● 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.
  ▶ Next page
  ◄ Previous page
  ◄ Page before you clicked a link

● To jump to the beginning of a chapter, click the chapter title at right.
Initial Information

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
- Neck Strap
- Strap Adapter

* 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.
- Images recorded by the camera shall be for personal use. Refrain from unauthorized recording that infringes on copyright law, and note that even for personal use, photography may contravene copyright or other legal rights at some performances or exhibitions, or in some commercial settings.
- The camera warranty is valid only in the area of purchase. In case of camera problems while abroad, return to the area of purchase before contacting a Canon Customer Support Help Desk.
- Although the screen (monitor) and viewfinder are produced under extremely high-precision manufacturing conditions and more than 99.99% of the pixels meet design specifications, in rare cases some pixels may be defective or may appear as red or black dots. This does not indicate camera damage or affect recorded images.
- 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 (13) on front
  - Front dial (3) on front
  - Up button (11) on back
  - Left button (12) on back
  - Right button (17) on back
  - Down button (19) on back
  - Control dial (18) on back
- 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

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lens</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Lamp</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Front dial</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Zoom lever</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Strap mount</td>
<td></td>
</tr>
<tr>
<td>6</td>
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<td></td>
</tr>
<tr>
<td>7</td>
<td>Shutter button</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Flash</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Hot shoe</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Diopter adjustment dial</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Mode dial</td>
<td></td>
</tr>
<tr>
<td>12</td>
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<td></td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>15</td>
<td>(N-Mark)*</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Tripod socket</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Memory card/battery cover</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>DC coupler terminal cover</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Flash</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Hot shoe</td>
<td></td>
</tr>
</tbody>
</table>

*1 Used with NFC features (134).

*2 Gestures may not be detected as easily if you apply a screen protector. In this case, increase the sensitivity of the touch-screen panel (164).

---

You can turn the control dial to perform most of the operations possible with the buttons, such as choosing items and switching images.
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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 trigger the flash in close proximity to people's eyes. Exposure to the intense light produced by the flash could damage eyesight. In particular, remain at least 1 meter (3.3 feet) away from infants when using the flash.
- 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. The hot shoe cover is dangerous if swallowed. If this occurs, contact a doctor immediately.
- 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.
- If your model has a viewfinder or interchangeable lens, do not look through the viewfinder or lens at bright light sources (such as the sun on a clear day, or a bright artificial light source). This may damage your eyesight.
- If your model has an interchangeable lens, do not leave the lens (or the camera with the lens attached) in the sun without the lens cap on. This could result in a fire.
- Do not touch the product during thunderstorms if it is plugged in. This could result in electrical shock or fire. Immediately stop using the product and distance yourself from it.
- Use only the recommended battery pack/batteries.
- Do not place the battery pack/batteries near or in direct flame. This may cause the battery pack/batteries to explode or leak, resulting in electrical shock, fire, or injuries. If leaking battery electrolyte comes into contact with eyes, mouth, skin, or clothing, immediately flush with water.
- If the product uses a battery charger, note the following precautions.
  - Remove the plug periodically and, using a dry cloth, wipe away any dust and dirt that has collected on the plug, the exterior of the power outlet, and the surrounding area.
  - Do not insert or remove the plug with wet hands.
  - Do not use the equipment in a manner that exceeds the rated capacity of the electrical outlet or wiring accessories. Do not use if the plug is damaged or not fully inserted in the outlet.
  - Do not allow dust or metal objects (such as pins or keys) to contact the terminals or plug.
  - Do not cut, damage, alter, or place heavy items on the power cord, if your product uses one.

This could result in electrical shock or fire.
● Turn the camera off in places where camera use is prohibited. The electromagnetic waves emitted by the camera may interfere with the operation of electronic instruments and other devices. Exercise adequate caution when using the product in places where use of electronic devices is restricted, such as inside airplanes and medical facilities.

● 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.

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- 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.
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.
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.

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 guidelines on how many shots or hours of recording can be saved on one memory card, see “Number of Shots per Memory Card” (212).

For details on charging time and the number of shots and recording time possible with a fully charged battery pack, see “Number of Shots/Recording Time, Playback Time” (211).

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.

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.

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 (160).

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.

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   - 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 guidelines on how many shots or hours of recording can be saved on one memory card, see “Number of Shots per Memory Card” (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.

### Using the Screen

- Open the screen (1) and rotate it toward the lens 180° (2).
- Close the screen in this orientation (3).

**●** The screen can only open to approximately 175° in direction (1). Be careful not to open the screen any further than this, as it will damage the camera.

### Adjusting the Screen Angle and Orientation

- **You can adjust the angle and orientation of the screen as needed, to suit shooting conditions.**
- **To protect the screen when the camera is not in use, always keep it closed and facing the camera body.**

**Open the screen to activate it when the camera is on. This will deactivate the viewfinder. Similarly, close the screen (facing the camera body) to deactivate it and activate the viewfinder.**

**When including yourself in shots, you can view a mirror image of yourself by rotating the screen around toward the front of the camera. To cancel reverse display, press the [MENU] button, choose [Reverse Display] on the [1] tab, press the [2] button, and then press the [4][0] buttons to choose [Off].**

### 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.
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].
   - Press the [ ] buttons or turn the [ ] dial to choose [ ] tab.
   - Press the [ ] buttons or turn the [ ] dial to choose [Date/Time], and then press the [ ] button.

3. Change the date and time.
   - Follow step 2 in “Setting the Date and Time” (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 or connect the camera to an AC adapter kit (sold separately, 169), 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” (20).

2. Set the date and time.
   - Press the [ ] buttons to choose an item.
   - Press the [ ] buttons or turn the [ ] dial to specify the date and time.
   - When finished, press the [ ] button.

3. Specify your home time zone.
   - Press the [ ] buttons to choose your home time zone.

4. Finish the setup process.
   - Press the [ ] button when finished.
   - To turn off the camera, press the power button.

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

- To set daylight saving time (1 hour ahead), choose [ ] in step 2 and then choose [ ] by pressing the [ ] buttons or turning the [ ] dial.

- You can also set the date and time by touching the desired item on the screen in step 2 and then touching [ ], followed by [SET]. Similarly, you can also set your home time zone by touching [ ] on the screen in step 3, followed by [SET].
Trying the Camera Out

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

### Shooting (Smart Auto)

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

1. **Turn the camera on.**
   - Press the power button.
   - The startup screen is displayed.

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

3. **Compose the shot.**
   - To zoom in and enlarge the subject, move the zoom lever toward [ ] (telephoto), and to zoom away from the subject, move it toward [ ] (wide angle).
4 Shoot.  
Shooting Still Images

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, lift the flash with your fingers. 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 [ ] button.
   - Your last shot is displayed.

2 Choose images.
   - To view the previous image, press the [] button or turn the [ ] dial counterclockwise. To view the next image, press the [ ] button or turn the [ ] dial clockwise.
   - Press and hold the [ ] buttons to browse through images quickly.
   - To access this screen (Scroll Display mode), turn the [ ] dial rapidly. In this mode, turn the [ ] dial to browse through images.
   - To return to single-image display, press the [ ] button.
   - Movies are identified by a [ ] icon. To play movies, go to step 3.

3 Play movies.
   - Press the [ ] button, press the [ ] buttons to choose [], and then press the [ ] button again.
   - Playback now begins, and after the movie is finished, [ ] is displayed.
   - To adjust the volume, press the [ ] buttons during playback.

   - To switch to Shooting mode from Playback mode, press the shutter button halfway.
   - You can also start movie playback by touching [ ]. 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.**
   - Press the [ ] buttons or turn the dial to choose an image.

2 **Erase the image.**
   - Press the [ ] button.
   - After [Erase?] is displayed, press the [ ] buttons or turn the dial to choose [Erase], and then press the [ ] button.
   - The current image is now erased.
   - To cancel erasure, press the [ ] buttons or turn the dial to choose [Cancel], and then press the [ ] button.

- You can choose multiple images to erase at once (118).
- You can also erase the current image by touching [Erase] on the screen in step 2.
- Images can also be erased by using Touch Actions (122).
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.
- 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 (27).

Power Saving in Playback Mode

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

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

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

1 Press halfway. (Press lightly to focus.)
   - Press the shutter button halfway. The camera beeps twice, and frames are displayed around image areas in focus.

2 Press all the way down. (From the halfway position, press fully to shoot.)
   - The camera shoots, as a shutter sound is played.
   - Keep the camera still until the shutter sound ends.

Images may be out of focus if you shoot without initially pressing the shutter button halfway.

Length of shutter sound playback varies depending on the time required for the shot. It may take longer in some shooting scenes, and images will be blurry if you move the camera (or the subject moves) before the shutter sound ends.
Using the Viewfinder

Shooting is easier with an electronic viewfinder, which helps you concentrate on keeping subjects in focus.

1 Switch between using the screen and viewfinder as needed.
- Moving the viewfinder near your eye will activate its display and deactivate the camera screen.
- Moving the viewfinder away from your eye will deactivate its display and activate the camera screen.

2 Adjust the diopter.
- Turn the dial to bring viewfinder images into sharp focus.

- Although the viewfinder 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.
- Some aspect ratio settings will cause black bars to be displayed on the top and bottom or left and right edges of the screen. These areas will not be recorded.
- The screen will not be activated when you move your eye away from the viewfinder if you have selected MENU ► [Display settings] ► [Display Control] ► [Manual] and then [Manual display] ► [Viewfinder].
- Motion is displayed more smoothly (both on the viewfinder and screen) in , , , or mode when you select MENU ► [Display priority] ► [Smooth]. At this time, setting [VF display] to [Fast] makes motion on the viewfinder even smoother but may make motion on the screen choppier.
- Display will switch to the camera screen during Wi-Fi communication or when the on-screen keyboard is displayed.
- You can configure display brightness for the viewfinder and camera screen separately.
- To reduce the shooting screen, choose MENU ► [VF display format] ► [Display 2].
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 100).

- Open the screen to activate it when the camera is on. This will deactivate the viewfinder. Similarly, close the screen (facing the camera body) to deactivate it and activate the viewfinder (page 20).
- 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 107).

Shooting Modes

Use the mode dial to access each shooting mode.

1. p, tv, av, m, and c modes
   - Take a variety of shots using your preferred settings (page 77, page 96).

2. Movie Mode
   - For shooting movies (page 73, page 89).
   - You can also shoot movies when the mode dial is not set to Movie mode, simply by pressing the movie button.

3. Auto Mode / Hybrid Auto Mode

4. Creative Shot Mode
   - See several effects applied to each shot automatically (page 58).

5. Special Scene Mode
   - Shoot with settings designed for specific scenes, or add a variety of effects (page 60).
Using the Quick Set Menu

Configure commonly used functions in the (Quick Set) menu. Note that menu items and options vary depending on the shooting mode (196).

1 Access the Q menu.
   - Press the [Q] button.

2 Choose a menu item.
   - Press the [\(\uparrow\)] buttons to choose a menu item (1).
   - Available options (2) are shown at the bottom of the screen.

3 Choose an option.
   - Press the [\(\llcorner\) \(\lrcorner\)] buttons or turn the [\(\uparrow\downarrow\)] dial to choose an option.
   - Items labeled with a [MENU] icon can be configured by pressing the [MENU] button.
   - Items labeled with a [INFO] icon can be configured by pressing the [INFO] button.
   - Items labeled with a [\(\pm\)] icon can be configured by pressing the [\(\pm\)] button.

4 Confirm your choice and exit.
   - Press the [Q] button.
   - The screen before you pressed the [Q] button in step 1 is displayed again, showing the option you configured.

   - To undo any accidental setting changes, you can restore the camera’s default settings (165).
   - You can also exit by choosing [\(\llcorner\)] in the menu items and pressing the [Q] button.

Using Touch-Screen Operations to Configure Settings

- Touch [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 [Q] menu item, or touch the selected option again.
- You can access the screen for items labeled with a [MENU] icon by touching [MENU].
- You can access the screen for items labeled with a [INFO] icon by touching [INFO].
- You can access the screen for items labeled with a [\(\pm\)] icon by touching [\(\pm\)].
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.
   - Tabs represent functions (1), such as shooting ([]), playback ([]), or settings ([]), or pages within each function (2). Tabs are identified in this manual by combining the function and page, as in [1].
   - Move the zoom lever to choose the function tab, and then press the [] buttons or turn the [ ] dial to choose the page tab.

3 Choose a menu item.
   - Press the [ ] buttons or turn the [ ] dial to choose an item, and then press the [ ] button.
   - For menu items with options not shown, first press the [ ] button to switch screens, and then either press the [ ] buttons or turn the [ ] dial to select the menu item.
   - To return to the previous screen, press the [MENU] button.

4 Choose an option.
   - When options are listed vertically, press the [ ] buttons or turn the [ ] dial to choose an option.
   - When options are listed horizontally, press the [ ] buttons or turn the [ ] dial to choose an option.

5 Confirm your choice and exit.
   - Press the [ ] 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 (165).
● Available menu items vary depending on the selected shooting or playback mode (199 – 208).
Touch-Screen Operations

- To choose tabs, press the [MENU] button to access the menu screen, and then touch the desired function tab and page tab.
- Drag the menu items up or down to scroll them, or touch a menu item to choose it.
- Touch an option to complete the setting and return to the menu item selection screen.
- For menu items displayed with a bar to indicate the level, touch the desired position on the bar.
- To configure menu items for which options are not shown, first touch the menu item to access the setting screen. On the setting screen, either drag or touch to choose the item, and then touch to choose the option. To return to the previous screen, touch [MENU].
- You can also touch input elements (such as check boxes or text fields) to select them, and you can enter text by touching the on-screen keyboard.
- When [SET] is shown, you can touch [SET] instead of pressing the [SET] button, if you prefer.
- When [MENU] is shown, you can touch [MENU] instead of pressing the [MENU] button, if you prefer.
- When [INFO] is shown, you can touch [INFO] instead of pressing the [INFO] button, if you prefer.
- To dismiss the menu, press the [MENU] button again.

On-Screen Keyboard

Use the on-screen keyboard to enter information for Face ID (45), Wi-Fi connections (133), and so on. Note that the length and type of information you can enter varies depending on the function you are using.

Entering Characters

- Touch the characters to enter them.
- The amount of information you can enter (1) varies depending on the function you are using.

Moving the Cursor

- Touch [➡️] or [⬅️].

Entering Line Breaks

- Touch [↵].

Switching Input Modes

- To switch to numbers or symbols, touch [🔢].
- Touch [🔤] to enter capital letters.
- Available input modes vary depending on the function you are using.

Deleting Characters

- To delete the previous character, either touch [⌫] or press the [⌫] button.
- Touching and holding [⌫] will delete five characters at a time.
Confirming Input and Returning to the Previous Screen

- Press the [MENU] button.
- The on-screen keyboard is not available while the viewfinder ([28]) is in use.
- For some functions, [ ] is not displayed and cannot be used.
- Another way to use the keyboard is by pressing the [▲][▼][◄][►] buttons or turning the [ ] dial to select characters or icons, and then pressing the [ ] button. You can also move the cursor by turning the [ ] dial. To return to the previous screen, press the [MENU] button.

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 ([96], [97]), connected to a computer ([177]), connecting/transmitting via Wi-Fi, or display off ([27], [161], [162])</td>
</tr>
<tr>
<td>Orange</td>
<td>On</td>
<td>Charging via USB</td>
</tr>
</tbody>
</table>

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

You can check the current time.

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

- When the camera is off, press and hold the [ DISP ] 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 (39, 40).
   - 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 [Ⅲ] (telephoto), and to zoom away from the subject, move it toward [Ⅰ] (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 [Raise the flash] is displayed, lift the flash with your fingers. 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) 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.

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

### Shooting in Hybrid Auto Mode

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

1. **Enter [**H**] mode.**
   - Follow step 2 in “Shooting (Smart Auto)” (35) and choose [H].

2. **Compose the shot.**
   - Follow steps 3 – 4 in “Shooting (Smart Auto)” (35) 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)” (35) 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 [**H**] 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 [HD] for NTSC or [SD] for PAL and cannot be changed (160).
- Sounds are not played when you press the shutter button halfway or trigger the self-timer (164).
- Digest movies are saved as separate movie files in the following cases even if they were recorded on the same day in [H] 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 (115).
  - Daylight saving time (120) or time zone (162) settings are changed.
  - A new folder is created (159).
- 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 (31) ► [**H**] tab ► [Digest Type] ► [No Stills].
- Individual chapters can be edited (128).
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 (p. 109).

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].

Movies

- You can change how long images are displayed after shots (p. 56).

- 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.

- Audio is recorded in stereo.

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 “Camera” (p. 210).
- 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 “Shooting Range” (p. 211).
- 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 (p. 39) are displayed.
- Although you can shoot again before the shooting screen is displayed, your previous shot may determine the focus, brightness, and colors used.
Scene Icons

Still Images  Movies

In [ ] and [ ] 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 ( ).

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

- 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 ( ), and when [Hg Lamp Corr.] is set to [On] and scenes are automatically corrected ( ).
- 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 ( ). Confirm beforehand that the date and time are correct ( ).

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

If 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>Smiling (including Babies)</th>
<th>![ ] Consecutive images are captured, and the camera analyzes details such as facial expressions to save the image determined to be the best.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleeping (including Babies)</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, press the [ ] button, and then select [ ] (either press the [ ] [ ] buttons or turn the [ ] dial).

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] (54). In this case, an IS icon is not displayed.
● In [ ] mode, no [ ] icon is displayed.
On-Screen Frames

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

- A white frame is displayed around the subject (or person’s face) determined by the camera to be the main subject, and gray frames are displayed around other detected faces. Frames follow moving subjects within a certain range to keep them in focus. However, if the camera detects subject movement, only the white frame will remain on the screen.
- When you are pressing the shutter button halfway and the camera detects subject movement, a blue frame is displayed, and the focus and image brightness are constantly adjusted (Servo AF).

- Try shooting in P mode (77) 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. (190). 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 (94), the maximum zoom factor can be achieved by following step 1.

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 17x enlargement.

1. Move the 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.
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 [ ] ( = 30).
- 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, choose [ ] in step 1.

Shooting at Preset Focal Lengths (Step Zoom)

Shoot at common focal lengths in a range of 24 – 100 mm (35mm film equivalent).

To change the focal length from 24 to 28 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 ( = 41), you cannot adjust the zoom factor by turning the [ ] ring counterclockwise. However, you can set the focal length to 100 mm by turning it clockwise.

Using the Self-Timer

Still Images Movies

Configure the setting.
- Press the [ ] button, choose [ ] in the menu, and then choose [ ] ( = 30).
- 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, choose [ ] in step 1.
Using the Self-Timer to Avoid Camera Shake

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

- Follow step 1 in “Using the Self-Timer” (142) and choose [ ].
- Once the setting is complete, [ ] is displayed.

Customizing the Self-Timer

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

1 Choose [ ].
- Following step 1 in “Using the Self-Timer” (142), choose [ ] and press the [ ] button.

2 Configure the setting.
- Press the [ ] buttons to choose the delay time or number of shots.
- Press the [ ] buttons or turn the [ ] dial 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” (142) to shoot.

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.
- Press the [ ] button, choose [Touch Shutter] on the [ ] tab, and then choose [Enable] (31).
Continuous Shooting

2 Shoot.
- Touch the subject on the screen, and then lift your finger immediately.
- The camera shoots, as a shutter sound is played.
- To cancel touch shutter, choose [Disable] in step 1.

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 (42).
- 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.
- Multi-area White Balance (35) is not available. Also note that these features are not available.
  - [Hg Lamp Corr.] (51)
  - [Blink Detection] (53)
- With Touch Shutter (43), 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.

In [AUTO] mode, you can also choose items in step 1 by pressing the (1) buttons.

Image Display during Playback

Each set of images shot continuously is managed as a single group, and only the first image in that group will be displayed. To indicate that the image is part of a group, is displayed in the upper left of the screen.

If you erase a grouped image (118), all images in the group are also erased. Be careful when erasing images.
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 (p. 110).

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. 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 (p. 49).
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.
- Press the [MENU] button, choose [Face ID Settings] on the [1] tab, and then press the [OK] button (31).
- Press the [▲][▼] buttons or turn the [■] dial to choose [Add to Registry], and then press the [OK] button.
- Press the [▲][▼] buttons or turn the [■] dial to choose [Add a New Face], and then press the [OK] button.

2 Register face information.
- Aim the camera so that the face of the person you want to register is inside the gray frame at the center of the screen.
- A white frame on the person’s face indicates that the face is recognized. Make sure a white frame is displayed on the face, and then shoot.
- If the face is not recognized, you cannot register face information.

3 Register the person’s name and birthday.
- Press the [6] button to access the keyboard, and then enter the name (32).
- To register a birthday, on the [Edit Profile] screen, choose [Birthday] (either press the [▲][▼] buttons or turn the [■] dial), and then press the [OK] button.
- Press the [▲][▼] buttons to choose an option.
- Press the [▲][▼] buttons or turn the [■] dial to specify the date.
- When finished, press the [OK] button.

4 Save the settings.
- Press the [▲][▼] buttons or turn the [■] dial to choose [Save], and then press the [OK] button.
- After a message is displayed, press the [▲][▼] buttons or turn the [■] dial to choose [Yes], and then press the [OK] button.
5 Continue registering face information.

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

- The flash will not fire when following step 2.
- If you do not register a birthday in step 3, Babies or Children icons on the Information Display 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.

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.

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

- Registered people may not be correctly detected if the captured image or scene differs drastically from the registered face information.
- If a registered face is not detected, or not easily detected, overwrite registered information with new face info. Registering face info right before shooting will allow for easier detection of registered faces.
- If a person is mistakenly detected as another person and you continue shooting, you can edit or erase the name recorded in the image during playback.
- Because faces of babies and children change quickly as they grow, you should update their face info regularly.
- Names will still be recorded in images even if you clear the [Shooting Info] check box in “Customizing the Information Displayed” 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).
- In [1] mode, names are not displayed on the shooting screen, but they will be recorded in still images.
- Names recorded in continuous shooting 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” (46), choose [Check/Edit Info].

2. Choose a person to check or edit their information.
   - Press the [▲▼] buttons to choose the person whose information you want to check or edit, and then press the [SET] button.

3. Check or edit the information as needed.
   - To check a name or birthday, choose [Edit Profile] (either press the [▲▼] buttons or turn the [D] dial, and then press the [SET] button. On the screen displayed, you can edit the name or birthday as described in step 3 of “Registering Face ID Information” (46).
   - To check face information, choose [Face Info List] (either press the [▲▼] buttons or turn the [D] dial, and then press the [SET] button. To erase face information, press the [SET] button on the screen displayed, choose face information to erase by pressing the [▲▼] buttons or turning the [D] dial, and then press the [SET] button. After [Erase?] is displayed, choose [OK] (either press the [▲▼] buttons or turn the [D] dial), and then press the [SET] button.

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” (46), choose [Add Face Info].

