person’s face and press the movie 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.

4 Choose the face to focus on.
- To switch the face frame [ ] to another detected face, press the movie button.
- Once you cycle through all detected faces, [Face Select : Off] is displayed, followed by the selected AF method screen.

5 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], only the name of the registered person chosen as the main subject is displayed, even if other registered people have been detected. However, their names will be recorded in the still images (43).
Choosing Subjects to Focus On (Touch AF)

You can shoot after choosing a person’s face or another subject to focus on.

1. Set the AF method to [ ]+Tracking (84).

2. Choose a person’s face or another subject to focus on.
   - Touch the subject or person on the screen.
   - When the subject is detected, the camera beeps and [ ] is displayed. Focus is maintained even if the subject moves.
   - To cancel Touch AF, touch [ ].

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

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 [MENU] button.
   - The focus is now locked, and [ ] and the MF indicator are displayed.
   - To unlock the focus, release the shutter button and touch [ ].

2. Compose the shot and shoot.
   - Cannot be used with Touch Shutter (42).
Flash

Changing the Flash Mode

You can change the flash mode to match the shooting scene. For details on the flash range, see “Flash” (p. 211).

1 Raise the flash.
   - Move the [Flash] switch.

2 Configure the setting.
   - Press the [Flash] button, choose [Flash Mode], and choose the desired option.
   - The option you configured is now displayed.

   ● The flash mode cannot be changed by pressing the [Flash] button when the flash is lowered. Move the [Flash] switch to raise the flash, then configure the setting.
   ● If the flash fires, vignetting may occur.

Autoflash

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 [Slow Synchro] 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 (p. 51).
- In [Slow Synchro] mode, even after the flash fires, ensure that the main subject does not move until the shutter sound is finished playing.

Off

For shooting without the flash.

- If a blinking [Flash] icon is displayed when you press the shutter button halfway in camera-shake inducing, low-light conditions, mount the camera on a tripod or take other measures to keep it still.
- You can also configure this setting by touching [Flash], touching an option, and then touching it again.
Adjusting the Flash Exposure Compensation

Just as with regular exposure compensation (73), you can adjust the flash exposure from –2 to +2 stops, in 1/3-stop increments.


2. Aim the camera at the subject to shoot with the exposure locked, and then touch [1].

3. The flash fires, and when [1] is displayed, the flash output level is retained.


5. Compose the shot and shoot.

● FE: Flash Exposure

Shooting with the FE Lock

Just as with the AE lock (73), you can lock the exposure for flash shots.

1. Raise the flash and set it to [5] (89).

2. Lock the flash exposure.

   - Aim the camera at the subject to shoot with the exposure locked, and then touch [X].

   - The flash fires, and when [X] is displayed, the flash output level is retained.

   - To unlock FE, touch [X] again. [X] is no longer displayed.

3. Compose the shot and shoot.

   - FE: Flash Exposure
Changing the Flash Timing

1. Access the setting screen.

2. Configure the setting.
   - Choose [Shutter Sync.], and then choose the desired option (29).

<table>
<thead>
<tr>
<th>1st-curtain</th>
<th>The flash fires immediately after the shutter opens.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd-curtain</td>
<td>The flash fires immediately before the shutter closes.</td>
</tr>
</tbody>
</table>

Other Settings

Changing the IS Mode Settings

You can keep image stabilization off until the moment you shoot.

1. Follow the steps in “Deactivating Image Stabilization” (51) to choose [Shoot Only].
Tv, Av, M, and C 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.

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” (page 211).

1. Enter [Tv] mode.
   - Set the mode dial to [Tv].

2. Set the shutter speed.
   - Turn the [ ] ring to set the shutter speed.

<table>
<thead>
<tr>
<th>Shutter Speed (Sec.)</th>
<th>Available ISO Speed ([Auto], [125] – [3200])</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 – 1.3</td>
<td>[Auto], [125] – [3200]</td>
</tr>
<tr>
<td>1 – 1/2000</td>
<td>[Auto], [125] – [12800]</td>
</tr>
</tbody>
</table>

- In conditions requiring slower shutter speeds, there may be a delay before you can shoot again, as the camera processes images to reduce noise.
- When shooting at low shutter speeds on a tripod, you should set [IS Mode] to [Off] (page 51).
- Orange display of the aperture value when you press the shutter button halfway indicates that the optimum exposure has not been obtained. Adjust the shutter speed until the aperture value is displayed in white, or use safety shift (page 93).

- [Tv]: Time value
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.

1. Enter [M] mode.
   - Set the mode dial to [M].

2. Configure the setting.
   - Touch [ ] (1), choose the shutter speed (2), aperture value (3), or [ ] (4), and then turn the [ ] ring to specify a value.
   - When the ISO speed is fixed, an exposure level mark (6) based on your specified values is shown on the exposure level indicator for comparison to the standard exposure level (5). The exposure level mark is shown as [ ] or [ ] when the difference from standard exposure exceeds 3 stops.
   - The ISO speed is determined and screen brightness changes when you press the shutter button halfway after setting the ISO speed to [AUTO]. If standard exposure cannot be obtained with your specified shutter speed and aperture value, the ISO speed is displayed in orange.

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” (211).

1. Enter [Av] mode.
   - Set the mode dial to [Av].

2. Set the aperture value.
   - Turn the [ ] ring to set the aperture value.

Orange display of the shutter speed when you press the shutter button halfway indicates that the optimum exposure has not been obtained. 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 diaphragm in the lens)
- In [Tv] and [Av] modes, press the [MENU] button and set [Safety shift] on the [a] tab to [On] (29) to have the camera automatically adjust the shutter speed and aperture value when there are exposure problems, so that you can shoot at the optimum exposure. However, safety shift is disabled when the flash fires.
Shooting Long Exposures (Bulb)

With bulb exposures, shots are exposed for as long as you hold down the shutter button.

1 Specify bulb exposure.
   - Set the shutter speed to [BULB], following steps 1 – 3 in "Specific Shutter Speeds and Aperture Values ([M] Mode)" (76).

2 Shoot.
   - Shots are exposed for as long as you hold the shutter button all the way down. The elapsed exposure time is displayed during exposure.

   - Maximum continuous shooting time with this feature is 4 min. 16 sec.
   - Mount the camera on a tripod or take other measures to keep it still and prevent camera shake. In this case, also disable image stabilization (51).

   - To avoid camera shake that may otherwise occur when pressing the shutter button directly, you can control the camera remotely from a smartphone (156).

   - When [Touch Shutter] is set to [On], shooting is started by touching the screen once and stopped by touching it again. Be careful not to move the camera when touching the screen.

   - After you set the shutter speed and 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 and aperture value. However, screen brightness remains the same when the flash is up and the mode is set to [S].
   - Image brightness may be affected by the Auto Lighting Optimizer (76).

   - Calculation of optimum exposure is based on the specified metering method (73).
   - The following operations are available when ISO speed is set to [AUTO].
     - Adjust exposure by touching a few times to choose the exposure compensation bar and then turning the ring.
     - Touch to lock the ISO speed. Screen brightness changes accordingly.

   - [ ]: Manual
   - Calculation of optimum exposure is based on the specified metering method (73).
   - The following operations are available when ISO speed is set to [AUTO].
     - Adjust exposure by touching a few times to choose the exposure compensation bar and then turning the ring.
     - Touch to lock the ISO speed. Screen brightness changes accordingly.
Recording Movies at Specific Shutter Speeds and Aperture Values

Set your preferred shutter speed, aperture value, exposure, and ISO speed.

For details on available shutter speeds, aperture values, and ISO speeds, see “Shutter” (p. 211), “Aperture” (p. 211), and “Changing the ISO Speed” (p. 74).

1 Enter [ ] mode.
   - Set the mode dial to [ ].
   - Touch [ ], and then choose [ ].
   - To confirm your choice, touch [OK].

2 Configure the settings.
   - Touch [ ] (1), choose an item to configure (2), and then turn the [ ] ring to specify a value.

3 Shoot.
   - Press the movie button.
   - During recording, you can switch the setting to configure by touching [ ] repeatedly and adjust the value by turning the [ ] ring.

● Some shutter speeds may cause flickering on the screen when recording under fluorescent or LED lighting, which may be recorded.
You can touch the screen to switch the function (ISO speed, exposure compensation, shutter speed, and aperture value) configured with the control ring, and quickly adjust the setting by turning the ring.

Touch \[\text{[ ]]\] to switch to another item, and then turn the \[\text{[ ]]\] ring to set a value.

Available setting items vary by shooting mode.

<table>
<thead>
<tr>
<th>M</th>
<th>Av</th>
<th>Tv</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>[\text{Tv}]</td>
<td>Av</td>
<td>[\text{Tv}]</td>
<td>[\text{+/-}]</td>
</tr>
<tr>
<td>[\text{Av}]</td>
<td>[\text{+/-}]</td>
<td>[\text{ISO}]</td>
<td>[\text{ISO}]</td>
</tr>
<tr>
<td>[\text{+/-}]</td>
<td>[\text{ISO}]</td>
<td>[\text{ISO}]</td>
<td>[\text{ISO}]</td>
</tr>
</tbody>
</table>

\[\text{+/-}\]: exposure compensation (\[\text{73}\]); ISO: ISO speed (\[\text{74}\]); Tv: shutter speed (\[\text{92}\]); Av: aperture value (\[\text{93}\]).
Functions Assignable to the Control Ring

Functions you can assign to the control ring vary depending on shooting mode.

<table>
<thead>
<tr>
<th>Item</th>
<th>Shooting Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
</tr>
<tr>
<td>Av</td>
<td>Av</td>
</tr>
<tr>
<td>Tv</td>
<td>Tv</td>
</tr>
<tr>
<td>ISO</td>
<td>Adjust the ISO speed (74)</td>
</tr>
<tr>
<td>a</td>
<td>Correct the exposure (73)</td>
</tr>
<tr>
<td>b</td>
<td>Correct white balance (78)</td>
</tr>
<tr>
<td>q</td>
<td>Perform step zooming (40) (except in mode)</td>
</tr>
<tr>
<td>e</td>
<td>Set the Auto Lighting Optimizer effect (76)</td>
</tr>
<tr>
<td>h</td>
<td>Adjust the aspect ratio (47) (except in mode)</td>
</tr>
</tbody>
</table>

- +/-: exposure compensation (73); Tv: shutter speed (92); Av: aperture value (93).

The ring can be used for step zooming (40) in AUTO or mode.

Changing Control Ring Settings

Reassign control ring functions as follows. Using the control ring is an enjoyable way to control the camera as you would a fully manual camera.

1 Choose a function to assign to the ring.
   - Choose [Set Function].

2 Configure the assigned function.
   - Touch an option, and then press the [button.

Still Images
Movies
Customizing Display Information

Customize what screen is displayed when you press the [INFO] button on the shooting screen. You can also customize what information is displayed.

1 **Access the setting screen.**
   - On the [1] tab, choose [Screen info/toggle settings] in [Shooting information display], and then press the [MENU] button (29).

2 **Configure the setting.**
   - Touch any screen that you prefer not to display, to remove the [✓] mark. Touching it again will add the [✓] mark, which indicates that it is included in display.
   - To return to the menu screen, press the [MENU] button.

   - An example of display with the options selected in step 2 is shown at left for reference.
   - At least one option must be selected.

Customizing the Information Displayed

- Follow steps 1 – 2 in “Customizing Display Information” (98) to choose [Custom display 1] or [Custom display 2], and then press the [INFO] button.
- Touch information to display, to add a [✓] mark.
- To see an example of display, press the [MENU] button to return to the [Screen info/toggle settings] screen.

Assigning Functions to the Movie Button

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

1 **Access the setting screen.**

2 **Configure the setting.**
   - Touch an option to assign, and then press the [INFO] button.

   - For a smaller grid pattern, access [1] tab > [Shooting information display] > [Grid display].

   - An example of display with the options selected in step 2 is shown at left for reference.
   - At least one option must be selected.
Customizing the Quick Set Menu

The display of Quick Set menu items can be customized.

Choosing Items to Include in the Menu

1. Access the setting screen.

2. Choose icons to include in the menu.
   - Touch icons to include in the Quick Set menu. Selected icons are marked with a [√].
   - Selected items (labeled with a [√]) will be included in display.
   - Items without a [√] can be configured on the [ ] tab of the menu screen.

3. Configure the setting.
   - Press the [MENU] button, and then touch [OK].

   - Up to 11 items can be displayed in the menu.
   - The screen in step 2 can also be accessed by holding down the [ ] button when the Quick Set menu is displayed.

Rearranging Menu Items

1. Access the setting screen.
   - On the screen in step 2 of “Choosing Items to Include in the Menu” (99), press the [INFO] button.
   - Drag an icon to move it to a new position.

2. Configure the setting.
   - Press the [MENU] button, and then touch [OK].

   - You can also configure settings by touching a desired option and then touching it again or touching [SET].

   - Icons labeled with [ ] indicate that the function is not available in the current shooting mode or under current function conditions.
   - With [AF], you can move and resize the AF frame by pressing the movie button in [1-point AF] mode (84, 85).
   - When the [AF] function is used, each press of the movie button adjusts and locks the focus, and [AF] is displayed on the screen.
   - Pressing the movie button when the [AF] function is used 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.

   - To restore the default setting to the movie button, choose [ ].
   - Icons labeled with [ ] indicate that the function is not available in the current shooting mode or under current function conditions.

   - You can also configure settings by touching a desired option and then touching it again or touching [SET].
**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 [C]. 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], and [M] modes** (73 – 93)
- **Shooting menu settings**
- **Zoom positions**
- **Manual focus positions** (82)
- **My Menu settings** (101)

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

1. **Access the screen for assigning functions.**
   - Press the [MENU] button, choose [Custom shooting mode (C)] on the [C] tab, and then press the [SET] button.

2. **Save the settings.**
   - Choose [Register settings] and press the [SET] button.
   - On the confirmation screen displayed next, touch [OK].

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

   - **To reset saved settings to their defaults,** choose [Clear settings] on the screen in step 2, press the [SET] button, and then touch [OK] on the confirmation screen.

   - **To automatically update your saved settings with any changes to settings that you make while shooting in [C] mode,** set [Auto update set.] to [Enable] on the screen in step 2.

---

*Note: The text is from a camera user guide and refers to specific modes and settings that can be saved for later use.*
Saving Commonly Used Shooting Menu Items
(My Menu)

You can save up to six commonly used shooting menu items on the [★1] tab. By customizing the [★1] tab, you can access these items quickly from a single screen.

1 Access the setting screen.
   2. Touch [OK].

2 Configure the setting.
   1. Choose [Select item to register], and then press the [OK] button.
   2. Choose up to six menu items to save.
   3. [✓] is displayed.
   4. To cancel saving, press the [OK] button. [✓] is no longer displayed.
   5. Press the [MENU] button.

3 Rearrange menu items, as needed.
   1. Choose [Sort registered items], and then press the [OK] button.
   2. Choose a menu item to move, and then press the [OK] button.
   3. Turn the [OK] ring to change the order, and then press the [OK] button.
   4. Press the [MENU] button.

- Grayed-out items in step 2 can also be specified, but they may not be available in some shooting modes.
- You can add up to 5 by repeating this process from step 1.
- Choosing [Delete all items on tab] on the screen in step 2 will delete all items added to the tab.
- On the [Select item to register] screen for saving or clearing items, you can also touch items to select them. On the [Sort registered items] screen, you can also drag items to change the display order.
Renaming My Menu Tabs

1 Choose [Rename tab].
   - Following step 2 in “Saving Commonly Used Shooting Menu Items (My Menu)” (101), choose [Rename tab] and press the [OK] button.

2 Change the tab name.
   - Use the keyboard displayed to enter the new tab name (30).
   - Press the [MENU] button, and then touch [Yes].

Deleting a My Menu Tab

1 Choose [Delete tab].
   - Following step 2 in “Saving Commonly Used Shooting Menu Items (My Menu)” (101), choose [Delete tab] and press the [OK] button.

2 Delete the item.
   - Touch [OK].

Deleting All My Menu Tabs or Items

1 Choose an item.
   - On the screen in step 1 of “Saving Commonly Used Shooting Menu Items (My Menu)” (101), choose [Delete all My Menu tabs] or [Delete all items], and then press the [OK] button.

2 Delete the item.
   - Touch [OK].
   - Choosing [Delete all My Menu tabs] will delete all My Menu tabs and restore the default [1] tab.
   - Choosing [Delete all items] will delete all items added to tabs [1] to [5].

Customizing My Menu Tab Display

Specify which screen is displayed when the [MENU] button is pressed in Shooting mode.

1 On the screen in step 1 of “Saving Commonly Used Shooting Menu Items (My Menu)” (101), choose [Menu display], and then choose an item as desired.

| Normal display | Display the most recent menu, as shown for your previous operation. |
| Display from My Menu tab | Start display from [1] tab screens. |
| Display only My Menu tab | Restrict display to [1] tab screens. |
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.

   - Enter Playback mode.
     - Press the [ ] button.
     - Your last shot is displayed.

