Camera User Guide

- Make sure you read this guide, including the “Safety Precautions” (15) 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.
Before Use

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-10L (with terminal cover)
- Battery Charger CB-2LC/CB-2LCE
- Neck Strap
- Lens Cap (with cord)

- Printed matter is also included.
- A memory card is not included (①).

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.
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).
  - [Continuous ring (20) on front]
  - [Front dial (7) on front]
  - [Up button (10) on back]
  - [Left button (11) on back]
  - [Right button (18) on back]
  - [Down button (19) on back]
  - [Control dial (12) 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
- ☀: Pages with related information (in this example, "xx" represents a page number)
- Instructions in this guide apply to the camera under default settings.
- For convenience, all supported memory cards are simply referred to as the "memory card".
- The symbols ➤ Still Images” and ➤ Movies” below titles indicate how the function is used—whether for still images or movies.
Part Names

(1) Lens
(2) Lamp
(3) Zoom lever
  Shooting: (telephoto) / (wide angle)
  Playback: (magnify) / (index)
(4) Shutter button
(5) Movie button
(6) Strap mount
(7) Front dial
(8) Exposure compensation dial
(9) Power button
(10) Mode dial
(11) Flash
(12) Microphone
(13) External microphone IN terminal
(14) (Flash pop up) switch
(15) Headphone jack
(16) (In-Mark)*1
(17) Wi-Fi antenna area
(18) (Manual focus) button
(19) (Framing Assist – Seek) button
(20) Continuous ring
(21) Tripod socket
(22) Memory card/battery cover
(23) DC coupler terminal cover

*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).

Turning the control dial is one way to choose setting items, switch images, and perform other operations. Most of these operations are also possible with the \(\uparrow\), \(\downarrow\), \(\leftarrow\), \(\rightarrow\), \(\times\), \(\circlearrowleft\), \(\circlearrowright\) buttons.
Table of Contents

Before Use

Initial Information ................................................................. 2
Package Contents .......................................................... 2
Compatible Memory Cards ........................................... 2
Preliminary Notes and Legal Information ...................... 3
Conventions in This Guide ............................................. 3
Part Names ..................................................................... 4
Common Camera Operations ........................................ 13
Safety Precautions ......................................................... 15

Basic Guide

Basic Operations .............................................................. 18
Initial Preparations ......................................................... 18
Attaching Accessories ............................................... 18
Holding the Camera ...................................................... 19
Charging the Battery Pack .......................................... 19
Inserting the Battery Pack and Your Memory Card ........ 20
Removing the Battery Pack and Memory Card ............. 20
Setting the Date and Time ............................................. 21
Changing the Date and Time ....................................... 21
Display Language .......................................................... 22
Trying the Camera Out .................................................. 23
Shooting (Smart Auto) .................................................. 23
Viewing ...................................................................... 24
Erasing Images ............................................................. 25

Advanced Guide

Camera Basics ................................................................ 26
On/Off ........................................................................ 26
Power-Saving Features (Auto Power Down) .................. 27
Power Saving in Shooting Mode ................................ 27
Power Saving in Playback Mode .................................. 27
Shutter Button ............................................................. 27
Shooting Modes ............................................................. 28
Adjusting the Screen Angle and Orientation ............... 28
Tilting the Screen Downward ...................................... 28
Tilting the Screen Upward ........................................... 28
Shooting Display Options ............................................. 29
Using the Quick Set Menu ............................................. 30
Using Touch-Screen Operations to Configure Settings ... 30
Using the Menu/Screen ................................................ 31
Touch-Screen Operations ............................................. 32
On-Screen Keyboard ...................................................... 32
Indicator Display .......................................................... 33
Clock ......................................................................... 34

Auto Mode / Hybrid Auto Mode .................................... 35
Shooting with Camera-Determined Settings ................. 35
Shooting (Smart Auto) .................................................. 35
Shooting in Hybrid Auto Mode ................................ 37
Digest Movie Playback ................................................ 38
Still Images/Movies ...................................................... 38
Still Images ................................................................. 38
Movies .................................................................... 38
Scene Icons ................................................................. 39
Continuous Shooting Scenes ..................................... 40
Image Stabilization Icons ............................................ 40