2. Choose a person to overwrite their face info.
   - Press the [▲▼] buttons to choose the name of the person whose face info you want to overwrite, and then press the [SET] button.
   - If less than five items of face info are registered, go to step 4 to add face information.

Even if you change names in [Edit Profile], the names recorded in previously shot images will remain the same.
3 Choose the face info to overwrite.
- Press the [▲] [▼] [◄] [►] buttons or turn the [◉] dial to choose the face info to overwrite, and then press the [●] button.

4 Register face information.
- Follow step 2 in “Registering Face ID Information” (46) 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 (49), and then register new face information (46) 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” (46) and choose [Erase Info].

2 Choose a person to erase their information.
- Press the [▲] [▼] [◄] [►] buttons to choose the name of the person to erase, and then press the [●] button.
- After [Erase?] is displayed, press the [◄] [●] buttons or turn the [◉] dial to choose [OK], and then press the [●] button.

- If you erase a registered person’s info, you will not be able to display their name (109), overwrite their info (113), or search for images that include them (110).

- You can also erase names in image information (113).
Image Customization Features

Changing the Aspect Ratio

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

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

16:9 Used for display on widescreen HDTVs or similar display devices.
3:2 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.
4:3 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.
1:1 Square aspect ratio.

Changing Image Quality

Choose from 4 levels of image quality. For guidelines on how many of each kind of image can fit on a memory card, see “Number of Shots per Memory Card” (212).

- Press the [ ] button, choose [ ] in the menu, and choose the desired option (3:2).
- The option you configured is now displayed.
- To restore the original setting, repeat this process but choose [ ].

Guidelines for choosing image quality based on paper size (for 3:2 images)

- A2 (16.5 x 23.4 in.)
- A3 – A5 (11.7 x 16.5 – 5.8 x 8.3 in.)
- 3.5 x 5 in., 5 x 7 in., Postcard
- For e-mailing and similar purposes

- Not available in [ ] mode.
- You can also change the image quality by accessing MENU (31) ► [ ] tab ► [Image quality].

- You can also configure this setting by choosing MENU (31) ► [ ] tab ► [Still Image Aspect Ratio].
### Correcting Greenish Image Areas from Mercury Lamps

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

- Once the setting is complete, [ ] is displayed.
- To restore the original setting, repeat this process but choose [Off].

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

- Try taking some test shots first to make sure you obtain the desired results.
- In continuous shooting (44), this setting is set to [Off] and cannot be changed.

### 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 (160). For guidelines on the total recording time for movies at each level of image quality that will fit on a memory card, see “Recording Time per Memory Card” (212).

- Press the [ ] button, choose the movie quality menu item, and then choose the desired option (30).
- The option you configured is now displayed.

<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>[ ]</td>
<td>1920 x 1080</td>
<td>59.94 fps</td>
<td>For shooting in Full HD. Enables movies with smoother motion.</td>
</tr>
<tr>
<td>[ ]</td>
<td>1920 x 1080</td>
<td>29.97 fps</td>
<td>For shooting in HD.</td>
</tr>
<tr>
<td>[ ]</td>
<td>1280 x 720</td>
<td>23.98 fps</td>
<td>For shooting in standard definition.</td>
</tr>
</tbody>
</table>
**Helpful Shooting Features**

### Using the Dual Axis Electronic Level

#### Still Images

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

1. **Display the electronic level.**
   - Press the button several times to display the electronic level.

2. **Straighten the camera.**
   - (1) indicates the front-back orientation and (2) the left-right orientation.
   - If the camera is tilted, move it so that the red line changes to green.

#### Movies

- **If the electronic level is not displayed in step 1, press the button and check the setting in tab ► [Shooting information display].**
- **The electronic level is not displayed during movie recording.**
- **If you hold the camera vertically, the orientation of the electronic level will be updated automatically to match the camera orientation.**
- **Calibrate the electronic level if it seems ineffective in helping you level the camera ( ).**
- **Not available in mode.**

---

**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>1280 x 720</td>
<td>25.00 fps</td>
<td>For shooting in HD.</td>
<td></td>
</tr>
<tr>
<td>640 x 480</td>
<td>25.00 fps</td>
<td>For shooting in standard definition.</td>
<td></td>
</tr>
</tbody>
</table>

- Black bars (displayed on the left and right in and modes and on the top and bottom in modes) indicate image areas not recorded.
- You can also configure this setting by choosing MENU ( ) ► [Movie Quality].

---

- Black bars (displayed on the left and right in and modes and on the top and bottom in modes) indicate image areas not recorded.
- You can also configure this setting by choosing MENU ( ) ► [Movie Quality].
**Magnifying the Area in Focus**

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

1. **Configure the setting.**

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

- The area in focus is not magnified in the following cases when the shutter button is pressed halfway:
  - If a face was not detected, if the person is too close to the camera and their face is too large for the screen, or if the camera detects subject movement
  - When digital zoom is used (41)
  - When a TV is used as a display (170)
- Not available in mode.

**Checking for Closed Eyes**

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

1. **Configure the setting.**

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

- When you have specified multiple shots in mode, this function is only available for the final shot.
- A frame is displayed around people whose eyes are closed when you have selected [2 sec.], [4 sec.], [8 sec.], or [Hold] in [Display Time] (58).
- This feature is not available during continuous shooting in mode (40).
- This feature is not available in continuous shooting mode (44).
Deactivating Auto Level

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

1. Press the [MENU] button, choose [Auto level] on the [?] tab, and then press the [?] button (31).
2. Choose [Disable], and press the [?] button again (31).

Once recording begins, the display area narrows, and subjects are enlarged (55).

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.
   - Press the [MENU] button, choose [IS Settings] on the [?] tab, and then press the [?] button (31).
2. Configure the setting.
   - Press the [?][?] buttons or turn the [?] dial to choose [IS Mode], press the [?] button, and then press the [?][?] buttons or turn the [?] dial to choose the desired option (40).

<table>
<thead>
<tr>
<th>IS Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>Deactivates image stabilization.</td>
</tr>
<tr>
<td>Continuous</td>
<td>Optimal image stabilization for the shooting conditions is automatically applied (Intelligent IS) (40).</td>
</tr>
</tbody>
</table>

Continuous Optimal image stabilization for the shooting conditions is automatically applied (Intelligent IS) (40).
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” (31).
- Follow step 1 in “Deactivating Image Stabilization” (54) to access the [IS Settings] screen.
- Choose [Dynamic IS], and then choose [Low] (31).

- 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] (54).
- Only [Standard] is available when the movie quality is [576 x 416] (NTSC) or [640 x 480] (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” (31).

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.

- Press the [MENU] button, choose [AF-assist Beam] on the [ ] tab, and then choose [Off].
- To restore the original setting, repeat this process but choose [On].
Changing the Image Display Style after Shots

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

### Changing the Image Display Period after Shots

2. Configure the setting.
   - Choose [Display Time], and then choose the desired option.
   - To restore the original setting, repeat this process but choose [Quick].

<table>
<thead>
<tr>
<th>Display Time</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quick</td>
<td>Displays images only until you can shoot again.</td>
</tr>
<tr>
<td>2 sec., 4 sec., 8 sec.</td>
<td>Displays images for the specified time. Even while the shot is displayed, you can take another shot by pressing the shutter button halfway again.</td>
</tr>
<tr>
<td>Hold</td>
<td>Displays images until you press the shutter button halfway.</td>
</tr>
<tr>
<td>Off</td>
<td>No image display after shots.</td>
</tr>
</tbody>
</table>

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. Access the [Flash Control] screen.
2. Configure the setting.
   - Choose [Red-Eye Lamp], and then choose [Off].
   - To restore the original setting, repeat this process but choose [On].
Changing the Screen Displayed after Shots

Change the way images are displayed after shots as follows.

1 Set [Display Time] to [2 sec.], [4 sec.], [8 sec.], or [Hold] (56).

2 Configure the setting.
   ● Choose [Display Info], and then choose the desired option.
   ● To restore the original setting, repeat this process but choose [Off].

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>Displays only the image.</td>
</tr>
<tr>
<td>Detailed</td>
<td>Displays shooting details (192).</td>
</tr>
</tbody>
</table>

- When [Display Time] (56) is set to [Off] or [Quick], [Display Info] is set to [Off] and cannot be changed.
- By pressing the [INFO] button while an image is displayed after shooting, you can switch the display information. Note that the settings of [Display Info] are not changed. You can also erase images by pressing the [Erase] button.
Other Shooting Modes

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

Applying Effects Automatically (Creative Shot)

Enjoying a Variety of Images from Each Shot

The camera determines the subject and shooting conditions, automatically applying special effects and recomposing the shot to emphasize the subject. Six still images are recorded for each shot. You can capture multiple still images with effects using camera-determined settings.

1. Enter [Creative Shot] mode.
   - Set the mode dial to [Creative Shot].

2. Shoot.
   - Press the shutter button all the way down. As you shoot, the shutter sound is played three times.
   - After the six images are displayed in succession, they are displayed simultaneously for about two seconds.
   - To keep the images displayed until you press the shutter button halfway, press the [ ] button. You can choose an image for full-screen display by pressing the [ ] buttons or turning the [ ] dial, and then press the [ ] button.
   - To return to the original display, press the [ ] button.

- Shooting will take some time when the flash fires, but hold the camera steady until the shutter sound is played three times.
- The six images are managed together as a group (112).
- Simultaneous display of the six images as shown in step 2 is only available immediately after you shoot.
Recording Movies with a Variety of Effects

Let the camera determine subjects and shooting conditions when you record movies, and filters and effects such as playback in slow or fast motion will be added automatically. Once you have recorded a few movies, up to four are automatically combined to create a Creative Shot movie of 15 – 25 seconds. Note that sound is not recorded in this mode.

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

2. **Record the first movie.**
   - Press the movie button. Recording begins, and a bar is displayed to indicate the elapsed time.
   - Recording stops automatically in 3 – 6 seconds.

3. **Record the second to fourth movies.**
   - Repeat step 2 three times to record four movies.

   - **Even if you do not record four movies that day, a Creative Shot movie will be saved as a separate file once the date changes.**

   - **Effects are generally applied consistently to movies 1 – 4, but you can also change the effect in each movie (page 59).**
   - **Individual chapters can be edited (page 128).**

Creative Shot Movie Playback

You can choose and play back Creative Shot movies recorded in [?] mode (page 108).

Choosing Effects

You can choose effects for images captured in [?] mode.

- After choosing [?] mode, turn the front dial to choose the effect.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto</td>
<td>All effects</td>
</tr>
<tr>
<td>Retro</td>
<td>Images resemble old photos</td>
</tr>
<tr>
<td>Monochrome</td>
<td>Images are generated in one color</td>
</tr>
<tr>
<td>Special</td>
<td>Bold, distinctive-looking images</td>
</tr>
<tr>
<td>Natural</td>
<td>Subdued, natural-looking images</td>
</tr>
</tbody>
</table>
Specific Scenes

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

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

2 Choose a shooting mode.
   - Press the [ ] button, choose [ ] in the menu, and then choose a shooting mode (30).

3 Shoot.

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 (79) 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. In this case, you should set [IS Mode] to [Off] (54).
- When you use a tripod for evening scenes, shooting in [AUTO] mode instead of [ ] mode will give better results (35).
- You can also choose the shooting mode by accessing MENU (31) ► [Rec. Mode].
- In [ ] mode, although no frames are displayed when you press the shutter button halfway, optimal focus is still determined.

Shooting Portraits (Portrait)

- Still Images  Movies
- Take shots of people with a softening effect.

Shooting Evening Scenes without Using a Tripod (Handheld Night Scene)

- Still Images  Movies
- 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.

Specific Scenes

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

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

2 Choose a shooting mode.
   - Press the [ ] button, choose [ ] in the menu, and then choose a shooting mode (30).

3 Shoot.
Applying Special Effects

Add a variety of effects to images when shooting.

1. **Shooting in Vivid Colors**
   - (Super Vivid)
   - Still Images  Movies
   - Shots in rich, vivid colors.

2. **Posterized Shots (Poster Effect)**
   - Still Images  Movies
   - Shots that resemble an old poster or illustration.

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

   - You can also choose the shooting mode by accessing MENU (31) ➤ [1] tab ➤ [Rec. Mode].

Shooting Yourself under Optimal Settings (Self Portrait)

For self-portraits, customizable image processing includes skin smoothing as well as brightness and background adjustment to make yourself stand out.

1. **Choose [ ]**.
   - Follow steps 1 – 2 in “Specific Scenes” (60) and choose [ ].

2. **Open the screen**.
   - Open the screen as shown.

3. **Configure the setting**.
   - On the screen, touch the icon of the setting to configure.
   - Choose the desired option.
   - To return to the previous screen, touch [ ].

4. **Shoot**.
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 [HDR].
   - Follow steps 1 – 2 in “Specific Scenes” (60) and choose [HDR].

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

   - Areas other than people’s skin may be modified, depending on the shooting conditions.
   - Try taking some test shots first to make sure you obtain the desired results.

   - In [ ] flash mode, background defocusing is set to [AUTO] and cannot be changed.
   - In [ ] mode, the time left before shooting is shown on the top of the screen when you activate the self-timer by selecting [ ], or by selecting [ ] and setting the time to 3 seconds or more.

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

   - If excessive camera shake interferes with shooting, mount the camera on a tripod or take other measures to keep it still. Additionally, you should set [IS Mode] to [Off] when using a tripod or other means to secure the camera (54).
   - Any subject movement will cause images to look blurry.
   - There will be a delay before you can shoot again, as the camera processes and combines the images.
   - [ ] may be displayed when you press the shutter button halfway in bright conditions, indicating automatic adjustment for optimal image brightness.
### Adding Artistic Effects

- Colors will look faded on the shooting screen, but the image aging effect is not shown. Review the image in Playback mode to see the effect (105).
- The image aging effect is not shown in movies.

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

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

1. **Choose [ ].**
   - Follow steps 1 – 2 in “Specific Scenes” (60) 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.**

### Shooting with Faded Colors (Nostalgic)

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

<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>

- Try taking some test shots first, to make sure you obtain the desired results.
Shots Resembling Miniature Models  
(Miniature Effect)

Creates the effect of a miniature model, by blurring image areas above and below your selected area. You can also make movies that look like scenes in miniature models by choosing the playback speed before the movie is recorded. People and objects in the scene will move quickly during playback. Note that sound is not recorded.

1 Choose [ ],
Follow steps 1 – 2 in “Specific Scenes” (60) 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 turn the [ ] dial to move it.

3 For movies, choose the movie playback speed.
Turn the [ ] dial to choose the speed.

4 Return to the shooting screen and shoot.
Press the [ ] button to return to the shooting screen, and then shoot.

—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.

● The zoom is not available when shooting movies. Be sure to set the zoom before shooting.
● Try taking some test shots first, to make sure you obtain the desired results.
● To switch the orientation of the frame to vertical, press the [ ] buttons in step 2. To return the frame to horizontal orientation, press the [ ] buttons.
● To move the frame when it is in horizontal orientation, press the [ ] buttons, and to move the frame when it is in vertical orientation, press the [ ] buttons.
● Holding the camera vertically will change the orientation of the frame.
● Movie image quality is [ ] at an aspect ratio of [ ] and [ ] at an aspect ratio of [ ] (50). These quality settings cannot be changed.
● You can also move the frame by touching or dragging across the screen.
### 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** [weekday3].
   - Follow steps 1 – 2 in “Specific Scenes” ( rains = 60) and choose [weekday3].

2. **Choose a color tone.**
   - Turn the [weekday3] 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>Standard</th>
<th>Shots resemble toy camera images.</th>
</tr>
</thead>
<tbody>
<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.

### 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** [weekday3].
   - Follow steps 1 – 2 in “Specific Scenes” ( rains = 60) and choose [weekday3].

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 [weekday3] icon indicates that the images could not be processed.

- 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 [weekday3] ring.

- Standard Shots resemble toy camera images.
- Warm Images have a warmer tone than with [Standard].
- Cool Images have a cooler tone than with [Standard].
Shooting with a Soft Focus Effect

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

1. Choose [ ].
   - Follow steps 1 – 2 in “Specific Scenes” (60) 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.

Shooting in Monochrome

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

1. Choose [ ].
   - Follow steps 1 – 2 in “Specific Scenes” (60) 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>B/W</th>
<th>Black and white shots.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sepia</td>
<td>Sepia tone shots.</td>
</tr>
<tr>
<td>Blue</td>
<td>Blue and white shots.</td>
</tr>
</tbody>
</table>
Special Modes for Other Purposes

### Shooting Starry Skies (Star)

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 “Camera” (210).

1. **Choose **
   - Follow steps 1 – 2 in “Specific Scenes” (60) and choose , and then press the button.
   - Press the buttons or turn the dial to choose , and then press the button.
   - Zoom is set to maximum wide angle and cannot be adjusted.

2. **Raise the flash.**
   - Lift the flash with your fingers.

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.

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

- Still Images
- Movies

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 “Camera” (210).

1. **Choose **
   - Follow steps 1 – 2 in “Specific Scenes” (60) and choose , and then press the button.
   - Press the buttons or turn the dial to choose , and then press the button.

2. **Raise the flash.**
   - Lift the flash with your fingers.

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.
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” (p.160) and choose [ ], and then press the [ ] button.
   - Press the [ ] buttons or turn the [ ] dial to choose [ ], 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” (60) and choose [ ], and then press the [ ] button.
- Press the [ ] buttons or turn the [ ] dial to choose [ ], 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 [ ] 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. [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.
- To make stars brighter, choose MENU ► [5] 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].
- Try switching to manual focus mode (85) to more accurately specify the focal position before shooting.
- Try switching to manual focus mode (85) to more accurately specify the focal position before shooting.
Shooting 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 [ ].
   - Follow steps 1 – 2 in “Specific Scenes” (60) and choose [ ], and then press the [ ] button.
   - Press the [ ] buttons or turn the [ ] dial to choose [ ], and then press the [ ] button.
   - Zoom is set to maximum wide angle and cannot be adjusted.

2. Configure movie settings.
   - Press the [ ] button.
   - Press the [ ] buttons or turn the [ ] dial to choose 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 (105) and check image brightness.
   - To adjust brightness, turn the exposure compensation dial and change the exposure level on the shooting screen. Check brightness again by taking another shot.

5. Shoot.
   - Press the movie button. [Busy] is displayed briefly, and then shooting begins.
   - 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 (161) while shooting.

<table>
<thead>
<tr>
<th>Item</th>
<th>Options</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<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>🌠 59.9, 59.97 (NTSC) 🌠 50.0, 50.00 (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>
</tbody>
</table>
● Sound is not recorded.
● You can also access the screen in step 2 by choosing MENU (31) ► [5] tab ► [Star Time-Lapse Movie Setting].
● To save each shot collected before the movie is created, choose MENU (31) ► [5] tab ► [Save Stills] ► [On]. Note that these individual images are managed as a single group, and during playback, only the first image is displayed. To indicate that the image is part of a group, a is displayed in the upper left of the screen. If you erase a grouped image (118), all images in the group are also erased. Be careful when erasing images.
● Try switching to manual focus mode (85) to more accurately specify the focal position before shooting.
● Even if you specify [Unlimited] in [Shooting Time] in step 2 and use an AC adapter kit (sold separately, 169), shooting will stop after about 8 hours, at most.

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

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

● There will be a delay before you can shoot again, as the camera processes the images.
● If the camera runs out of battery power or memory card space, shooting stops and a movie created from the images up to that point is saved.
● A shooting interval of [1 min.] is not available with these effects: , , , or .
Adjusting Colors

Colors can be manually adjusted in [ ] mode.

1 Choose a shooting mode.
   ● Choose [ ] ( ), [ ] ( ), [ ] ( ), or [ ] ( ) .

2 Choose color adjustment.
   ● Press the [ ] button, and then choose [ ] in the menu ( ).

3 Adjust the setting.
   ● Turn the [ ] dial or press the [ ] buttons to adjust the correction level for B and A, and then press the [ ] button.
   ● Once the setting is complete, [ ] is displayed.

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

   ● 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.
   ● Choose [ ] ( ), [ ] ( ), or [ ] ( ).

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

3 Frame the stars to capture.
   ● Press the [ ] button.
   ● Tilt the camera so that the stars to capture are inside the frame displayed.

4 Adjust the focus.
   ● Press the [ ] button. [Adjusting star focus] is displayed, and adjustment begins.
   ● Adjustment may take about 30 seconds. Do not move the camera until [Adjustment completed] is displayed.
   ● Press the [ ] button.

5 Shoot ( , , ).
Recording Various Movies

Recording Movies in [ ] Mode

1. **Enter [ ] mode.**
   - Set the mode dial to [ ].
   - Press the [ ] button, choose [ ] in the menu, and then choose [ ] (30).
   - 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 (193).**

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 (31) ► [ ] tab ► [Rec. Mode].
- Focus can be adjusted during recording by touching [ ] and pressing the [ ] buttons while [ ] is displayed.

- 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.
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 [ן] to lock the exposure.
- To unlock the exposure, touch [ן] again.

2 Adjust the exposure.
- Turn the exposure compensation dial.

3 Shoot (=73).

Disabling Auto Slow Shutter

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

- To restore the original setting, repeat this process but choose [A-SLOW ON].

- Auto Slow Shutter is only available for [ר5.94P] and [ר5.00P] movies.
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” (155) to choose [High].

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.
- Choose [Off] (31).

Using the Attenuator
The attenuator can reduce audio distortion in noisy environments. However, in quiet environments, it lowers the sound-recording level.
- Choose an option as desired (31).

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 (129).
1 Enter [C] mode.
- Set the mode dial to [C].
- Press the [3] button, choose [C] in the menu, and then choose (30).
- 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 [C] button.
- Turn the [C] dial to set the shooting time (4 – 6 sec.), and turn the [C] dial to set the playback effect (76).
3 Shoot (73).
- A bar showing the elapsed time is displayed.
### Playback Effects

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2x</td>
<td>Playback in fast motion</td>
</tr>
<tr>
<td>1x</td>
<td>Playback at normal speed</td>
</tr>
<tr>
<td>1/2x</td>
<td>Playback in slow motion</td>
</tr>
<tr>
<td>C</td>
<td>Normal playback with the last two seconds rewound and played again in slow motion</td>
</tr>
</tbody>
</table>

- Sound is not recorded in these clips.
- The movie quality is 840P (for NTSC) or 850P (for PAL) (51, 52) and cannot be changed.
- During C recording, a mark indicating the last two seconds is added to the bar showing the elapsed time.

### Recording iFrame Movies

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

1. **Choose [Ⅸ].**
   - Set the mode dial to [Ⅸ].
   - Press the [Ⅸ] button, choose [Ⅸ] in the menu, and then choose [Ⅸ] (30).
   - Black bars displayed on the top and bottom edges of the screen indicate image areas not recorded.