   - Choose images.
     - To view the next image, drag right to left across the screen, and to view the previous image, drag left to right.

     - You can also view the next image by touching the right edge of the screen (1). In this case, [ ] is displayed. Similarly, you can view the previous image by touching the left edge of the screen (2), and in this case, [ ] is displayed.

     - To access this screen (Scroll Display mode), quickly drag left or right repeatedly.

     - In this mode, drag left or right to browse through images.

     - Touching the central image will restore single-image display.

     - To browse images grouped by shooting date in Scroll Display mode, quickly drag up or down.

     - Movies are identified by a [ ] icon. To play movies, go to step 3.
3 Play movies.
- Touch ( ) to start playback.

4 Adjust the volume.
- Quickly drag up or down to adjust the volume.
- To adjust the volume when the volume indicator (1) is no longer displayed, quickly drag up or down across the screen.

5 Pause playback.
- To pause or resume playback, press the ( ) button.
- To pause playback, touch the screen. The movie control panel is displayed. To resume playback, touch ( ).
- After the movie is finished, ( ) is displayed.

- To switch to Shooting mode from Playback mode, press the shutter button halfway.
- White lines indicating the aspect ratio are displayed when you view RAW images. These lines are shown on the top and bottom of images shot at an aspect ratio of [3:2] and on the left and right of images shot at an aspect ratio of [4:3] or [1:1].
- To deactivate Scroll Display, choose MENU (2) > [5] tab > [Scroll Display] > [Off].
- To have the most recent shot displayed when you enter Playback mode, choose MENU (2) > [5] tab > [Resume] > [Last shot].
- To change the transition shown between images, access MENU (2) and choose your desired effect on the [5] tab > [Transition Effect].
- Touching the volume indicator displays the volume panel. You can adjust the volume by touching ( ) ( ).
Switching Display Modes

Press the [INFO] button in Playback mode to switch from “no info display” to “info display 1” (basic info) to “info display 2” (details).

- Switching display modes is not possible while the camera is connected via Wi-Fi to devices other than printers.

Customizing the Shooting Information Displayed

Customize the information shown on each screen. For details on the information available, see “During Playback” (193).

1. **Access the setting screen.**

2. **Choose information to display.**
   - Choose information to display, and then press the [OK] button to add a [✓] mark.
   - To return to the menu screen, press the [MENU] button.

- An example of display with the options selected in step 2 is shown at left for reference.

Overexposure Warning (for Image Highlights)

Washed-out highlights in the image flash on the screen in detailed information display (193).

Brightness Histogram

- Information displays 2 – 5 include a graph on the top called a brightness histogram, which shows the distribution of brightness in images. 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.

RGB Histogram

- Information display 3 includes an RGB histogram, showing the distribution of reds, greens, and blues in images. 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.

- An RGB histogram can also be shown at the top of information displays 2 – 5. Choose one of the information display options from 2 to 5 in [Playback information display] on tab [3], press the [INFO] button, choose [RGB], and then press the [OK] button. Note that information display 3 will show a brightness histogram on the bottom of the screen.

- The brightness histogram can also be accessed while shooting (98, 192).
Viewing Short Movies Created When Shooting Still Images (Digest Movies)

View digest movies recorded automatically in [ ] mode (35) on a day of still image shooting as follows.

1 Choose an image.
   ● Still images shot in [ ] mode are labeled with [ ] icon.
   ● Choose a still image labeled with [ ].

2 Play the digest movie.
   ● Touch [ ], and then touch [OK].
   ● The movie recorded automatically on the day of still image shooting is played back, from the beginning.

Viewing by Date

Digest movies can be viewed by date.

Press the [MENU] button, choose [List/Play Digest Movies] on the [2] tab, and then touch a date (39).

Checking People Detected in Face ID

If you switch the camera to simple information display mode (105), the names of up to five detected people registered in Face ID (43) will be displayed.

Press the [INFO.] button several times to enter simple information display, and then choose an image by dragging left or right on the screen.

Names will be displayed on detected people.

● If you prefer not to have names displayed on images shot using Face ID, choose MENU (29) > [3] tab > [Face ID Info] > [Name Display] > [Off].
Browsing and Filtering Images

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 \[ \text{Q} \] 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.
- Drag up or down on the screen to scroll through displayed images.
- Touch an image to choose it, and touch it again to view it in single-image display.
- You can also drag left or right across the screen to move the orange frame, and then hold the zoom lever toward [Q] to view an image in single-image display.

Touch-Screen Operations

- Pinch in to switch from single-image display to index display.
- To view more thumbnails per screen, pinch in again.
- Drag up or down on the screen to scroll through displayed images.
- To view fewer thumbnails per screen, spread your fingers apart.
- Touch an image to choose it, and touch it again to view it in single-image display.

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 (\[113\]) or delete (\[115\]) these images all at once.

<table>
<thead>
<tr>
<th>Favorites</th>
<th>Displays images tagged as favorites ([118]).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shot Date</td>
<td>Displays the images shot on a specific date.</td>
</tr>
<tr>
<td>People</td>
<td>Displays images with detected faces.</td>
</tr>
<tr>
<td>Still image/ Movie</td>
<td>Displays still images, movies, or movies shot in [\text{mode} ] ([35]).</td>
</tr>
<tr>
<td>Name</td>
<td>Displays images of a registered person ([43]).</td>
</tr>
</tbody>
</table>

To deactivate the 3D display effect (shown if you drag the screen up or down quickly), choose MENU (\[29\]) > [5] tab > [Index Effect] > [Off].
1 Choose the first condition.
- In single-image display, press the [a] button, choose [a] in the menu, press the [a] button again, and choose a condition.
- When [a] or [a] is selected, you can view only images matching this condition by touching [a] or turning the [a] ring. To perform an action for all of these images together, press the [a] button and go to step 3.

2 Choose the second condition and view the filtered images.
- When you have selected [a] or [a] as the first condition, choose the second by touching [a], and then turn the [a] ring to view only matching images.
- To switch to filtered image display, press the [a] button and go to step 3.
- When you have selected [a] as the first condition, press the [a] button and choose a person on the next screen.

3 View the filtered images.
- Images matching your conditions are displayed in yellow frames. To view only these images, drag left or right across the screen.
- To cancel filtered display, press the [a] button, choose [a] in the menu, and then press the [a] button.

- When the camera has found no corresponding images for some conditions, those conditions will not be available.
- To hide or view other information, press the [INFO] button in step 3.
- Options for viewing the images found (in step 3) include "Navigating through Images in an Index" ([107]), "Magnifying Images" ([111]), and "Viewing Slideshows" ([112]). You can also apply image operations to all images found, by choosing [Protect All Images in Search] in "Protecting Images" ([113]) or [Select All Images in Search] in "Erasing Multiple Images at Once" ([115]), "Adding Images to the Print List (DPOF)" ([181]), or "Adding Images to a Photobook" ([183]).
- If you edit images and save them as new images ([120] – [127]), a message is displayed, and the images that were found are no longer shown.
- After choosing conditions, you can view images matching your conditions by touching a condition again.
Using the Control Ring to Jump between Images

Stills Images Movies

Use the control ring to find and jump between desired images quickly by filtering image display according to your specified conditions.

- Single image: Jumps by 1 image at a time.
- Jump 10 Images: Jumps by 10 images at a time.
- Jump 100 Images: Jumps by 100 images at a time.
- Jump Shot Date: Jumps to the first image in each group of images that were shot on the same date.
- Jump to Favorites: Displays images tagged as favorites.

1 Choose a condition.
   - Choose a condition (or jump method) by pressing the [MENU] button and choosing [Image jump w/ ] on the [ ] tab.

2 View images matching your specified condition, or jump by the specified amount.
   - In single-image display, turn the ring to view only images matching the condition or jump by the specified number of images forward or back.

Touch-Screen Operations

You can also jump to the previous or next image according to your jump method chosen in step 1 of “Using the Control Ring to Jump between Images” by dragging left or right with two fingers.

Viewing Individual Images in a Group

Still Images Movies

Individual still images saved in [ ] mode are grouped, so that only the first image is displayed, but you can also view the images individually.

1 Choose a grouped image.
   - Browse images by dragging left or right until you find a desired image labeled .

2 Choose [ ].
   - Press the [ ] button, and then choose [ ] in the menu (28).

3 View images in the group individually.
   - Dragging images left or right will display only images in the group.
   - To cancel group playback, press the [ ] button, choose [ ] in the menu, and press the [ ] button again (28).
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 [\(\text{[3]}\)] tab (29).
   - Choose [Edit ID Info] and press the [\(\text{[2]}\)] button.

2. Choose an image.
   - Choose an image after dragging left or right to browse. Press the [\(\text{[5]}\)] button.
   - To choose the name you want to overwrite, touch that person’s face.

3. Choose the editing option.
   - Touch [Overwrite].

4. Choose the name of the person to overwrite with.
   - Touch the name of the person to use for overwriting.

- You can also access the [Edit ID Info] screen by touching an image on the screen in step 2, touching \(\text{[2]}\) on the screen, or touching [Face ID Info] in the setting menu.
- During group playback (step 3), you can browse through images quickly “Navigating through Images in an Index” (107) and magnify them “Magnifying Images” (111). You can apply your actions to all images in the group at once by choosing [Protect All Images in Group] in “Protecting Images” (113), [All Images in Group] in “Erasing Multiple Images at Once” (115), or [Select All in Group] in “Adding Images to the Print List (DPOF)” (181) or “Adding Images to a Photobook” (183).
- To ungroup images so that they are displayed only as single still images, choose MENU (29) > [\(\text{[5]}\)] tab > [Group Images] > [Off] (29). However, grouped images cannot be ungrouped during individual playback.
- You can also view group images individually by touching [SET] on the screen in steps 1 and 2.

- You can also view group images individually by touching [SET] on the screen in steps 1 and 2.
- You can also view group images individually by touching [SET] on the screen in steps 1 and 2.
### Image Viewing Options

#### Magnifying Images

- **Still Images**
  - **1 Magnify an image.**
    - Moving the zoom lever toward \( \square \) will zoom in and magnify the image. You can magnify images up to about 10x by continuing to hold the zoom lever.
    - The approximate position of the displayed area (1) is shown for reference.
    - To zoom out, move the zoom lever toward \( \square \). You can return to single-image display by continuing to hold it.

- **Movies**
  - **2 Move the display position and switch images as needed.**
    - To move the display position, drag across the screen.
    - Press the [MENU] button to restore single-image display.
    - To switch to other images while zoomed, turn the \( \square \) ring.

- **You can check the focus when \( \square \) is displayed by pressing the [SET] button to show the position in focus (Focus Check). When multiple positions are in focus, press the [SET] button repeatedly to switch to other positions.**

### Erasing Names

- On the screen displayed in step 3 in “Changing Names” (110), touch [Erase].
- After [Erase?] is displayed, touch [OK].
Viewing Slideshows

Automatically play back images from a memory card as follows.

- Press the [MENU] button, and then choose [Slideshow] on the [1] tab (29).
- Touch [Start].
- 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 (26) are deactivated during slideshows.
- To pause or resume slideshows, press the [3] button.
- You can configure slideshow repetition, the display time per image, and the transition between images on the screen accessed by touching [Set up] (29).
- You can also stop slideshows by touching the screen.
- Slideshows can also be started by using Touch Actions (119).

Touch-Screen Operations

- Spread your fingers apart (pinch out) to zoom in.
- You can magnify images up to about 10x by repeating this action.
- To move the display position, drag across the screen.
- Pinch in to zoom out.
- Touch [MENU] to restore single-image display.

Double-Touch Magnification

- Quickly touch the screen twice to magnify the image about 3x.
- To return to single-image display from magnified display, quickly touch the screen twice.

Still Images  Movies

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Choosing Images Individually

1. Choose [Select].
   - Following the procedure in “Using the Menu” (113), choose [Select] and press the [ ] button.

2. Choose an image.
   - Choose an image after dragging left or right to browse. Once you press the [ ] button, [ ] is displayed.
   - To cancel selection, press the [ ] button again. [ ] is no longer displayed.
   - Repeat this process to specify other images.

3. Protect the image.
   - Press the [ ] button. A confirmation message is displayed.
   - Touch [OK].

Protecting Images

Protect important images to prevent accidental erasure (115).

- Press the [ ] button, choose [ ] in the menu, and then choose [ ] . [ ] is displayed.
- To cancel protection, choose [OFF]. [ ] is no longer displayed.

- Protected images on a memory card will be erased if you format the card (162).
- Protected images cannot be erased using the camera’s erasure function. To erase them this way, first cancel protection.

Using the Menu

1. Access the setting screen.
   - Press the [ ] button and choose [Protect] on the [ ] tab (29).

2. Choose a selection method.
   - Choose an option as desired (29).
   - To return to the menu screen, 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.
- You can also select or clear images by touching the screen in step 2, and you can access the confirmation screen by touching [ ].

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Movies

Protecting Images

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Indexes
\section*{Selecting a Range}

\textbf{1 Choose \([\text{Select Range}]\).}
- Following the procedure in “Using the Menu” (\(\text{\[113\]}\)), choose [Select Range] and press the \([\text{\[6]}}\) button.

\textbf{2 Choose a starting image.}
- Press the \([\text{\[6]}}\) button.
- Choose an image after dragging left or right to browse. Press the \([\text{\[6]}}\) button.

\textbf{3 Choose an ending image.}
- Touch an image to activate \([\text{Last image}]\), and then press the \([\text{\[6]}}\) button.
- Choose an image after dragging left or right to browse. Press the \([\text{\[6]}}\) button.
- Images before the first image cannot be selected as the last image.

\section*{Protecting All Images at Once}

\textbf{1 Choose \([\text{Protect All Images}]\).}
- Following the procedure in “Using the Menu” (\(\text{\[113\]}\)), choose [Protect All Images] and press the \([\text{\[6]}}\) button.

\textbf{2 Protect the images.}
- Touch \([\text{OK}]\).
- You can also choose images on the screens in steps 2 and 3 by turning the \([\text{\[6]}}\) ring.
- To cancel protection for groups of images, choose \([\text{Unlock}]\) in step 4.

\section*{Clearing All Protection at Once}

You can clear protection from all images at once.
To clear protection, choose \([\text{Unprotect All Images}]\) in step 1 of “Protecting All Images at Once”, and then complete step 2.
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 (113) cannot be erased.

1 Choose an image to erase.
   - Drag left or right across the screen to choose an image.

2 Erase the image.
   - Press the [Erase] button, and then choose [Erase] in the menu (28).
   - After [Erase?] is displayed, touch [Erase].
   - The current image is now erased.
   - To cancel erasure, touch [Cancel].

For images captured in both RAW and JPEG format, touching [Erase] while the image is displayed gives you the option of choosing [Erase RAW], [Erase JPEG], or [Erase Both]. Images can also be erased by using Touch Actions (119).

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 (113) cannot be erased.

Choosing a Selection Method

1 Access the setting screen.

2 Choose a selection method.
   - Choose the selection method, and then press the [SET] button.
   - To return to the menu screen, press the [MENU] button.
   - Touch [MENU] to return to the menu screen.

- For images captured in both RAW and JPEG format, touching [Erase] while the image is displayed gives you the option of choosing [Erase RAW], [Erase JPEG], or [Erase Both].
- Images can also be erased by using Touch Actions (119).
Choosing Images Individually

1 Choose [Select].
- Following the procedure in “Choosing a Selection Method” (115), choose [Select] and press the [OK] button.

2 Choose an image.
- Choose an image after dragging left or right to browse. Once you touch the screen, [✓] is displayed.
- To cancel selection, touch the screen again. [✓] is no longer displayed.
- Repeat this process to specify other images.

3 Erase the images.
- Press the [MENU] button. A confirmation message is displayed.
- Touch [OK].

Specifying All Images at Once

1 Choose [Select All Images].
- Following the procedure in “Choosing a Selection Method” (115), choose [Select All Images] and press the [OK] button.

2 Erase the images.
- Touch [OK].

Choosing Images Individually

1 Choose [Select].
- Following the procedure in “Choosing a Selection Method” (115), choose [Select] and press the [OK] button.

2 Choose an image.
- Choose an image after dragging left or right to browse. Once you touch the screen, [✓] is displayed.
- To cancel selection, touch the screen again. [✓] is no longer displayed.
- Repeat this process to specify other images.

3 Erase the images.
- Touch [Erase].
Rotating Images

Change the orientation of images and save them as follows.

1 Choose [ ].
   - Press the [ ] button, and then choose [ ] in the menu (p. 28).

2 Rotate the image.
   - Each time you drag an option, the image is rotated 90° in that direction. Press the [ ] button to complete the setting.

   - Rotation is not possible when [Auto Rotate] is set to [Off] (p. 117).

Using the Menu

1 Choose [Rotate].
   - Press the [ ] button and choose [Rotate] on the [ ] tab (p. 29).

2 Rotate the image.
   - Drag left or right across the screen to choose an image.
   - The image is rotated 90° each time you press the [ ] button.
   - To return to the menu screen, press the [ ] button.