Index

Before Use

Basic Guide

Advanced Guide

Camera Basics

Auto Mode / Hybrid Auto Mode

Other Shooting Modes

P Mode

Tv, Av, M, C1, and C2 Mode

Playback Mode

Wi-Fi Functions

Setting Menu

Accessories

Appendix

Index
On-Screen Frames ..............................................41
Common, Convenient Features ..........................41
Zooming In Closer on Subjects (Digital Zoom) ....41
Shooting at Preset Focal Lengths (Step Zoom) ...42
Easily Reacquiring Subjects after Manual Zooming (Framing Assist – Seek) ...............42
Auto Zooming in Response to Subject Movement (Auto Zoom) ........................................43
Adjusting the Constant Face Display Size ..........44
Easily Reacquiring Subjects with Auto Zooming (Seek Assist) ........................................44
Using the Self-Timer .........................................45
Using the Self-Timer to Avoid Camera Shake ....45
Customizing the Self-Timer ...............................46
Shooting by Touching the Screen (Touch Shutter) ....46
Continuous Shooting ........................................47
Image Display during Playback .........................47
Using Face ID ..................................................48
Personal Information ........................................48
Registering Face ID Information .........................48
Shooting .........................................................49
Checking and Editing Registered Information ....50
Overwriting and Adding Face Information ..........51
Erasing Registered Information .........................52
Image Customization Features .........................52
Changing the Aspect Ratio ...............................52
Changing Image Quality ................................53
Correcting Greenish Image Areas from Mercury Lamps ......53
Changing Movie Image Quality .........................54
For NTSC Video ............................................54
For PAL Video ...............................................54
Helpful Shooting Features ...................................55
Using the Electronic Level ..................................55
Magnifying the Area in Focus ............................55
Checking for Closed Eyes ...............................56
Changing the IS Mode Settings .........................56
Deactivating Image Stabilization ......................56
Recording Movies with Subjects at the Same Size Shown before Recording .....................57
Customizing Camera Operation .........................57
Preventing the AF-Assist Beam from Firing ....57
Preventing the Red-Eye Reduction Lamp from Lighting Up ........................................57
Changing the Image Display Style after Shots ....58
Changing the Image Display Period after Shots ....58
Changing the Screen Displayed after Shots ....58
Other Shooting Modes ........................................59
Enjoying a Variety of Images from Each Shot (Creative Shot) ........................................59
Choosing Effects ........................................60
Moving Subjects (Sports) ..................................60
Specific Scenes ..............................................61
Image Effects (Creative Filters) .........................62
Shooting High-Contrast Scenes (High Dynamic Range) .................................62
Adding Artistic Effects ....................................63
Shooting with Faded Colors (Nostalgic) ..............63
Shooting with a Fish-Eye Lens Effect (Fish-Eye Effect) ..................64
Shots Resembling Miniature Models (Miniature Effect) ................................64
Playback Speed and Estimated Playback Time (for One-Minute Clips) ..........65
Shooting with a Toy Camera Effect (Toy Camera Effect) ..................................65
Making Subjects Stand Out (Background Defocus) ..........................................................66
Shooting with a Soft Focus Effect .......................66
Shooting in Monochrome ..................................67
Special Modes for Other Purposes ............................................. 67
Auto Shooting after Face Detection (Smart Shutter) .......... 67
Auto Shooting after Smile Detection (Smile) ....................... 67
Auto Shooting after Wink Detection (Wink Self-Timer) ....... 68
Auto Shooting after Detecting New Person 
(Face Self-Timer) ................................................................. 69
Shooting Starry Skies (Star) ......................................................... 70
Shooting Night Scenes under Starry Skies 
(Star Nightscape) ................................................................... 70
Shooting Star Trails (Star Trails) ................................................. 70
Shooting Movies of Star Movement 
(Star Time-Lapse Movie) ........................................................ 71
Adjusting Colors ..................................................................... 73
Recording Various Movies ............................................................. 74
Recording Movies in [ ] Mode ....................................................... 74
Shooting Still Images during Movie Recording ..................... 74
Locking or Changing Image Brightness before Recording ..... 75
Correcting Severe Camera Shake .............................................. 75
Sound Settings .......................................................................... 76
Adjusting the Recording Volume .............................................. 76
Deactivating the Wind Filter ..................................................... 76
Using the Attenuator ................................................................. 76
Recording Short Clips ............................................................... 76
Playback Effects ....................................................................... 77
Recording iFrame Movies ......................................................... 77