2. **Shoot (73).**

   - iFrame is a video format developed by Apple Inc.
   - The movie quality is 840P (for NTSC) or 850P (for PAL) (51, 52) and cannot be changed.
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 (78 – 95), 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 (79) or activating the flash (if subjects are dark, 91), which may enable optimum exposure.
- Movies can be recorded in [P] mode as well, by pressing the movie button. However, some [ ] menu (30) and MENU (31) settings may be automatically adjusted for movie recording.

P Mode

More discerning shots, in your preferred shooting style

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

- **Adjusting Image Brightness (Exposure Compensation)**

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

  - As you watch the screen, turn the exposure compensation dial to adjust brightness.

- **Locking Image Brightness / Exposure (AE Lock)**

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

  1. **Lock the exposure.**
     - Aim the camera at the subject to shoot with the exposure locked, and then press the [ ] button.
     - [ ] is displayed, and the exposure is locked.
     - To unlock AE, press the [ ] button 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.

  - Press the [ ] button, choose [ ] in the menu, and choose the desired option (30).
  - The option you configured is now displayed.

  - **Evaluative**
    - For typical shooting conditions, including backlit shots. Automatically adjusts exposure to match the shooting conditions.

  - **Center Weighted Avg.**
    - Determines the average brightness of light across the entire image area, calculated by treating brightness in the central area as more important.

  - **Spot**
    - Metering restricted to within the [ ] (Spot AE Point frame). You can also link the Spot AE Point frame to the AF frame (79).
Linking the Spot AE Point Frame to the AF Frame

1 Set the metering method to [ ].
- Follow the steps in “Changing the Metering Method” (78) to choose [ ].

2 Configure the setting.
- Press the [ ] button, choose [Spot AE Point] on the [ ] tab, and then choose [AF Point] (31).
- The Spot AE Point frame will now be linked to the movement of the AF frame (88).

Not available when [AF method] is set to [ ] (88).

Changing the ISO Speed

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.

- Press the [ ] button, choose [ ] in the menu, and choose the desired option (30).
- 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 (31) ► [ ] tab ► [ISO speed] ► [ISO Speed].

- Not available when [AF method] is set to [ ] (88).
Adjusting ISO Auto Settings

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

1. Access the setting screen.
   - Press the [MENU] button, choose [ISO speed] on the [ ] tab, and then press the [ ] button (31).
   - Choose [ISO Auto Settings] and press the [ ] button.

2. Configure the setting.
   - Choose a menu item to configure, and then choose the desired option (31).

Changing the Noise Reduction Level (High ISO NR)

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

1. Access the setting screen.
   - Press the [MENU] button, choose [High ISO NR] on the [ ] tab, and then choose the desired option (31).

   - Not available when images are captured in RAW format (94).

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 [ ].
   - Press the [MENU] button, choose [Bracketing] on the [ ] tab, and then choose [ ] (31).

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

   - AEB shooting is only available in [ ] mode (91).
   - Continuous shooting (44) is not available in this mode.

   - If exposure compensation is already in use (78), the value specified for that function is treated as the standard exposure level for this function.
   - You can also access the setting screen of step 2 by pressing the [ ] button when the exposure compensation screen (78) is displayed.
   - Three shots are taken, regardless of any quantity specified in (43).
   - In [Blink Detection] mode (53), this function is only available for the final shot.
**Dynamic Range Correction (DR Correction)**

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

- Press the [ ] button, choose [ ] in the menu, and choose the desired option (30).
- The option you configured is now displayed.

---

**Shadow Correct**

Automatically preserve image detail in shadows as follows.

- Press the [ ] button, choose [ ] in the menu, and then choose [ ] (30).
- Once the setting is complete, [ ] is displayed.

---

**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 [ ] enables you to reduce the shutter speed and aperture value.

- Press the [ ] button, choose [ ] in the menu, and choose the desired option (30).
- The option you configured is now displayed.

---

- ISO speed (79) will be adjusted to a speed within the supported range if you have specified a value outside the supported range indicated here.

- When selecting [ ], mount the camera on a tripod or take other measures to keep it still and prevent camera shake. In this case, you should set [IS Mode] to [Off] (54).

- ND: Neutral Density
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.

- Press the [ ] button, choose [ ] in the menu, and choose the desired option (30).
- The option you configured is now displayed.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto</td>
<td>Automatically sets the optimal white balance for the shooting conditions.</td>
</tr>
<tr>
<td>Day Light</td>
<td>For shooting outdoors in fair weather.</td>
</tr>
<tr>
<td>Shade</td>
<td>For shooting in the shade.</td>
</tr>
<tr>
<td>Cloudy</td>
<td>For shooting in cloudy weather or at twilight.</td>
</tr>
<tr>
<td>Tungsten</td>
<td>For shooting under ordinary incandescent lighting.</td>
</tr>
<tr>
<td>Fluorescent</td>
<td>For shooting under white fluorescent lighting.</td>
</tr>
<tr>
<td>Fluorescent H</td>
<td>For shooting under daylight fluorescent lighting.</td>
</tr>
<tr>
<td>Flash</td>
<td>For shooting with the flash.</td>
</tr>
<tr>
<td>Custom</td>
<td>For manually setting a custom white balance (82).</td>
</tr>
</tbody>
</table>

Custom White Balance

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

- Follow the steps in “Capturing Natural Colors (White Balance)” (82) to choose [ ] or [ ].
- Aim the camera at a plain white subject, so that the entire screen is white. Press the [ ] button.
- The tint of the screen changes once the white balance data has been recorded.

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

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)” (82) to choose [ ].
- Turn the [ ] dial to adjust the correction level for B and A.
Changing Image Color Tones (My Colors)

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

- Press the [MENU] button, choose [WB] in the menu, and choose the desired option (30).
- The option you configured is now displayed.

| My Colors Off | – |
| Vivid | Emphasizes contrast and color saturation, making images sharper. |
| Neutral | Tones down contrast and color saturation for subdued images. |
| Sepia | Creates sepia tone images. |
| B/W | Creates black and white images. |
| Positive Film | Combines the effects of Vivid Blue, Vivid Green, and Vivid Red to produce intense yet natural-looking colors resembling images on positive film. |
| Lighter Skin Tone | Lightens skin tones. |
| Darker Skin Tone | Darkens skin tones. |
| Vivid Blue | Emphasizes blues in images. Makes the sky, ocean, and other blue subjects more vivid. |
| Vivid Green | Emphasizes greens in images. Makes mountains, foliage, and other green subjects more vivid. |
| Vivid Red | Emphasizes reds in images. Makes red subjects more vivid. |
| Custom Color | Adjust contrast, sharpness, color saturation, and other qualities as desired (84). |
Shooting Range and Focusing

Shooting Close-Ups (Macro)

To restrict the focus to subjects at close range, set the camera to [MF]. For details on the range of focus, see “Shooting Range” (p.211).

1. Access the setting screen.
   - Press the [MF] button, choose [MF] (either press the [MF] buttons or turn the [MF] dial), and then press the [MENU] button.
   - Once the setting is complete, [MF] is displayed.

2. Configure the setting.
   - Press the [MF] buttons or turn the [MF] dial to choose an item, and then adjust the setting by turning the [MF] dial.
   - For stronger/more intense effects (or darker skin tones), adjust the value to the right, and for weaker/lighter effects (or lighter skin tones), adjust the value to the left.
   - Press the [OK] button to complete the setting.

- 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 [MF] (p.43).

- You can also configure this setting by pressing the [MF] button, touching [MF], and then touching it again.

- White balance (p.82) cannot be set in [L] or [S] modes.
- With [L] and [S] modes, colors other than people's skin tone may change. These settings may not produce the expected results with some skin tones.

Custom Color

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

1. Access the setting screen.
   - Follow the steps in “Changing Image Color Tones (My Colors)” (p.83) to choose [CUSTOM], and then press the [CUSTOM] button.

2. Configure the setting.
   - Press the [ ] buttons or turn the [ ] dial to choose an item, and then adjust the setting by turning the [ ] dial.
   - For stronger/more intense effects (or darker skin tones), adjust the value to the right, and for weaker/lighter effects (or lighter skin tones), adjust the value to the left.
   - Press the [OK] button to complete the setting.

- You can also specify a value by touching or dragging the bar.
Shooting in Manual Focus Mode

When focusing is not possible in AF mode, use manual focus. You can specify the general focal position and then press the shutter button halfway to have the camera determine the optimal focal position near the position you specified. For details on the range of focus, see “Shooting Range” (211).

1 Choose [MF].
   ● Press the [ ] button, choose [MF] (either press the [ ] buttons or turn the [ ] dial), and then press the [ ] button.
   ● [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, turn the [ ] dial to specify the general focal position, and then press the [ ] button.
   ● To adjust the magnification, press the [ ] button.
   ● During magnified display, you can move the focusing frame by pressing the [ ] button and then the [ ] buttons.

3 Fine-tune the focus.
   ● Press the shutter button halfway to have the camera fine-tune the focal position (Safety MF).
   ● To cancel manual focus, choose [ ] in step 1.
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 (31).

- 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 [BKT].


2 Configure the setting.

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

- Focus bracketing is only available in [ ] mode (91).
- Continuous shooting (44) 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” (85).
- Three shots are taken, regardless of any quantity specified in [ ] (43).
- In [Blink Detection] mode (53), this function is only available for the final shot.

- You can also configure this setting by touching or dragging the bar on the screen in step 2 to specify a value and then touching [MENU].
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 [3] tab, and then choose the desired option (31).
- 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 [ ] 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)” (41).

Choosing the AF Method

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

- Press the [ ] button, choose [AF ] in the menu, and choose the desired option (31).

- You can also configure this setting by accessing MENU (31) ► [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 (90).

- 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).

- The AF frame position is enlarged when you press the shutter button halfway with [AF-Point Zoom] (53) set to [On].
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).
   - Turn the [ ] or [ ] dial to move the AF frame, and press the [ ] buttons to fine-tune the position.
   - To return the AF frame to the original position in the center, press the [ ] button.

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

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

- AF frames are displayed at normal size when you use the digital zoom (41) or digital tele-converter (87), and in manual focus mode (85).

+Tracking

- You can also access the screen in step 1 by pressing the [ ] button.
- You can also return the AF frame to the original position in the center by holding down the [ ] button.
- You can also link the Spot AE Point frame to the AF frame (79).
- You can also configure the AF frame size by pressing the [ ] button and choosing [AF Frame Size] on the [ ] tab (31).

- 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 (50) setting.
- If no faces are detected in Servo AF (89) 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 and turn the [ ] dial to 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 (44) 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.
- [AF-Point Zoom] on the [ ] tab (31) is not available.
- Not available when using the self-timer (42).

- To have the camera keep adjusting the focus during continuous shooting (44), specify Servo AF with [AF method] set to [1-point AF].
- You can also configure this setting by accessing MENU (31) ► [ ] 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.

Press the [MENU] button, choose [Continuous AF] on the [ ] tab, and then choose [Off] (31).

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

Choosing a Person to Focus On (Face Select)

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

1 Set the AF method to [ + Tracking] (87).
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] (87).
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.

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 (45).

2 Enter Face Select mode.
   - Aim the camera at the person’s face and press the [ ] button.
   - After [Face Select : On] is displayed, a face frame [ ] is displayed around the face detected as the main subject.
   - Even if the subject moves, the face frame [ ] follows the subject within a certain range.
   - If a face is not detected, [ ] is not displayed.

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

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

Changing the Flash Mode

You can change the flash mode to match the shooting scene. For details on the flash range, see “Camera” (210).

1 Lift the flash.

2 Configure the setting.

- Press the button, choose a flash mode (either press the buttons or turn the dial), and then press the button.
- The option you configured is now displayed.

- The setting screen cannot be accessed by pressing the button when the flash is lowered. Lift the flash in advance.
- If the flash fires, vignetting may occur.

Auto

Fires automatically in low-light conditions.

On

Fires for each shot.
Adjusting the Flash Exposure Compensation

Just as with regular exposure compensation (pp. 78), you can adjust the flash exposure from –2 to +2 stops, in 1/3-stop increments.

- Raise the flash, press the [ ] button and immediately turn the [ ] dial to choose the compensation level, and then press the [ ] button.
- The correction level you specified is now displayed.

- When there is a risk of overexposure, the camera automatically adjusts the shutter speed or aperture value for flash shots to reduce washed-out highlights and shoot at optimal exposure. However, you can deactivate automatic adjustment of the shutter speed and aperture value by accessing MENU (pp. 31) and choosing [5] tab ► [Flash Control] ► [Safety FE] ► [Off].
- You can also configure the flash exposure compensation by accessing MENU (pp. 31) and choosing [5] tab ► [Flash Control] ► [Flash Exp. Comp].
- You can also access the [Built-in Flash Settings] screen (pp. 31) as follows (except when an optional external flash is mounted).
  - Press and hold the [ ] button for at least one second.
  - When the flash is up, press the [ ] button and immediately press the [ ] button.

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 [ ] 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 (pp. 54).
- In [ ] 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 [ ] 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 pressing the [ ] button, touching the desired option, and then touching it again.

Still Images  Movies

- 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 (pp. 54).
- In [ ] mode, even after the flash fires, ensure that the main subject does not move until the shutter sound is finished playing.

- When there is a risk of overexposure, the camera automatically adjusts the shutter speed or aperture value for flash shots to reduce washed-out highlights and shoot at optimal exposure. However, you can deactivate automatic adjustment of the shutter speed and aperture value by accessing MENU (pp. 31) and choosing [5] tab ► [Flash Control] ► [Safety FE] ► [Off].
- You can also configure the flash exposure compensation by accessing MENU (pp. 31) and choosing [5] tab ► [Flash Control] ► [Flash Exp. Comp].
- You can also access the [Built-in Flash Settings] screen (pp. 31) as follows (except when an optional external flash is mounted).
  - Press and hold the [ ] button for at least one second.
  - When the flash is up, press the [ ] button and immediately press the [ ] button.
Changing the Flash Timing

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

1 Access the setting screen.
   - Press the [MENU] button, choose [Flash Control] on the [5] tab, and then press the [ ] button (31).

2 Configure the setting.
   - Choose [Shutter Sync.], and then choose the desired option (31).

<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>

Shooting with the FE Lock

Just as with the AE lock (78), you can lock the exposure for flash shots.

1 Raise the flash and set it to [¥] (91).

2 Lock the flash exposure.
   - Aim the camera at the subject to shoot with the exposure locked. With the shutter button pressed halfway, press the [ ] button.
   - The flash fires, and when [ ] is displayed, the flash output level is retained.
   - To unlock FE, release the shutter button and press the [ ] button again. In this case, [ ] is no longer displayed.

3 Compose the shot and shoot.
   - After one shot, FE is unlocked and [ ] is no longer displayed.

- FE: Flash Exposure

- Still Images
- Movies
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 use the software (Digital Photo Professional, 176) 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 (30).
- 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].

- When transferring RAW images (or RAW and JPEG images recorded together) to a computer, always use the dedicated software (176).
- Digital zoom (41) is not available when capturing images in RAW format. Additionally, noise reduction level (80), dynamic range correction (81), shadow correction (81), and My Colors (83) cannot be configured.

- Follow the steps in “Changing Image Quality” (50) to adjust the settings.

### Capturing in RAW Format

#### Before Use

- Basic Guide
- Advanced Guide
- Camera Basics
- Auto Mode / Hybrid Auto Mode
- Other Shooting Modes
- P Mode
- Tv, Av, M, and C Mode
- Playback Mode
- Wi-Fi Mode
- Setting Menu
- Accessories
- Appendix
- Index

### Other Settings

#### Changing Image Quality

Choose from 8 combinations of size (number of pixels) and compression (image quality). Also specify whether to capture images in RAW format (94). For guidelines on how many of each kind of image can fit on a memory card, see “Number of Shots per Memory Card” (212).

- Follow the steps in “Changing Image Quality” (50) to adjust the settings.

- 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 use the software (Digital Photo Professional, 176) 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 (30).
- 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].

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- Press the [ ] button, and then choose [ ] in the menu (30).
- 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].

- When transferring RAW images (or RAW and JPEG images recorded together) to a computer, always use the dedicated software (176).
- Digital zoom (41) is not available when capturing images in RAW format. Additionally, noise reduction level (80), dynamic range correction (81), shadow correction (81), and My Colors (83) cannot be configured.

- Follow the steps in “Changing Image Quality” (50) to adjust the settings.
Using the Menu

- Press the [MENU] button, choose [Image quality] on the [1] tab, and then press the [button ([31].
- To capture in RAW format at the same time, turn the [ ] dial and choose [RAW] under [RAW]. Note that only JPEG images are captured when [−] is selected.
- Press the [ ] buttons or turn the [ ] dial to choose [JPEG], and then choose the image size and quality. 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 [−].

Changing the IS Mode Settings

You can keep image stabilization off until the moment you shoot.
- Follow the steps in “Deactivating Image Stabilization” ([54) to choose [Shoot Only].

Still Images

Movies
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 “Camera” (p.210).

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

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

<table>
<thead>
<tr>
<th>Shutter Speed (Sec.)</th>
<th>Available ISO Speed (p.79)</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] (p.54).
- 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 (p.97).

- [Tv]: Time value
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 “Camera” (page 210).

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

2 Set the aperture value.
  ● Turn the [Av] dial to set the aperture 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. For details on available shutter speeds and aperture values, see “Camera” (page 210).

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

2 Configure the setting.
  ● Turn the [Av] dial to set the shutter speed (1).
  ● Turn the [ ] ring to set the aperture value (2).
  ● When the ISO speed is fixed, an exposure level mark (4) based on your specified values is shown on the exposure level indicator for comparison to the standard exposure level (3). 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.

Tips:
- 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 [ ] tab to [On] (31) 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)" (79).

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.

### Table: Shutter Speed (Sec.) and Available ISO Speed

<table>
<thead>
<tr>
<th>Shutter Speed (Sec.)</th>
<th>Available ISO Speed ([AUTO] = [97])</th>
</tr>
</thead>
<tbody>
<tr>
<td>[BULB], 30 – 1.3</td>
<td>[AUTO], [125] – [3200]</td>
</tr>
<tr>
<td>1 – 1/2000</td>
<td>[AUTO], [125] – [12800]</td>
</tr>
</tbody>
</table>

- 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 [M].

- **[M]: Manual**
  - Calculation of optimum exposure is based on the specified metering method (78).
  - The following operations are available when ISO speed is set to [AUTO]:
    - Adjust exposure by turning the exposure compensation dial.
    - Press the [ISO] button to lock the ISO speed. Screen brightness changes accordingly.

- 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 (54).

- To avoid camera shake that may otherwise occur when pressing the shutter button directly, you can shoot remotely (155) or use an optional remote switch (74).

- When [Touch Shutter] is set to [Enable], 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.
Adjusting the Flash Output

Choose from the three flash levels in [Tv], [Av], and [M] modes.

1 Specify the flash mode.
   - Press the [↑,↓] buttons or turn the [ }] dial to choose [Flash Mode], and then press the [3] button.
   - Press the [↑,↓] buttons or turn the [ }] dial to choose [Manual], and then press the [3] button.

2 Configure the setting.
   - Raise the flash, press the [ ] button and immediately turn the [ ] dial to choose the flash level, and then press the [3] button.
   - Once the setting is complete, the flash output level is displayed.
     - [ ]: Minimum, [ ]: Medium, [ ]: Maximum

   - You can also set the flash level by accessing MENU (31) and choosing [5] tab ➤ [Flash Control] ➤ [Flash Output].
   - You can also access the [Flash Control] screen (31) as follows.
     - Press and hold the [ ] button for at least one second.
     - When the flash is up, press the [ ] button and immediately press the [MENU] button.

Recording Movies at Specific Shutter Speeds and Aperture Values

Set your preferred shutter speed, exposure, aperture value, and ISO speed.
For details on available shutter speeds and aperture values, see "Camera" (210), and for available ISO speeds, see "Changing the ISO Speed" (79).

1 Enter [ ] mode.
   - Set the mode dial to [ ].
   - Press the [3] button, choose [ ] in the menu, and then choose [ ] (30).

2 Configure the settings.
   - Turn the [ ] dial to set the shutter speed.
   - Turn the [ ] ring to set the aperture value.

3 Shoot.
   - Press the movie button.
   - You can also adjust settings while recording, as described in step 2.

   - Some shutter speeds may cause flickering on the screen when recording under fluorescent or LED lighting, which may be recorded.
Customizing Controls and Display

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] or [VF info/toggle settings] in [Shooting information display], and then press the [31] button.

2. Configure the setting.
   - Press the [▲][▼] buttons or turn the [▲] dial to choose any screen you prefer not to display, and then press the [31] button to remove the [▲] mark. Pressing the [31] button again will add the [▲] mark, which indicates that it is selected for 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.

- In [AUTO] mode, you can also adjust the exposure before recording by turning the exposure compensation dial.
- When the ISO speed is fixed, an exposure level mark based on your specified value is shown on the exposure level indicator for comparison to the standard exposure level. The exposure level mark is shown as [▲] or [▼] when the difference from standard exposure exceeds 3 stops.
- You can check the ISO speed in [AUTO] mode by pressing the shutter button halfway. If standard exposure cannot be obtained with your specified shutter speed and aperture value, the ISO speed is displayed in orange.

- Focus can be adjusted during recording by touching [AF] (to switch it to [MF]) and then pressing the [▲][▼] buttons.
Assigning Functions to Controls

Reassign functions of the shutter button, [MENU] button, [ ] ring, [ ] dial, or [ ] dial, or assign common functions to the movie button or [ ] button.

1 Access the setting screen.


2 Configure the setting.

- Press the [ [ ] ] buttons or turn the [ ] dial to choose the dial or button to assign, and then press the [ ] button.

- When assigning the shutter button, [ ] button, [ ] ring, [ ] dial, or [ ] dial, press the [ [ ] ] buttons or turn the [ ] dial to choose the shooting mode or the camera control, press the [ [ ] ] buttons to choose the shooting mode or function, and then press the [MENU] button.

- When assigning the [ ] or [ ] button, press the [ ] button, choose the function on the screen displayed (either press the [ [ ] ] buttons or turn the [ ] dials), and then press the [ ] button.

Customizing the Information Displayed

- Follow steps 1 – 2 in “Customizing Display Information” (page 100) to choose [Custom display 1] or [Custom display 2], and then press the [ ] button.

- Press the [ [ ] ] buttons or turn the [ ] dial to choose information to display, and then press the [ ] button to add a [ ] mark.

- To see an example of display, press the [MENU] button to return to the [Screen info/ toggle settings] or [VF info/ toggle settings] screen.

- For a smaller grid pattern, access [1] tab ► [Shooting information display] ► [Grid display].
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.
   - Press the [MENU] button, choose [Quick setting menu layout] on the [ ] tab, and then press the [ ] button (31).  

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. Complete 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” (102), press the [MENU] button.
   - Drag an icon to move it to a new position.