   - On the screen in step 2, you can also touch [ ] to rotate images or touch [ ] to return to the menu screen.

Deactivating Auto Rotation

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

- Press the [ ] button, choose [Auto Rotate] on the [ ] tab, and then choose [Off] (p. 29).

   - Images cannot be rotated (p. 117) when you set [Auto Rotate] to [Off]. Additionally, images already rotated will be displayed in the original 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.


1. Press the [ ] button, choose [★] in the menu, and then choose [★]. [★] is displayed.
2. To untag the image, repeat this process and choose [OFF], and then press the [ ] button.
3. Finish the setup process.
   - Press the [MENU] button. A confirmation message is displayed.
   - Touch [OK].

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.

Tagging images as favorites makes it easier to add them when creating albums (1128).
Images can also be tagged as favorites by using Touch Actions (1119).
To specify multiple images at once, move the zoom lever toward [ ] for index display, and then touch images to choose them.

Using the Menu

1. Choose [Favorites].
2. Choose an image.
   - Choose an image after dragging left or right to browse. Once you press the [ ] button, [★] is displayed.
   - To untag the image, press the [ ] button again. [★] is no longer displayed.
   - Repeat this process to choose additional images.
Convenient Control: Touch Actions

You can quickly and easily activate functions that you have assigned to four touch gestures (Touch Actions), in single-image display.

### Using Touch Actions Functions

- Drag across the screen as shown.
- The function assigned to [↕] is now activated.
- Similarly, you can also activate functions assigned to [☜], [☞], and [ipherals] by dragging across the screen.
- Customize functions assigned to Touch Actions as desired.

### Changing Touch Actions Functions

Simplify your preferred camera operations by reassigning dragging patterns to them as desired.

1. **Access the setting screen.**

2. **Assign a function to a Touch Action.**
   - Choose a dragging pattern, and then press the [↕] button.
   - Choose a function to assign.

<table>
<thead>
<tr>
<th>Assignable Functions</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slideshow</td>
<td>Start a slideshow.</td>
</tr>
<tr>
<td>Erase</td>
<td>Erase an image.</td>
</tr>
<tr>
<td>Protect</td>
<td>Protect an image or cancel protection.</td>
</tr>
<tr>
<td>Rotate</td>
<td>Rotate an image.</td>
</tr>
<tr>
<td>Favorites</td>
<td>Tag images as favorites, or untag the image.</td>
</tr>
<tr>
<td>Next Favorite</td>
<td>Switch to displaying the next image tagged as a favorite.</td>
</tr>
<tr>
<td>Previous Favorite</td>
<td>Switch to displaying the previous image tagged as a favorite.</td>
</tr>
<tr>
<td>Next Date</td>
<td>Switch to displaying the first image with the next shooting date.</td>
</tr>
<tr>
<td>Previous Date</td>
<td>Switch to displaying the first image with the previous shooting date.</td>
</tr>
<tr>
<td>To Camera</td>
<td>Access the Wi-Fi connection screen.</td>
</tr>
<tr>
<td>To Smartphone</td>
<td>For Wi-Fi details, see “Wireless Features” (132).</td>
</tr>
<tr>
<td>To Computer</td>
<td></td>
</tr>
<tr>
<td>To Printer</td>
<td></td>
</tr>
<tr>
<td>To Web Service</td>
<td></td>
</tr>
</tbody>
</table>
EDITING STILL IMAGES

- Image editing (120 – 123) is only available when the memory card has sufficient free space.

- When [MENU] is shown on an editing screen, you can touch [MENU] instead of pressing the [MENU] button, if you prefer.
- When [SET] is shown on an editing screen, you can touch [SET] instead of pressing the [SET] button, if you prefer.

RESIZING IMAGES

1. Choose an image size.

2. Save the new image.
   - Touch [OK].
   - The image is now saved as a new file.

3. Review the new image.
   - Touch [Processed img.].
   - The saved image is now displayed.

- Editing is not possible for images shot at a recording pixel setting of [2].
- RAW images cannot be edited.
- To cancel resizing in step 1, choose [2].
- Images cannot be resized to a higher number of recording pixels.
- Choosing [Original image] in step 3 will display the original image.
Using the Menu

1 Choose [Resize].

2 Choose an image.
   ● Choose an image after dragging left or right to browse. Press the [DISP.] button.

3 Choose an image size.
   ● Choose a size, and then press the [DISP.] button.

4 Save as a new image and review.
   ● Follow step 2 in “Resizing Images” (120).
   ● Press the [MENU] button and follow step 3 in “Resizing Images” (120).

Cropping

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

1 Access the setting screen.
   ● Press the [MENU] button, choose [ ] in the menu, and then press the [ ] button (128).

2 Resize, move, and adjust the aspect ratio of the cropping frame.
   ● To resize the frame, move the zoom lever.
   ● To move the frame, drag on the screen.
   ● To change the frame orientation, touch [ ].
   ● To change the frame aspect ratio, touch [ ].
     To switch between aspect ratios (3:2, 16:9, 4:3, and 1:1), press the [ ] button repeatedly.

3 Preview the cropped image.
   ● Touch [ ].
   ● To switch display between the cropped image and the cropping frame, press the [DISP.] button repeatedly.

4 Save as a new image and review.
   ● Touch [ ].
   ● Follow steps 2 – 3 in “Resizing Images” (120).
Applying Filter Effects

Apply effects equivalent to shooting in [ ], [ ], [ ], [ ], [ ], and [ ] modes to images and save them as separate images.

1 Choose an effect.
   - Press the [ ] button, choose [ ] in the menu, and then choose the effect ([ ], [ ], [ ], [ ], [ ], [ ], [ ]).
   - Press the [ ] button.

2 Adjust the effect as needed.
   - [ ]: Touch or drag the bar on the bottom of the screen to adjust contrast.
   - [ ]: Touch or drag the bar on the bottom of the screen to adjust defocusing.
   - [ ] or [ ]: Touch or drag the bar on the bottom of the screen to adjust the level of the effect.
   - [ ]: Touch or drag the bar on the bottom of the screen to adjust color saturation.
   - [ ]: Touch or drag the bar on the bottom of the screen to adjust color tone.
   - [ ]: Move the zoom lever to resize the frame. To move it, either touch the screen or drag the white frame up or down.

3 Save as a new image and review.
   - Press the [ ] button.
   - Follow steps 2 – 3 in “Resizing Images” ([ ], [ ], [ ], [ ], [ ], [ ], [ ]).
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].
2. Choose an image.
   - Drag left or right across the screen to choose an image.
3. Correct the image.
   - Press the [8] 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” (111).

4. Save as a new image and review.
   - Touch [New File].
   - The image is now saved as a new file.
   - Press the [MENU] button and follow step 3 in “Resizing Images” (120).

● 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 also captured in RAW format, but the original image cannot be overwritten.
Processing RAW Images with the Camera

Process images captured in RAW format on the camera. The original RAW image is retained, and a copy is saved as a JPEG.

1 Choose a RAW image.
   - Drag left or right across the screen to choose a RAW image.

2 Access the setting screen.
   - Press the [MENU] button, choose [ ] in the menu, and choose the desired option.
   - When choosing [ ], go to step 5.

3 Set the processing conditions.
   - If you have chosen [ ], after pressing the [ ] button, choose an option.

4 Configure advanced settings.
   - Choose an effect on the bottom of the screen, and then press the [ ] button to return to the screen in step 3.

5 Save the image.
   - If you have chosen [ ], choose [ ] and touch [OK].
   - If you have chosen [ ], touch [OK].

<table>
<thead>
<tr>
<th>Brightness adjustment</th>
<th>Adjust brightness.</th>
</tr>
</thead>
<tbody>
<tr>
<td>White balance</td>
<td>Choose a white balance.</td>
</tr>
<tr>
<td>Picture Style</td>
<td>Choose a Picture Style.</td>
</tr>
<tr>
<td>Auto Lighting Optimizer</td>
<td>Set Auto Lighting Optimizer details.</td>
</tr>
<tr>
<td>High ISO speed NR</td>
<td>Set noise reduction details.</td>
</tr>
<tr>
<td>Image quality</td>
<td>Set the image quality level of the resulting JPEG image.</td>
</tr>
</tbody>
</table>

- For magnified display on the screen in step 3, move the zoom lever toward [Q].
- You can configure advanced settings for functions labeled with [INFO] on the screen in step 4 by pressing the [INFO] button.
- To compare the current image to the original image before saving in step 5, press the [INFO] button and turn the [ ] ring. To return to the setting screen, press the [MENU] button.
- Touch [ ] before saving in step 5 to restore the original settings.
Using the Menu

1 Access the setting screen.

2 Choose a selection method.
   - Choose images.
     - Follow steps 2 – 3 in “Selecting a Range” (114) to specify images.

Choosing Images Individually

1 Choose [Select].
   - Following the procedure in “Using the Menu” (125), choose [Select] and press the [3] button.

2 Choose an image.
   - Once you choose an image following step 2 in “Choosing Images Individually” (116), [✓] is displayed.
   - To cancel selection, press the [3] button again. [✓] is no longer displayed.
   - Repeat this process to specify other images.
   - Press the [MENU] button to go to the next screen.

3 Process the image.
   - Touch [OK].
   - Follow steps 2 – 5 in “Processing RAW Images with the Camera” (124) to process the image.

Selecting a Range

1 Choose [Select Range].
   - Following the procedure in “Using the Menu” (125), choose [Select Range] and press the [3] button.

2 Choose images.
   - Follow steps 2 – 3 in “Selecting a Range” (114) to specify images.

3 Process the image.
   - Touch [OK].
   - Follow steps 2 – 5 in “Processing RAW Images with the Camera” (124) to process the image.

- Images produced by in-camera processing will not match those processed with Digital Photo Professional exactly.
- Up to 500 images can be selected at one time.
Editing Movies

You can remove unneeded portions from the beginning and end of movies.

1 Choose [\].
   - Follow steps 1 – 5 in “Viewing” (103) and choose [\].
   - The movie editing panel and editing bar are now displayed.

2 Specify portions to cut.
   - (1) is the movie editing panel, and (2) is the editing bar.
   - Choose [\] or [\].
   - To view the portions you can cut (identified by [\] on the screen), drag [\]. 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.
   - Touch [\] to play the edited movie.
   - To edit the movie again, repeat step 2.
   - To cancel editing, press the [MENU] button, and then touch [OK].

4 Save the edited movie.
   - Touch [\].
   - Touch [New File].
   - Touch [Save w/o Comp.].
   - The movie is now saved as a new file.

   - 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.
Reducing File Sizes

Movie file sizes can be reduced by compressing movies as follows.

1. On the screen in step 2 of “Editing Movies”, choose [ ], and then choose [New File].
2. Touch [Compress & Sav.].

Image Quality of Compressed Movies

<table>
<thead>
<tr>
<th>Before Compression</th>
<th>After Compression</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

- [ ] and [ ] movies cannot be compressed.
- Edited movies cannot be saved in compressed format when you choose [Overwrite].
- Compressing movies to [ ] or [ ] reduces the file size while maintaining the same image quality.

Erasing Movie Chapters

Individual chapters (clips) ([35]) 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)” ([106]) to play a short movie, and then press the [ ] button to access the movie control panel.
   - Touch [ ] or [ ] to choose a chapter.
2. Choose [ ].
   - Touch [ ].
   - The selected clip is played back repeatedly.
3. Confirm erasure.
   - Touch [OK].
   - 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.
## Viewing Albums (Story Highlights)

You can choose themes such as a date or person’s name to create an album of automatically selected images that match the theme. These images are combined into a slideshow that can be saved as a short movie of about 2 – 3 minutes.

Before using this feature, make sure the battery pack is fully charged. Creating albums also requires free space on the memory card. As a guideline, use a memory card with a capacity of 16 GB or higher, and ensure at least 1 GB of free space.

### Choosing Themes for Albums

Press the [播放] button and choose the Story Highlights icon. The home screen is displayed, and you can choose the theme for the camera to use when selecting album elements. Note that the camera is more likely to add images tagged as favorites (118) to albums.

<table>
<thead>
<tr>
<th>Date</th>
<th>Creates an album of images shot on the same day. Images are selected from those shot on the same day as the image displayed before you access the home screen.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person’s name</td>
<td>Can be used to create monthly albums of people, such as albums of children as they grow up. Subjects whose Face ID information you registered before shooting may be selected for albums. Images selected are those that have the same subject shot during the same month as the image displayed before you access the home screen.</td>
</tr>
<tr>
<td>Event</td>
<td>A good choice for albums of vacations, parties, or other events. Images are selected from those shot during the event before and after the image displayed before you access the home screen.</td>
</tr>
<tr>
<td>Custom</td>
<td>Includes images based on your specified images, dates, or people registered in Face ID.</td>
</tr>
</tbody>
</table>

### 1 Choose an image.
- Choose an image in single-image display.
- Themes available in step 3 will vary depending on image shooting date and Face ID information.

### 2 Access the home screen.
- Press the [播放] button, choose [Story Highlights], and then press the [播放] button (26).
- After [Busy] is displayed, the home screen is displayed.

### 3 Preview an album.
- Choose a person or [Date] or [Event] as the album theme, and then press the [播放] button.
- After [Loading] is displayed for a few seconds, the album is played.

### 4 Save the album.
- Choose [Save Album as Movie], and then press the [播放] button.
- Once the album is saved, [Saved] is displayed.

### 5 Play the album (103).
Adding Background Music to Albums

Choose from seven kinds of background music to play during album playback.

1 Register background music to a memory card.

- Following steps 1 – 4 in “Viewing Albums (Story Highlights)” (128), choose [Music Settings] and press the \( \Rightarrow \) button.

2 Create the album.

- Follow steps 1 – 3 in “Viewing Albums (Story Highlights)” (128) to create an album.

3 Configure background music settings.

- Choose an item, press the \( \Rightarrow \) button, and choose an option (29).

4 Save the album.

- Follow step 4 in “Viewing Albums (Story Highlights)” (128) to save albums.

- Once albums are saved, background music cannot be added later. Background music in albums cannot be removed or changed.

- Chapters of albums with background music cannot be edited (127).

- If you prefer not to add background music, set [Add BGM] to [No] on the screen in step 3.

- To use only background music instead of movie audio, set [Audio Mixer] to [BGM only] on the screen in step 3.

- To listen to a sample of the background music selected in [Track], choose [Sample BGM] on the screen in step 3 and press the \( \Rightarrow \) button.
Creating Your Own Albums

Create your own albums by choosing desired images.

1 **Choose to create a Custom album.**
   - Following steps 1 – 3 in “Viewing Albums (Story Highlights)” (128), choose [Custom] and press the [ ] button.

2 **Choose a selection method.**
   - Choose [Image Selection], [Date Selection], or [Person Selection], and then press the [ ] button.

3 **Choose album elements.**
   - Touch elements for your album to label them with [ ].
   - Press the [MENU] button after you are finished selecting still images or short clips in [Image Selection], dates in [Date Selection], or people in [Person Selection].
   - Choose [Preview] and press the [ ] button.

4 **Choose background music.**
   - When the screen at left is displayed, choose [Music Settings]. Add background music as described in “Adding Background Music to Albums” (129), and then press the [MENU] button.

5 **Choose a color effect.**
   - On the screen in step 4, choose [Change Color Effect].
   - Drag left or right to choose a color effect, and then press the [ ] button.

6 **Save the album.**
   - Follow step 4 in “Viewing Albums (Story Highlights)” (128) to save albums.
Combining Short Clips

Combine short clips to create a longer movie. Note that movies created this way are not included in Story Highlights albums (128).

1 Access the editing screen.

2 Specify clips to combine.
   - Drag clips on the top of the screen left or right, choose a clip to combine, and press the [z] button.
   - Your selected clip is displayed on the bottom of the screen.
   - To cancel selection, press the [z] button again.
   - Repeat these steps to specify other clips to combine.
   - After you are finished selecting clips, press the [MENU] button.

3 Preview the movie.
   - Choose [Preview] and press the [z] button.
   - After [Loading] is displayed for a few seconds, a preview of the combined clips is played.

4 Save the movie.
   - Choose [Save] and press the [z] button.
   - Once the album is saved, [Saved] is displayed.

5 Play the movie.
   - Choose [Play Back Movie] on the screen in step 1 to view a list of movies you have created.
   - Choose the movie to play and press the [z] button.

- The next time you combine short clips, [Select images based on previous settings?] is displayed, and you can choose [Yes] to display the editing screen with clips arranged in the order you selected them last time.
- To play the selected clip, move the zoom lever toward [z] on the screen in step 2.
- To rearrange clips, touch [Sort] on the screen in step 2, select a clip, press the [z] button, drag left or right, and press the [z] button again.
- To apply a color effect, choose [Change Color Effect] on the screen in step 3.
- To add background music, choose [Music Settings] on the screen in 3 (129).
- The image quality of movies saved is [z].
- Use a fully charged battery pack, if possible.
Wireless Features

Send images wirelessly from the camera to a variety of compatible devices, and use the camera with Web services.