P Mode ............................................................................. 78

Shooting in Program AE ([P] Mode) ............................................. 78
Image Brightness (Exposure) ...................................................... 79
Adjusting Image Brightness (Exposure Compensation) ....... 79
Locking Image Brightness / Exposure (AE Lock) .................... 79
Changing the Metering Method ................................................. 79
Linking the Spot AE Point Frame to the AF Frame .............. 80
Changing the ISO Speed ............................................................... 80
Adjusting ISO Auto Settings ..................................................... 81
Changing the Noise Reduction Level (High ISO NR) .......... 81
Auto Exposure Bracketing (AEB Shooting) ......................... 81
Dynamic Range Correction (DR Correction) ......................... 82
Shadow Correction ................................................................. 83
Using the ND Filter ................................................................. 83
Image Colors .......................................................................... 83
Capturing Natural Colors (White Balance) ......................... 83
Custom White Balance ............................................................ 84
Manually Correcting White Balance ..................................... 84
Changing Image Color Tones (My Colors) ......................... 85
Custom Color ......................................................................... 85
Shooting Range and Focusing .................................................... 86
Shooting Close-Ups (Macro) ..................................................... 86
Shooting in Manual Focus Mode ............................................. 86
Fine-Tuning the Focus ............................................................. 87
Easily Identifying the Focus Area (MF Peaking) .................... 88
Focus Bracketing (Focus-BKT Mode) ..................................... 88
Digital Tele-Converter ............................................................. 89
Choosing the AF Method .......................................................... 89
1-point AF ............................................................................. 89
Moving and Resizing AF Frames (1-point AF) ...................... 89
Tracking ................................................................................. 90
Shooting with Servo AF ............................................................ 91
Changing the Focus Setting ..................................................... 91
Choosing a Person to Focus On (Face Select) ....................... 92
Choosing Subjects to Focus On (Touch AF) ......................... 92
Shooting with the AF Lock ....................................................... 93
Flash ...................................................................................... 93
Changing the Flash Mode ....................................................... 93
Auto ....................................................................................... 93
Specifying All Images at Once .................................................. 120
Rotating Images ........................................................................... 120
Using the Menu ........................................................................... 120
Deactivating Auto Rotation .............................................................. 121
Tagging Images as Favorites .............................................................. 121
Using the Menu ........................................................................... 121
Convenient Control: Assigned Buttons ........................................... 122
Convenient Control: Touch Actions ................................................ 123
Using Touch Actions Functions ......................................................... 123
Changing Touch Actions Functions .................................................. 123
Assignable Functions .................................................................... 123
Editing Still Images ........................................................................ 124
Resizing Images ............................................................................ 124
Using the Menu ........................................................................... 124
Cropping ....................................................................................... 125
Changing Image Color Tones (My Colors) .......................................... 126
Correcting Image Brightness (i-Contrast) ........................................... 126
Correcting Red-Eye ......................................................................... 127
Editing Movies .............................................................................. 128
Reducing File Sizes ...................................................................... 129
Image Quality of Compressed Movies .............................................. 129
Editing Digest Movies ..................................................................... 129
Viewing Albums (Story Highlights) .................................................. 130
Choosing Themes for Albums ............................................................ 130
Adding Background Music to Albums .............................................. 131
Creating Your Own Albums .............................................................. 132
Wi-Fi Functions ............................................................................. 133
Available Wi-Fi Features ................................................................. 133
Sending Images to a Smartphone ..................................................... 134
Sending Images to an NFC-Compatible Smartphone ......................... 134
Connecting via NFC When Camera Is Off or in Shooting Mode ......................................................... 134
Connecting via NFC When Camera Is in Playback Mode .................... 135
Sending to a Smartphone Assigned to the Button ......................... 136
Adding a Smartphone Using the Wi-Fi Menu ................................... 138
Using Another Access Point ........................................................... 139
Previous Access Points .................................................................. 140
Saving Images to a Computer ........................................................ 140
Preparing to Register a Computer .................................................. 140
Checking Your Computer Environment .......................................... 140
Installing the Software .................................................................. 140
Configuring the Computer for a Wi-Fi Connection                   (Windows Only) .......................................................... 141
Saving Images to a Connected Computer ....................................... 142
Confirming Access Point Compatibility ......................................... 142
Using WPS-Compatible Access Points .......................................... 142
Connecting to Listed Access Points ............................................... 144
Previous Access Points .................................................................. 145
Sending Images to a Registered Web Service .................................. 145
Registering Web Services ............................................................... 145
Registering CANON iMAGE GATEWAY .......................................... 146
Registering Other Web Services ...................................................... 147
Uploading Images to Web Services ................................................ 148
Printing Images Wirelessly from a Connected Printer ........................ 149
Sending Images to Another Camera .............................................. 150
Image Sending Options ................................................................. 151
Sending Multiple Images ............................................................... 151
Choosing Images Individually ......................................................... 151
Selecting a Range ......................................................................... 151
Sending Favorite Images .............................................................. 152
Notes on Sending Images ............................................................. 152
Choosing the Number of Recording Pixels (Image Size) .................. 153
Appendix