2. Complete the setting.
   - Press the [MENU] button.

Saving Shooting Settings

Save commonly used shooting modes and your configured function settings for reuse. To access saved settings later, simply turn the mode dial to [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 (78 – 97)
- Shooting menu settings
- Zoom positions
- Manual focus positions (85)
- My Menu settings (104)

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

2. Configure the setting.
3 Save the settings.
  ● Press the [4][2] buttons or turn the [3] dial to choose [OK], and then press the [✓] button.

2 Configure the setting.
  ● Press the [4][2] buttons or turn the [3] dial to choose [Select items], and then press the [✓] button.
  ● Press the [4][2] buttons or turn the [3] dial to choose a menu item to save (max. six items) and then press the [✓] button to save it.
  ● [✓] is displayed.
  ● To cancel saving, press the [✓] button. [✓] is no longer displayed.
  ● Press the [MENU] button.

3 Rearrange menu items, as needed.
  ● Press the [4][2] buttons or turn the [3] dial to choose [Sort], and then press the [MENU] button.
  ● Choose a menu item to move (either press the [4][2] buttons or turn the [3] dial), and then press the [✓] button.
  ● Press the [4][2] buttons or turn the [3] dial to change the order, and then press the [✓] button.
  ● Press the [MENU] button.

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

● To make My Menu immediately accessible by pressing the [MENU] button in Shooting mode, set [Set default view] to [Yes].

● On the [Select items] screen for saving or clearing items, you can also touch items to select them.

● On the [Sort] screen, you can also drag items to change the display order.

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 Configure the setting.
  ● Press the [4][2] buttons or turn the [3] dial to choose [Select items], and then press the [✓] button.
  ● Press the [4][2] buttons or turn the [3] dial to choose a menu item to save (max. six items) and then press the [✓] button to save it.
  ● [✓] is displayed.
  ● To cancel saving, press the [✓] button. [✓] is no longer displayed.
  ● Press the [MENU] button.

3 Rearrange menu items, as needed.
  ● Press the [4][2] buttons or turn the [3] dial to choose [Sort], and then press the [MENU] button.
  ● Choose a menu item to move (either press the [4][2] buttons or turn the [3] dial), and then press the [✓] button.
  ● Press the [4][2] buttons or turn the [3] dial to change the order, and then press the [✓] button.
  ● Press the [MENU] button.
Playback Mode

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

- To prepare the camera for these operations, press the [播放] 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.

Viewing

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

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

2. **Choose images.**
   - To view the previous image, press the [前] button or turn the [上] dial counterclockwise. To view the next image, press the [后] button or turn the [下] dial clockwise.
   - Press and hold the [前][后] buttons to browse through images quickly.
   - To access this screen (Scroll Display mode), turn the [上] dial rapidly. In this mode, turn the [上] dial to browse through images.
   - To return to single-image display, press the [播放] button.
   - To browse images grouped by shooting date, press the [前][后] buttons in Scroll Display mode.

- To prepare the camera for these operations, press the [播放] 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.
Movies are identified by a [ ] icon. To play movies, go to step 3.

3 Play movies.
- To start playback, press the [ ] button to access the movie control panel, press the [ ] buttons to choose [ ], and then press the [ ] button again.

4 Adjust the volume.
- Press the [ ] buttons to adjust the volume.
- To adjust the volume when the volume indicator (1) is no longer displayed, press the [ ] buttons.

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

Touch-Screen Operations

- To view the next image, drag left across the screen, and to view the previous image, drag right.
- To access Scroll Display mode, quickly drag left or right repeatedly.
- You can also browse through images in Scroll Display mode by dragging left or right.
- 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.
- To start movie playback, touch [ ] in step 2 of “Viewing” (105).
- To adjust the volume during movie playback, quickly drag up or down.
- To stop playback, touch the screen. The screen shown at left is displayed, and the following operations are available.
  - Touch [ ] to display the volume panel, and then touch [ ] to adjust the volume. At a volume of 0, [ ] is displayed.
  - To switch frames, touch the scrollbar or drag left or right.
  - To resume playback, touch [ ].
  - Touch [ ] to return to the screen in step 2 of “Viewing” (105).

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

3 Play movies.
- To start playback, press the [ ] button to access the movie control panel, press the [ ] buttons to choose [ ], and then press the [ ] button again.

4 Adjust the volume.
- Press the [ ] buttons to adjust the volume.
- To adjust the volume when the volume indicator (1) is no longer displayed, press the [ ] buttons.

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

- To switch to Shooting mode from Playback mode, press the shutter button halfway.
- To deactivate Scroll Display, choose MENU ([31] ▶ [5] tab ▶ [Scroll Display] ▶ [Off].
- To have the most recent shot displayed when you enter Playback mode, choose MENU ([31] ▶ [5] tab ▶ [Resume] ▶ [Last shot].
- To change the transition shown between images, access MENU ([31] and choose your desired effect on the [5] tab ▶ [Transition Effect].
Switching Display Modes

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

Open the screen to activate it when the camera is on. This will deactivate the viewfinder. Similarly, close the screen (facing the camera body) to deactivate it and activate the viewfinder (20).

Overexposure Warning (for Image Highlights)

Washed-out highlights in the image flash on the screen in detailed information display (107).

Histogram

The graph in detailed information display (107) is a histogram showing the distribution of brightness in the image. The horizontal axis represents the degree of brightness, and the vertical axis, how much of the image is at each level of brightness. Viewing the histogram is a way to check exposure.

The histogram can also be accessed while shooting (100, 191).

RGB Histogram, GPS Information Display

The RGB histogram shows the distribution of shades of red, green, and blue in an image. The horizontal axis represents R, G, or B brightness, and the vertical axis, how much of the image is at that level of brightness. Viewing this histogram enables you to check image color characteristics.
Play the movie.

1 Choose an image.
- Still images shot in [ ] mode are labeled with [ ] icon.
- Choose a still image labeled with [ ] and press the [ ] button.

2 Play the digest movie.
- Press the [ ] buttons to choose [ ], and then press the [ ] button.
- The movie recorded automatically on the day of still image shooting is played back, from the beginning.

Viewing Short Movies Recorded in Creative Shot Mode (Creative Shot Movies)

Play back Creative Shot movies recorded in [ ] mode (58).

1 Choose a movie.
- Press the [ ] button and choose [Play Creative Shot Movies] on the [ ] tab (31).

2 Play the movie.
- Select a movie and press the [ ] button to play it.

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

View digest movies recorded automatically in [ ] mode (37) 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 [ ] and press the [ ] button.

2 Play the digest movie.
- Press the [ ] buttons to choose [ ], and then press the [ ] button.
- The movie recorded automatically on the day of still image shooting is played back, from the beginning.

- After a moment, [ ] will no longer be displayed when you are using the camera with information display deactivated (107).
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 [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 [W]. Fewer images are shown each time you move the lever.

2. Choose an image.
   - Turn the [■] dial to scroll through the images.
   - Press the [◀][►][◄][►] buttons to choose an image.
   - An orange frame is displayed around the selected image.
   - Press the [Q] button to view the selected image in single-image display.

- To deactivate the 3D display effect (shown if you hold down the [◀][►] buttons or turn the [■] dial rapidly), choose MENU (31) ➤ [3] tab ➤ [Index Effect] ➤ [Off].

Viewing by Date

Digest movies can be viewed by date.

Checking People Detected in Face ID

If you switch the camera to simple information display mode (107), the names of up to five detected people registered in Face ID (45) will be displayed.

- Press the [INFO] button several times until simple information display is activated, and then press the [◄][►] buttons or turn the [■] dial to choose an image.
- Names will be displayed on detected people.

- If you prefer not to have names displayed on images shot using Face ID, choose MENU (31) ➤ [3] tab ➤ [Face ID Info] ➤ [Name Display] ➤ [Off].
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

- Favorites: Displays images tagged as favorites (121).
- Shot Date: Displays the images shot on a specific date.
- People: Displays images with detected faces.
- Still image/Movie: Displays still images, movies, or movies shot in [ ] mode (37).
- Name: Displays images of a registered person (46).

1. Choose the first condition.
   - In single-image display, press the [ ] button, choose [ ] in the menu, and choose a condition.
   - When [ ] or [ ] is selected, you can view only images matching this condition by pressing the [ ] buttons or turning the [ ] dial. To perform an action for all of these images together, press the [ ] button and go to step 3.

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

3. View the filtered images.
   - Images matching your conditions are displayed in yellow frames. To view only these images, press the [ ] buttons, or turn the [ ] dial.
   - To cancel filtered display, press the [ ] button, choose [ ] in the menu, and then press the [ ] button again.

- When the camera has found no corresponding images for some conditions, those conditions will not be available.
Using the Front Dial to Jump between Images

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

| Jump to Favorites | Displays images tagged as favorites (121). |
| Jump Shot Date    | Jumps to the first image in each group of images that were shot on the same date. |
| 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. |

1 Choose a condition.
- Choose a condition (or jump method) in single-image display by turning the [ ] dial and immediately pressing the [ ] buttons.

2 View images matching your specified condition, or jump by the specified amount.
- Turn the [ ] dial to view only images matching the condition or jump by the specified number of images forward or back.

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 Front Dial to Jump between Images” (111) by dragging left or right with two fingers.
Viewing Individual Images in a Group

Images shot continuously (44), images shot in [ ] mode (58), and individual still images saved as source data in [ ] mode (70) are grouped, and only the first image is displayed. However, you can also view the images individually.

1 Choose a grouped image.
   - Press the [ ] buttons or turn the [ ] dial to choose an image labeled with [ ].

2 Choose [ ].
   - Press the [ ] button, and then choose [ ] in the menu (30).

3 View images in the group individually.
   - Pressing the [ ] buttons or turning the [ ] dial will display only images in the group.
   - To cancel group playback, press the [ ] button, choose [ ] in the menu, and press the [ ] button again (30).

During group playback (step 3), you can browse through images quickly “Navigating through Images in an Index” (109) and magnify them “Magnifying Images” (114). You can apply your actions to all images in the group at once by choosing [Protect All Images in Group] in “Protecting Images” (115), [All Images in Group] in “Erasing Multiple Images at Once” (118), [Select All in Group] in “Adding Images to the Print List (DPOF)” (182), or [Select All Images] in “Adding Images to a Photobook” (184).

To ungroup images so that they are displayed only as single still images, choose [ ] ➤ [ ] ➤ [Group Images] ➤ [Off] (31). However, grouped images cannot be ungrouped during individual playback.

In [ ] mode, the simultaneous display after step 2 in “Applying Effects Automatically (Creative Shot)” (58) is only shown immediately after you shoot.
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.**

2. **Choose an image.**
   - Following the procedure in “Checking People Detected in Face ID” (109), choose an image and press the [6] button.
   - An orange frame is displayed around the selected face. When multiple names are displayed in an image, press the [4] buttons or turn the [5] dial to choose the name to change, and then press the [6] button.

3. **Choose the editing option.**

4. **Choose the name of the person to overwrite with.**
   - Follow step 2 in “Overwriting and Adding Face Information” (48) to choose the name of the person you want to overwrite with.
   - You can also access the [Edit ID Info] screen by touching an image on the screen in step 2, touching [SET] to display the orange frame, and then touching the face to overwrite its name.
   - You can also choose editing options by touching them in step 3.

### Erasing Names

- After [Erase?] is displayed, press the [4][4][4][4] buttons or turn the [5] dial to choose [OK], and then press the [6] button.
**Image Viewing Options**

**Magnifying Images**

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

2. **Move the display position and switch images as needed.**
   - To move the display position, press the [△](↑)/[□](↓)/[←](←)/[→](→) buttons.
   - To switch to other images while zoomed, turn the [○](○) dial.

   - You can return to single-image display from magnified display by pressing the [MENU] button.
   - You can check the focus when [SET] is displayed by pressing the [B] button to show the position in focus (Focus Check). When multiple positions are in focus, press the [B] button repeatedly to switch to other positions.

**Viewing Slideshows**

Automatically play back images from a memory card as follows.

- Press the [MENU] button, and then choose [Slideshow] on the [E] tab (31).
- Press the [△](↑)/[□](↓) buttons or turn the [○](○) dial to choose [Start], and then press the [B] button.
- The slideshow will start after [Loading image] is displayed for a few seconds.
- Press the [B] button to stop the slideshow.

- The camera’s power-saving functions (27) are deactivated during slideshows.

**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.
Protecting Images

Protect important images to prevent accidental erasure (118).

- Press the [ ] button, choose [ ] in the menu, and then choose [ ] (either press the [ ] buttons or turn the [ ] dial). [ ] 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 (160).

- 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 [MENU] button and choose [Protect] on the [ ] tab (31).

2. Choose a selection method.
   - Choose an option as desired (31).
   - To return to the menu screen, press the [MENU] button.
### Choosing Images Individually

1. **Choose [Select].**
   - Following the procedure in “Using the Menu” (115), choose [Select] and press the [OK] button.

2. **Choose an image.**
   - To cancel selection, press the [OK] button again. [6] is no longer displayed.
   - Repeat this process to specify other images.

3. **Protect the image.**
   - Press the [MENU] button. A confirmation message is displayed.
   - Press the [4][5] buttons or turn the [6] dial to choose [OK], and then press the [OK] button.

   - **Warning:** 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 [MENU].
   - You can also protect images by touching [OK] on the screen in step 3.

### Selecting a Range

1. **Choose [Select Range].**
   - Following the procedure in “Using the Menu” (115), choose [Select Range] and press the [OK] button.

2. **Choose a starting image.**
   - Press the [OK] button.
   - Press the [4][5] buttons or turn the [6] dial to choose an image, and then press the [OK] button.

3. **Choose an ending image.**
   - Press the [OK] button to choose [Last image], and then press the [OK] button.
   - Press the [4][5] buttons or turn the [6] dial to choose an image, and then press the [OK] button.
   - Images before the first image cannot be selected as the last image.

   - **Warning:** 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 [MENU].
   - You can also protect images by touching [OK] on the screen in step 3.
4 Protect the images.
  ● Press the [▼] button to choose [Protect], and then press the [OK] button.

Clearing All Protection at Once

You can clear protection from all images at once. To clear protection, choose [Unprotect All Images] in step 1 of “Protecting All Images at Once”, and then complete step 2.

Protecting All Images at Once

1 Choose [Protect All Images].
  ● Following the procedure in “Using the Menu” (115), choose [Protect All Images] and press the [OK] button.

2 Protect the images.
  ● Press the [◄][►] buttons or turn the [Main] dial to choose [OK], and then press the [OK] button.
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 (115) cannot be erased.

Choosing a Selection Method

1. Access the setting screen.
   - Press the [MENU] button, and then choose [Erase] on the [ ] tab (31).

2. Choose a selection method.
   - Press the [ ] buttons or turn the [ ] dial to choose a selection method, and then press the [ ] button.
   - To return to the menu screen, press the [MENU] button.

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 (115) cannot be erased.

1. Choose an image to erase.
   - Press the [ ] buttons or turn the [ ] dial to choose an image.

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

For images captured in both RAW and JPEG format, pressing the [ ] button while the image is displayed gives you the option of choosing [Erase RAW], [Erase JPEG], or [Erase RAW + JPEG].

You can also erase the current image by touching [Erase] on the screen in step 2.

Images can also be erased by using Touch Actions (122).
Choosing Images Individually

1 **Choose [Select].**
   - Following the procedure in “Choosing a Selection Method” (118), choose [Select] and press the [OK] 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 [C] button 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.
   - Press the [LOCK] buttons or turn the [C] dial to choose [OK], and then press the [OK] button.

   ! Choosing an image captured in both RAW and JPEG format will erase both versions.

Selecting a Range

1 **Choose [Select Range].**
   - Following the procedure in “Choosing a Selection Method” (118), choose [Select Range] and press the [OK] button.

2 **Choose images.**
   - Follow steps 2 – 3 in “Selecting a Range” (116) to specify images.

3 **Erase the images.**
   - Press the [C] button to choose [Erase], and then press the [OK] button.

Specifying All Images at Once

1 **Choose [Select All Images].**
   - Following the procedure in “Choosing a Selection Method” (118), choose [Select All Images] and press the [OK] button.

2 **Erase the images.**
   - Press the [LOCK] buttons or turn the [C] dial to choose [OK], and then press the [OK] button.

   ● Choosing an image captured in both RAW and JPEG format will erase both versions.
Rotating Images

Change the orientation of images and save them as follows.

1 **Choose [Rotate].**
   - Press the [ ] button, and then choose [Rotate] in the menu (30).

2 **Rotate the image.**
   - Press the [ ] or [ ] button, depending on the desired direction. Each time you press the button, the image is rotated 90°. Press the [ ] button to complete the setting.

   ● Rotation is not possible when [Auto Rotate] is set to [Off] (120).

● On the screen in step 2, you can also touch [ ] to rotate images or touch [SET] 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.

2 **Rotate the image.**
   - Press the [ ] button or turn the [ ] dial to choose an image.
   - The image is rotated 90° each time you press the [ ] button.
   - To return to the menu screen, press the [MENU] button.

   ● Images cannot be rotated (120) when you set [Auto Rotate] to [Off]. Additionally, images already rotated will be displayed in the original orientation.

Using the Menu

1 **Choose [Rotate].**
   - Press the [ ] button and choose [Rotate] on the [ ] tab (31).
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.


Press the [ ] button, and then choose [ ] in the menu (30).

To untag the image, repeat this process and choose [OFF], and then press the [ ] button.

Using the Menu

1. Choose [Favorites].
   - Press the [ ] button and choose [Favorites] on the [ ] tab (31).

2. Choose an image.
   - Press the [ ] buttons or turn the [ ] dial to choose an image, and then press the [ ] button. [ ] is displayed.
   - To untag the image, press the [ ] button again. [ ] is no longer displayed.
   - Repeat this process to choose additional images.

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

   - Images will not be 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 (129).

   - You can also select or clear current images by touching the screen in step 2.
   - Images can also be tagged as favorites by using Touch Actions (122).
Assign a function to a Touch Action.
- Press the [▲][▼] buttons or turn the [●] dial to choose a dragging pattern, and then press the [●] button.
- Press the [▲][▼] buttons or turn the [●] dial to choose a function to assign.

Assignable Functions

<table>
<thead>
<tr>
<th>Slideshow</th>
<th>Start a slideshow.</th>
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<tbody>
<tr>
<td>Erase</td>
<td>Erase an image.</td>
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<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 “Wi-Fi Functions” (133).</td>
</tr>
<tr>
<td>To Computer</td>
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<td>To Printer</td>
<td></td>
</tr>
<tr>
<td>To Web Service</td>
<td></td>
</tr>
</tbody>
</table>

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.**
   - Press the [▲][▼] buttons or turn the [●] dial to choose a dragging pattern, and then press the [●] button.
   - Press the [▲][▼] buttons or turn the [●] dial to choose a function to assign.
Editing Still Images

- Image editing (123 – 126) is only available when the memory card has sufficient free space.

- You can access editing screens for various functions by touching an image after choosing the function in the menu.
- 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

Save a copy of images at a lower number of recording pixels.

1. Choose an image size.
   - Press the [6] button.

2. Save the new image.
   - After [Save new image?] is displayed, press the [3] buttons or turn the [3] dial to choose [OK], and then press the [6] button.
   - The image is now saved as a new file.

3. Review the new image.
   - The saved image is now displayed.

- Editing is not possible for images shot at a recording pixel setting of [S].
- RAW images cannot be edited.
- Images cannot be resized to a higher number of recording pixels.
- You can also view saved images by touching [Yes] on the screen in step 3.

Using the Menu

1. Choose [Resize].

2. Choose an image.

3. Choose an image size.

- Editing is not possible for images shot at a recording pixel setting of [S].
- RAW images cannot be edited.
- Images cannot be resized to a higher number of recording pixels.
- You can also view saved images by touching [Yes] on the screen in step 3.
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 (30).

2 Resize, move, and adjust the aspect ratio of the cropping frame.
   - To resize the frame, move the zoom lever.
   - To move the frame, press the [ ], [ ], [ ] buttons.
   - To change the frame orientation, turn the [ ] dial to choose [ ], and then press the [ ] button.
   - To change the frame aspect ratio, turn the [ ] dial to choose [ ]. To switch between aspect ratios (3:2, 16:9, 4:3, and 1:1), press the [ ] button repeatedly.

3 Preview the cropped image.
   - Turn the [ ] dial to choose [ ].
   - To switch display between the cropped image and the cropping frame, press the [ ] button repeatedly.

4 Save as a new image and review.
   - Follow step 2 in “Resizing Images” (123).
   - Press the [MENU] button and follow step 3 in “Resizing Images” (123).

- Editing is not possible for images shot at a recording pixel setting of [ ] or resized to [ ] (123).
- RAW images cannot be edited.
- Cropped images cannot be cropped again.
- Cropped images cannot be resized.

- Cropped images will have a lower number of recording pixels than uncropped images.
- While previewing the cropped image in step 3, you can resize, move, and adjust the aspect ratio of the cropping frame.
- Operations in step 2 are also possible by pressing the [MENU] button, choosing [ ] tab ► [Cropping], pressing the [ ] button, choosing an image, and pressing the [ ] button again.
- If you crop still images shot using Face ID (45), only the names of the people left in the cropped image will remain.
- You can also move the cropping frame in step 2 by dragging it. You can also resize frames by pinching in or out (114) on the screen.
- Operations are also possible by touching [ ], [ ], [ ], and [ ] on the top of the screen in step 2.
Changing Image Color Tones (My Colors)

You can adjust image colors and then save the edited image as a separate file. For details on each option, see “Changing Image Color Tones (My Colors)” (83).

1. **Choose [My Colors].**

2. **Choose an image.**
   - Press the [4] buttons or turn the [ ] dial to choose an image, and then press the [ ] button.

3. **Choose an option.**
   - Press the [4] buttons or turn the [ ] dial to choose an option, and then press the [ ] button.

4. **Save as a new image and review.**
   - Follow step 2 in “Resizing Images” (123).
   - Press the [MENU] button and follow step 3 in “Resizing Images” (123).

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

Correcting Image Brightness (i-Contrast)

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

1. **Choose [i-Contrast].**
   - Press the [MENU] button, and then choose [i-Contrast] on the [3] tab (31).

2. **Choose an image.**
   - Press the [4] buttons or turn the [ ] dial to choose an image, and then press the [ ] button.

3. **Choose an option.**
   - Press the [4] buttons or turn the [ ] dial to choose an option, and then press the [ ] button.

- The color of images edited using this function may vary slightly from the color of images shot using My Colors (83).
- You can also configure this setting by touching an option to select it on the screen in step 3 and then touching it again.
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.

- Press the [ ] buttons or turn the [ ] dial to choose an image.

3 Correct the image.

- Press the [ ] 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” (114).

4 Save as a new image and review.

- Press the [ ] buttons or turn the [ ] dial to choose [New File], and then press the [ ] button.
- The image is now saved as a new file.
- Press the [MENU] button and follow step 3 in “Resizing Images” (123).

- 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.