Before using wireless features, be sure to read “Precautions for Wireless Features (Wi-Fi, Bluetooth, or Others)” ( p. 217).

Available Wireless Features

Using Wi-Fi Features

You can send and receive images and control the camera remotely by connecting it to these devices and services via Wi-Fi.

- Smartphones and Tablets
  Send images to smartphones and tablet computers that have Wi-Fi functions. You can also shoot as you view a shooting screen on your smartphone or tablet. For convenience in this guide, smartphones, tablets, and other compatible devices are collectively referred to as “smartphones”.

- Computer
  Use software to save camera images to a computer connected via Wi-Fi.

- Web Services
  Add your account information to the camera for CANON iMAGE GATEWAY online photography service or other Web services to send camera images to the services. Unsent images on the camera can also be sent to a computer or Web service via CANON iMAGE GATEWAY.

- Printers
  Send images wirelessly to a PictBridge-compatible printer (supporting DPS over IP) to print them.

- Another Camera
  Send images wirelessly between Wi-Fi-compatible Canon cameras.

Using Bluetooth® Features

You can easily pair the camera with a smartphone featuring Bluetooth low energy technology*. You can also shoot or view images by using your smartphone as a remote control.

* Hereafter referred to as “Bluetooth”.
Sending Images to a Smartphone

There are several ways to connect the camera to a smartphone and send images.

- Connect via Bluetooth
  You can easily connect the camera to a Bluetooth enabled smartphone by pairing them. This simplifies transferring images to a smartphone.
- Connect via NFC (135)
  Simply touch an NFC-compatible Android smartphone against the camera to connect the devices.
- Connect via the Wi-Fi menu (137)
  You can connect the camera to a smartphone as you would connect it to a computer or other device. Multiple smartphones can be added.

Before connecting to the camera, you must install the free dedicated Camera Connect app on the smartphone. For details on this application (supported smartphones and included functions), refer to the Canon website.

- Canon Wi-Fi-compatible camera owners who use CameraWindow to connect their camera via Wi-Fi to a smartphone should consider switching to the Camera Connect mobile app.

Transferring Images to a Bluetooth Enabled Smartphone

Once you have paired with a smartphone via Bluetooth, simply operate your smartphone to view and save camera images.

1. Install Camera Connect.
   - For Android smartphones, find Camera Connect in Google Play and download and install the app.
   - For an iPhone or iPad, find Camera Connect in the App Store and download and install the app.

2. Register a nickname.
   - Press the power button to turn the camera on.
   - Press the [3] button to access the keyboard (30), and then enter a nickname.
   - To return to [Wireless settings] after pressing the [MENU] button, press the [MENU] button again.
3 Prepare for pairing.
* Choose [Bluetooth settings] to choose [Pairing], and then press the [OK] button.

* A screen is displayed indicating that the camera is waiting to connect.

4 Start Camera Connect.
* Activate Bluetooth on the smartphone, and then start Camera Connect on the smartphone.

* After the camera is recognized, a camera selection screen is displayed.

5 Select the camera to connect to.
* Choose the camera nickname.

* Complete the pairing process for the smartphone.

6 Complete pairing.
* Touch [OK] after the confirmation message on the camera.

* Press the [OK] button when the screen at left is displayed.

7 Transfer images.
* The camera will automatically switch to Wi-Fi if you choose [Images on camera] in Camera Connect.

* On an iPhone or iPad, in the device’s Wi-Fi setting menu, choose the SSID (network name) displayed on the camera to establish a connection.

* Use the smartphone to transfer images from the camera to the smartphone.

* To switch to Bluetooth, disable the Wi-Fi connection on the smartphone.

● Battery life may be shorter when you use the camera after pairing, because power is consumed even when the camera is off.

● Before bringing the camera to places where the use of electronic devices is restricted, set [Bluetooth] to [Off], to avoid having the camera ready for Bluetooth communication even when it is off.

● You can also use the camera to disable Wi-Fi connection described in step 7.

* To check the information of the smartphone connected via Bluetooth in [Check/clear connection info], choose MENU (MENU) > [ ] tab > [Wireless settings] > [Bluetooth settings]. Choose [Address check] to check the camera’s Bluetooth address.

* Bluetooth connection status is indicated by one of the following icons.

  Connected, Disconnected
Transferring Images to an NFC-Compatible Smartphone

Use an Android smartphone’s NFC to simplify the process of installing Camera Connect and connecting to the camera. Operation when devices are initially connected via NFC varies depending on the camera mode when the devices are touched together.

- If the camera is off or in Shooting mode when the devices are touched together, you can choose and send images on the image selection screen. Once the devices are connected, you can also shoot remotely while viewing a shooting screen on the smartphone, or geotag your shots (156). It’s easy to reconnect to recent devices, which are listed in the Wi-Fi menu.
- If the camera is in Playback mode when the devices are touched together, you can choose and send images from the index display shown for image selection.

Follow the instructions in the following section for NFC-initiated connection to a camera that is off or in Shooting mode.

Connecting via NFC When Camera Is Off or in Shooting Mode

1 Install Camera Connect.
   - Refer to the smartphone user manual to check where the N-Mark (N) is located.
   - Activate NFC on the smartphone and touch the devices’ N-Marks (N) together to start Google Play on the smartphone automatically. Once the Camera Connect download page is displayed, download and install the app.

2 Establish the connection.
   - Make sure the camera is off or in Shooting mode.
   - Touch the N-Mark (R) on the smartphone with Camera Connect installed against the camera’s N-Mark.
   - The camera screen automatically changes.
   - If the [Device Nickname] screen is displayed, touch [OK].

   - Camera Connect is started on the smartphone.
   - The devices are connected automatically.

3 Adjust the privacy setting.
   - When this screen is displayed, touch [Yes].
   - You can now use the smartphone for remote live view shooting, or to browse, transfer, or geotag images on the camera.
4 Send an image.

- Drag images left or right to choose an image to send, and then touch [Send this image].
- [Transfer completed] is displayed after the image is sent, and the image transfer screen is displayed again.
- To end the connection, touch [MENU] in the upper right of the screen, and then touch [OK] on the confirmation screen. You can also use the smartphone to end the connection.

- When using NFC, keep the following points in mind.
  - Avoid strong impact between the camera and smartphone. This may damage the devices.
  - Depending on the smartphone, the devices may not recognize each other immediately. In this case, try holding the devices together in slightly different positions. If connection is not established, keep the devices together until the camera screen is updated.
  - If you attempt connection when the camera is off, a message may be displayed on the smartphone reminding you to turn on the camera. If so, turn the camera on and touch the devices together again.
  - Do not place other objects between the camera and smartphone. Also, note that camera or smartphone covers or similar accessories may block communication.
  - All images in the camera can be viewed from the connected smartphone when you choose [Yes] in step 3. To keep camera images private, so that they cannot be viewed from the smartphone, choose [No] in step 3.
  - Once you have registered a smartphone, you can change privacy settings for it on the camera (158).

- Connections require that a memory card be in the camera.
- You can also change the camera nickname on the screen in step 2 (158).
- You can also send multiple images at once and change the image size before sending (151).
- To disable NFC connections, choose MENU (29) > [4] tab > [Wireless settings] > [Wi-Fi Settings] > [NFC] > [Off].

Connecting via NFC When Camera Is in Playback Mode

- Press the [?] button to turn the camera on.
- Touch the smartphone with Camera Connect installed (135) against the camera’s N-Mark (R).
- Touching an image to send will label it with a [✓] icon.
- To cancel selection, touch it again. [✓] is no longer displayed.
- Repeat this process to choose additional images.
- After you finish choosing images, press the [MENU] button, and then touch [OK].
- Touch [Send].
- The images are now sent.

- If during connection a message on the camera requests you to enter the nickname, enter it as described in “On-Screen Keyboard” (30).
- The camera does not keep a record of smartphones you connect to via NFC in Playback mode.
- You can preset images to transfer at your desired size (151).
Adding a Smartphone Using the Wi-Fi Menu

These steps show how to use the camera as an access point, but you can also use an existing access point (138).

1 Install Camera Connect.
   - For Android smartphones, find Camera Connect in Google Play and download and install the app.
   - For an iPhone or iPad, find Camera Connect in the App Store and download and install the app.

2 Access the Wi-Fi menu.
   - Press the [Wi-Fi] button.
   - If the [Device Nickname] screen is displayed, choose [OK].

3 Choose [Connect].
   - Touch [Connect].

4 Choose [Add a Device].
   - Touch [Add a Device].

5 Connect the smartphone to the network.
   - In the smartphone’s Wi-Fi setting menu, choose the SSID (network name) displayed on the camera to establish a connection.
   - In the password field, enter the password displayed on the camera.

6 Start Camera Connect.
   - Start Camera Connect on the smartphone.

7 Select the camera to connect to.
   - On the camera selection screen displayed on the smartphone, choose the camera to begin pairing.

8 Adjust the privacy setting.
   - Touch [Yes].
   - You can now use the smartphone to browse, import, or geotag images on the camera or shoot remotely.
9 Send an image.

- Drag images left or right to choose an image to send, and then touch [Send this image].
- [Transfer completed] is displayed after the image is sent, and the image transfer screen is displayed again.
- To end the connection, touch [MENU] in the upper right of the screen, and then touch [OK] on the confirmation screen. You can also use the smartphone to end the connection.
- To add multiple smartphones, repeat the above procedure starting from step 1.

- All images in the camera can be viewed from the connected smartphone when you choose [Yes] in step 8. To keep camera images private, so that they cannot be viewed from the smartphone, choose [No] in step 8.
- Once you have registered a smartphone, you can change privacy settings for it on the camera (p.158).

- Connections require that a memory card be in the camera.
- Once you have connected to devices via the Wi-Fi menu, recent destinations will be listed first when you access the Wi-Fi menu. Simply touch a listed device to connect again. You can register new devices by dragging left or right to access the device selection screen.
- If you prefer not to display recent target devices, choose MENU (p.29) > [4] tab > [Wireless settings] > [Wi-Fi Settings] > [Target History] > [Off].
- To connect without entering a password in step 5, choose MENU (p.29) > [4] tab > [Wireless settings] > [Wi-Fi Settings] > [Password] > [Off]. [Password] is no longer displayed on the SSID screen (in step 4).
- You can also send multiple images at once and change the image size before sending (p.151).
- Once a connection destination is assigned in Touch Actions (p.119), you can automatically reconnect to a previous destination simply by dragging across the screen with the assigned gesture.

Using Another Access Point

When connecting the camera to a smartphone through the Wi-Fi menu, you can also use an existing access point.

1 Prepare for the connection.

- Access the [Waiting to connect] screen by following steps 1 – 4 in “Adding a Smartphone Using the Wi-Fi Menu” (p.137).
2 Connect the smartphone to the access point.

3 Choose [Switch Network].
   ● Touch [Switch Network].
   ● A list of detected access points will be displayed.

4 Connect to an access point.
   ● For WPS-compatible access points, connect to the access point as described in steps 5 – 8 in “Using WPS-Compatible Access Points” (142).
   ● For non-WPS access points, follow steps 2 – 4 in “Connecting to Listed Access Points” (144) to connect to the access point.

5 Select the camera to connect to.
   ● On the camera selection screen displayed on the smartphone, choose the camera to begin pairing.

6 Configure the privacy settings and send images.
   ● Follow steps 8 – 9 in “Adding a Smartphone Using the Wi-Fi Menu” (137) to configure the privacy settings and send images.

**Previous Access Points**

You can reconnect to any previous access points automatically by following step 4 in “Adding a Smartphone Using the Wi-Fi Menu” (137).

- To use the camera as an access point, choose [Switch Network] on the screen displayed when you establish a connection, and then choose [Camera Access Point Mode].
- To switch access points, choose [Switch Network] on the screen displayed when you establish a connection, and then follow the procedure in “Using Another Access Point” (138) from step 4.

| Connect the smartphone to the access point. | Setting Menu |
| Connect to an access point. | Wireless Features |
| Select the camera to connect to. | Index |
| Configure the privacy settings and send images. | 
| Previous Access Points | 

*Previous Access Points*

You can reconnect to any previous access points automatically by following step 4 in “Adding a Smartphone Using the Wi-Fi Menu” (137).

- To use the camera as an access point, choose [Switch Network] on the screen displayed when you establish a connection, and then choose [Camera Access Point Mode].
- To switch access points, choose [Switch Network] on the screen displayed when you establish a connection, and then follow the procedure in “Using Another Access Point” (138) from step 4.
Saving Images to a Computer

Preparing to Register a Computer

For details on computers that you can connect the camera to via Wi-Fi, system requirements, and other compatibility information (including support in new operating systems), visit the Canon website.

- 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 CameraWindow

1. Download the software.
   - Visit the following site from a computer connected to the Internet.
   - Choose your country or region, and then follow the instructions displayed to prepare for downloading.

2. Follow the instructions displayed.
   - Double-click the downloaded file to install it.

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 an 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.
Saving Images to a Connected Computer

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 “Interface” (page 213). Connection methods vary depending on whether the access point supports Wi-Fi Protected Setup (WPS, page 142) or not (page 144). For non-WPS access points, check the following information.

- 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. Check which security setting is used: WPA2-PSK (AES), WPA2-PSK (TKIP), WPA-PSK (AES), WPA-PSK (TKIP), WEP (open system authentication), or no security.

- 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. Use “1” as the setting.

- 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.

- For information on WPS compatibility and for instructions on checking settings, refer to the access point user manual.

- 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 MENU (page 29) > [4] tab > [Wireless settings] > [Wi-Fi Settings] > [Check MAC Address].
Using 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 computer is connected to an access point.
   ● For instructions on checking the connection, refer to the device and access point user manuals.

2. Access the Wi-Fi menu.
   ● Press the [Wireless] button.

3. Choose [Connect to Computer].
   ● Touch [Connect to Computer].

4. Choose [Add a Device].
   ● Touch [Add a Device].

5. Choose [WPS Connection].
   ● Touch [WPS Connection].

6. Choose [PBC Method].
   ● Touch [PBC Method].

7. Establish the connection.
   ● On the access point, hold down the WPS connection button for a few seconds.
   ● Touch [Next].
   ● The camera connects to the access point and lists devices connected to it on the [Select a Device] screen.

8. Choose the target device.
   ● Touch the name of the target device, and then press the [Enter] button.

Using 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 computer is connected to an access point.
   ● For instructions on checking the connection, refer to the device and access point user manuals.

2. Access the Wi-Fi menu.
   ● Press the [Wireless] button.

3. Choose [Connect to Computer].
   ● Touch [Connect to Computer].

4. Choose [Add a Device].
   ● Touch [Add a Device].

5. Choose [WPS Connection].
   ● Touch [WPS Connection].

6. Choose [PBC Method].
   ● Touch [PBC Method].

7. Establish the connection.
   ● On the access point, hold down the WPS connection button for a few seconds.
   ● Touch [Next].
   ● The camera connects to the access point and lists devices connected to it on the [Select a Device] screen.

8. Choose the target device.
   ● Touch the name of the target device, and then press the [Enter] button.
9 Install a driver (first Windows connection only).

- When this screen 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.

10 Display CameraWindow.

- Windows: Access CameraWindow by clicking [Downloads Images From Canon Camera].

11 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.
- Use Digital Photo Professional to view images you save to a computer. To view movies, use preinstalled or commonly available software compatible with movies recorded by the camera.

  - Once you have connected to devices via the Wi-Fi menu, recent destinations will be listed first when you access the Wi-Fi menu. Simply touch a listed device to connect again. You can register new devices by dragging left or right to access the device selection screen.
  - If you prefer not to display recent target devices, choose MENU (29) > [ ] tab > [Wireless settings] > [Wi-Fi Settings] > [Target History] > [Off].
  - You can also change the camera nickname on the screen in step 2 (158).
  - When the camera is connected to a computer, the camera screen is blank.
  - To disconnect from the camera, turn off the camera.
  - If you chose [PIN Method] in step 6, 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.
  - Once a connection destination is assigned in Touch Actions (119), you can automatically reconnect to a previous destination simply by dragging across the screen with the assigned gesture.
Connecting to Listed Access Points

1 View the listed access points.
- View the listed networks (access points) as described in steps 1 – 4 of “Using WPS-Compatible Access Points” (142).

2 Choose an access point.
- Touch a network (access point) to choose it.

3 Enter the access point password.
- Touch the text box (in the area outlined, in this example) to access the keyboard, and then enter the password (30).
- Touch [Next].

4 Choose [Auto].
- Touch [Auto].
- To save images to a connected computer, follow the procedure from step 8 in “Using WPS-Compatible Access Points” (142).

* To determine the access point password, check on the access point itself or refer to the user manual.
* If no access points are detected even after you choose [Refresh] in step 2 to update the list, choose [Manual Settings] in step 2 to complete access point settings manually. Follow on-screen instructions and enter an SSID, security settings, and a password (141).
* 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, touch [Next].