187

Troubleshooting
On-Screen Messages
On-Screen Information
Shooting (Information Display)
Battery Level
Playback (Information Display)
Summary of Movie Control Panel

Functions and Menu Tables
Functions Available in Each Shooting Mode
Quick Set Menu
Shooting Tab
[1] Tab
[2] Tab
[3] Tab
[4] Tab
[5] Tab
[6] Tab
[7] Tab
[8] Tab
Set Up Tab
My Menu Tab
Playback Tab
Print Tab

Handling Precautions
Specifications
Camera Specifications
Wi-Fi
Digital Zoom Focal Length (35mm equivalent)
Number of Shots/Recording Time, Playback Time
Number of Shots per Memory Card
Recording Time per Memory Card
Common Camera Operations

Shoot

- Use camera-determined settings (Auto Mode, Hybrid Auto Mode)
  - 35, 37
- See several effects applied to each shot, using camera-determined settings (Creative Shot Mode)
  - 59

Shooting people well

- Portraits (61)
- Against Snow (61)

Matching specific scenes

- Sports (60)
- Night Scenes (61)
- Fireworks (61)
- Starry Skies (70)

Applying special effects

- Vivid Colors (62)
- Poster Effect (62)
- “Aged” Photos (63)
- Fish-Eye Effect (64)
- Miniature Effect (64)
- Toy Camera Effect (65)
- Background Defocus (66)
- Soft Focus (66)
- Monochrome (67)

- Focus on faces
  - 35, 61, 90, 92
- Without using the flash (Flash Off)
  - 35
- Include yourself in the shot (Self-Timer)
  - 45, 69
- Movie clips and photos together (Movie Digest)
  - 37
View

- View images (Playback Mode) - 106
- Automatic playback (Slideshow) - 115
- On a TV - 169
- On a computer - 178
- Browse through images quickly - 110
- Erase images - 118
- Create an album automatically - 130

Shoot/View Movies

- Shoot movies - 35, 74, 101
- View movies (Playback Mode) - 106

Print

- Print pictures - 180

Save

- Save images to a computer via a cable - 178

Use Wi-Fi Functions

- Send images to a smartphone - 134
- Share images online - 145
- Send images to a computer - 153
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.
- Do not look through the viewfinder (if your model has one) at intense light sources, such as the sun on a clear day or an intense artificial light source. This could damage your eyesight.
- 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

- 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.