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

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

- You can also configure this setting by touching [ ] on the screen in step 3.
Editing Movies

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

1 Choose [\[\]].
   - Following steps 1 – 5 in “Viewing” (105), choose [\[\]] and press the [\(\)] button.
   - 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.
   - Press the \([\uparrow,\downarrow]\) buttons to choose \([\times]\) or \([\square]\).
   - To specify a portion to cut (indicated by \([\times]\)), press the \([\leftarrow,\rightarrow]\) buttons or turn the \(\bigcirc\) dial to move the orange \([\square]\) or \([\times]\) icon. Cut the beginning of the movie (from \([\times]\)) by choosing \([\times]\), and cut the end of the movie by choosing \([\square]\).
   - If you move \([\square]\) or \([\times]\) to a position other than a \([\times]\) mark, in \([\times]\) the portion before the nearest \([\times]\) mark on the left will be cut, while in \([\square]\) the portion after the nearest \([\times]\) mark on the right will be cut.

3 Review the edited movie.
   - Press the \([\bigcirc,\bigtriangledown]\) buttons to choose \([\bigcirc]\), and then press the [\(\bigcirc\)] button. The edited movie is now played.
   - If you edit the movie again, repeat step 2.
   - To cancel editing, press the [MENU] button, choose [OK] (either press the \([\leftarrow,\rightarrow]\) buttons or turn the \(\bigcirc\) dial), and then press the [\(\bigcirc\)] button.

4 Save the edited movie.
   - Press the \([\uparrow,\downarrow]\) buttons to choose \([\bigcirc]\), and then press the [\(\bigcirc\)] button.
   - Press the \([\bigtriangledown,\uparrow,\leftarrow,\rightarrow]\) buttons or turn the \(\bigcirc\) dial to choose [New File], and then press the [\(\bigcirc\)] button.
   - Choose [Save w/o Comp.], and then press the [\(\bigcirc\)] button.
   - The movie is now saved as a new file.

- The following movies cannot be edited this way: digest movies (37), Creative Shot movies (59), or albums without background music (130).
- To overwrite the original movie with the cut one, choose [Overwrite] in step 4. In this case, the original movie will be erased.
- If the memory card lacks sufficient space, only [Overwrite] will be available.
- Movies may not be saved if the battery pack runs out while saving is in progress.
- When editing movies, you should use a fully charged battery pack or an AC adapter kit (sold separately, 169).
- You can also edit movies by touching the movie editing panel or editing bar.
Reducing File Sizes

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

- On the screen in step 2 of “Editing Movies”, choose [Compress & Sav.]. Choose [New File], and then press the [OK] button.
- Choose [Compress & Sav.], and then press the [OK] button.

Image Quality of Compressed Movies

<table>
<thead>
<tr>
<th>Before Compression</th>
<th>After Compression</th>
</tr>
</thead>
<tbody>
<tr>
<td>[720/30P]</td>
<td>[720/25P]</td>
</tr>
<tr>
<td>[2072P]</td>
<td>[2560P]</td>
</tr>
<tr>
<td>[8192P]</td>
<td>[8128P]</td>
</tr>
</tbody>
</table>

- [720/30P] or [8192P] movies cannot be compressed.
- Edited movies cannot be saved in compressed format when you choose [Overwrite].
- Compressing movies to [2072P] or [8192P] reduces the file size while maintaining the same image quality.

Erasing Movie Chapters

Individual chapters (clips) recorded in [ ] or [ ] mode (, 37, 59) can be erased. Be careful when erasing clips, because they cannot be recovered.

1. Select the clip to erase.
   - Play a short movie as described in steps 1 – 2 of “Viewing Short Movies Recorded in Creative Shot Mode (Creative Shot Movies)” (108) or “Viewing Short Movies Created When Shooting Still Images (Digest Movies)” (108), and then press the [ ] button to access the movie control panel.
   - Press the [ ] buttons or turn the [Set] dial to choose [ ] or [ ], and then press the [ ] button to choose a clip.

2. Choose [ ].
   - Press the [ ] buttons or turn the [Set] dial to choose [ ], and then press the [ ] button.
   - The selected clip is played back repeatedly.

3. Confirm erasure.
   - Press the [ ] buttons or turn the [Set] dial to choose [OK], and then press the [ ] button.
   - The clip is erased, and the short movie is overwritten.
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 \[ \] button to access the home screen and 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 (\[ 121 \]) 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 \[ \] button.
   - After [Busy] is displayed, the home screen is displayed.

3 Preview an album.
   - Press the \[ \] buttons to choose a person or [Date] or [Event] as the album theme, and then press the \[ \] button.
   - After [Loading] is displayed for a few seconds, the album is played.

4 Save the album.
   - Press the \[ \] buttons to choose [Save Album as Movie], and then press the \[ \] button.
   - Once the album is saved, [Saved] is displayed.

5 Play the album (\[ 105 \]).

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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)” (129), choose [Music Settings] and press the [播放/停止] button.

2 **Create the album.**
   - Follow steps 1 – 3 in “Viewing Albums (Story Highlights)” (129) to create an album.

3 **Configure background music settings.**
   - Press the [向上/向下] buttons or turn the [向左/向右] dial to choose the desired item, press the [播放/停止] button, and then press the [向上/向下] buttons or turn the [向左/向右] dial to choose an option (31).

4 **Save the album.**
   - Follow step 4 in “Viewing Albums (Story Highlights)” (129) to save albums.

- Albums can include following images captured by the camera.
  - Still images
  - Digest movies (137), except compressed movies
  - Short movie clips (175) of two seconds or longer, or Creative Shot movies (159), except compressed movies

- Albums cannot be saved unless there is enough space on the memory card.
- To jump to the next chapter during the preview, drag left, and to jump to the previous chapter, drag right.
- You can specify the color effect in step 4 by choosing [Change Color Effect] and pressing the [播放/停止] button. To preview how the album looks with your selected effect applied, choose [Preview Album Again] on the screen in step 4 after pressing the [播放/停止] buttons to choose a color effect and pressing the [播放/停止] button.
- To play saved albums, choose [List of Albums] on the Story Highlights home screen, press the [播放/停止] button, choose a listed album, and press the [播放/停止] button again.

- 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 (128).
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)” (p. 129), choose [Custom] and press the [MENU] button.

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

3 **Choose album elements.**
   - Once you select the elements for your album and press the [MENU] button, your selected elements are labeled with [✓].
   - Press the [MENU] button after you are finished selecting still images, short clips, or Creative Shot movies in [Image Selection], dates in [Date Selection], or people in [Person Selection].
   - Press the [MENU] buttons or turn the [ ] dial to choose [Preview], and then 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” (p. 130), and then press the [MENU] button.

5 **Choose a color effect.**
   - On the screen in step 4 of “Viewing Albums (Story Highlights)” (p. 129), choose [Change Color Effect].
   - Press the [ ] buttons to choose a color effect, and then press the [ ] button.

6 **Save the album.**
   - Follow step 4 in “Viewing Albums (Story Highlights)” (p. 129) to save albums.
   - You can specify up to 40 files (or 10 movie files) after choosing [Image Selection]. The second time you create a custom album, [Select images based on previous settings?] is displayed. To use previously selected images as the basis, choose [Yes]. The previous stills, clips, or Creative Shot movies are labeled with [✓], and multiple images are displayed.
   - Up to 15 dates can be selected if you choose [Date Selection].
   - The color effect may not be applied to some images.
Combining Short Clips

Combine short clips to create a longer movie.
Note that movies created this way are not included in Story Highlights albums (129).

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 [ ] button.
   - Your selected clip is displayed on the bottom of the screen.
   - To cancel selection, press the [ ] button again.
   - Repeat these steps to specify other clips to combine.
   - After you are finished selecting clips, press the [ ] button.

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

4 Save the movie.
   - Choose [Save], and then press the [ ] button.
   - Once the movie 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 [ ] button.

   - To play the selected clip, move the zoom lever toward [ ] on the screen in step 2.
   - To rearrange clips, press the [ ] button on the screen in step 2, select a clip, press the [ ] button, press the [ ] buttons or turn the [ ] dial, and then press the [ ] 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 step 3 (130).
   - The image quality of movies saved is [ ] (for NTSC) or [ ] (for PAL).
   - Use a fully charged battery pack, if possible.
Available 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 remotely and geotag your shots from a smartphone or tablet. For convenience in this manual, 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.

Before using Wi-Fi, be sure to read “Wi-Fi (Wireless LAN) Precautions” (216).
Sending Images to a Smartphone

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

- **Connect via NFC (134)**
  Simply touch an NFC-compatible Android smartphone (OS version 4.0 or later) against the camera to connect the devices.

- **Connect to a device assigned to the \[ \] button (136)**
  Simply press the \[ \] button to connect the devices. This simplifies sending images to a smartphone (136). Note that only one smartphone can be assigned to the \[ \] button.

- **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.

Sending Images to an NFC-Compatible Smartphone

Use an Android (OS version 4.0 or later) 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 and geotag your shots (155). 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. The connection is ended automatically after image transfer.

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.**
   - 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 (N) on the smartphone with Camera Connect installed against the camera’s N-Mark.
- The camera starts up automatically.
- If the [Device Nickname] screen is displayed, press the [▲][▼] buttons or turn the [◄] dial to choose [OK], and then press the [●] button.
- Camera Connect is started on the smartphone.
- The devices are connected automatically.

3 Adjust the privacy setting.
- When this screen is displayed, press the [◄][►] buttons or turn the [◄] dial to choose [Yes], and then press the [●] button.
- You can now use the smartphone to browse, import, or geotag images on the camera or shoot remotely.

4 Send an image.
- Turn the [◄] dial to choose an image to send, press the [◄][►] buttons to choose [Send this image], and then press the [●] button.
- Image transfer will begin. The screen darkens during image transfer.
- [Transfer completed] is displayed after the image is sent, and the image transfer screen is displayed again.
- To end the connection, press the [MENU] button, choose [OK] on the confirmation screen (either press the [◄][►] buttons or turn the [◄] dial), and then press the [●] button. You can also use the smartphone to end the connection.

- 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 (156).
● Connections require that a memory card be in the camera.
● You can also change the camera nickname on the screen in step 2 (134).
● Not all NFC-compatible smartphones have an N-Mark (N). For details, refer to the smartphone user manual.
● You can also send multiple images at once and change the image size before sending (150).
● To disable NFC connections, choose MENU (31) ► [4] tab ► [Wi-Fi Settings] ► [NFC] ► [Off].

Connecting via NFC When Camera Is in Playback Mode

- Press the [C] button to turn the camera on.
- Touch the smartphone with Camera Connect installed (134) against the camera’s N-Mark (N).
- Press the [▲▼▲] buttons to choose an image to send, and then press the [□] button. [✓] is displayed.
- To cancel selection, press the [□] button again. [✓] is no longer displayed.
- Repeat this process to choose additional images.
- After you finish choosing images, press the [MENU] button, choose [OK], and then press the [□] button.
- Press the [▲▼▲] buttons to choose [Send], and then press the [□] button.
- The images are now sent. The connection is ended automatically after the image is sent.

- If during connection a message on the camera requests you to enter the nickname, follow step 2 in “Connecting via NFC When Camera Is Off or in Shooting Mode” (134) to enter it.
- 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 (152).

Sending to a Smartphone Assigned to the Button

Once you have connected to a smartphone initially by pressing the [C] button, you can simply press the [□] button after that to connect again for viewing and saving camera images on your connected device. These steps show how to use the camera as an access point, but you can also use an existing access point (139).

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

2 Press the [□] button.
- Press the [□] button.
- If the [Device Nickname] screen is displayed, press the [▲▼] buttons or turn the [□] dial to choose [OK], and then press the [□] button.
Choose [ ].
- Press the [ ] buttons or turn the [] dial to choose [ ], and then press the [ ] button.

The camera’s SSID is displayed.

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.

Start Camera Connect.
- Start Camera Connect on the smartphone.
- After the camera recognizes the smartphone, a device selection screen is displayed.

Choose the smartphone to connect to.
- Choose the smartphone (either by pressing the [ ] button or by turning the [] dial), and then press the [ ] button.
- After a connection is established with the smartphone, the smartphone name is displayed on the camera. (This screen will close in about one minute.)

Import images.
- Use the smartphone to import images from the camera to the smartphone.
- Use the smartphone to end the connection; the camera will automatically turn off.

Connections require that a memory card be in the camera.
- You can also change the camera nickname on the screen in step 2 (157).
- For better security, you can display a password on the screen in step 3 by accessing MENU (31) and choosing [ ] tab ► [Wi-Fi Settings] ► [Password] ► [On]. In this case, in the password field on the smartphone in step 4, enter the password displayed on the camera.
- One smartphone can be registered to the [ ] button. To assign a different one, first clear the current one in MENU (31) ► [4] tab ► [Mobile Device Connect Button].

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 (139).

1 Install Camera Connect.
- For an iPhone or iPad, find Camera Connect in the App Store and download and install the app.
- For Android smartphones, find Camera Connect in Google Play and download and install the app.
2 Access the Wi-Fi menu.
- Press the [Wi-Fi] button.

3 Choose [Connect to smartphone].
- Press the [Wi-Fi] button or turn the mode dial to choose [Connect to smartphone], and then press the [Wi-Fi] button.

4 Choose [Add a Device].
- Press the [Wi-Fi] button or turn the mode dial to choose [Add a Device], and then press the [Wi-Fi] button.

5 Adjust the privacy setting.
- Press the [Wi-Fi] button or turn the mode dial to choose [Yes], and then press the [Wi-Fi] button.

6 Send an image.
- Turn the mode dial to choose an image to send, press the [Wi-Fi] button to choose [Send this image], and then press the [OK] button.
- Image transfer will begin. The screen darkens during image transfer.
- [Transfer completed] is displayed after the image is sent, and the image transfer screen is displayed again.
- To end the connection, press the [MENU] button, choose [OK] on the confirmation screen (either press the [Wi-Fi] buttons or turn the mode dial), and then press the [Wi-Fi] button. You can also use the smartphone to end the connection.
- To add multiple smartphones, repeat the above procedure starting from step 1.
Using Another Access Point

When connecting the camera to a smartphone with the button or 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 either following steps 1 – 3 in “Sending to a Smartphone Assigned to the Button” (136) or steps 1 – 4 in “Adding a Smartphone Using the Wi-Fi Menu” (137).

2 Connect the smartphone to the access point.

3 Choose [Switch Network].
   - Press the buttons or turn the dial to choose [Switch Network], and then press the button.
   - A list of detected access points will be displayed.

4 Connect to the access point and choose the smartphone.
   - For WPS-compatible access points, connect to the access point and choose the smartphone 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 and choose the smartphone.

5 Configure the privacy settings and send images.
   - Follow steps 5 – 6 in “Adding a Smartphone Using the Wi-Fi Menu” (137) to configure the privacy settings and send images.

Previous Access Points

To reconnect to a previous access point automatically, follow step 3 in “Sending to a Smartphone Assigned to the Button” (136) or 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 reconnect to a previous access point, follow the procedure from step 5 in “Using Another Access Point” (139).
- 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” (139) from step 4.
Saving Images to a Computer

Preparing to Register a Computer

Checking Your Computer Environment

The camera can connect via Wi-Fi to computers running the following operating systems. For detailed system requirements and compatibility information, including support in new operating systems, visit the Canon website.

- Windows 8/8.1
- Windows 7 SP1
- Mac OS X 10.9
- Mac OS X 10.8.2 or later

- Windows 7 Starter and Home Basic editions are not supported.
- Windows 7 N (European version) and KN (South Korean version) require a separate download and installation of Windows Media Feature Pack.
For details, check the following website.
http://go.microsoft.com/fwlink/?LinkId=159730

Installing the Software

Windows 7 and Mac OS X 10.8 are used here for the sake of illustration.

1 Download the software.
- Visit the following site from a computer connected to the Internet.

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

- Choose your country or region, and then follow the instructions displayed to prepare for downloading.
- The compressed software is now downloaded to your computer.

2 Begin the installation.
- Double-click the downloaded file, and when the screen at left is displayed, click [Easy Installation]. Follow the on-screen instructions to complete the installation process.
- Installation may take some time, depending on computer performance and the Internet connection.
- Click [Finish] or [Restart] on the screen after installation.

- Internet access is required, and any ISP account charges and access fees must be paid separately.

- To uninstall the software, follow these steps.
  - Windows: Select [Start] menu ► [All Programs] ► [Canon Utilities], and then choose the software for uninstallation.
  - 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.

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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.

   - The following Windows settings are configured when you run the utility in step 2.
     - Turn on media streaming.
     - Turn on network discovery.
     - Turn on ICMP (Internet Control Message Protocol).
   - Some security software may prevent you from completing the settings as described here. Check the settings of your security software.

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 “Camera” (\*210). Connection methods vary depending on whether the access point supports Wi-Fi Protected Setup (WPS, \*142) or not (\*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.
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 [ ] button.
   - Press the [ ] button.
   - If the [Device Nickname] screen is displayed, press the [ ] buttons or turn the [ ] dial to choose [OK], and then press the [ ] button.

3. Choose [ ].
   - Press the [ ] buttons or turn the [ ] dial to choose [ ], and then press the [ ] button.

4. Choose [Add a Device].
   - Press the [ ] buttons or turn the [ ] dial to choose [Add a Device], and then press the [ ] button.

5. Choose [WPS Connection].
   - Press the [ ] buttons or turn the [ ] dial to choose [WPS Connection], and then press the [ ] button.

6. Choose [PBC Method].
   - Press the [ ] buttons or turn the [ ] dial to choose [PBC Method], and then press the [ ] button.

7. Establish the connection.
   - On the access point, hold down the WPS connection button for a few seconds.
   - On the camera, press the [ ] button to go to the next step.
   - The camera connects to the access point and lists devices connected to it on the [Select a Device] screen.
8 Choose the target device.
- Choose the target device name (either press the [▲][▼] buttons or turn the [●] dial), and then press the [●] 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].
- Mac OS: CameraWindow is automatically displayed when a Wi-Fi connection is established between the camera and computer.

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. You can easily connect again by pressing the [▲][▼] buttons to choose the device and then pressing the [●] button. To add a new device, display the device selection screen by pressing the [▲][▼] buttons, and then configure the setting.
- If you prefer not to display recent target devices, choose MENU (= 31) ► [4] tab ► [Wi-Fi Settings] ► [Target History] ► [Off].
- You can also change the camera nickname on the screen in step 2 (= 157).
- When the camera is connected to a computer, the camera screen is blank.
- Mac OS: If CameraWindow is not displayed, click the [CameraWindow] icon in the Dock.
- 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.
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.
   ● Press the [▲][▼] buttons or turn the [①] dial to choose a network (access point), and then press the [□] button.

3 Enter the access point password.
   ● Press the [□] button to access the keyboard, and then enter the password (32).
   ● Press the [▲][▼] buttons or turn the [①] dial to choose [Next], and then press the [②] button.

4 Choose [Auto].
   ● Press the [▲][▼] buttons or turn the [①] dial to choose [Auto], and then press the [□] button.
   ● To save images to a connected computer, follow the procedure from step 8 in “Using WPS-Compatible Access Points” (142).

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 [Wi-Fi] button to turn the camera on.
   - Press the [Wi-Fi] button.
   - If the [Device Nickname] screen is displayed, touch [OK].

2. Choose [Wi-Fi].
   - Press the [Wi-Fi] buttons or turn the [Wi-Fi] dial to choose [Wi-Fi], and then press the [Wi-Fi] button.

3. Accept the agreement to enter an email address.
   - Read the agreement displayed and touch [I Agree].
4 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).

5 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].

6 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.

7 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.

8 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.

9 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).

- Make sure initially that your computer or smartphone mail application is not configured to block email from relevant domains, which may prevent you from receiving the notification message.
- You can also change the camera nickname on the screen in step 1 (157).
- Once you have connected to devices via the Wi-Fi menu, recent destinations will be listed first when you access the menu. Press the [ ] buttons to access the device selection screen and then configure the setting.
- Once a connection destination is assigned in Touch Actions (122), you can automatically reconnect to a previous destination simply by dragging across the screen with the assigned gesture.
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 [ ].
   - In Playback mode, 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 to turn the camera on.
   - 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.

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].
   - Image transfer will begin. The screen darkens during image transfer.
   - After the image is sent, touch [OK] on the screen displayed to return to the playback screen.

Registering Other Web Services
You can also add Web services besides CANON iMAGE GATEWAY to the camera.
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 (139).

1. Access the Wi-Fi menu.
   - Press the [Wi-Fi] button to access the Wi-Fi menu as described in step 2 in “Adding a Smartphone Using the Wi-Fi Menu” (137).

2. Choose [Add a Device].
   - Press the [Wi-Fi] button to choose [Add a Device], and then press the [Wi-Fi] button.
   - The camera’s SSID is displayed.

3. Choose [Add a Device].
   - Press the [Wi-Fi] button to choose [Add a Device], and then press the [Wi-Fi] button.
   - The camera’s SSID is 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 (150).
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.

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● You can also send multiple images at once, resize images, and add comments before sending (150).
● 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.
Sending Images to Another Camera

Connect two cameras via Wi-Fi and send images between them as follows.

1. **Access the Wi-Fi menu.**
   - In the printer’s Wi-Fi setting menu, choose the SSID (network name) displayed on the camera to establish a connection.

2. **Choose [Add a Device].**
   - Choose the printer (either press the [D] buttons or turn the [O] dial), and then press the [T] button.

3. **Choose [Add a Device].**
   - Choose the printer name (either press the [D] buttons or turn the [O] dial), and then press the [T] button.

4. **Connect the printer to the network.**
   - Press the [D] buttons or turn the [O] dial to choose an image.
   - Press the [T] button.

5. **Choose an image to print.**
   - Press the [D] buttons or turn the [O] dial to choose an image.
   - For detailed printing instructions, see “Printing Images” (178).

6. **Connect the printer to the network.**
   - Press the [D] buttons or turn the [O] dial to choose the [Add a Device] button.
   - Follow steps 1 – 3 on the target camera too.
   - Camera connection information will be displayed when [Start connection on target camera] is displayed on both camera screens.

**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 pressing the [D] buttons to choose the device and then pressing the [T] button. To add a new device, display the device selection screen by pressing the [D] buttons, and then configure the setting.

**If you prefer not to display recent target devices, choose MENU (31) ➤ [4] tab ➤ [Wi-Fi Settings] ➤ [Target History] ➤ [Off].**

**To use another access point, follow steps 3 – 4 in “Using Another Access Point” (139).**
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, press the [MENU] button, choose [OK] on the confirmation screen (either press the [ ] buttons or turn the dial), and then press the button.