Previous Access Points

You can reconnect to any previous access points automatically by following step 4 in “Using WPS-Compatible Access Points” (142).
- To connect to a device via an access point, confirm that the target device is already connected to the access point, and then follow the procedure from step 8 in “Using WPS-Compatible Access Points” (142).
- To switch access points, choose [Switch Network] on the screen displayed when you establish a connection, and then either follow the procedure in “Using WPS-Compatible Access Points” (142) from step 5 or the procedure in “Connecting to Listed Access Points” (144) from step 2.
Registering CANON iMAGE GATEWAY

Link the camera and CANON iMAGE GATEWAY by adding CANON iMAGE GATEWAY as a destination Web service on the camera. Note that you will need to enter an email address used on your computer or smartphone to receive a notification message for completing linkage settings.

1 Access the Wi-Fi menu.
   - Press the [Fn] button.

2 Choose [ ].
   - Touch [ ].

3 Accept the agreement to enter an email address.
   - Read the agreement displayed and touch [ I Agree ].

Sending Images to a Registered Web Service

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.

- CANON iMAGE GATEWAY also provides user guides for downloading.
Establish a connection with an access point.
- Connect to the access point as described in steps 5 – 7 in “Using WPS-Compatible Access Points” (142) or in steps 2 – 4 in “Connecting to Listed Access Points” (144).

Enter your email address.
- Once the camera is connected to CANON iMAGE GATEWAY via the access point, a screen is displayed for entering an email address.
- Enter your email address and touch [Next].

Enter a four-digit number.
- Enter a four-digit number of your choice and touch [Next].
- You will need this four-digit number later when setting up linkage with CANON iMAGE GATEWAY in step 8.

Check for the notification message.
- Once information has been sent to CANON iMAGE GATEWAY, you will receive a notification message at the email address entered in step 5.
- Touch [OK] on the next screen, which indicates that notification has been sent.
- [✈️] now changes to [🔥].

Access the page in the notification message and complete camera link settings.
- From a computer or smartphone, access the page linked in the notification message.
- Follow the instructions to complete the settings on the camera link settings page.

Complete CANON iMAGE GATEWAY settings on the camera.
- Touch (🔥). (153) and CANON iMAGE GATEWAY are now added as destinations.
- You can add other Web services, as needed. In this case, follow the instructions from step 2 in “Registering Other Web Services” (147).
Registering Other Web Services

You can also add Web services besides CANON iMAGE GATEWAY to the camera.

1 Log in to CANON iMAGE GATEWAY and access the camera link settings page.
   ● From a computer or smartphone, access http://www.canon.com/cig/ to visit CANON iMAGE GATEWAY.

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 [ ].
   ● Press the [ ] button.
   ● Drag left or right on the screen, and then touch [ ].
   ● The Web service settings are now updated.

   ● If any configured settings change, follow these steps again to update the camera settings.

Uploading Images to Web Services

1 Access the Wi-Fi menu.
   ● Press the [ ] button.

2 Choose the destination.
   ● Touch the icon of the Web service to connect to.
   ● If multiple recipients or sharing options are used with a Web service, touch the desired item on the [Select Recipient] screen displayed, and then press the [ ] button.

3 Send an image.
   ● Drag images left or right to choose an image to send, and then touch [Send this image].
   ● When uploading to YouTube, read the terms of service, and touch [I Agree].
   ● After the image is sent, touch [OK] on the screen displayed to return to the playback screen.
Printing Images Wirelessly from a Connected Printer

Connect the camera to a printer via Wi-Fi to print as follows. These steps show how to use the camera as an access point, but you can also use an existing access point (p.138).

1. Access the Wi-Fi menu.
   - Press the [Wi-Fi] button.

2. Choose [Add a Device].
   - Touch [Add a Device].

3. Choose [Add a Device].
   - Touch [Add a Device].

- The camera SSID and password are displayed.

Connections require that a memory card with saved images be in the camera.
You can also send multiple images at once, resize images, and add comments before sending (p.151).
To view images uploaded to CANON IMAGE GATEWAY on a smartphone, try the dedicated Canon Online Photo Album app. Download and install the Canon Online Photo Album app for iPhones or iPads from the App Store or for Android devices from Google Play.
4 Connect the printer to the network.
○ In the printer’s Wi-Fi setting menu, choose the SSID (network name) displayed on the camera to establish a connection.
○ In the password field, enter the password displayed on the camera.

5 Choose the printer.
○ Touch the name of the printer.

6 Choose an image.
○ Drag left or right across the screen to choose an image.

7 Access the printing screen.
○ Press the [Print] button, choose [Print], and press the [Print] button again.

8 Print the image.
○ For detailed printing instructions, see “Printing Images” (177).
○ To end the connection, press the [OK] button and touch [OK] on the disconnection confirmation screen.

Connections require that a memory card with saved images be in the camera.
Once you have connected to devices via the Wi-Fi menu, recent destinations will be listed first when you access the Wi-Fi menu. You can easily connect again by choosing the device. To add a new device, drag left or right to access the device selection screen, and then configure the setting.
If you prefer not to display recent target devices, choose MENU (29) > [4] tab > [Wireless settings] > [Wi-Fi Settings] > [Target History] > [Off].
To connect without entering a password in step 4, choose MENU (29) > [4] tab > [Wireless settings] > [Wi-Fi Settings] > [Password] > [Off]. [Password] is no longer displayed on the SSID screen (in step 3).
To use another access point, follow steps 3 – 4 in “Using Another Access Point” (138).
Once a connection destination is assigned in Touch Actions (119), you can automatically reconnect to a previous destination simply by dragging across the screen with the assigned gesture.
Sending Images to Another Camera

Connect two cameras via Wi-Fi and send images between them as follows.

- Only Wi-Fi compatible Canon cameras can be connected via Wi-Fi. You cannot connect to a Canon camera unless it is Wi-Fi compatible, even if it supports FlashAir/Eye-Fi cards.

1. **Access the Wi-Fi menu.**
   - Press the [Wi-Fi] button.

2. **Choose [Connect].**
   - Touch [Connect].

3. **Choose [Add a Device].**
   - Touch [Add a Device].
   - 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.

4. **Send an image.**
   - Drag images left or right to choose an image to send, and then touch [Send this image].
   - [Transfer completed] is displayed after the image is sent, and the image transfer screen is displayed again.
   - To end the connection, touch [MENU] in the upper right of the screen, and then touch [OK] on the confirmation screen.

- Connections require that a memory card be in the camera.
- Once you have connected to devices via the Wi-Fi menu, recent destinations will be listed first when you access the Wi-Fi menu. You can easily connect again by choosing the device. To add a new device, drag left or right to access the device selection screen, and then configure the setting.
- If you prefer not to display recent target devices, choose MENU (42) > [4] tab > [Wireless settings] > [Wi-Fi Settings] > [Target History] > [Off].
- You can also send multiple images at once and change the image size before sending (151).
- Once a connection destination is assigned in Touch Actions (119), you can automatically reconnect to a previous destination simply by dragging across the screen with the assigned gesture.

- Only Wi-Fi compatible Canon cameras can be connected via Wi-Fi. You cannot connect to a Canon camera unless it is Wi-Fi compatible, even if it supports FlashAir/Eye-Fi cards.
Image Sending Options

You can choose multiple images to send at once and change the image recording pixel setting (size) before sending. Some Web services also enable you to annotate the images you send.

Sending Multiple Images

1 Choose [Select and send].
   ● On the image transfer screen, touch [Select and send].

2 Choose a selection method.
   ● Touch a selection method, and then press the [OK] button.

Choosing Images Individually

1 Choose [Select].
   ● Following step 2 in “Sending Multiple Images” (151), choose [Select] and press the [OK] button.
2 Choose images.
- Follow steps 2 – 3 in “Selecting a Range” (114) to specify images.
- To include movies, touch [✓] to add a [✓] next to [Incl. Movies].
- Touch [OK].

3 Send the images.
- Touch [Send].

Sending Favorite Images

Send only images tagged as favorites (118).

1 Choose [Favorite Images].
- Following step 2 in “Sending Multiple Images” (151), choose [Favorite Images] and press the [OK] button.
- An image selection screen for favorites is displayed. If you prefer not to include an image, touch the image to remove [✓].
- After you finish choosing images, press the [MENU] button.
- Touch [OK].

2 Send the images.
- Touch [Send].

- In step 1, [Favorite Images] is not available unless you have tagged images as favorites.

Notes on Sending Images

- 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.
- Web services may limit the number of images or length of movies you can send.
- For movies that you do not compress (127), 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.
- When sending movies to smartphones, note that the supported image quality varies depending on the smartphone. For details, refer to the smartphone user manual.
- On the screen, wireless signal strength is indicated by the following icons.
  - [��] high, [中] medium, [低] low, [弱] 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 Number of Recording Pixels (Image Size)

On the image transfer screen, you can choose the recording pixel setting (size) of images to send by touching \( \square \).
- To send images at original size, select [No] as the resizing option.
- Choosing \( \square \) will resize images that are larger than the selected size before sending.
- Movies cannot be resized.

Images size can also be configured in MENU (\( \square \)) > [\( \square \)] tab > [Wireless settings] > [Wi-Fi Settings] > [Resize for Sending].

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.
   - On the image transfer screen, touch \( \square \).
2. Add a comment (\( \square \)).
3. Send the image.
   - When a comment is not entered, the comment set in CANON IMAGE GATEWAY is automatically sent.
   - You can also annotate multiple images before sending them. The same comment is added to all images sent together.

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

Preparing the Camera

Register \( \square \) as the destination. On the destination computer, you will install and configure Image Transfer Utility, free software compatible with Image Sync.

1. Add \( \square \) as a destination.
   - Add \( \square \) as a destination, as described in “Registering CANON IMAGE GATEWAY” (\( \square \)).
   - To include a Web service as the destination, log in to CANON IMAGE GATEWAY (\( \square \)). select your camera model, access the Web service settings screen, and choose the destination Web service in Image Sync settings. For details, refer to CANON IMAGE GATEWAY Help.
Preparing the Computer

Install and configure the software on the destination computer.

1 **Install Image Transfer Utility.**
   - Install Image Transfer Utility on a computer connected to the Internet by following steps 1 – 2 of “Installing CameraWindow” (140).
   - Image Transfer Utility can also be downloaded from the Image Sync settings page of CANON iMAGE GATEWAY (153).

2 **Register the camera.**
   - Windows: In the taskbar, right-click [ ] and then click [Add new camera].
   - Mac OS: In the menu bar, click [ ], and then click [Add new camera].
   - A list of cameras linked to CANON iMAGE GATEWAY is displayed. Choose the camera from which images are to be sent.
   - Once the camera is registered and the computer is ready to receive images, the icon changes to [ ].

2 **Choose the type of images to send (only when sending movies with images).**
   - Press the [MENU] button, choose [Wireless settings] on the [ ] tab, and then choose [Wi-Fi Settings] (29).
   - Choose [Image Sync], press the [ ] button, and then choose [Stills/Movies].
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.

1 Send images.
   ● Follow steps 1 – 2 in “Uploading Images to Web Services” (147) and choose (1).
   ● Sent images are labeled with a (1) icon.

2 Save the images to the computer.
   ● 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.

   • 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.

Viewing Images Sent via Image Sync on a Smartphone

By installing the Canon Online Photo Album (Canon OPA) app, you can use your smartphone to view and download images sent via Image Sync while they are stored temporarily on the CANON iMAGE GATEWAY server.

In preparation, enable smartphone access as follows.

   ● Make sure you have completed the settings described in “Preparing the Computer” (154).

   ● Download and install the Canon Online Photo Album app for iPhones or iPads from the App Store or for Android devices from Google Play.

   ● Log in to CANON iMAGE GATEWAY (145), select your camera model, access the Web service settings screen, and enable viewing and downloading from a smartphone in the Image Sync settings. For details, refer to CANON iMAGE GATEWAY Help.

Once images stored temporarily on the CANON iMAGE GATEWAY server have been deleted, they can no longer be viewed.

Images you sent before enabling smartphone viewing and downloading in Image Sync settings cannot be accessed this way.

For Canon Online Photo Album instructions, refer to Canon Online Photo Album Help.
Using a Smartphone to View Camera Images and Control the Camera

You can do the following with the dedicated smartphone app Camera Connect.
- Browse images on the camera and save them to the smartphone
- Geotag images on the camera (156)
- Control the camera remotely from a smartphone (156)

**Geotagging Images on the Camera**

GPS data recorded on a smartphone using the dedicated Camera Connect application 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, as described in “Setting the Date and Time” (20). Also follow the steps in “World Clock” (165) to specify any shooting destinations in other time zones.
- 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.

Controlling the Camera Remotely from a Smartphone

**Controlling the Camera via Wi-Fi**

You can shoot as you view a shooting screen on your smartphone.

- Privacy settings must be configured in advance to allow viewing of all images from the smartphone (137).

1. **Secure the camera.**
   - Keep the camera still by mounting it on a tripod or taking other measures.

2. **Connect the camera and smartphone (137).**
   - In the privacy settings, choose [Yes].

3. **Choose remote live view shooting.**
   - In Camera Connect on the smartphone, choose [Remote live view shooting].
   - Once the camera is ready for remote live view shooting, a live image from the camera is displayed on the smartphone.
   - At this time, a message is displayed on the camera, and all operations except pressing the power button are disabled.

4. **Shoot.**
   - Use the smartphone to shoot.
Controlling the Camera via Bluetooth

You can use a Bluetooth enabled smartphone for remote shooting and switching of image display. This is convenient if you want to connect quickly while shooting, or if you will control playback while connected to a TV.

1 Prepare the camera.
   ● Set the shooting mode and the shooting functions on the camera.
   ● Keep the camera still by mounting it on a tripod or taking other measures when shooting.

2 Connect the camera and smartphone (133).
   ● Make sure that the Bluetooth connection has been established.

3 Choose Bluetooth remote controller.
   ● In Camera Connect on the smartphone, choose [Bluetooth remote controller].
   ● The smartphone screen changes to a screen for remote control via Bluetooth.

4 Shoot and switch images.
   ● Use the smartphone to shoot in Shooting mode and switch images in Playback mode.

   ● [Bluetooth remote controller] is not available when connected via Wi-Fi.

   ● You can check the Bluetooth connection status by referring to the icon on the screen (133).

   ● Movie shooting is not available.
   ● Focusing may take longer.
   ● Image display or shutter release may be delayed, depending on the connection status.

   ● Any rough subject motion shown on the smartphone due to the connection environment will not affect recorded images.
   ● Captured images are not transferred to the smartphone. Use the smartphone to browse and transfer images from the camera.

   ● Movie shooting is not available.
   ● Focusing may take longer.
   ● Image display or shutter release may be delayed, depending on the connection status.
Editing or Erasing Wi-Fi Settings

Edit or erase Wi-Fi settings as follows.

**Editing Connection Information**

1. Access the Wi-Fi menu and choose a device to edit.
   - Press the [Fn] button.
   - Drag left or right to access the device selection screen, and then touch the icon of a device to edit.

2. Choose [Edit a Device].
   - Touch [Edit a Device], and then press the [Fn] button.

3. Choose the device to edit.
   - Touch the device to edit, and then press the [Fn] button.

4. Choose the item to edit.
   - Touch the item you want to edit.
   - The items you can change depend on the device or service.

<table>
<thead>
<tr>
<th>Configurable Items</th>
<th>Connection</th>
<th>Web Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Change Device Nickname]</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>(158)</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>[View Settings]</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>(159)</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>[Erase Connection Info]</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>(158)</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

O : Configurable – : Not configurable

**Changing a Device Nickname**

You can change the device nickname (display name) that is displayed on the camera.

- Following step 4 in “Editing Connection Information” (158), choose [Change Device Nickname] and press the [Fn] button.
- Press the [Fn] button and a keyboard will be displayed. Enter the new nickname (30).

**Erasing Connection Information**

Erase connection information (information about devices that you have connected to) as follows.

- Following step 4 in “Editing Connection Information” (158), choose [Erase Connection Info] and press the [Fn] button.
- After [Erase?] is displayed, touch [OK].
- The connection information will be erased.
### Specifying Images Viewable from Smartphones

Specify whether all images on the camera’s memory card can be viewed from smartphones connected to the camera.

- Choose [View Settings] in step 4 of “Editing Connection Information” (158) and choose the desired option.

- For remote live view shooting, choose [On].

### Changing the Camera Nickname

Change the camera nickname (displayed on connected devices) as desired.

1. **Choose [Wireless settings].**

2. **Choose [Nickname].**

3. **Change the nickname.**
   - Press the [3] button to access the keyboard (30), and then enter a nickname.

- A message is displayed if the nickname you enter begins with a symbol or space. Press the [3] button and enter a different nickname.
- You can also change the nickname from the [Device Nickname] screen displayed when you first use Wi-Fi. In this case, select the text box, press the [3] button to access the keyboard, and then enter a new nickname.
Clearing Information of Devices Paired via Bluetooth

Before pairing with a different smartphone, clear the information about any connected smartphones.