Caution

- 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

- Do not aim the camera at intense light sources, such as the sun on a clear day or an intense artificial light source. Doing so may damage the image sensor or other internal components.
- When using the camera on a sandy beach or at a windy location, be careful not to allow dust or sand to enter the camera.
- On products that raise and lower the flash automatically, do not push the flash down or pry it open. This may cause the product to malfunction.
- Wipe off any dust, grime, or other foreign matter on the flash with a cotton swab or cloth. The heat emitted from the flash may cause foreign matter to smoke or the product to malfunction.
- Remove and store the battery pack/batteries when you are not using the product. Any battery leakage that occurs may cause product damage.
- Before you discard the battery pack/batteries, cover the terminals with tape or other insulators. Contacting other metal materials may lead to fire or explosions.
- Unplug any battery charger used with the product when not in use. Do not cover with a cloth or other objects when in use. Leaving the unit plugged in for a long period of time may cause it to overheat and distort, resulting in fire.
- Do not leave any dedicated battery packs near pets. Pets biting the battery pack could cause leakage, overheating, or explosion, resulting in product damage or fire.
● If your product uses multiple batteries, do not use batteries that have different levels of charge together, and do not use old and new batteries together. Do not insert the batteries with the + and – terminals reversed. This may cause the product to malfunction.

● When putting the camera in your bag, ensure that hard objects do not come into contact with the screen. Also close the screen (so that it faces the body), if your product’s screen closes.

● Do not attach any hard objects to the product. Doing so may cause malfunctions or damage the screen.
Prepare for shooting as follows.

### Attaching Accessories

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

2. **Attach the lens cap.**
   - Remove the lens cap from the lens and attach the lens cap cord to the strap.
   - Always remove the lens cap before turning the camera on. Try clipping the lens cap to the neck strap when the cap is not in use.
   - Keep the lens cap on the lens when the camera is not in use.
Holding the Camera

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

Charging the Battery Pack

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

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

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

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

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

- For details on charging time and the number of shots and recording time possible with a fully charged battery pack, see “Number of Shots/Recording Time, Playback Time” (1212).
- 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 (p.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, hold the battery lock toward (1) and insert the battery pack toward (2) 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).

Removing the Battery Pack and Memory Card

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

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

Set the current date and time correctly as follows if the [Date/Time] screen is displayed when you turn the camera on. Information you specify this way is recorded in image properties when you shoot, and it is used when you manage images by shooting date or print images showing the date.

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

2 Set the date and time.
   ● Press the ⤅⢃ buttons to choose an option.
   ● Press the ⤅⢃ buttons or turn the ⤅⢃ dial to specify the date and time.
   ● When finished, press the SET button.

3 Specify your home time zone.
   ● Press the ⤅⢃ buttons to choose your home time zone.

4 Finish the setup process.
   ● Press the SET button when finished. After a confirmation message, the setting screen is no longer displayed.
   ● To turn off the camera, press the power button.

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 SET button.
3 Change the date and time.
- Follow step 2 in “Setting the Date and Time” (21) 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, 168), 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” (21).

### Display Language

Change the display language as needed.

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

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

3. Set the display language.
   - Press the [ ] buttons or turn the [] dial to choose a language, and then press the [ ] button.
   - Once the display language has been set, the setting screen is no longer displayed.

- The current time is displayed if you wait too long in step 2 after pressing the [ ] button before you press the [MENU] button. In this case, press the [ ] button to dismiss the time display and repeat step 2.
- You can also change the display language by pressing the [MENU] button and choosing [Language] on the [3] tab.
- You can also set the display language by touching a language on the screen in step 3 and then touching it again.
Tryng 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, move the [ ] switch to raise the flash. It will fire when shooting. If you prefer not to use the flash, push it down with your finger, into the camera.

      - 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 [ Disp ] 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 (119).

- 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 (123).
On/Off

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

Playback Mode
- Press the [ ] button to turn the camera on and view your shots.
- To turn the camera off, press the [ ] button again.

● To switch to Playback mode from Shooting mode, press the [ ] button.
● To switch to Shooting mode from Playback mode, press the shutter button halfway (=27).
● 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.

Advanced Guide
Camera Basics

Other basic operations and more ways to enjoy your camera, including shooting and playback options
**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 (p. 27).

**Power Saving in Playback Mode**

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

- You can deactivate Auto Power Down and adjust the timing of Display Off, if you prefer (p. 162).
- Power saving is not active while the camera is connected to other devices via Wi-Fi (p. 133), or when connected to a computer (p. 178).