2. Choose a selection method.
   - Press the buttons or turn the dial to choose a selection method.

Choosing Images Individually

1. Choose [Select].
   - Following step 2 in “Sending Multiple Images” (150), choose [Select] and press the button.

- 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 pressing the buttons to choose the device and then pressing the button. To add a new device, display the device selection screen by pressing the buttons, and then configure the setting.
- 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 pressing the buttons to choose the device and then pressing the button. To add a new device, display the device selection screen by pressing the buttons, and then configure the setting.
- If you prefer not to display recent target devices, choose MENU (31) ◄ [4] tab ◄ [Wi-Fi Settings] ◄ [Target History] ◄ [Off].
- You can also send multiple images at once and change the image size before sending (150, 152).
- Once a connection destination is assigned in Touch Actions (122), you can automatically reconnect to a previous destination simply by dragging across the screen with the assigned gesture.
2 Choose an image.
- Press the [▲▼◄►] buttons to choose an image to send, and then press the [●] button. [✓] is displayed.
- To cancel selection, press the [●] button again. [✓] is no longer displayed.
- Repeat this process to choose additional images.
- After you finish choosing images, press the [MENU] button.
- Press the [◄►] buttons or turn the [◉] dial to choose [OK], and then press the [●] button.

3 Send the images.
- Press the [◄►] buttons or turn the [◉] dial to choose [Send], and then press the [●] button.

Sending Favorite Images

Send only images tagged as favorites (121).

1 Choose [Select Range].
- Following step 2 in “Sending Multiple Images” (115), choose [Select Range] and press the [●] button.

2 Choose images.
- Follow steps 2 – 3 in “Selecting a Range” (116) to specify images.
- To include movies, press the [▲▼◄►] buttons to choose [Incl. Movies], and then press the [●] button to mark the option as selected (✓).
- Press the [▲▼◄►] buttons to choose [OK], and then press the [●] button.

3 Send the images.
- Press the [◄►] buttons or turn the [◉] dial to choose [Send], and then press the [●] button.

● You can also choose images in step 2 by moving the zoom lever twice toward [Q] to access single-image display and then pressing the [◄►] buttons or turning the [◉] dial.

Selecting a Range

1 Choose [Select Range].
- Following step 2 in “Sending Multiple Images” (115), choose [Select Range] and press the [●] button.

2 Choose images.
- Follow steps 2 – 3 in “Selecting a Range” (116) to specify images.
- To include movies, press the [▲▼◄►] buttons to choose [Incl. Movies], and then press the [●] button to mark the option as selected (✓).
- Press the [▲▼◄►] buttons to choose [OK], and then press the [●] button.

3 Send the images.
- Press the [◄►] buttons or turn the [◉] dial to choose [Send], and then press the [●] button.
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 (128), 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, [ ] medium, [ ] low, [ ] weak
- Sending images to Web services will take less time when resending images you have already sent that are still on the CANON iMAGE GATEWAY server.

Choosing the Number of Recording Pixels (Image Size)

On the image transfer screen, choose [ ] by pressing the [ ] buttons, and then press the [ ] button. On the screen displayed, choose the recording pixel setting (image size) by pressing the [ ] buttons, and then press the [ ] button.

- To send images at original size, select [No] as the resizing option.
- Choosing [ ] will resize images that are larger than the selected size before sending.
- Movies cannot be resized.

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, choose [ ] by pressing the [ ] buttons, and then press the [ ] button.
2. Add a comment (32).
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 [CAM] as the destination. You can also assign [CAM] to the [Wi-Fi] button, so that you can simply press the [Wi-Fi] button to send any unsent images on the memory card to a computer via CANON iMAGE GATEWAY.

   - Add [CAM] as a destination, as described in “Registering CANON iMAGE GATEWAY” (145).
   - To include a Web service as the destination, log in to CANON iMAGE GATEWAY (145), 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.

2. Choose the type of images to send (only when sending movies with images).
   - Press the [Wi-Fi] button and choose [Wi-Fi Settings] on the [Wi-Fi] tab (31).
   - Press the [Wi-Fi] buttons to choose [Image Sync], and then press the [Wi-Fi] buttons to choose [Stills/Movies].

Preparing the Computer

Install and configure the software on the destination computer.

1. Install the software.
   - Install the software on a computer connected to the Internet (140).

2. Register the camera.
   - Windows: In the taskbar, right-click [CAM], and then click [Add new camera].
   - Mac OS: In the menu bar, click [CAM], 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 [CAM].

Assign [CAM] to the [Wi-Fi] button (only when sending images by pressing the [Wi-Fi] button).

- Clear the [Wi-Fi] button setting if a smartphone is already assigned to the button (136).
- Press the [Wi-Fi] button to access the mobile connection screen, choose [CAM] (either press the [Wi-Fi] buttons or turn the [Wi-Fi] dial), and then press the [Wi-Fi] button.
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.
- If you have already assigned 
  to the 
  button, press the 
  button.
- If you have not assigned the button this way, choose 
  as described in steps 1 – 2 in “Uploading Images to Web Services” (147).
- Sent images are labeled with a 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 or an AC adapter kit (sold separately, 169).

- 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” (153).
- 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.
## Shooting Remotely

As you check a shooting screen on your smartphone, you can use it to shoot remotely.

1. **Choose a shooting mode.**
   - Turn the mode dial to choose **P**. **Tv**, **Av**, **M**, or **C** as the mode.

2. **Secure the camera.**
   - Once remote shooting begins, the camera lens will come out. Lens motion from zooming may also move the camera out of position. Keep the camera still by mounting it on a tripod or taking other measures.

3. **Connect the camera and smartphone (136, 137).**
   - In the privacy settings, choose [Yes].

4. **Choose remote shooting.**
   - In Camera Connect on the smartphone, choose remote shooting.
   - The camera lens will come out. Keep your fingers away from the lens, and make sure no objects will obstruct it.
   - Once the camera is ready for remote shooting, a live image from the camera will be displayed on the smartphone.
   - At this time, a message is displayed on the camera, and all operations except pressing the power button are disabled.

5. **Shoot.**
   - Use the smartphone to shoot.
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 [Wi-Fi] button.
   - Press the [Wi-Fi] button.
   - Press the [Wi-Fi] buttons or turn the [Wi-Fi] dial to choose the icon of a device to edit, and then press the [Wi-Fi] button.

2. **Choose [Edit a Device].**
   - Press the [Wi-Fi] buttons or turn the [Wi-Fi] dial to choose [Edit a Device], and then press the [Wi-Fi] button.

3. **Choose the device to edit.**
   - Press the [Wi-Fi] buttons or turn the [Wi-Fi] dial to choose the device to edit, and then press the [Wi-Fi] button.

4. **Choose the item to edit.**
   - Press the [Wi-Fi] buttons or turn the [Wi-Fi] dial to choose the item to edit, and then press the [Wi-Fi] button.
   - The items you can change depend on the device or service.

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**Important Notes:**

- [P] mode is used for shooting in modes other than [P], [Tv], [Av], [M], and [C]. However, some Quick Set and MENU settings you have configured in advance may be changed automatically.
- Movie shooting is not available.
- Any jerky 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 import images from the camera.

- Movie shooting is not available.
- Any jerky 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 import images from the camera.

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**Before Use**

**Basic Guide**

**Advanced Guide**

- Camera Basics
- Auto Mode / Hybrid Auto Mode
- Other Shooting Modes
- P Mode
- Tv, Av, M, and C Mode
- Playback Mode
- Wi-Fi Mode
- Setting Menu
- Accessories
- Appendix
- Index
Changing the Camera Nickname

Change the camera nickname (displayed on connected devices) as desired.

1. Choose [Wi-Fi Settings].

2. Choose [Change Device Nickname].

3. Change the nickname.
   - Press the [4] button to access the keyboard (132), and then enter a nickname.

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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” (156), choose [Change Device Nickname] and press the [4] button.
- Select the input field and press the [4] button. Use the keyboard displayed to enter a new nickname (132).

Erasing Connection Information

Erase connection information (information about devices that you have connected to) as follows.

- Following step 4 in “Editing Connection Information” (156), choose [Erase Connection Info] and press the [4] button.
- The connection information will be erased.
Returning the Wi-Fi Settings to Default

Return the Wi-Fi settings to default if you transfer ownership of the camera to another person, or dispose of it. 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 [Wi-Fi Settings].

2. Choose [Reset Settings].
   - Press the [ ] buttons or turn the [ ] dial to choose [Reset Settings], and then press the [ ] button.

3. Restore the default settings.
   - Press the [ ] buttons or turn the [ ] dial to choose [OK], and then press the [ ] button.
   - The Wi-Fi settings are now reset.

To reset other settings (aside from Wi-Fi) to defaults, choose [Reset All] on the [4] tab (165).
Adjusting Basic Camera Functions

MENU (31) settings on the [1], [2], [3], and [4] 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.

1. Choose [Video system] on the [1] tab, and then choose an option.


3. Follow step 2 in “Formatting Memory Cards” (p. 160) to continue with the formatting process.

4. The memory card is now formatted.

- Low-level formatting takes longer than “Formatting Memory Cards” (p. 160), 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.

1. Choose [Video system] on the [1] tab, and then choose an option.

2. Regardless of the option selected in this setting, shots may be numbered consecutively after the last number of existing images.

Formatting Memory Cards

Before using a new memory card or a card formatted in another device, you should format the card with this camera. Formatting erases all data on a memory card. Before formatting, copy images on the memory card to a computer, or take other steps to back them up.


3. Choose [OK].

4. The memory card is now formatted.

- Formatting or erasing data on a memory card only changes file management information on the card and does not erase the data completely. When transferring or disposing of memory cards, take steps to protect personal information if necessary, as by physically destroying cards.

- The total card capacity indicated on the formatting screen may be less than the advertised capacity.
Electronic Level Calibration

Calibrate the electronic level if it seems ineffective in helping you level the camera. For greater calibration accuracy, display grid lines (100) to help you level the camera in advance.

1 Make sure the camera is level.
   • Place the camera on a flat surface, such as a table.

2 Calibrate the electronic level.
   • To adjust left/right tilt, choose [Horizontal Roll Calibration], and to adjust forward/backward tilt, choose [Vertical Pitch Calibration], followed by the [1] button. A confirmation message is displayed.
   • Choose [OK], and then press the [1] button.

Resetting the Electronic Level

Restore the electronic level to its original state as follows. Note that this is not possible unless you have calibrated the electronic level.

1 Configure the setting.
   • Choose [Reset], and then press the [1] button.
   • Choose [OK], and then press the [1] button.

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 (67).

2 To restore the original display, choose [Off].

Using Eco Mode

This function allows you to conserve battery power in Shooting mode. When the camera is not in use, the screen quickly darkens to reduce battery consumption.

1 Configure the setting.
   • Choose [Eco Mode] on the [2] tab, and then choose [On].
   • [Eco] is now shown on the shooting screen (191).
   • The screen darkens when the camera is not used for approximately two seconds; approximately ten seconds after darkening, the screen turns off. The camera turns off after approximately three minutes of inactivity.
2 Shoot.
- To activate the screen and prepare for shooting when the screen is off but the lens is still out, press the shutter button halfway.

Power-Saving Adjustment

Adjust the timing of automatic camera and screen deactivation (Auto Power Down and Display Off, respectively) as needed (27).

- Choose an item, press the [ ] button, and then press the [ ] buttons or turn the [ ] dial to configure the setting.

- 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 (161) to [On].

Screen Brightness

Screen and viewfinder brightness can be set separately. Before adjustment, make sure the display to adjust is activated.

- Choose [Disp. Brightness] on the [2] tab, press the [ ] button, and then press the [ ] buttons or turn the [ ] dial to adjust the brightness.

- For maximum brightness, press and hold the [ Info ] button for at least one second when the shooting screen is displayed or when in single-image display. (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.

World Clock

To ensure that your shots will have the correct local date and time when you travel abroad, simply register the destination in advance and switch to that time zone. This convenient feature eliminates the need to change the Date/Time setting manually.

Before using the world clock, be sure to set the date and time and your home time zone, as described in “Setting the Date and Time” (20).

1 Specify your destination.
- Choose [Time Zone] on the [2] tab, and then press the [ ] button.
- Press the [ ] buttons or turn the [ ] dial to choose [ World ], and then press the [ ] button.
- Press the [ ] buttons to choose the destination.
- To set daylight saving time (1 hour ahead), choose [ ] by pressing the [ ] buttons or turning the [ ] dial, and then choose [ ] by pressing the [ ] buttons.
- Press the [ ] button.
Switch to the destination time zone.
- Press the [▲][▼] buttons or turn the [▼] dial to choose [World], and then press the [MENU] button.
- [World] is now shown on the shooting screen (191).
- Adjusting the date or time while in [World] mode (21) will automatically update your [Home] time and date.

Date and Time
Adjust the date and time as follows.
- Choose [Date/Time] on the [2] tab, and then press the [▼] button.
- Press the [▲][▼][▲][▼] buttons to choose an option, and then adjust the setting, either by pressing the [▲][▼] buttons or turning the [▼] dial.

Lens Retraction Timing
The lens is normally retracted for safety about one minute after you press the [ vend] button in Shooting mode (26). To have the lens retracted immediately after you press the [ vend] button, set the retraction timing to [0 sec.].
- Choose [Lens Retraction] on the [2] tab, and then choose [0 sec.].

Display Language
Change the display language as needed.
- Choose [Language] on the [3] tab, and then press the [▼] button.
- Press the [▲][▼][▲][▼] buttons or turn the [▼] dial to choose a language, and then press the [▼] button.
- You can also access the [Language] screen in Playback mode by pressing and holding the [▼] button and immediately pressing the [▼] button.

Silencing Camera Operations
Silence camera sounds and movies as follows.
- Operation can also be silenced by holding down the [INFO] button as you turn the camera on.
- Sound is not played during movies (105) if you mute camera sounds. To restore sound during movies, press the [▲] button or drag up across the screen. Adjust volume as needed by pressing the [▲][▼] buttons or by dragging up or down quickly.
### Adjusting the Volume

Adjust the volume of individual camera sounds as follows.

- Choose [Volume] on the [3] tab, and then press the [ ] button.
- Choose an item, and then press the [ ] buttons to adjust the volume.

### Customizing Sounds

Customize camera operating sounds as follows.

- Choose [Sound Options] on the [3] tab, and then press the [ ] button.
- Choose an item, and then press the [ ] buttons to change the sound.

The shutter sound in digest movies recorded in [ ] 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 [1] tab, and then press the [ ] button.
- Press the [ ] buttons or turn the [ ] dial to choose an option.

### Hiding Hints and Tips

Hints and tips are normally shown when you choose Quick Set menu (30) items. If you prefer, you can deactivate this information.


### Adjusting the Touch-Screen Panel

Sensitivity of the touch-screen panel can be increased to respond to a lighter touch, or you can disable touch control.

- Choose [Touch Operation] on the [4] tab, and then choose the desired option.
- To increase touch-screen panel sensitivity, choose [Sensitive], and to disable touch control, choose [Disable].

### Metric / Non-Metric Display

Change the unit of measurement shown in the zoom bar (35), the MF indicator (85), and elsewhere from m/cm to ft/in as needed.

- Choose [Units] on the [4] tab, and then choose [ft/in].
Deleting All Copyright Information

You can delete both the author's name and copyright details at the same time as follows.

1. Follow the steps in “Setting Copyright Information to Record in Images” (page 165) and choose [Delete Copyright Info].
2. Press the 
   buttons or turn the 
   dial to choose [OK], and then press the 
   button.

Adjusting Other Settings

The following settings can also be adjusted.

- [ ] tab setting [Wi-Fi Settings] (page 133)
- [ ] tab setting [Mobile Device Connect Button] (page 136)

Restoring Default Camera Settings

If you accidentally change a setting, you can restore default camera settings.

1. Access the [Reset All] screen.
   - Choose [Reset All] on the [ ] tab, and then press the 
     button.
2. Restore default settings.
   - Press the 
     buttons or turn the 
     dial to choose [OK], and then press the 
     button.
   - Default settings are now restored.
The following functions are not restored to default settings.
- Information registered using Face ID (45)
- [1] tab setting [Video system] (160)
- Custom white balance data you have recorded (82)
- Shooting Mode
- Exposure compensation (78) setting
- Movie mode (73)
- Wi-Fi settings (133)
- Calibrated value for the electronic level (161)
- Copyright information (165)
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.

Accessories

Enjoy the camera in more ways with optional Canon accessories and other compatible accessories sold separately.
*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.).
*4 The following accessories are also supported: Speedlite 580EX, 430EX, 270EX, and 220EX, Speedlite Transmitter ST-E3-RT, Speedlite Bracket SB-E2, and Off-Camera Shoe Cord OC-E3.
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/ECB-2LHE
- Charger for Battery Pack NB-13L

AC Adapter Kit ACK-DC110
- For powering the camera using household power. Recommended when using the camera over extended periods, or when connecting the camera to a printer or computer. Cannot be used to charge the battery pack in the camera.

Flash Units

High-Power Flash HF-DC2
- External flash for illuminating subjects that are out of range of the built-in flash. High-Power Flash HF-DC1 can also be used.

Speedlite 600EX-RT/600EX/580EX II/430EX II/320EX/270EX II
- Shoe-mounted flash unit that enables many styles of flash photography. Speedlite 580EX, 430EX, 270EX, and 220EX are also supported.

Speedlite Bracket SB-E2
- Prevents unnatural shadows next to subjects during vertical shooting. Includes Off-Camera Shoe Cord OC-E3.

Speedlite Transmitter ST-E2/ST-E3-RT
- Enables wireless control of slave Speedlite flash units (except Speedlite 220EX/270EX).

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.

● High-Power Flash units cannot be used in [M], [Av], or [Tv] shooting mode when [Flash Mode] is set to [Manual].
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 [HDMI4], [HDMI3], [HDMI2], [HDMI1], [HDMI0] or [HDMI] 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.
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.

**Other Accessories**

- **Interface Cable IFC-600PCU**
  - For connecting the camera to a computer or printer.

- **Remote Switch RS-60E3**
  - Enables remote shutter button operation (pressing the button halfway or all the way down).

**Printers**

- **Canon-Brand PictBridge-Compatible Printers**
  - Even without using a computer, you can print images by connecting the camera directly to a printer. For details, visit your nearest Canon retailer.

**Photo and Movie Storage**

- **Connect Station CS100**
  - A media hub for storing camera images, viewing on a connected TV, printing wirelessly on a Wi-Fi-compatible printer, sharing over the Internet, and more.
4 Turn the camera on.
- Press the [电源] 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.

⚠ Touch-screen operations are not supported while the camera is connected to a television.

- Some information may not be available when using a TV as the display (192).
- Camera operating sounds are not played while the camera is connected to an HDTV.
- When the camera and TV are connected, you can also shoot while previewing shots on the larger screen of the TV. To shoot, follow the same steps as when using the camera screen. However, AF-Point Zoom (83), MF-Point Zoom (85), MF Peaking (86) and Night Display (161) are not available.

Powering the Camera with Household Power

Powering the camera with AC Adapter Kit ACK-DC110 (sold separately) eliminates the need to monitor the remaining battery level.

1 Make sure the camera is off.

2 Open the cover.
- Follow step 1 in “Inserting the Battery Pack and Your Memory Card” (19) to open the memory card/battery cover, and then open the coupler cable port cover as shown.

3 Insert the coupler.
- Holding the coupler with the terminals (1) facing as shown, insert the coupler just as you would a battery pack (following step 2 in “Inserting the Battery Pack and Your Memory Card” (19)).

- Make sure the coupler cable passes through the port (1).
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).

5 Connect the power cord.
- Insert one end of the power cord into the compact power adapter, and then plug the other end into a power outlet.
- Turn the camera on and use it as desired.
- When finished, turn the camera off and unplug the power cord from the outlet.

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 or Interface Cable IFC-600PCU.

1 Insert the battery pack.
- Follow step 1 in “Inserting the Battery Pack and Your Memory Card” (19) to open the cover.
- Insert the battery pack as described in step 2 of “Inserting the Battery Pack and Your Memory Card” (19).
- Follow step 3 in “Inserting the Battery Pack and Your Memory Card” (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.

● Do not disconnect the adapter or unplug the power cord while the camera is still on. This may erase your shots or damage the camera.
● Do not attach the adapter or adapter cord to other objects. Doing so could result in malfunction or damage to the product.
Charge the battery pack.

- CA-DC30: Flip out the plug (1) and plug the compact power adapter 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.

- To protect the battery pack and keep it in optimal condition, do not charge it continuously for more than 24 hours.
- When charging a different battery pack, be sure first to disconnect the interface cable from the camera and then insert another battery pack for charging.

3 Charge the battery pack.

- For details on charging time and the number of shots and recording time possible with a fully charged battery pack, see “Number of Shots/Recording Time, Playback Time” (211).
- You can view images even while the battery is charging, by turning the camera on and entering Playback mode (24). 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” (172). For details about USB connections on the computer, refer to the computer user manual.

- Charging is not possible when the camera is 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.
Using a Remote Switch (Sold Separately)

An optional Remote Switch RS-60E3 can be used to avoid camera shake that may otherwise occur when pressing the shutter button directly. This optional accessory is convenient when shooting at slow shutter speeds.

1 Connect the remote switch.
   - Make sure the camera is off.
   - Open the terminal cover and insert the remote switch plug.

2 Shoot.
   - To shoot, press the release button on the remote switch.

Using an External Flash (Sold Separately)

More sophisticated flash photography is possible with an optional Speedlite EX series flash. For movie shooting using an LED light, the optional Speedlite 320EX flash is available.

1 Attach the flash.
   - Make sure the camera is off, and then attach the flash unit to the hot shoe.

2 Turn the flash on, and then turn the camera on.
   - A red [ ] icon is now displayed.
   - The flash pilot lamp will light up when the flash is ready.

3 Choose shooting mode [ ], [ ], [ ], or [ ].
   - Flash settings can only be configured in these modes. In other modes, the flash is adjusted and fired automatically, as needed.

4 Configure the external flash.
   - Press the [ ] button, choose [Flash Control] on the [ ] tab, and then press the [ ] button.
   - Options already set on the flash itself are displayed.
   - Press the [ ] buttons or turn the [ ] dial to choose an item, and then set the desired option.
   - Available items vary depending on the shooting mode and the flash attached (175).

These optional flash units can provide bright lighting and meet a variety of flash photography needs.

Using a Remote Switch (Sold Separately)

Still Images
Movies

Connect the remote switch.
- Make sure the camera is off.
- Open the terminal cover and insert the remote switch plug.

Shoot.
- To shoot, press the release button on the remote switch.

Using an External Flash (Sold Separately)

Still Images
Movies

Attach the flash.
- Make sure the camera is off, and then attach the flash unit to the hot shoe.

Turn the flash on, and then turn the camera on.
- A red [ ] icon is now displayed.
- The flash pilot lamp will light up when the flash is ready.

Choose shooting mode [ ], [ ], [ ], or [ ].
- Flash settings can only be configured in these modes. In other modes, the flash is adjusted and fired automatically, as needed.