1. Choose [Bluetooth settings].

2. Choose [Check/clear connection info].
   - Choose [Check/clear connection info], and then press the [3] button.

3. Clear the information.
   - When [Clear information about devices you have connected to] is displayed, touch [OK].

4. Clear the camera information.
   - In the Bluetooth setting menu on the smartphone, clear the camera information registered on the smartphone.

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. 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.

1. Choose [Wireless settings].

2. Choose [Reset Settings].
   - Choose [Reset Settings], and then press the [3] button.

3. Restore the default settings.
   - Touch [OK].
   - The Wi-Fi settings are now reset.

   To reset other settings (aside from Wi-Fi) to defaults, choose [Reset camera] on the [5] tab (169).
Setting Menu

Customize or adjust basic camera functions for greater convenience

Adjusting Basic Camera Functions

MENU (29) settings on the [1], [2], [3], [4], and [5] tabs can be configured. Customize commonly used functions as desired, for greater convenience.

- **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] on the [1] tab, and then choose [Daily].
  - Images will now be saved in folders created on the shooting date.

- **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] on the [1] tab, 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. |
Low-Level Formatting

Perform low-level formatting in the following 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 2 of “Formatting Memory Cards” (p. 162), press the [INFO] button to choose [Low Level Format]. A [✓] icon is displayed.
- Follow step 2 in “Formatting Memory Cards” (p. 162) to continue with the formatting process.
- Low-level formatting takes longer than “Formatting Memory Cards” (p. 162), 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.

Changing the Video System

Set the video system of any television used for display. This setting determines the image quality (frame rate) available for movies.

- Choose [Video system] on the [1] tab, and then choose an option.
Switching the Color of Screen Information
Information displayed on the 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 [ahi] (60).

2 To restore the original display, choose [Off].

You can also return the setting to [Off] by holding down the INFO button for at least one second.

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.
   1 Choose [Eco Mode] on the [ahi] tab, and then choose [On].
   2 [Eco] is now shown on the shooting screen (ahi 192).
   3 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.

Electronic Level Calibration
Calibrate the electronic level if it seems ineffective in helping you level the camera. For greater calibration accuracy, display grid lines (ahi 98) to help you level the camera in advance.

1 Make sure the camera is level.
   1 Place the camera on a flat surface, such as a table.
2 Calibrate the electronic level.
   1 Choose [Electronic level] on the [ahi] tab, and then press the INFO button.
   2 Choose [Calibrate] and press the INFO button. A confirmation message is displayed.
   3 Touch [OK].

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.

1 Choose [Electronic level] on the [ahi] tab, and then press the INFO button.
2 Choose [Reset], and then press the INFO button.
3 Touch [OK].
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 (p. 26).

- Choose an item, and then choose an option.

- For maximum brightness, press and hold the [INFO] button for at least one second. (This will override the [Disp. Brightness] setting on the [2] tab.) To restore the original brightness, press and hold the [INFO] button again for at least one second or restart the camera.

- 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 (p. 163) to [On].

- Touch [和] to adjust the brightness.
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.

1 Specify your home time zone.

- When configuring this setting for the first time, make sure [Home] is selected, and then press the [Set] button.
- Touch [Home] to choose the home time zone. To set daylight saving time (1 hour ahead), touch [±].
- Press the [Set] button.

2 Specify your destination.

- Touch [World], and then press the [Set] button.
- Touch [World] to choose the destination time zone.
- If necessary, specify daylight saving time as in step 1.
- Press the [Set] button.

3 Switch to the destination time zone.

- Make sure [World] is selected, and then press the [MENU] button.
- [World] is now shown on [Time Zone] and shooting screens (192).

Date and Time

Adjust the date and time as follows.

- Choose [Date/Time] on the [2] tab, and then press the [Set] button.
- Touch the option to configure, and then touch [A][V] to specify the date and time.

Lens Retraction Timing

The lens is normally retracted for safety about one minute after you press the [Set] button in Shooting mode (19). To have the lens retracted immediately after you press the [Set] button, set the retraction timing to [0 sec.].

- Choose [Lens Retraction] on the [2] tab, and then choose [0 sec.].
Adjusting the Volume

Adjust the volume of individual camera sounds as follows.

- Choose [Volume] on the [F3] tab, and then press the [INFO] button.
- Choose an item, and then adjust the volume by touching the desired position on the bar.

Customizing Sounds

Customize camera operating sounds as follows.

- Choose [Sound Options] on the [F3] tab, and then press the [INFO] button.
- Choose an item, and then press the [INFO] button.
- Choose an option.

- The shutter sound in digest movies recorded in [F2] mode (=35) cannot be changed.

Start-Up Screen

Customize the start-up screen shown after you turn the camera on as follows.

- Choose [Start-up Image] on the [F1] tab, and then press the [INFO] button.
- Choose an option.
**Automatically Locking the Touch-Screen Panel**

To prevent unintended operations, you can set up automatic locking of the touch-screen panel.

- Choose [Screen auto lock], and then choose [Enable].
- Choose [Auto-locks after], and then choose an option.
- To unlock the touch-screen panel, press the shutter button halfway.

**Metric / Non-Metric Display**

Change the unit of measurement shown in the zoom bar (33), the MF indicator (82), and elsewhere from m/cm to ft/in as needed.

- Choose [Units] on the [4] tab, and then choose [ft/in].

**Hiding Hints and Tips**

Hints and tips are normally shown when you choose Quick Set menu (28) items. If you prefer, you can deactivate this information.

- Choose [Hints & Tips] on the [9] tab, and then choose [Off].

**Listing Shooting Modes by Icon**

List shooting modes on the selection screen by icon only, without mode names, for faster selection.

- Choose [Mode icon size/info] on the [9] tab, and then choose [Small, no info].

**Increasing Touch-Screen Panel Sensitivity**

Sensitivity of the touch-screen panel can be increased, so that the camera responds to a lighter touch.

- Choose [Touch Operation] on the [9] tab, and then choose [Sensitive].
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.


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 [Enter Author’s Name] or [Enter Copyright Details], press the [5] button to access the keyboard, and then enter the name (max 30).
- Press the [MENU] button. When [Accept changes?] is displayed, touch [Yes].
- 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 [5] button.

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” (168) and choose [Delete Copyright Info].
- Touch [OK].

- The copyright info already recorded in images will not be deleted.

Adjusting Other Settings

The following settings can also be adjusted.

- [5] tab setting [Custom shooting mode (C)] (100)
Restoring Default Camera Settings

If you accidentally change a setting, you can restore default camera settings.

Restoring All Camera Defaults

   - Choose [Basic settings] and press the [8] button.

2. Restore default settings.
   - Touch [OK].
   - All camera defaults are now restored.

Restoring Defaults for Individual Functions

Settings for the following functions can be restored to defaults individually.
- User settings for custom shooting modes
- Copyright information
- Calibrated value for the electronic level
- Face ID information
- Wireless settings

   - Choose [Other settings] and press the [8] button.

2. Choose the function to reset.
   - Choose the function to reset, and then press the [8] button.

3. Restore default settings.
   - Touch [OK].
   - Default function settings are now restored.

The following functions are not restored to default settings.
- [1] tab setting [Video system] (162)
- [2] tab settings [Time Zone] (165) and [Date/Time] (165)
- [9] tab setting [Language] (166)
- Shooting mode (153)
- Wireless settings (132)
- Calibrated value for the electronic level (163)
- Copyright information (163)
- Face ID information
Accessories

Enjoy the camera in more ways with optional Canon accessories and other compatible accessories sold separately.

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 any repairs your Canon product may require as a result of such malfunction are not covered under warranty and will incur a fee.

*1 Also available for purchase separately.
*2 A genuine Canon accessory is also available (Interface Cable IFC-600PCU).
*3 Use a commercially available cable no longer than 2.5 m (8.2 ft.).
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-13L
- Rechargeable lithium-ion battery

Battery Charger CB-2LH/CB-2LHE
- Charger for Battery Pack NB-13L

- The battery charger and compact power adapter 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 Unit

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.

- High-Power Flash units cannot be used in [M], [Av], or [Tv] shooting mode when [Flash Mode] is set to [Manual].

Other Accessories

Interface Cable IFC-600PCU
- For connecting the camera to a computer or printer.

Compact Power Adapter CA-DC30/CA-DC30E
- Insert the included battery pack into the camera for charging. Interface Cable IFC-600PCU (sold separately) is required to connect the adapter to the camera.

- The message [Battery communication error] is displayed if you use a non-genuine Canon battery pack, and user response is required. Note that Canon shall not be liable for any damages resulting from accidents, such as malfunction or fire, that occur due to use of non-genuine Canon battery packs.

- The battery pack includes a convenient cover which you can attach to know the charge status at a glance. Attach the cover so that ▲ is visible on a charged battery pack, and attach it so that ▲ is not visible on an uncharged battery pack.

- The battery charger and compact power adapter 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.
Using Optional Accessories

Playback on a TV

You can view your shots on a TV by connecting the camera to an HDTV with a commercially available HDMI cable (not exceeding 2.5 m / 8.2 ft., with a Type D terminal on the camera end). Movies shot at an image quality of [**], [**], [**], [**], [**], or [**] can be viewed in high definition. For details on connection or how to switch inputs, refer to the TV manual.

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.
Inserting and Charging the Battery Pack

Charge the battery pack by using the supplied battery pack with an optional Compact Power Adapter CA-DC30/CA-DC30E and Interface Cable IFC-600PCU.

1 Insert the battery pack.
- Follow step 1 in “Inserting the Battery Pack and Your Memory Card” (p. 19) to open the cover.
- Insert the battery pack as described in step 2 of “Inserting the Battery Pack and Your Memory Card” (p. 19).
- Follow step 4 in “Inserting the Battery Pack and Your Memory Card” (p. 19) to close the cover.

2 Connect the compact power adapter to the camera.
- With the camera turned off, open the cover (1). Hold the smaller plug of the interface cable (sold separately) facing as shown and insert the plug fully into the camera terminal (2).
- Insert the larger plug of the interface cable into the compact power adapter.

3 Turn the TV on and switch to external input.
- Switch the TV input to the external input you connected the cable to in step 2.

4 Turn the camera on.
- Press the [ ] button.
- 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.

- Some information may not be displayed when viewing images on a TV (p. 193).
- Camera operating sounds are not played while the camera is connected to an HDTV.
3 Charge the battery pack.

- CA-DC30: Flip out the plug (1) and plug the charger into a power outlet (2).

- CA-DC30E: Plug the power cord into the compact power adapter, then plug the other end into a power outlet.

- Charging begins and the USB charge lamp lights up.
- The lamp turns off when charging finishes.
- Remove the compact power adapter from the power outlet and the interface cable from the camera.

- For details on charging time and the number of shots and recording time possible with a fully charged battery pack, see “Power” (212).
- You can view images even while the battery is charging, by turning the camera on and entering Playback mode (223). However, you cannot shoot while the battery is charging.
- 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.
- 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.

Using a Computer to Charge the Battery

You can also charge the battery pack by inserting the larger plug of the interface cable into a computer’s USB terminal in step 2 of “Inserting and Charging the Battery Pack” (173). For details about USB connections on the computer, refer to the computer user manual. We recommend using Interface Cable IFC-600PCU (sold separately).

- With the camera turned off, open the cover. With the smaller plug of the cable in the orientation shown, insert the plug fully into the camera terminal.

- Connect the larger cable plug to the computer. For details on computer connections, refer to the computer user manual.
Using the Software

To utilize the features of the following software, download the software from the Canon website and install it on your computer.

- **CameraWindow**
  - Import images to your computer
  - Add Picture Styles saved on your computer to the camera
- **Image Transfer Utility**
  - Set up Image Sync (153) and receive images
- **Map Utility**
  - Use a map to view GPS information that has been added to images
- **Digital Photo Professional**
  - Browse, process and edit RAW images
- **Picture Style Editor**
  - Edit Picture Styles and create and save Picture Style files

- To view and edit movies on a computer, use preinstalled or commonly available software compatible with movies recorded by the camera.

- Image Transfer Utility can also be downloaded from the Image Sync settings page of CANON iMAGE GATEWAY.

Charging now begins, and the indicator on the back of the camera blinks in green. Charging will be finished in about four hours.

However, charging may take longer if you import images on the camera to the computer, as described in “Saving Images to a Computer” (176).

The indicator continues to blink in green even after charging is finished, as long as the camera is connected to the computer.

Charging stops and the indicator goes off if, after you begin charging as described above, you press the power button to turn the camera off.

With some computers, battery charging may require the memory card to be in the camera. Insert the memory card in the camera (19) before connecting the cable to the computer’s USB port.
Computer Connections via a Cable

Checking Your Computer Environment

For detailed software system requirements and compatibility information (including support in new operating systems), visit the Canon website.

Installing the Software

Install the software as described in steps 1 – 2 of “Installing CameraWindow” (140).

To uninstall (remove) the software in Mac OS, in the [Canon Utilities] folder within the [Applications] folder, drag the folder of the software for uninstallation to the Trash, and then empty the Trash.

Saving Images to a Computer

Using a USB cable (sold separately; camera end: Micro-B), you can connect the camera to the computer and save images to the computer.

1. Connect the camera to the computer.
   - With the camera turned off, open the cover. With the smaller plug of the cable in the orientation shown, insert the plug fully into the camera terminal.
   - Connect the larger cable plug to the computer. For details on computer connections, refer to the computer user manual.
   - Once you have connected the camera to the computer, the camera turns on automatically.

2. Access CameraWindow.
   - Mac OS: CameraWindow is displayed when a connection is established between the camera and computer.
   - Windows: Follow the steps introduced below.
   - In the screen that is displayed, click the change program link of [ ].
   - 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.
- To view images you save to a computer, use preinstalled or commonly available software compatible with images captured by the camera.

Printing Images

3 Still Images 4 Movies

Print your shots and configure a variety of settings used for your printer or photo printing services by connecting the camera to a PictBridge-compatible printer with a cable. A Canon SELPHY CP printer is used in this example of PictBridge printing. Also refer to your printer user manual.

Easy Print

Still Images Movies

Print your shots by connecting the camera to a PictBridge-compatible printer with a USB cable (sold separately; camera end: Micro-B).

1 Make sure the camera and printer are off.

2 Connect the camera to the printer.
- Open the terminal 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.

- Windows 7: If the screen in step 2 is not displayed, click the icon in the taskbar.
- Mac OS: If CameraWindow is not displayed after step 2, 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.
3 Turn the printer on.

4 Choose an image.
   ● Drag left or right across the screen to choose an image.

5 Access the printing screen.
   ● Press the [ ] button, choose [ ], and press the [ ] button again.

6 Print the image.
   ● Choose [Print] and press the [ ] button.
   ● Printing now begins.
   ● To print other images, repeat the above procedures starting from step 4 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” (172).

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**Configuring Print Settings**

1 Access the printing screen.
   ● Follow steps 1 – 5 in “Easy Print” (177) to access this screen.

2 Configure the settings.
   ● Touch an item, and on the next screen, choose an option. Press the [ ] button to return to the printing screen.

<table>
<thead>
<tr>
<th>Item</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Default</td>
<td>Matches current printer settings.</td>
</tr>
<tr>
<td>File No.</td>
<td>Default</td>
<td>Prints images with the file number added.</td>
</tr>
<tr>
<td>Both</td>
<td>Default</td>
<td>Prints images with both the date and file number added.</td>
</tr>
<tr>
<td>Off –</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Red-Eye 1</td>
<td>Off</td>
<td>Uses information from the time of shooting to print under optimal settings.</td>
</tr>
<tr>
<td>Cropping</td>
<td>–</td>
<td>Choose a desired image area to print (179).</td>
</tr>
<tr>
<td>Paper Settings</td>
<td>–</td>
<td>Specify the paper size, layout, and other details (179).</td>
</tr>
</tbody>
</table>
Choosing Paper Size and Layout before Printing

1. Choose [Paper Settings].
   - After following step 1 in “Configuring Print Settings” (178) to access the printing screen, touch [Paper Settings].

2. Choose a paper size.
   - Choose an option, and then press the [ ] button.

3. Choose a type of paper.
   - Choose an option, and then press the [ ] button.

4. Choose a layout.
   - Choose an option, and then press the [ ] button.
   - When choosing [N-up], specify the number of images per sheet.
   - Press the [ ] button.

5. Print the image.
   - Follow step 6 in “Easy Print” (177) to print.

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” (178) to access the printing screen, touch [Cropping].
   - 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, drag it.
   - To rotate the frame, press the [INFO] button.
   - When finished, press the [ ] button.