---

**Shutter Button**

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

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

1. **Press halfway. (Press lightly to focus.)**
   - Press the shutter button halfway. The camera beeps twice, and 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.
Adjusting the Screen Angle and Orientation

You can adjust the screen angle and orientation to suit the scene or how you are shooting.

- **Tilting the Screen Downward**
  - Pull the top of the screen down.
  - The screen can be opened to about 45°.

- **Tilting the Screen Upward**
  - Lift the bottom of the screen up until it clicks (1), slide the top of the screen down (2), and then lift the bottom of the screen up again (3).
  - The screen can be opened to about 180°.
  - When including yourself in shots, you can view a mirror image of yourself by rotating the screen around toward the front of the camera.
  - When finished, tilt the screen back to lower it (4), and then slide it up until it clicks (5).
Shooting Display Options

Press the [DISP] button to show or hide shooting information, grid lines, or the electronic level. To configure the on-screen display in greater detail, access [1] tab ► [Shooting information display] (102).

- 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” (108).

Tips:
- When the camera is not in use, keep the screen closed.
- Be careful not to open the screen any further than this, as it will damage the camera.
- To cancel reverse display, choose MENU (31) ► [1] tab ► [Reverse Disp.] ► [Off].
Using the Quick Set Menu

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

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

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

3 Choose an option.
   - Press the [←] or [→] buttons or turn the [○] or [MENU] dial to choose an option.
   - Options labeled with a [MENU] icon can be configured by pressing the [MENU] button.
   - Options labeled with a [DISP] icon can be configured by pressing the [DISP] button.

4 Finish the setup process.
   - Press the [Q] button.
   - The screen before you pressed the [Q] button in step 1 is displayed again, showing the option you configured.

Using Touch-Screen Operations to Configure Settings

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

- 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 options labeled with a [MENU] icon by touching [MENU].
- You can access the screen for options labeled with a [DISP] icon by touching [DISP].
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 ([ PHOTO ]), playback ([ PLAY ]), or settings ([ SETUP ]), or pages within each function (2). Tabs are identified in this manual by combining the function and page, as in [ SETUP ].
   - 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 Finish the setup process.
   - 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 (200 – 209).
**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 menu 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 [DISP] is shown, you can touch [DISP] instead of pressing the [DISP] 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 (48), Wi-Fi connections (142), and so on. Note that the length and type of information you can enter varies depending on the function you are using.

(1) The amount of information you can enter (1) varies depending on the function you are using.

**Entering Characters**

- Touch the characters to enter them.

**Moving the Cursor**

- Touch [ ].

**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.

- 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>On</td>
<td>Connected to a computer (178), or display off (27, 161, 162)</td>
</tr>
<tr>
<td></td>
<td>Blinking</td>
<td>Starting up, recording/reading/transmitting images, shooting long exposures (98, 99), or connecting/transmitting via Wi-Fi</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 [Q] button.
- The current time appears.
- If you hold the camera vertically while using the clock function, it will switch to vertical display. Press the [Q] buttons or turn the [Q] dial to change the display color.
- Press the [Q] button again to cancel the clock display.

- When the camera is off, press and hold the [Q] 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.

---

**Still Images**

**Movies**
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). (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, move the [(getResources)] switch to raise the flash. It will fire when shooting. If you prefer not to use the flash, push it down with your finger, into the camera.

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

Recording Movies

1) Start recording.
- Press the movie button. The camera beeps once as recording begins, and [Rec] is displayed with the elapsed time (1).
- Black bars are displayed on the top and bottom edges of the screen, and the subject is slightly enlarged. The black bars indicate image areas not recorded.
- Frames displayed around any detected faces indicate that they are in focus.
- Once recording begins, take your finger off the movie button.

2) 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 AUTO mode.
- Follow step 2 in “Shooting (Smart Auto)” (35) and choose AUTO.

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 AUTO 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 [STD] 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 AUTO 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 (116).
  - Daylight saving time (121) 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) ► [Digest Type] ► [No Stills].
- Individual chapters can be edited (129).
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 (109).

Still Images/Movies
- If the camera is turned on while the DISP button is held down, the camera will no longer sound. To activate sounds again, press the MENU button and choose [Mute] on the [ ] tab, and then choose [Off].