Configure the external flash.
- Press the [ ] button, choose [Flash Control] on the [ ] tab, and then press the [ ] button.
- Options already set on the flash itself are displayed.
- Press the [ ] buttons or turn the [ ] dial to choose an item, and then set the desired option.
- Available items vary depending on the shooting mode and the flash attached (175).
Camera Settings Available with an External Flash (Sold Separately)

The following items are available in [P], [Tv], [Av], or [M] mode. In other shooting modes, only [Red-Eye Lamp] can be configured. (With autoflash control, the flash always fires.) However, external flash units do not fire in modes that the built-in flash does not fire (193).

<table>
<thead>
<tr>
<th>Item</th>
<th>Options</th>
<th>Shooting Mode</th>
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<tbody>
<tr>
<td>Flash Mode</td>
<td>[Auto]*1 [Manual]*2</td>
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<td>Flash Exp. Comp*3</td>
<td>–3 to +3</td>
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<td>Flash Output*4</td>
<td>1/128~1/1 (in 1/3-stop increments)</td>
<td>P</td>
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<td>Wireless Func.*5</td>
<td>Off/Optical/Radio</td>
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<td>Safety FE*7</td>
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<td>Clear Flash Settings*8</td>
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● Settings for the built-in flash cannot be configured while a Speedlite EX series flash is attached, because that setting screen is no longer accessible.

● You can also access the setting screen by pressing the [] button for at least one second.

● 600EX-RT/580EX II only: [Flash Control] is not available if the external flash has been set up for stroboscopic flash.

● 320EX only: Auto LED lighting is only available in low-light movie recording or in Movie mode. In this case, the [ ] icon is shown.

Using Speedlite Bracket SB-E2 (Sold Separately)

● Using the optional Speedlite Bracket SB-E2 can help prevent unnatural shadows next to subjects during vertical shooting.

● To keep the LCD screen out of the way of the bracket, use the screen closed and facing outward.

Still Images
Movies

Using Speedlite Bracket SB-E2 (Sold Separately)

Still Images
Movies

● Settings for the built-in flash cannot be configured while a Speedlite EX series flash is attached, because that setting screen is no longer accessible.

● You can also access the setting screen by pressing the [] button for at least one second.

● 600EX-RT/580EX II only: [Flash Control] is not available if the external flash has been set up for stroboscopic flash.

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Camera Settings Available with an External Flash (Sold Separately)

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<td>1/128~1/1 (in 1/3-stop increments)</td>
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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
- 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

- 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.

Computer Connections via a Cable

Checking Your Computer Environment

The software can be used on the following computers. For detailed system requirements and compatibility information, including support in new operating systems, visit the Canon website.

- Windows 8/8.1
- Windows 7 SP1
- Mac OS X 10.10
- Mac OS X 10.9
When sending images to a computer via Wi-Fi, check the system requirements in “Checking Your Computer Environment” (140).

Installing the Software

For software installation instructions, see “Installing the Software” (140).

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.

2 Turn the camera on to access CameraWindow.
   • Press the [ ] button.
   • 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

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

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.

3 Turn the printer on.

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.

Still Images  Movies

Still Images  Movies

Still Images  Movies

Still Images  Movies
Configuring Print Settings

1. Access the printing screen.
   - Follow steps 1 – 6 in “Easy Print” (178) to access this screen.

2. Configure the settings.
   - Press the [▲][▼] buttons or turn the [▲] dial to choose an item, and then press the [□] button. On the next screen, choose an option (either press the [▲][▼] buttons or turn the [▲] dial), and then press the [□] button to return to the printing screen.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Default</td>
<td>Prints images with the date added.</td>
</tr>
<tr>
<td>File No.</td>
<td>Both</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>Default</td>
<td>Default</td>
<td>Matches current printer settings.</td>
</tr>
<tr>
<td>Off</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>On</td>
<td>–</td>
<td>Uses information from the time of shooting to print under optimal settings.</td>
</tr>
<tr>
<td>Red-Eye</td>
<td>1</td>
<td>Corrects red-eye.</td>
</tr>
<tr>
<td>No. of Copies</td>
<td>–</td>
<td>Choose the number of copies to print.</td>
</tr>
<tr>
<td>Cropping</td>
<td>–</td>
<td>Specify a desired image area to print (180).</td>
</tr>
<tr>
<td>Paper Settings</td>
<td>–</td>
<td>Specify the paper size, layout, and other details (180).</td>
</tr>
</tbody>
</table>

3. Print the image.
   - Press the [▲][▼] buttons or turn the [▲] dial to choose [Print], and then press the [□] button.
   - Printing now begins.
   - To print other images, repeat the above procedures starting from step 5 after printing is finished.
   - When you are finished printing, turn the camera and printer off and disconnect the cable.

For Canon-brand PictBridge-compatible printers (sold separately), see “Printers” (170).

RAW images cannot be printed.

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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” (179) to access the printing screen, choose [Cropping] and press the [ ] button.
- A cropping frame is now displayed, indicating the image area to print.

2 **Adjust the cropping frame as needed.**

- To resize the frame, move the zoom lever.
- To move the frame, press the [ ] buttons or turn the [ ] dial.
- To rotate the frame, turn the [ ] dial.
- When finished, press the [ ] button.

3 **Print the image.**

- Follow step 7 in “Easy Print” (178) to print.

Choosing Paper Size and Layout before Printing

1 **Choose [Paper Settings].**

- After following step 1 in “Configuring Print Settings” (179) to access the printing screen, choose [Paper Settings] and press the [ ] button.

2 **Choose a paper size.**

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

3 **Choose a type of paper.**

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

4 **Choose a layout.**

- Press the [ ] buttons or turn the [ ] dial to choose an option.
- When choosing [N-up], press the [ ] button. On the next screen, choose the number of images per sheet (either press the [ ] buttons or turn the [ ] dial), and then press the [ ] button.

5 **Print the image.**

- Cropping may not be possible at small image sizes, or at some aspect ratios.
## Printing Movie Scenes

### Still Images

1. **Access the printing screen.**
   - Follow steps 1 – 6 in “Easy Print” (§178) to choose a movie. The screen at left is displayed.

2. **Choose a printing method.**
   - Press the [▲] [▼] buttons to choose [□], and then press the [●] button. On the next screen, choose an option (either press the [▲] [▼] buttons or turn the [■] dial), and then press the [●] button to return to the printing screen.

3. **Print the image.**

### Movies

- To cancel printing in progress, press the [●] button, choose [OK], and then press the [●] button again.
- After displaying a scene to print as described in steps 2 – 5 of “Viewing” (§105), you can also access the screen in step 1 here by pressing the [▲] [▼] buttons to choose [□] in the movie control panel and then pressing the [●] button.

## Movie Printing Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>Prints the current scene as a still image.</td>
</tr>
<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>

1. **Choose [ID Photo].**
   - Following steps 1 – 4 in “Choosing Paper Size and Layout before Printing” (§180), choose [ID Photo] and press the [●] button.

2. **Choose the long and short side length.**
   - Press the [▲] [▼] buttons or turn the [■] dial to choose an item, and then press the [●] button. On the next screen, choose the length (either press the [▲] [▼] buttons or turn the [■] dial), and then press the [●] button.

3. **Choose the printing area.**
   - Press the [▲] [▼] buttons or turn the [■] dial to choose [Cropping], and then press the [●] button.
   - Follow step 2 in “Cropping Images before Printing” (§180) to choose the printing area.

4. **Print the image.**
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.

Press the [MENU] button, choose [Print settings] on the [4] tab, and then press the [OK] button. Press the [ ] buttons or turn the [ ] dial to choose [Print Settings], and then press the [OK] button. On the next screen, choose and configure items as needed (31).

### Print Type

<table>
<thead>
<tr>
<th>Print Type</th>
<th>Standard</th>
<th>Index</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>One image is printed per sheet.</td>
<td>Smaller versions of multiple images are printed per sheet.</td>
<td>Both standard and index formats are printed.</td>
<td></td>
</tr>
</tbody>
</table>

### Date

<table>
<thead>
<tr>
<th>Date</th>
<th>On</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>Images are printed with the shooting date.</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

### File No.

<table>
<thead>
<tr>
<th>File No.</th>
<th>On</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>Images are printed with the file number.</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

### Clear DPOF data

<table>
<thead>
<tr>
<th>Clear DPOF data</th>
<th>On</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>All image print list settings are cleared after printing.</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Setting Up Printing for Individual Images

1. Choose [Select Images & Qty.].
   - Press the [ ] buttons or turn the [ ] dial to choose [Print Settings], and then press the [OK] button (31).

2. Choose an image.
   - Press the [ ] buttons or turn the [ ] dial to choose an image, and then press the [OK] button.
   - You can now specify the number of copies.
   - If you specify index printing for the image, it is labeled with a [ ] icon. To cancel index printing for the image, press the [OK] button again. [ ] is no longer displayed.

### Setting Menu

- 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 (21).
Specify the number of prints.

- Press the [▲][▼] buttons or turn the [●] dial to specify the number of prints (up to 99).
- To set up printing for other images and specify the number of prints, repeat steps 2 - 3.
- Printing quantity cannot be specified for index prints. You can only choose which images to print, by following step 2.
- When finished, press the [MENU] button to return to the menu screen.

Setting Up Printing for a Range of Images

Following step 1 in “Setting Up Printing for Individual Images” (182), choose [Select Range] and press the [●] button.
- Follow steps 2 – 3 in “Selecting a Range” (116) to specify images.
- Press the [▲][▼] buttons to choose [Order], and then press the [●] button.

Setting Up Printing for All Images

Following step 1 in “Setting Up Printing for Individual Images” (182), choose [Select All Images] and press the [●] button.
- Press the [◄][►] buttons or turn the [●] dial to choose [OK], and then press the [●] button.

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 [●] button.
- Press the [◄][►] buttons or turn the [●] dial to choose [OK], and then press the [●] button.

Printing Images Added to the Print List (DPOF)

- When images have been added to the print list (182 – 183), this screen is displayed after you connect the camera to a PictBridge-compatible printer. Press the [◄][►] buttons to choose [Print now], and then simply press the [●] button to print the images in the print list.
- Any DPOF print job that you temporarily stop will be resumed from the next image.

Setting Up Printing for a Range of Images

Still Images Movies

Select Range

Order

Still Images Movies

Setting Up Printing for All Images

Still Images Movies

Select All Images

Set 1 copy per image

Cancel OK

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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 (176), 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.

- [ ] 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 Images Individually

1. Choose [Select].

   - Following the procedure in "Choosing a Selection Method" (184), choose [Select] and press the [ ] button.

2. Choose an image.

   - Press the [ ] buttons or turn the [ ] dial to choose an image, and then press the [ ] button.
   - [ ] is displayed.
   - To remove the image from the photobook, press the [ ] button again. [ ] is no longer displayed.
   - Repeat this process to specify other images.
   - When finished, press the [MENU] button to return to the menu screen.

Adding All Images to a Photobook

- Following the procedure in "Choosing a Selection Method" (184), choose [Select All Images] and press the [ ] button.
- Press the [ ] buttons or turn the [ ] dial to choose [OK], and then press the [ ] button.

Removing All Images from a Photobook

- Following the procedure in "Choosing a Selection Method" (184), choose [Clear All Selections] and press the [ ] button.
- Press the [ ] buttons or turn the [ ] dial to choose [OK], and then press the [ ] button.
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 (170).
Shooting

Cannot shoot.
  ● In Playback mode (105), press the shutter button halfway (27).
Strange display on the screen under low light (29).
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 (94).

($) flashes on the screen when the shutter button is pressed, and shooting is not possible (38).

($) is displayed when the shutter button is pressed halfway (38).
  ● Set [IS Mode] to [Continuous] (54).
  ● Raise the flash and set the flash mode to ($) (91).
  ● Increase the ISO speed (79).
  ● 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 (54).

Shots are out of focus.
  ● Press the shutter button halfway to focus on subjects before pressing it all the way down to shoot (27).
  ● Make sure subjects are within focusing range (211).
  ● Confirm that unneeded functions such as macro are deactivated.
  ● Try shooting with focus lock or AF lock (87, 91).

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.

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 ($) (91).
  ● Adjust brightness by using exposure compensation (78).
  ● Use AE lock or spot metering (78, 78).

Subjects look too bright, highlights are washed-out.
  ● Lower the flash and set the flash mode to ($) (35).
  ● Adjust brightness by using exposure compensation (78).
  ● Use AE lock or spot metering (78, 78).
  ● Reduce the lighting on subjects.

Shots look too dark despite the flash firing (38).
  ● Shoot within flash range (210).
  ● Adjust brightness by using flash exposure compensation or changing the flash output level (92, 99).
  ● Increase the ISO speed (79).

Subjects in flash shots look too bright, highlights are washed-out.
  ● Shoot within flash range (210).
  ● Lower the flash and set the flash mode to ($) (35).
  ● Adjust brightness by using flash exposure compensation or changing the flash output level (92, 99).

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 (79).
  ● High ISO speeds in some shooting modes may cause grainy images (60).

Subjects are affected by red-eye.
  ● Set [Red-Eye Lamp] to [On] (56). The red-eye reduction lamp (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 (126).

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 (160).

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” (193 – 199).
Playback stops, or audio skips.
- Switch to a memory card that you have performed low-level formatting on with the camera.
- 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 if you have activated [Mute] or the sound in the movie is faint.
- No sound is played for movies shot in [ ] mode because audio is not recorded in these modes.

Cannot access the Story Highlights home screen by pressing the [ ] button.
- 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, choose an image that shows the name of the person for the album before accessing the Story Highlights home screen.

Memory Card

The memory card is not recognized.
- Restart the camera, with the memory card in it.

Computer

Cannot transfer images to a computer.
- When attempting to transfer images to the computer via a cable, try reducing the transfer speed as follows.
  - Press the [ ] button to enter Playback mode. Hold the [MENU] button down as you press the [ ] and [ ] buttons at the same time. On the next screen, press the [ ] buttons to choose [B], and then press the [ ] button.
Wi-Fi

Cannot access the Wi-Fi menu by pressing the button.
- The Wi-Fi menu is not available in Shooting mode. Switch to Playback mode and try again.
- 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 (156).
- Use a computer or smartphone to register Web services (145).
- To add a smartphone, first install the dedicated application Camera Connect on your smartphone (136).
- 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, Bluetooth devices, or other equipment operating on the 2.4 GHz band.
- Bring the camera closer to the other device you are trying to connect to (such as the access point), and make sure there are no objects between the devices.

Cannot connect to the access point.
- Confirm that the access point channel is set to a channel supported by the camera (210). 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 are not 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 (152).
- Movies may take a long time to send.
- Do not use the camera near sources of Wi-Fi signal interference, such as microwave ovens, Bluetooth devices, or other equipment operating on the 2.4 GHz band. Note that images may take a long time to send even when is displayed.
- Bring the camera closer to the other device you are trying to connect to (such as the access point), and make sure there are no objects between the devices.

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 (158).
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 (160)**
  - If the same error message is displayed even after you have formatted a supported memory card (12) 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 (35, 68, 77, 96) or edit images (123). Either erase unneeded images (118) or insert a memory card with enough free space (19).

- **Touch AF unavailable**
  - Touch AF is not available in the current shooting mode (193).

- **Touch AF canceled**
  - The subject selected for Touch AF can no longer be detected (90).

- **Charge the battery (18)**

- **No Image**
  - The memory card does not contain any images that can be displayed.

- **Protected! (115)**

---

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/ Cannot assign to category/Unselectable image./No identification information
- The following functions may be unavailable for images that were renamed or already edited on a computer, or images shot with another camera. Note that starred (*) functions are not available for movies.
  - Edit ID Info* (113), Magnify* (114), Rotate* (120), Favorites (121), Edit* (123), Print List* (182), and Photobook Set-up* (184).

Invalid selection range
- When specifying a range for image selection (116, 119, 183), 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 (182) or Photobook Set-up (184). Choose 998 images or less.
- Print List (182) or Photobook Set-up (184) 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 (115), Erase (118), Favorites (121), Print List (182), or Photobook Set-up (184).

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] (159), or format the memory card (160).

Lens Error
- This error may occur if the lens is held while it is moving, or when the camera is used in dusty or sandy locations.
- Frequent display of this error message may indicate camera damage. In this case, contact a Canon Customer Support Help Desk.
A camera error was detected (error number)
- If this error message is displayed immediately after a shot, the image may not have been saved. Switch to Playback mode to check for the image.
- Frequent display of this error message may indicate camera damage. In this case, write down the error number (Exx) and contact a Canon Customer Support Help Desk.

File Error
- Correct printing (page 178) 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 (page 180). If this error message is displayed when the setting is correct, restart the printer and complete the setting on the camera again.

Ink absorber full
- Contact a Canon Customer Support Help Desk to request assistance with ink absorber replacement.

Wi-Fi

Connection failed
- No access points were recognized. Check the access point settings (page 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 (page 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, Bluetooth devices, and other devices that operate on the 2.4 GHz band.
- Bring the camera closer to the other device you are trying to connect to (such as the access point), and make sure there are no objects between the devices.
- Check the connected device to make sure it is not experiencing errors.

Sending failed
Memory card error
- If the same error message is displayed even when you have inserted a formatted memory card facing the correct way, contact a Canon Customer Support Help Desk.

Receiving failed
Insufficient space on card
- There is not enough free space on the memory card in the target camera to receive images. Erase images to create space on the memory card, or insert a memory card with sufficient space.

Receiving failed
Memory card locked
- The write-protect switch of the memory card facing the correct way, contact a Canon Customer Support Help Desk.

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 (page 153) to your computer.

Check network settings
- Check to make sure your computer can connect to the Internet with the current network settings.
On-Screen Information

Shooting (Information Display)

The same information is shown on the viewfinder.

| (1) Shooting mode (193), Scene icon (39) | (9) Drive mode (44), AEB shooting (80), Focus bracketing (86) |
| (2) Flash mode (91) | (10) White balance (82), Mercury lamp correction (51) |
| (3) Flash exposure compensation / Flash output level (92, 99) | (11) My Colors (83) |
| (4) Shadow correction (81) | (12) IS mode icon (40) |
| (5) Metering method (78) | (13) Battery level (191) |
| (6) Eco mode (161) | (14) Still image compression (94), Recording pixel setting (94) |
| (7) ND filter (81), High ISO NR (80) | (15) Recordable shots (212)* |
| (8) Self-timer (42) | (16) Zoom magnification (41), Digital tele-converter (87) |

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="charge.png" alt="Battery Charge" /></td>
<td>Sufficient charge</td>
</tr>
<tr>
<td><img src="charge.png" alt="Battery Charge" /></td>
<td>Slightly depleted, but sufficient</td>
</tr>
<tr>
<td><img src="charge.png" alt="Battery Charge" /> (Blinking red)</td>
<td>Nearly depleted—charge the battery pack soon</td>
</tr>
<tr>
<td><img src="charge.png" alt="Charge the battery" /></td>
<td>Depleted—charge the battery pack immediately</td>
</tr>
</tbody>
</table>
## Playback (Detailed Information Display)

| (1) | Movies (135, 1105) |
| (2) | Digest movies (108) |
| (3) | Group playback (112) |
| (4) | Current image no. / Total no. of images |
| (5) | Histogram (107) |
| (6) | Battery level (191) |
| (7) | Wi-Fi signal strength (152) |
| (8) | Image Sync (153) |
| (9) | Image editing (123), Movie compression (128) |
| (10) | Favorites (121) |
| (11) | Protection (115) |
| (12) | Folder number - File number (159) |
| (13) | Shooting date/time (20) |
| (14) | Shooting mode (193) |
| (15) | Shutter speed (136, 197) |
| (16) | Aperture value (137, 197) |
| (17) | Exposure compensation level (78) |
| (18) | ISO speed (179) |
| (19) | Metering method (78) |
| (20) | Flash (91), Flash exposure compensation (82) |
| (21) | White balance (82) |
| (22) | White balance correction (82), Mercury lamp correction (81), Creative Shot effect (59) |
| (23) | My Colors (83, 125) |
| (24) | Focus range (184, 185) |
| (25) | ND filter (181) |
| (26) | Red-eye correction (126), Short clip playback effect (75) |
| (27) | High ISO NR (80) |

(28) DR correction (181)  
(29) Shadow correction (181)  
(30) Image quality / Frame rate (movies) (151)  
(31) Group playback (112)  
(32) Compression (image quality) (194) / Recording pixel setting (151), Digest movies (37), RAW (194), MP4 (movies), Albums (129)  

- Some information may not be displayed when viewing images on a TV (170).
Summary of Movie Control Panel

The following operations are available on the movie control panel, accessed as described in “Viewing” (105).

- **Touch to display the volume panel, and then touch [▲][▼] to adjust the volume. At a volume of 0, [●] is displayed.**

- **Play**

- **Slow Motion** (To adjust the playback speed, press the [◄][►] buttons or turn the [■] dial. No sound is played.)

- **Skip Backward* or Previous Clip** (128) (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** (128) (To continue skipping forward, keep holding down the [□] button.)

- **Erase Clip** (displayed when a digest movie is selected, 128)

- **Edit** (127)

- **Shown when the camera is connected to a PictBridge-compatible printer (178).**

* Displays the frame approx. 4 sec. before or after the current frame.

- During movie playback, you can skip back or forward (or to the previous or next clip) by pressing the [◄][►] buttons.

---

**Summary of Movie Control Panel**

* ◄ [●] to display the volume panel, and then touch [▲][▼] to adjust the volume. At a volume of 0, [●] is displayed.

**Play**

**Slow Motion** (To adjust the playback speed, press the [◄][►] buttons or turn the [■] dial. No sound is played.)

**Skip Backward* or Previous Clip** (128) (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** (128) (To continue skipping forward, keep holding down the [□] button.)

**Erase Clip** (displayed when a digest movie is selected, 128)

**Edit** (127)

**Shown when the camera is connected to a PictBridge-compatible printer (178).**

---

**Functions and Menu Tables**

### Functions Available in Each Shooting Mode

Icons in black, such as C, indicate that the function is available or automatically set in that shooting mode. Gray icons, such as C, indicate that the function is unavailable in that shooting mode.

#### Exposure Compensation (78)

- **C/M/Av/Tv/P: AUTO / 1/1000 / 1/500 / 1/250 / 1/125 / 1/60 / 1/30 / 1/15 / 1/8 / 1/4 / 1/2 / 1 / 2 / 1 / 4 / 1 / 8 / 1 / 16**

#### ISO Speed (79)

- **Auto**

- **C/M/Av/Tv/P: AUTO / 100 / 200 / 400 / 800 / 1600 / 3200 / 6400 / 12800**

#### AF Operation (89)

- **ONE SHOT**

- **SERVO**

---

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Bracketing (80, 86)

Drive Mode (44)

Flash (91)

Flash Exposure Compensation (92)

Flash Output Level (99)
### Focus Range *(84, 85)*

- **Auto**
- **Manual Focus Switching When Recording Movies *(73)*
- **Program Shift *(78)*
- **AE Lock/FE Lock in Standby *(78, 93)*
- **AE Lock (during recording)/Exposure Compensation *(74)*
- **AF Lock (when assigned to the [ ] or movie button) *(91)*
- **Touch AF *(90)*

### Av/Tv Settings *(96, 97)*

- **Aperture Value**
- **Shutter Speed**
- **Bulb Setting**

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---

1. Focus Range *(84, 85)*
2. Manual Focus Switching When Recording Movies *(73)*
3. Move AF Frame *(88)*
4. Touch AF *(90)*

---

*Note: The above table is a condensed representation of the document contents.*
Quick Set Menu

AF method (*87)

Tracking

1-point AF

Image quality

For details, see “Shooting Tab” (*199).