3. Print the image.
   - Follow step 6 in “Easy Print” (177) to print.

- Cropping may not be possible at small image sizes, or at some aspect ratios.
Available Layout Options

<table>
<thead>
<tr>
<th>Default</th>
<th>Matches current printer settings.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bordered</td>
<td>Prints with blank space around the image.</td>
</tr>
<tr>
<td>Borderless</td>
<td>Borderless, edge-to-edge printing.</td>
</tr>
<tr>
<td>N-up</td>
<td>Choose how many images to print per sheet.</td>
</tr>
<tr>
<td>ID Photo</td>
<td>Prints images for identification purposes. Only available for images with a recording pixel setting of L and an aspect ratio of 3:2.</td>
</tr>
<tr>
<td>Fixed Size</td>
<td>Choose the print size. Choose from 3.5 x 5 in., postcard, or wide-format prints.</td>
</tr>
</tbody>
</table>

Printing ID Photos

1. **Choose [ID Photo].**
   - Following steps 1 – 4 in “Choosing Paper Size and Layout before Printing” (179), choose [ID Photo] and press the [OK] button.

2. **Choose the long and short side length.**
   - Choose an item and press the [OK] button. On the next screen, choose the length, and then press the [OK] button.

3. **Choose the printing area.**
   - Choose [Cropping] and press the [OK] button.
   - Follow step 2 in “Cropping Images before Printing” (179) to choose the printing area.

4. **Print the image.**
   - Follow step 6 in “Easy Print” (177) to print.

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**Printing Movie Scenes**

1. **Access the printing screen.**
   - Follow steps 1 – 5 in “Easy Print” (177) to choose a movie. The screen at left is displayed.

2. **Choose a printing method.**
   - Choose [Single] and press the [OK] button. On the next screen, choose an option, and then press the [OK] button to return to the printing screen.

3. **Print the image.**
   - Follow step 6 in “Easy Print” (177) to print.

**Movie Printing Options**

<table>
<thead>
<tr>
<th>Single</th>
<th>Prints the current scene as a still image.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sequence</td>
<td>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].</td>
</tr>
</tbody>
</table>
Adding Images to the Print List (DPOF)

Batch printing (1183) 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.

2. Choose [Print Settings], and then press the [SET] button. On the next screen, choose and configure items as needed.

- Not all of your DPOF settings may be applied in printing by the printer or photo development service, in some cases.
- [1] 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.
- 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 [2] tab (220).

Specifying [Index] 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 Up Printing for Individual Images

1. Choose [Select Images & Qty.].
   - Choose [Select Images & Qty.], and then press the [OK] button.

2. Choose an image.
   - Drag left or right across the screen to choose an image.
   - If you specify index printing for the image, it is labeled with a [✓] icon. To cancel index printing for the image, press the [OK] button again. [✓] is no longer displayed.

3. Specify the number of prints.
   - Touch [▲▼] 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.
   - 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” (182), choose [Select Range] and press the [OK] button.
- Follow steps 2 – 3 in “Selecting a Range” (114) to specify images.
- Touch [Order].

Setting Up Printing for All Images

- Following step 1 in “Setting Up Printing for Individual Images” (182), choose [Select All Images] and press the [OK] button.
- Touch [OK].

Clearing All Images from the Print List

- Following step 1 in “Setting Up Printing for Individual Images” (182), choose [Clear All Selections] and press the [OK] button.
- Touch [OK].
Adding Images Individually

1. Choose [Select].
   - When images have been added to the print list (181 – 182), this screen is displayed after you connect the camera to a PictBridge-compatible printer. Choose [Print now], and then simply press the [OK] button to print the images in the print list.
   - Any DPOF print job that you temporarily stop will be resumed from the next image.

2. Choose an image.
   - Choose an image after dragging left or right to browse. Press the [OK] button.
   - [OK] is displayed.
   - To remove the image from the photobook, press the [OK] button again. [OK] is no longer displayed.
   - Repeat this process to specify other images.
   - When finished, press the [OK] button to return to the menu screen.

Adding Images to a Photobook

Photobooks can be set up on the camera by choosing up to 998 images on a memory card and using CameraWindow to import them to your computer (175), where they are copied to 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 [4] tab, and then choose how you will select images.

! IMPORTANT: [11] 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.

Adding All Images to a Photobook

- Following the procedure in “Choosing a Selection Method” (183), choose [Select All Images] and press the [OK] button.
- Touch [OK].

Printing Images Added to the Print List (DPOF)

Adding Images Individually

1. Choose [Select].
   - When images have been added to the print list (181 – 182), this screen is displayed after you connect the camera to a PictBridge-compatible printer. Choose [Print now], and then simply press the [OK] button to print the images in the print list.
   - Any DPOF print job that you temporarily stop will be resumed from the next image.

2. Choose an image.
   - Choose an image after dragging left or right to browse. Press the [OK] button.
   - [OK] is displayed.
   - To remove the image from the photobook, press the [OK] button again. [OK] is no longer displayed.
   - Repeat this process to specify other images.
   - When finished, press the [OK] button to return to the menu screen.

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Adding All Images to a Photobook

- Following the procedure in “Choosing a Selection Method” (183), choose [Select All Images] and press the [OK] button.
- Touch [OK].
Removing All Images from a Photobook

- Following the procedure in “Choosing a Selection Method” (183), choose [Clear All Selections] and press the [OK] button.
- Touch [OK].
Appendix

Helpful information when using the camera

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 (18).
- Confirm that the battery pack is inserted facing the correct way (19).
- Confirm that the memory card/battery cover is fully closed (19).
- 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.
- Dirty battery terminals reduce battery performance. Try cleaning the terminals with a cotton swab and reinserting the battery pack a few times.
- 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 (19).

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 are not displayed on a TV (172).
Shooting

Cannot shoot.
● In Playback mode (103), press the shutter button halfway (26).

Strange display on the screen under low light (27).

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.

Full-screen display is not available while shooting (47).

 ($) flashes on the screen when the shutter button is pressed, and shooting is not possible (36).
(.faces) is displayed when the shutter button is pressed halfway (36).
● Set [IS Mode] to [Continuous] (51).
● Raise the flash and set the flash mode to (89).
● Increase the ISO speed (74).
● 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 (51).

Shots are out of focus.
● Press the shutter button halfway to focus on subjects before pressing it all the way down to shoot (26).
● Make sure subjects are within focusing range (210).
● Set [AF-assist beam firing] to [Enable] (52).
● Confirm that unneeded functions such as macro are deactivated.
● Try shooting with focus lock or AF lock (84, 88).

Shots are blurry.
● Blurring may occur more often when Touch Shutter is used to shoot, depending on shooting conditions. Hold the camera still when shooting.

Continuous shooting suddenly stops.
● Continuous shooting stops automatically after about 2,000 shots are taken at one time. Release the shutter button a moment before you resume shooting.

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 ($) (89).
● Adjust brightness by using exposure compensation (73).
● Adjust brightness by using the Auto Lighting Optimizer (76).
● Use AE lock or spot metering (73, 73).

Subjects look too bright, highlights are washed-out.
● Lower the flash and set the flash mode to (33).
● Adjust brightness by using exposure compensation (73).
● Use AE lock or spot metering (73, 73).
● Reduce the lighting on subjects.

Shots look too dark despite the flash firing (36).
● Shoot within flash range (211).
● Adjust brightness by using flash exposure compensation or changing the flash output level (90, 95).
● Increase the ISO speed (74).

Subjects in flash shots look too bright, highlights are washed-out.
● Shoot within flash range (211).
● Adjust brightness by using flash exposure compensation or changing the flash output level (90, 95).

White spots 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 (74).
● High ISO speeds in some shooting modes may cause grainy images (53).
Subjects are affected by red-eye.
- Set [Red-Eye Lamp] to [On] ( página 52). The red-eye reduction lamp ( página 4) will light up for 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 ( página 123).

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 ( página 162).

Shooting settings or Quick Set menu settings are not available.
- Available setting items vary by shooting mode. Refer to “Functions Available in Each Shooting Mode”, “Quick Set Menu”, and “Shooting Tab” ( página 195 – 200).

The Babies or Children icon is not displayed.
- The Babies and Children icons will not be displayed if the birthday is not set in face information ( página 43). If the icons still are not displayed even when you set the birthday, re-register face information ( página 43), or make sure that the date/time is set correctly ( página 165).

Touch AF or Touch Shutter does not work.
- Touch AF or Touch Shutter will not work if you touch the edges of the screen. Touch closer to the center of the screen.
- If [Screen auto-lock settings] is set to [Enable], unlock the touch-screen panel ( página 167).

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 ( página 162, 212).

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 ( página 162).
  - Lower the image quality ( página 49).
  - Switch to a memory card that supports high-speed recording ( página 212).

Zooming is not possible.
- Zooming is not possible in mode ( página 60).
- Zooming is not possible when shooting movies in ( página 57) and ( página 69) modes.

Subjects look distorted.
- Subjects that pass in front of the camera quickly may look distorted. This is not a malfunction.

Linear noise is recorded.
- Linear noise may be recorded if lights or other sources of bright light are visible on the shooting screen in an otherwise dark scene. Recompose the shot so that the bright light is not visible on the shooting screen or nearby.

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.

Playback stops, or audio skips.
- Switch to a memory card that you have performed low-level formatting on with the camera ( página 162).
- 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 ( página 23) if you have activated [Mute] ( página 166) or the sound in the movie is faint.
- No sound is played for movies shot in ( página 57), ( página 63, 69), or ( página 71) mode because audio is not recorded in these modes.

Cannot access the Story Highlights home screen by touching .
- Home screen display is not possible when connected to a printer. Disconnect the camera from the printer.
- Home screen display is not possible during Wi-Fi connections. End the Wi-Fi connection.
A desired subject icon for an album is not displayed on the Story Highlights home screen.

- In simple information display mode (105), choose an image that shows the name of the person for the album before accessing the Story Highlights home screen (128).

**Memory Card**

The memory card is not recognized.

- Restart the camera, with the memory card in it (25).

**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.
  - While holding the shutter button and zoom lever toward [ ], press the [ ] button. In Playback mode, move the zoom lever toward [ ], and on the next screen, choose [ ] and press the [ ] button.

**Wi-Fi**

Cannot access the Wi-Fi menu.

- In Playback mode, the Wi-Fi menu cannot be accessed during magnified display or index display. Switch to single-image display and try again. Similarly, 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 (158).
- Use a computer or smartphone to register Web services (145).
- To add a smartphone, first install the dedicated application Camera Connect on your smartphone (137).
- To add a computer, first install the software CameraWindow on your computer. Also check your computer and Wi-Fi environment and settings (140, 141).
- Do not use the camera near sources of Wi-Fi signal interference such as microwave ovens 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 (213). 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 switch of the memory card in the destination camera is set to the locked position. Slide the write-protect switch to the unlocked position.
- RAW images cannot be sent. For images captured in both JPEG and RAW format, only the JPEG version is sent. However, RAW images can be sent using Image Sync.
- 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 (153). 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 recording pixel 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 reduce sending time (153).
- Movies may take a long time to send.
- Do not use the camera near sources of Wi-Fi signal interference such as microwave ovens 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.

No notification message is received on a computer or smartphone after adding CANON iMAGE GATEWAY to the camera.
- Make sure the email address you entered is correct, and try adding the destination again.
- Check the email settings on the computer or smartphone. If they are configured to block email from certain domains, you may not be able to receive the notification message.

Want to erase Wi-Fi connection information before disposing of the camera or giving it to someone else.
- Reset the Wi-Fi settings (160).

On-Screen Messages

If an error message is displayed, respond as follows.

Shooting or Playback

No memory card
- The memory card may be inserted facing the wrong way. Reinsert the memory card facing the correct way (19).

Memory card locked
- The write-protect switch of the memory card is set to the locked position. Switch the write-protect switch to the unlocked position (19).

Cannot record!
- Shooting was attempted without a memory card in the camera. To shoot, insert a memory card facing the correct way (19).

Memory card error (162)
- 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 (19), contact a Canon Customer Support Help Desk.

Insufficient space on card
- There is not enough free space on the memory card to shoot (33, 53, 72, 92) or edit images (120). Either erase unneeded images (115) or insert a memory card with enough free space (19).

Touch AF unavailable
- Touch AF is not available in the current shooting mode (195).

Touch AF canceled
- The subject selected for Touch AF can no longer be detected (88).

Charge the battery (18)

No Image.
- The memory card does not contain any images that can be displayed.

Protected! (113)
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 (177) 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 (179). 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.

Unidentified Image/Incompatible JPEG/Image too large./Cannot play back MOV/Cannot play back MP4
- 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 rotate/Cannot modify image/Cannot modify/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* (110), Magnify* (111), Rotate* (117), Favorites (118), Edit* (120), Print List* (181), and Photobook Set-up* (183).

Invalid selection range
- When specifying a range for image selection (114, 116, 118), 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 (181) or Photobook Set-up (183). Choose 998 images or less.
  - Print List (181) or Photobook Set-up (183) 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 (113), Erase (115), Favorites (116), Print List (181), or Photobook Set-up (183).

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] (161), or format the memory card (162).

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.
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 switch of the memory card in the camera to receive the images is set to the locked position. Slide the write-protect switch 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 (153) to your computer.

Check network settings
- Check to make sure your computer can connect to the Internet with the current network settings.

Wi-Fi

Connection failed
- No access points were recognized. Check the access point settings (141).
- 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 (141).

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 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.
On-Screen Information

Shooting (Information Display)

Battery Level
An on-screen icon or message indicates the battery charge level.

<table>
<thead>
<tr>
<th>Display</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Battery Icon" /></td>
<td>Sufficient charge</td>
</tr>
<tr>
<td><img src="image" alt="Blinking Battery Icon" /></td>
<td>Slightly depleted, but sufficient</td>
</tr>
<tr>
<td><img src="image" alt="Blinking Red Battery Icon" /></td>
<td>Nearly depleted—charge the battery pack soon</td>
</tr>
<tr>
<td>[Charge the battery] (image)</td>
<td>depleted—charge the battery pack immediately</td>
</tr>
</tbody>
</table>

(1) Shooting mode (195), Scene icon (137)
(2) Flash mode (89)
(3) Flash exposure compensation / Flash output level (90, 95)
(4) Metering method (73)
(5) ND filter (76)
(6) Drive mode (42), AEB shooting (75), Focus bracketing (83)
(7) White balance (77)
(8) High ISO speed noise reduction (75)
(9) Bluetooth connection status (133)
(10) Eco mode (163)
(11) Picture Style (79)
(12) Auto Lighting Optimizer (76)
(13) Self-timer (40)
(14) IS mode icon (38)
(15) Battery level (192)
(16) Still image compression (47), Recording pixel setting (47)
(17) Recordable shots (212)
(18) Zoom magnification (39), Digital tele-converter (84)
(19) Maximum continuous shots
(20) Movie quality (149)
(21) Remaining time (212)
(22) Histogram (105)
(23) Quick Set menu (28)
(24) Focus range (81, 82), AF lock (88)
(25) AE lock (73), FE lock (90)
(26) AF frame (84), Spot AE point frame (73)
(27) Control ring function switching (96)
(28) Touch Shutter (42)
(29) Manual focus switching (82)
(30) Grid lines (98)
(31) Shutter speed (92, 93)
(32) Aperture value (93, 93)
(33) Electronic level (50)
(34) Exposure level (93)
(35) ISO speed (74)
(36) Hybrid Auto mode (35)
(37) Camera shake warning (36)
(38) Zoom bar (33)
(39) MF indicator (82)
(40) Exposure compensation (73)
(41) Wind filter (68)
(42) Time zone (165)
(43) Image stabilization (51)
(44) Auto level (50)
(45) Auto slow shutter (68)
(46) Attenuator (69)

Battery Level
An on-screen icon or message indicates the battery charge level.

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<tr>
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<td>depleted—charge the battery pack immediately</td>
</tr>
</tbody>
</table>
### During Playback

#### Info Display 1

- **(1)** Current image / Total images
- **(2)** Battery level
- **(3)** Wi-Fi signal strength
- **(4)** Bluetooth connection status
- **(5)** Image Sync complete
- **(6)** Edited
- **(7)** Favorites

*1 Displayed for images with a creative filter, resizing, cropping, or red-eye correction applied.

*2 Cropped images are labeled with [ ].

#### Info Display 2

- **(1)** Shooting date/time
- **(2)** Histogram
- **(3)** Shooting mode
- **(4)** Shutter speed
- **(5)** Aperture value
- **(6)** Exposure compensation level
- **(7)** ISO speed
- **(8)** Image quality

*2 Cropped images are labeled with [ ].
Info Display 3
Shows GPS information and an RGB histogram. Information on the top of the screen is the same as for Info Display 2.

Info Display 4
Shows white balance information. Information on the top of the screen is the same as for Info Display 2.

Info Display 5
Shows Picture Style information. Information on the top of the screen is the same as for Info Display 2.

Summary of Movie Control Panel
The following operations are available on the movie control panel, accessed as described in “Viewing” (103).

- **Show when the camera is connected to a PictBridge-compatible printer (177).**
- **Touch to display the volume panel, and then touch [▲,▼] to adjust the volume. At a volume of 0, [▲] is displayed.**
- **Play**
- **Slow Motion (Touch [◄], [►] to adjust the playback speed. No sound is played.)**
- **Skip Backward* or Previous Clip (127) (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 (127) (To continue skipping forward, keep holding down the [►] button.)**
- **Erase Clip (displayed when a digest movie (106) is selected, or an album without background music (129))**
- **Edit (126)**

* Displays the frame approx. 4 sec. before or after the current frame.