Movies
- You can change how long images are displayed after shots (58).

● Keep your fingers away from the microphone (1) while shooting movies. Blocking the microphone may prevent audio from being recorded or may cause the recording to sound muffled.

- Avoid touching camera controls other than the movie button when shooting movies, because sounds made by the camera will be recorded.
- Once movie recording begins, the image display area changes and subjects are enlarged to allow for correction of significant camera shake. To shoot subjects at the same size shown before shooting, set Dynamic IS to [Low] (57).

- Audio is recorded in stereo.
- During movie recording, lens operating noises from auto focusing may also be recorded. If you prefer not to record sound, choose MENU (31) ► [ ] tab ► [Sound rec.] ► [Disable].

Still Images
- A blinking [ ] icon warns that images are more likely to be blurred by camera shake. In this case, mount the camera on a tripod or take other measures to keep it still.
- If your shots are dark despite the flash firing, move closer to the subject. For details on the flash range, see “Flash Range” (213).
- 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” (213).
- 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.
- The shutter sound will not be played when the Sleeping and Babies (Sleeping) icons (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 [AUTO] and [AUTO] modes, shooting scenes determined by the camera are indicated by the icon displayed, and corresponding settings are automatically selected for optimal focusing, subject brightness, and color. Depending on the scene, continuous images may be shot (74).

<table>
<thead>
<tr>
<th>Subject</th>
<th>Background</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Normal</td>
<td>Backlit</td>
<td>Dark*1</td>
<td>Sunsets</td>
<td>Spotlights</td>
</tr>
<tr>
<td>People</td>
<td>2</td>
<td>3</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Moving People</td>
<td>3</td>
<td>3</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Shadows on Face</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Smiling</td>
<td>3</td>
<td>3</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Sleeping</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Babies</td>
<td>3</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Smiling Babies</td>
<td>3</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Sleeping Babies</td>
<td>3</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Moving Children</td>
<td>3</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other Subjects</td>
<td>2</td>
<td>3</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other Moving Subjects</td>
<td>3</td>
<td>3</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other Close-Range Subjects</td>
<td>2</td>
<td>3</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

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

● For movies, only People, Other Subjects, and Other Close-Range Subjects icons are displayed.

● In [AUTO] 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 [40] (47) and when [Hg Lamp Corr.] is set to [On] and scenes are automatically corrected (53).

● Backlit icons are not displayed for moving children and smiling people when the flash is set to [3].

● 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 (48). Confirm beforehand that the date and time are correct (21).

![Warning]

<table>
<thead>
<tr>
<th>Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Try shooting in [P] mode (78) 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.</td>
</tr>
</tbody>
</table>
Image Stabilization Icons

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

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="" alt="Image stabilization for still images (Normal)" /></td>
<td>Image stabilization for still images (Normal)</td>
</tr>
<tr>
<td><img src="" alt="Image stabilization for macro shots. During movie recording, Image stabilization for macro shots. During movie recording is displayed, and image stabilization for macro movie recording is used (Hybrid IS)." /></td>
<td>Image stabilization for macro shots. During movie recording, <img src="add" alt="Image stabilization for macro shots. During movie recording" /> is displayed, and image stabilization for macro movie recording is used (Hybrid IS).</td>
</tr>
<tr>
<td><img src="" alt="Image stabilization for movies, reducing strong camera shake, as when shooting while walking (Dynamic)" /></td>
<td>Image stabilization for movies, reducing strong camera shake, as when shooting while walking (Dynamic)</td>
</tr>
<tr>
<td><img src="" alt="Image stabilization for slow camera shake, such as when shooting movies at telephoto (Powered)" /></td>
<td>Image stabilization for slow camera shake, such as when shooting movies at telephoto (Powered)</td>
</tr>
<tr>
<td><img src="" alt="No image stabilization, because the camera is mounted on a tripod or held still by other means. However, during movie recording, Image stabilization for slow camera shake, such as when shooting movies at telephoto (Powered). Note: displayed only 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. is displayed, and image stabilization to counteract wind or other sources of vibration is used (Tripod IS)." /></td>
<td>No image stabilization, because the camera is mounted on a tripod or held still by other means. However, during movie recording, <img src="add" alt="Image stabilization for slow camera shake, such as when shooting movies at telephoto (Powered). Note: displayed only 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." /> is displayed, and image stabilization to counteract wind or other sources of vibration is used (Tripod IS).</td>
</tr>
</tbody>
</table>