Movie Quality (*51, *52)

When Set to NTSC

* Options vary depending on the assigned shooting mode.
*2 [SERVO] when subject movement is detected.
*3 Not available, but switches to [62] in some cases.
*4 FE lock not available in [65] flash mode.
*5 Only when [MF] is selected.
*6 Only available for shooting. Subject designation not available.
Self-Timer (842)

When Set to PAL

Self-Timer Settings (843)

Delay*3

Shots*4

ND Filter (881)
### Still Image Aspect Ratio (p. 50)

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:9</td>
<td>C/ M/ Av/ Tv/ P/ AUTO/ HDR/ DYNAMIC RANGE/ DYNAMIC RANGE</td>
</tr>
<tr>
<td>3:2</td>
<td>C/ M/ Av/ Tv/ P/ AUTO/ HDR/ DYNAMIC RANGE/ DYNAMIC RANGE</td>
</tr>
<tr>
<td>4:3</td>
<td>C/ M/ Av/ Tv/ P/ AUTO/ HDR/ DYNAMIC RANGE/ DYNAMIC RANGE</td>
</tr>
<tr>
<td>1:1</td>
<td>C/ M/ Av/ Tv/ P/ AUTO/ HDR/ DYNAMIC RANGE/ DYNAMIC RANGE</td>
</tr>
</tbody>
</table>

### White Balance (p. 82)

<table>
<thead>
<tr>
<th>Mode</th>
<th>Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO</td>
<td>C/ M/ Av/ Tv/ P/ AUTO/ HDR/ DYNAMIC RANGE/ DYNAMIC RANGE</td>
</tr>
<tr>
<td>82</td>
<td>C/ M/ Av/ Tv/ P/ AUTO/ HDR/ DYNAMIC RANGE/ DYNAMIC RANGE</td>
</tr>
</tbody>
</table>

### WB Correction (p. 82)

<table>
<thead>
<tr>
<th>Mode</th>
<th>Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO</td>
<td>C/ M/ Av/ Tv/ P/ AUTO/ HDR/ DYNAMIC RANGE/ DYNAMIC RANGE</td>
</tr>
<tr>
<td>82</td>
<td>C/ M/ Av/ Tv/ P/ AUTO/ HDR/ DYNAMIC RANGE/ DYNAMIC RANGE</td>
</tr>
</tbody>
</table>

### Color Adjustment (p. 72)

<table>
<thead>
<tr>
<th>Mode</th>
<th>Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO</td>
<td>C/ M/ Av/ Tv/ P/ AUTO/ HDR/ DYNAMIC RANGE/ DYNAMIC RANGE</td>
</tr>
<tr>
<td>72</td>
<td>C/ M/ Av/ Tv/ P/ AUTO/ HDR/ DYNAMIC RANGE/ DYNAMIC RANGE</td>
</tr>
</tbody>
</table>

### My Colors (p. 83)

<table>
<thead>
<tr>
<th>Mode</th>
<th>Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO</td>
<td>C/ M/ Av/ Tv/ P/ AUTO/ HDR/ DYNAMIC RANGE/ DYNAMIC RANGE</td>
</tr>
<tr>
<td>83</td>
<td>C/ M/ Av/ Tv/ P/ AUTO/ HDR/ DYNAMIC RANGE/ DYNAMIC RANGE</td>
</tr>
</tbody>
</table>

### DR Correction (p. 81)

<table>
<thead>
<tr>
<th>Mode</th>
<th>Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO</td>
<td>C/ M/ Av/ Tv/ P/ AUTO/ HDR/ DYNAMIC RANGE/ DYNAMIC RANGE</td>
</tr>
<tr>
<td>81</td>
<td>C/ M/ Av/ Tv/ P/ AUTO/ HDR/ DYNAMIC RANGE/ DYNAMIC RANGE</td>
</tr>
</tbody>
</table>

---

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### Shooting Tab

#### [1] Tab

<table>
<thead>
<tr>
<th>Rec. Mode (60, 61, 73)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Image quality (50, 94)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPEG</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RAW</th>
</tr>
</thead>
</table>

*1 Options vary depending on the assigned shooting mode.
*2 Synchronizes with the aspect ratio setting and is automatically set (64).
*3 Cannot be set to 0 seconds in modes without selection of the number of shots.
*4 One shot (cannot be modified) in modes without selection of the number of shots.
*5 Automatically set, matching the aspect ratio specified in [Movie rec. size].
*6 White balance is not available.
*7 Set in a range of 1 – 5: contrast, sharpness, color saturation, red, green, blue, and skin tone.
### Display Mode (p.28)

#### Display priority
- **Power Saving**
- **Smooth**

#### VF display
- **Normal**
- **Fast**

#### VF display format (p.28)
- **Display 1**/**Display 2**

---

<table>
<thead>
<tr>
<th>Display Mode</th>
<th>Power Saving</th>
<th>Smooth</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1  M  Av  Tv  P  AUTO  Obj  Grid  Grid  Grid  Grid</td>
<td>C1  M  Av  Tv  P  AUTO  Obj  Grid  Grid  Grid  Grid</td>
<td>C1  M  Av  Tv  P  AUTO  Obj  Grid  Grid  Grid  Grid</td>
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</table>

<table>
<thead>
<tr>
<th>VF display</th>
<th>Normal</th>
<th>Fast</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1  M  Av  Tv  P  AUTO  Obj  Grid  Grid  Grid  Grid</td>
<td>C1  M  Av  Tv  P  AUTO  Obj  Grid  Grid  Grid  Grid</td>
<td>C1  M  Av  Tv  P  AUTO  Obj  Grid  Grid  Grid  Grid</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VF display format</th>
<th>Display 1/Display 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1  M  Av  Tv  P  AUTO  Obj  Grid  Grid  Grid  Grid</td>
<td>C1  M  Av  Tv  P  AUTO  Obj  Grid  Grid  Grid  Grid</td>
</tr>
</tbody>
</table>

---

### Still Image Aspect Ratio (p.50)
For details, see “Quick Set Menu” (p.196).

### Shooting information display (p.100)
- Screen info/ toggle settings / VF info/ toggle settings
- Shooting Info/Histogram/Grid display/Electronic Level

<table>
<thead>
<tr>
<th>VF vertical display</th>
<th>On/Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1  M  Av  Tv  P  AUTO  Obj  Grid  Grid  Grid  Grid</td>
<td>C1  M  Av  Tv  P  AUTO  Obj  Grid  Grid  Grid  Grid</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grid display</th>
<th>Grid 1</th>
<th>Grid 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1  M  Av  Tv  P  AUTO  Obj  Grid  Grid  Grid  Grid</td>
<td>C1  M  Av  Tv  P  AUTO  Obj  Grid  Grid  Grid  Grid</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reverse Display (p.20)</th>
<th>On/Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1  M  Av  Tv  P  AUTO  Obj  Grid  Grid  Grid  Grid</td>
<td>C1  M  Av  Tv  P  AUTO  Obj  Grid  Grid  Grid  Grid</td>
</tr>
</tbody>
</table>
### [2] Tab

<table>
<thead>
<tr>
<th>Setting</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Review image after shooting</strong> (56)</td>
<td></td>
</tr>
<tr>
<td>Display Time</td>
<td>Off/Quick</td>
</tr>
<tr>
<td>C1/M/AvTv/P/</td>
<td>AUTO/ Obj/ HDR/</td>
</tr>
<tr>
<td>Face ID Settings (45)</td>
<td>On/Off</td>
</tr>
<tr>
<td>C1/M/AvTv/P/</td>
<td>AUTO/ Obj/ HDR/</td>
</tr>
<tr>
<td><strong>Function Assignment</strong> (101)</td>
<td></td>
</tr>
<tr>
<td>[ ] ring</td>
<td>[ ] dial/[ ] dial/[ ] button/[ ] button</td>
</tr>
<tr>
<td>[ ] button</td>
<td></td>
</tr>
<tr>
<td>C1/M/AvTv/P/</td>
<td>AUTO/ Obj/ HDR/</td>
</tr>
<tr>
<td><strong>Quick setting menu layout</strong> (102)</td>
<td></td>
</tr>
<tr>
<td>C1/M/AvTv/P/</td>
<td>AUTO/ Obj/ HDR/</td>
</tr>
<tr>
<td><strong>Save Settings</strong> (103)</td>
<td></td>
</tr>
<tr>
<td>C1/M/AvTv/P/</td>
<td>AUTO/ Obj/ HDR/</td>
</tr>
<tr>
<td><strong>Before Use</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Basic Guide</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Advanced Guide</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Camera Basics</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Auto Mode</strong> / <strong>Hybrid Auto Mode</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Other Shooting Modes</strong></td>
<td></td>
</tr>
<tr>
<td><strong>P Mode</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Tv, Av, M, and C Mode</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Playback Mode</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Wi-Fi Mode</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Setting Functions</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Setting Menu</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Accessories</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Appendix</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Index</strong></td>
<td></td>
</tr>
</tbody>
</table>
### AF-Point Zoom (53)

<table>
<thead>
<tr>
<th></th>
<th>On</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Off</td>
</tr>
</tbody>
</table>

### AF operation (89)

For details, see “Functions Available in Each Shooting Mode” (193).

### AF method (87)

For details, see “Quick Set Menu” (196).

### AF Frame Size (88)*

<table>
<thead>
<tr>
<th>Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
</tr>
</tbody>
</table>

### Continuous AF (89)

<table>
<thead>
<tr>
<th>On</th>
</tr>
</thead>
</table>
Before Use

AF-assist Beam (55)
- Off
- On

[4] Tab

MF-Point Zoom (85)
- Off
- 5x/10x

Safety MF (85)
- On

MF Peaking Settings (66)

Peaking
- On/Off

Level
- Low/High

Color
- Red/Yellow/Blue

IS Settings (54)

IS Mode
- Off

Continuous
### Rate of Change

| C/M/Av/Tv/P | AUTO | 81 |

### DR Correction (81)
For details, see “Quick Set Menu” (196).

### Shadow Correct (81)
For details, see “Quick Set Menu” (196).

### Light Metering (78)
For details, see “Quick Set Menu” (196).

### ND Filter (81)
For details, see “Quick Set Menu” (196).

### Flash Control (56, 92, 93, 99)

#### Flash Mode

- **Auto**

- **Manual**

### Flash Exp. Comp
For details, see “Functions Available in Each Shooting Mode” (193).

### Flash Output
For details, see “Functions Available in Each Shooting Mode” (193).

### Dynamic IS

<table>
<thead>
<tr>
<th>Mode</th>
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<tbody>
<tr>
<td>Low</td>
</tr>
<tr>
<td>Standard</td>
</tr>
<tr>
<td>High</td>
</tr>
</tbody>
</table>

### Bracketing (86)
For details, see “Functions Available in Each Shooting Mode” (193).

### [5] Tab

<table>
<thead>
<tr>
<th>ISO speed (80)</th>
</tr>
</thead>
</table>

### ISO Speed
For details, see “Functions Available in Each Shooting Mode” (193).

### ISO Auto Settings

<table>
<thead>
<tr>
<th>Max ISO Speed</th>
</tr>
</thead>
</table>

### Bracketing (86)
For details, see “Functions Available in Each Shooting Mode” (193).
Save Stills (70)
On/Off

Star Time-Lapse Movie Setting (70)
Effect
Sharp/Off/Soft

Shot Interval
15 sec./30 sec./1 min.

Frame Rate
30, 60 (NTSC), 24, 30 (PAL)

Shooting Time
60 min./90 min./120 min./Unlimited

Shutter Sync.
1st-curtain
2nd-curtain

Red-Eye Lamp
On/Off

Safety FE
On/Off

Star Emphasis (68)
Sharp/Off/Soft

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WB Correction (82)
For details, see “Quick Set Menu” (196).

My Colors (125)
For details, see “Quick Set Menu” (196).

High ISO NR (80)
Low/Standard/High

[7] Tab

Star Portrait Settings (67)
Star Visibility
Standard/Prominent

Blink Detection (53)
On

Digest Type (37)
Include Stills/No Stills
[8] Tab

Movie Quality (51)
For details, see “Quick Set Menu” (196).

Wind Filter (75)
- Auto
- Off

Attenuator (75)
- On/Off
  - Auto

Auto level (54)
- Enable

Set Up Tab

<table>
<thead>
<tr>
<th>Tab</th>
<th>Item</th>
<th>Reference Page</th>
</tr>
</thead>
<tbody>
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*1 Options vary depending on the assigned shooting mode.
*2 Available when the AF frame is set to [1-point].
*3 [Enable] for functions other than Creative Zone and movies.
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### My Menu Tab

<table>
<thead>
<tr>
<th>Tab</th>
<th>Item</th>
<th>Reference Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>104</td>
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</table>
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

Camera

Image Sensor
Camera Effective Pixels
(Some image processing may use fewer pixels) ........................................... Approx. 20.2 million pixels
Total Pixels ......................................................... Approx. 20.9 million pixels
Image Size ......................................................... 1.0-inch type

Lens
Focal Length
(35mm film equivalent) ................................. 8.8 – 36.8 mm (24 – 100 mm)
Zoom Factor ..................................................... 4.2x

Digital Zoom
Maximum with Optical Zoom ......................... Approx. 17x
Focal Length
(Telephoto end, 35mm film equivalent)............. Approx. 400 mm
ZoomPlus .......................................................... Approx. 8.4x

Viewfinder ....................................................... Electronic viewfinder
Effective Pixels: Approx. 2,360,000 dots
Screen Size: Approx. 0.39 in.
Coverage: Approx. 100%
Eyepoint: 22 mm
Dioptric Adjustment: −3.0 to +1.0 m⁻¹ (dpt)

Screen (Monitor)
Type ................................................................. Color TFT LCD
Screen Size ....................................................... 3.0-type
Effective Pixels .................................................. Approx. 1,040,000 dots

Continuous Shooting
Speed
(Varies depending on the subject, zoom position, and other shooting factors, as well as memory card brands.)
One-Shot AF: Approx. 5.9 shots/sec.
Servo AF: Approx. 4.4 shots/sec.

Built-in Flash
Metering Range (Wide angle end) .......... 50 cm – 7.0 m (1.6 – 23 ft.)
Metering Range (Telephoto end) .......... 50 cm – 4.0 m (1.6 – 13 ft.)

Shutter Speed
Auto Mode (Auto Settings) ................. 1 – 1/2000 sec.
Other Modes Combined ...................... 30 – 1/2000 sec., bulb supported

Aperture
f/number ...................................................... 1.8 – 11 (W)
2.8 – 11 (T)

AF Type .............................................................. 1-point, Face+Tracking
(AF points: up to 31)

File Format .......................................................... Design rule for Camera File system, DPOF (version 1.1) compliant

Data Type (Still Images)
     Image File Format ........................................... Exif 2.3 (DCF 2.0)
     Image Formats ................................................. JPEG, RAW (CR2, a Canon 14-bit RAW format)

Data Type (Movies)
     Recording Format ........................................... MP4
     Video ......................................................... MPEG-4 AVC/H.264
     Audio .......................................................... MPEG-4 AAC LC (stereo)

Power Source
     Battery Pack ................................................. NB-13L
     Charging via USB ......................................... Using Compact Power Adapter CA-DC30/CA-DC30E
     AC Adapter Kit ............................................... ACK-DC110
Number of Shots/Recording Time, Playback Time

<table>
<thead>
<tr>
<th>Number of Shots</th>
<th>Screen On</th>
<th>Approx. 210</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Viewfinder On</td>
<td>Approx. 215</td>
</tr>
<tr>
<td>Number of Shots</td>
<td>Screen On</td>
<td>Approx. 320</td>
</tr>
<tr>
<td>(Eco Mode On)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Movie Recording</td>
<td>Screen On</td>
<td>Approx. 40 minutes</td>
</tr>
<tr>
<td>Time (Actual Use)*1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Movie Recording</td>
<td>Screen On</td>
<td>Approx. 1 hour 10 minutes</td>
</tr>
<tr>
<td>Time (Continuous Shooting)*2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playback Time*3</td>
<td></td>
<td>Approx. 4 hours</td>
</tr>
</tbody>
</table>

*1 Total time when shooting repeatedly under the following conditions:
- In [AUTO] mode, with all other settings set to defaults
- With recording, stopping, zooming, and turning the camera on and off

*2 Total time when shooting repeatedly under the following conditions:
- In [AUTO] mode, with all other settings set to defaults
- Automatically stop/resume after the time or capacity per recording is reached

*3 Time when playing back a slideshow of still images.

Shooting Range

<table>
<thead>
<tr>
<th>Shooting Mode</th>
<th>Focus Range</th>
<th>Maximum Wide Angle</th>
<th>Maximum Telephoto</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO</td>
<td>–</td>
<td>5 cm (2.0 in.) – infinity</td>
<td>40 cm (1.3 ft.) – infinity</td>
</tr>
<tr>
<td>Other modes</td>
<td>▲</td>
<td>5 cm (2.0 in.) – infinity</td>
<td>40 cm (1.3 ft.) – infinity</td>
</tr>
<tr>
<td></td>
<td>◆</td>
<td>5 – 5 cm (2.0 in. – 1.6 ft.)</td>
<td>–</td>
</tr>
</tbody>
</table>

* Not available in some shooting modes.
Number of Shots per Memory Card

The number of shots at an aspect ratio (50) of 3:2 per memory card is as follows. Note that the number of shots available varies by aspect ratio.

<table>
<thead>
<tr>
<th>Size</th>
<th>Number of shots per 16 GB memory card (approx. shots)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>1786&lt;br&gt;2999&lt;br&gt;2857&lt;br&gt;4810&lt;br&gt;8377&lt;br&gt;14724</td>
</tr>
<tr>
<td>M1</td>
<td>48592&lt;br&gt;69418</td>
</tr>
<tr>
<td>M2</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td></td>
</tr>
<tr>
<td>RAW</td>
<td></td>
</tr>
</tbody>
</table>

- The values in the table are based on Canon measurement conditions and may change depending on the subject, memory card and camera settings.

Recording Time per Memory Card

<table>
<thead>
<tr>
<th>Size</th>
<th>Frame Rate/Video System</th>
<th>Recording Time per 16 GB Memory Card (Approx.)</th>
<th>Recording Time for Individual Movies (Approx.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1920 x 1080)</td>
<td>(59 min. 30 sec.)</td>
<td>29 min. 59 sec.</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>(NTSC) (PAL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1280 x 720)</td>
<td>(4 hr. 05 min. 15 sec.)</td>
<td>29 min. 59 sec.</td>
<td></td>
</tr>
<tr>
<td>M1</td>
<td>(NTSC) (PAL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(640 x 480)</td>
<td>(10 hr. 22 min. 35 sec.)</td>
<td>1 hr.</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>(NTSC) (PAL)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- The values in the table are based on Canon measurement conditions and may change depending on the subject, memory card and camera settings.

Recording times for individual movies are based on memory cards rated at an SD speed class of 10. Recording may stop when cards rated at lower speed classes are used. Recording will also stop automatically when the file size reaches 4 GB, or when the card becomes full.
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. 5 hr.*
  (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.
Wi-Fi (Wireless LAN) Precautions

- Countries and Regions Permitting WLAN Use
  - Use of WLAN is restricted in some countries and regions, and illegal use may be punishable under national or local regulations. To avoid violating WLAN regulations, visit the Canon website to check where use is allowed.
  - Note that Canon cannot be held liable for any problems arising from use in other countries and regions.
- Doing any of the following may incur legal penalties:
  - Altering or modifying the product
  - Removing the certification labels from the product
- According to foreign exchange and foreign trade law regulations, export permission (or service transaction permission) from the Japanese government is necessary to export strategic resources or services (including this product) outside Japan.
- Because this product includes American encryption software, it falls under U.S. Export Administration Regulations, and cannot be exported to or brought into a country under U.S. trade embargo.
- Be sure to make notes of the wireless LAN settings you use.
  - The wireless LAN settings saved to this product may change or be erased due to incorrect operation of the product, the effects of radio waves or static electricity, or accident or malfunction. Be sure to make notes of wireless LAN settings as a precaution. Please note that Canon accepts no responsibility for damages or loss resulting from a degradation or disappearance of content.
  - When transferring this product to another person, disposing of it, or sending it for repair, be sure to note the wireless LAN settings and reset the product to its default settings (erase settings) if necessary.
  - Canon will not make compensation for damages resulting from loss or theft of the product.
- Be sure to use the product as directed in this guide.
  - Be sure to use the wireless LAN function of this product within the guidelines noted in this guide. Canon accepts no responsibility for damages or loss if the function and product are used in ways other than as described in this guide.
- Do not use the wireless LAN function of this product near medical equipment or other electronic equipment. Use of the wireless LAN function near medical equipment or other electronic equipment may affect operation of those devices.

Radio Wave Interference Precautions

- This product may receive interference from other devices that emit radio waves. To avoid interference, be sure to use this product as far away as possible from such devices, or avoid using the devices at the same time as this product.

Security Precautions

Because Wi-Fi uses radio waves to transmit signals, security precautions more stringent than when using a LAN cable are required. Keep the following points in mind when using Wi-Fi.

- Only use networks you are authorized to use.
  - This product searches for Wi-Fi networks in the vicinity and displays the results on the screen. Networks you are not authorized to use (unknown networks) may also be displayed. However, attempting to connect to or using such networks could be regarded as unauthorized access. Be sure to use only networks you are authorized to use, and do not attempt to connect to other unknown networks.
If security settings have not been properly set, the following problems may occur.

- **Transmission monitoring**
  Third parties with malicious intent may monitor Wi-Fi transmissions and attempt to acquire the data you are sending.

- **Unauthorized network access**
  Third parties with malicious intent may gain unauthorized access to the network you are using to steal, modify, or destroy information. Additionally, you could fall victim to other types of unauthorized access such as impersonation (where someone assumes an identity to gain access to unauthorized information) or springboard attacks (where someone gains unauthorized access to your network as a springboard to cover their tracks when infiltrating other systems).

To prevent these types of problems from occurring, be sure to thoroughly secure your Wi-Fi network. Only use this camera’s Wi-Fi function with a proper understanding of Wi-Fi security, and balance risk and convenience when adjusting security settings.

The camera can print to PictBridge-compatible printers via Wi-Fi. PictBridge technical standards make it easy to connect digital cameras, printers, and other devices directly. Additionally, a new standard called DPS over IP enables PictBridge connections in network environments, and the camera is also compatible with this standard.

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