- **To switch frames, touch the scrollbar or drag left or right.**
### Functions and Menu Tables

#### Functions Available in Each Shooting Mode

<table>
<thead>
<tr>
<th>Function</th>
<th>Shooting Mode</th>
<th>C</th>
<th>M</th>
<th>Av</th>
<th>Tv</th>
<th>P</th>
<th>AUTO</th>
<th>SCN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure Compensation (73)</td>
<td>AUTO</td>
<td>*1 O O O O – – –</td>
<td>O O O O O O O O O O O O O O O O O O O O O O O O</td>
<td>O O O O O</td>
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<tr>
<td>ISO Speed (74)</td>
<td>AUTO</td>
<td>*1 O O O O – – –</td>
<td>O O O O O O O O O O O O O O O O O O O O O O O O</td>
<td>O O O O O</td>
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<tr>
<td>Av/Tv Settings (92, 93)</td>
<td>Aperture Value</td>
<td>*1 O – – – – – – –</td>
<td>– – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – –</td>
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<td></td>
<td>Shutter Speed</td>
<td>*1 O – O – – – – –</td>
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<td></td>
<td>Bulb Exposure</td>
<td>*1 O – – – – – – –</td>
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<tr>
<td>Program Shift (73)</td>
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<td>*1 *2 *2 *2 O – – – – – – – – – – – – – – – – – – – – – – – – – – – –</td>
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<tr>
<td>AE Lock/FE Lock in Standby*3 (73, 90)</td>
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<td>O O O O – – – – – – – – – – – – – – – – – – – – – – – – – – – – – –</td>
<td>O O O O O</td>
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<tr>
<td>Movie Audio Recording (68)</td>
<td></td>
<td>O O O O O O O O O O O – – – – – – – – – – – – – – – – – – – – – –</td>
<td>O O O O O</td>
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<tr>
<td>AE Lock (during recording), Exposure Compensation (73, 75)</td>
<td></td>
<td>O O O O O – – – – – – – – – – – – – – – – – – – – – – – – – – – –</td>
<td>O –</td>
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<tr>
<td>AF Lock (when assigned to the movie button (98))</td>
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<td>O O O O O – – – – – – – – – – – – – – – – – – – – – – – – – – – –</td>
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<tr>
<td>AF Lock by touching during movie recording (67)</td>
<td></td>
<td>O O O O O – – – – – – – – – – – – – – – – – – – – – – – – – – – –</td>
<td>O O O O O</td>
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<tr>
<td>Optical Zoom</td>
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<td>O O O O O O O O O O O – – –</td>
<td>– – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – – –</td>
<td>O O O O O</td>
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</tr>
</tbody>
</table>

O Available or set automatically.  – Not available.
<table>
<thead>
<tr>
<th>Function</th>
<th>Shooting Mode</th>
<th>C</th>
<th>M</th>
<th>Av</th>
<th>Tv</th>
<th>P</th>
<th>AUTO</th>
<th>SCN</th>
</tr>
</thead>
</table>

*1 Options vary depending on the assigned shooting mode.
*2 Aperture value, shutter speed, and ISO speed may be changed automatically to maintain suitable exposure.
*3 FE lock not available in flash mode.
*4 Only when is selected.
*5 Only available for shooting. Subject designation not available.
### Quick Set Menu

<table>
<thead>
<tr>
<th>Function</th>
<th>Af method</th>
<th>Af operation</th>
<th>Image quality</th>
<th>Movie rec. size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive mode</td>
<td>[CMAVTVIP AUTO]</td>
<td>[CMAN]</td>
<td>[CMAN]</td>
<td>[CMAN]</td>
</tr>
<tr>
<td>Shooting mode</td>
<td>[CMAN]</td>
<td>[CMAN]</td>
<td>[CMAN]</td>
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<tr>
<td>When Set to NTSC</td>
<td>[CMAN]</td>
<td>[CMAN]</td>
<td>[CMAN]</td>
<td>[CMAN]</td>
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<tr>
<td>When Set to PAL</td>
<td>[CMAN]</td>
<td>[CMAN]</td>
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<tr>
<td>ONE-HOT</td>
<td>[CMAN]</td>
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</tbody>
</table>

- Available or set automatically.  
- Not available.
<table>
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<tr>
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<th>C</th>
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<th>V</th>
<th>P</th>
<th>AUTO</th>
<th>SCN</th>
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</thead>
<tbody>
<tr>
<td>Self-Timer (40)</td>
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<tr>
<td>Self-Timer Settings</td>
<td>Custom Timer</td>
<td>*1</td>
<td>O</td>
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<td></td>
<td>Delay*</td>
<td>*1</td>
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<tr>
<td>Flash firing (89)</td>
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<td>Flash Exp. Comp (90)</td>
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<td>Flash Output (90)</td>
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<tr>
<td>Still Image Aspect Ratio (47)</td>
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<tr>
<td>White balance (77)</td>
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<td>WB correction (78)</td>
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</tbody>
</table>

*1 Available or set automatically.  – Not available.
<table>
<thead>
<tr>
<th>Function</th>
<th>Shooting Mode</th>
<th>C</th>
<th>M</th>
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<tbody>
<tr>
<td>Color Adjustment (1166)</td>
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<tr>
<td>Set color temp. (1179)</td>
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<td>*1</td>
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<tr>
<td>Picture Style (1179)</td>
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<tr>
<td>Auto Lighting Optimizer (1176)</td>
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<tr>
<td>Metering mode (1173)</td>
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<tr>
<td>Focus Range (1181, 1182)</td>
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<td>ND Filter (1176)</td>
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</tbody>
</table>

*1 Options vary depending on the assigned shooting mode.
*2 [SERVO] when subject movement is detected.
*3 Synchronizes with the aspect ratio setting and is automatically set (1147).
*4 Cannot be set to 0 seconds in modes without selection of the number of shots.
*5 One shot (cannot be modified) in modes without selection of the number of shots.
*6 Not available, but switches to [ ] in some cases.
*7 Set automatically to suit the aspect ratio of the movie recording size.
## Shooting Tab

<table>
<thead>
<tr>
<th>Shooting Mode</th>
<th>CM</th>
<th>Av</th>
<th>T</th>
<th>P</th>
<th>AUTO</th>
<th>SCN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rec. Mode (53, 55, 67)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Image quality (47)</td>
<td>–</td>
<td>*1 O O O O – O – – – – – – – –</td>
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<tr>
<td>RAW</td>
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<td>*1 O O O O – O – – – – – – –</td>
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</tr>
</tbody>
</table>

### Rec. Mode (53, 55, 67)
- JPEG
- RAW

### Image quality (47)
- JPEG
- RAW

### Still Image Aspect Ratio (47)
See “Quick Set Menu” (197).

### Shooting information display (58)
- Screen info/ toggle settings
- Grid display
  - Grid 1 [3x3] / Grid 2 [6x4]

### Expo. simulation (73)
- Enable
- Disable

### Image review (52)
- 2 sec./4 sec./8 sec.
<table>
<thead>
<tr>
<th>Function</th>
<th>Shooting Mode</th>
<th>C</th>
<th>M</th>
<th>Av</th>
<th>Tv</th>
<th>P</th>
<th>AUTO</th>
<th>SCN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Touch Shutter</td>
<td>Enable</td>
<td>*1</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>Disable</td>
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<td>0</td>
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<tr>
<td>AF frame pos’n</td>
<td>Center/Touch point</td>
<td>*1</td>
<td>0</td>
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<td>On</td>
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* Available or set automatically.  – Not available.
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*1 Options vary depending on the assigned shooting mode.
*2 Available when the AF frame is set to [1-point AF].
*3 Available when still saving is set to [Disable].
*4 Available when the effect is set to [Off].
*6 Items from the [7] tab are shown on the [8] tab in these modes: [AUTO], [1], [2], [3], [4], [5], [6], [7], and [8].
*7 Items from the [8] tab are shown on the [9] tab in these modes: [AUTO], [1], [2], [3], [4], [5], [6], [7], and [8]. Items from the [8] tab are shown on the [9] tab in [8] mode.

When using Face ID (43) in some modes or with some settings, names of people may be recorded in shots even when not displayed.
### Tab Item Reference

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*1 Not available in these modes: [C], [M], [Av], [Tv], [P], [SN], and [AUTO].

*2 Not available in these modes: [C], [M], [Av], [Tv], [P], [SN], and [AUTO].

*3 Only [Other settings] is available in [C] mode.

### My Menu Tab

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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.
- Store unused battery packs in a plastic bag or other container. To maintain battery performance if you will not use the battery pack for some time, about once a year charge it and then use the camera until it runs out of power before storing the battery pack.

Specifications

- **Image Sensor**
  - Image size: 1.0 type
  - Camera Effective Pixels: Approx. 20.1 megapixels (Pixels may decrease due to image processing)
  - Total pixels: Approx. 20.9 megapixels

- **Lens**
  - Focal Length: 10.2 – 30.6 mm (28 – 84 mm)  
    (35mm film equivalent)
  - Zoom Magnification: 3x
  - Shooting Range (measured from the tip of the lens):
    - AUTO: 5 cm – infinity (2.0 in. – infinity), 35 cm – infinity (1.1 ft. – infinity)
    - Other modes: 5 cm – infinity (2.0 in. – infinity), 35 cm – infinity (1.1 ft. – infinity), 5 – 50 cm (2.0 in. – 1.6 ft.), –

<table>
<thead>
<tr>
<th>Shooting Mode</th>
<th>Focus Range</th>
<th>Maximum Wide Angle</th>
<th>Maximum Telephoto</th>
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<td>AUTO</td>
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<td>(2.0 in. – 1.6 ft.)</td>
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</tbody>
</table>

* Not available in some shooting modes.

Step Zoom: 28mm, 35mm, 50mm, 84mm
Shutter

Shutter Speed
Auto Mode (automatic settings)
- Max. Tv: 1 sec.
- Range in all shooting modes
  - Max. Tv: 30 sec.

Aperture

F number
- Wide angle: 2.0 – 11.0
- Telephoto: 4.9 – 11.0

Flash

Built-in Flash
- Flash range (Max. wide angle)
  - closest point: 50.0 cm (1.6 ft.)
  - farthest point: 6.0 m (20 ft.)
- Flash range (Telephoto end)
  - closest point: 50.0 cm (1.6 ft.)
  - farthest point: 2.4 m (7.9 ft.)

Monitor

Type: TFT color liquid crystal
- Screen Size: 3.0 type
- Effective Pixels: Approx. 1040 thousand dots

Shooting

Digital zoom
- Magnification: Approx. 4x
- Maximum with optical zoom: Approx. 12x

Focal Length (Telephoto end)
- 35mm film equivalent: Approx. 336 mm equivalent

ZoomPlus
- (Number of recording pixels L): Approx. 6x

Continuous Shooting
- Shooting speed*
  - One-Shot AF
  - High-speed Continuous
    - shooting speed: Max approx. 8.1 shots/sec.
  - Servo AF
  - High-speed Continuous
    - shooting speed: Max approx. 5.3 shots/sec.

* Continuous shooting speed may become slower due to the following factors:
- Tv value/Av value/Subject conditions/Lighting conditions/Use of flash/Zoom position

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**Recording**

File Format: DCF-compliant DPOF compatible (Version 1.1)

Data Type

- **Still Images**: Recording Format: Exif2.3 (DCF2.0) Image (RAW images taken while shooting are A/D converted into 12-bit format.) JPEG/RAW (CR2 a Canon 14-bit RAW format)
- **Movies**: Recording Format: MP4 Video: MPEG-4 AVC/H.264 Audio: MPEG-4 AAC-LC (stereo)

Recorded Pixels, Number of shots per a memory card

| L | 1786 |
| M | 3982 |
| S | 6656 |
| S1 | 6073 |
| S2 | 11043 |
| RAW | 7712 |
| RAW+JPEG | 525 |

Pixels Frame Rate/Video System Recordable time per a memory card (Approx.) Single Clip Recording Time (Approx.)

| L HD (1920 x 1080) | 59 min. 30 sec. | 10 min. |
| M HD (1280 x 720) | 1 hr. 26 min. 5 sec. | 29 min. 59 sec. |
| S HD (640 x 480) | 1 hr. 22 min. 35 sec. | 1 hr. |

- Limitations of movie shooting: continuous shooting is possible until the memory card becomes full or the recording length for one movie reaches approx. 29 minutes 59 seconds.

**Power**

Battery Pack: NB-13L

| Number of Still Image Shots (CIPA Compliant) | Screen (Monitor) On | Approx. 235 shots |
| Number of Still Image Shots (Eco Mode On) | Screen (Monitor) On | Approx. 315 shots |
| Movie Recording Time (CIPA Compliant) | Screen (Monitor) On | Approx. 60 min. |
| Movie Recording Time (Continuous Shooting) | Screen (Monitor) On | Approx. 95 min. |
| Playback Time* | Approx. 5 hr. |

* Time when playing back a slideshow of still images
### Interface

**Wired**
- Digital terminal (Hi-Speed USB compliant) ............... Micro USB
- HDMI OUT terminal .................................. Type D

**Wireless**
- NFC ................................................. NFC Forum Type3/4 Tag compliant (Dynamic)
- Bluetooth Compliance standards ...................... Bluetooth Ver. 4.1 (Bluetooth low energy technology)
- Wi-Fi Compliance standards .............................. IEEE 802.11b/g/n
  - Transmission frequency .............................. 2.4 GHz
  - Channels ............................................. 1 – 11
- Security
  - Infrastructure mode ......................... WPA-PSK (AES/TKIP), WPA-PSK (AES/TKIP), WEP
  - Camera access point mode ............... WPA2-PSK (AES)
  - Ad hoc mode ....................................... WPA2-PSK (AES)

### Operating Environment

Temperature ........................................ Min. 0 °C, max. 40 °C
(Min. 32 °F, max. 104 °F)

### Dimensions (CIPA Compliant)

W .................................................... 98.0 mm (3.9 in.)
H ..................................................... 57.9 mm (2.3 in.)
D ..................................................... 31.3 mm (1.2 in.)

### Weight (CIPA Compliant)

Camera Body Only ................................. Approx. 182 g (approx. 6.4 oz.)
Including Battery Pack, Memory Card .... Approx. 206 g (approx. 7.3 oz.)
Battery Pack NB-13L

Type: Rechargeable lithium-ion battery
Nominal voltage: 3.6 V DC
Nominal capacity: 1250 mAh
Charging cycles: Approx. 300 times
Operating temperatures: 0 – 40 °C (32 – 104 °F)

Battery Charger CB-2LH/CB-2LHE

Rated input: 100 – 240 V AC (50/60 Hz)
0.09 A (100 V) – 0.06 A (240 V)
Rated output: 4.2 V DC, 0.7 A
Charging time: Approx. 2 hr. 10 min. (when using NB-13L)
Operating temperatures: 5 – 40 °C (41 – 104 °F)

Compact Power Adapter CA-DC30/CA-DC30E

Rated input: 100 – 240 V AC (50/60 Hz)
0.07 A (100 V) – 0.045 A (240 V)
Rated output: 5.0 V DC, 0.55 A
Charging time: Approx. 2 hr. 50 min.* (when charged with NB-13L in the camera)
*Charging time varies greatly depending on the remaining battery level.
Operating temperatures: 5 – 40 °C (41 – 104 °F)

- Size, weight, and number of shots available are 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.
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Precautions for Wireless Features (Wi-Fi, Bluetooth, or Others)

- Countries and Regions Permitting Wireless Function Use
  - Use of wireless functions is restricted in some countries and regions, and illegal use may be punishable under national or local regulations. To avoid violating wireless regulations, visit the Canon website to check where use is allowed. Note that Canon cannot be held liable for any problems arising from wireless function 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
- Before goods or technologies in the camera regulated by the Foreign Exchange and Foreign Trade Act are exported (which includes bringing them outside Japan or showing them to non-residents in Japan), export or service transaction permission may be required from the Japanese government.
- Because this product includes American encryption items, 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 Wi-Fi settings you use. The wireless 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. 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 ownership, disposing of the product, or sending it for repair, restore the default wireless settings by erasing any settings you have entered.
- 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 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 function of this product near medical equipment or other electronic equipment. Use of the wireless 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.

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.
- Be sure to make notes of the Wi-Fi settings you use.
- When transferring ownership, disposing of the product, or sending it for repair, restore the default wireless settings by erasing any settings you have entered.
- 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.
- 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.
Personal Information and Security Precautions

If personal information and/or Wi-Fi security settings, such as passwords, etc., are saved on the camera, please be aware that such information and settings may still remain in the camera.

When transferring the camera to another person, disposing of it, or sending it for repair, be sure to take the following measures to prevent the leakage of such information and settings.

- Erase registered personal information by choosing [Erase Info] in the Face ID settings.
- Erase registered Wi-Fi security information by choosing [Reset Settings] in the Wi-Fi settings.

Third-Party Software

- expat.h
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