* 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] (56). In this case, an IS icon is not displayed.
- In ![Image stabilization for slow camera shake, such as when shooting movies at telephoto (Powered). Note: displayed only 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.](add) mode, no ![Image stabilization for slow camera shake, such as when shooting movies at telephoto (Powered). Note: displayed only 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.](add) icon is displayed.

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 ![Image stabilization for slow camera shake, such as when shooting movies at telephoto (Powered). Note: displayed only 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.](add), ![Image stabilization for slow camera shake, such as when shooting movies at telephoto (Powered). Note: displayed only 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.](add), or ![Image stabilization for slow camera shake, such as when shooting movies at telephoto (Powered). Note: displayed only 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.](add) is displayed to inform you that the camera shoots continuously.

<table>
<thead>
<tr>
<th>Scene</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smiling (including Babies)</td>
<td><img src="add" alt="Image stabilization for slow camera shake, such as when shooting movies at telephoto (Powered). Note: displayed only 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." /> Consecutive images are captured, and the camera analyzes details such as facial expressions to save the image determined to be the best.</td>
</tr>
<tr>
<td>Sleeping (including Babies)</td>
<td><img src="add" alt="Image stabilization for slow camera shake, such as when shooting movies at telephoto (Powered). Note: displayed only 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." /> 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><img src="add" alt="Image stabilization for slow camera shake, such as when shooting movies at telephoto (Powered). Note: displayed only 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." /> 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 ![Image stabilization for slow camera shake, such as when shooting movies at telephoto (Powered). Note: displayed only 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.](add) button, and then select ![Image stabilization for slow camera shake, such as when shooting movies at telephoto (Powered). Note: displayed only 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.](add) (either press the ![Image stabilization for slow camera shake, such as when shooting movies at telephoto (Powered). Note: displayed only 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.](add) button 1 or turn the ![Image stabilization for slow camera shake, such as when shooting movies at telephoto (Powered). Note: displayed only 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.](add) dial).
On-Screen Frames

Still Images  Movies

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 (78) 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. [ ] is displayed, and the camera enters Touch AF mode.

Common, Convenient Features

Zooming In Closer on Subjects (Digital Zoom)

Still Images  Movies

When distant subjects are too far away to enlarge using the optical zoom, use digital zoom for up to about 100x enlargement.

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

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

- Moving the zoom lever will display the zoom bar (which indicates the zoom position). The color of the zoom bar will change depending on the zoom range.
  - White range: optical zoom range where the image will not appear grainy.
  - Yellow range: digital zoom range where the image is not noticeably grainy (ZoomPlus).
  - Blue range: digital zoom range where the image will appear grainy.

- Because the blue range will not be available at some recording pixel settings (96), the maximum zoom factor can be achieved by following step 1.
Easily Reacquiring Subjects after Manual Zooming (Framing Assist – Seek)

If you lose track of a subject while zoomed in, you can find it more easily by temporarily zooming out.

1. Look for the lost subject.
   - Press and hold the button.
   - The camera zooms out and displays a white frame around the area shown before you pressed the button.

2. Reacquire the subject.
   - Aim the camera so that the subject enters the white frame, and then release the button.
   - The previous magnification is now restored, so that the area within the white frame fills the screen again.

● Some shooting information is not displayed while the camera is zoomed out.
● During movie shooting, the white frame is not displayed if you press the button. Also note that a changed zoom factor and camera operating sounds are recorded.

Shooting at Preset Focal Lengths (Step Zoom)

Shoot at common focal lengths in a range of 24 – 600 mm (35mm film equivalent).

- Turn the dial clockwise until it clicks to change the focal length from 24 mm to 28 mm. Turn the dial clockwise to zoom in or counterclockwise to zoom out.

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

- When using the digital zoom, turning the dial clockwise will not change the zoom factor. However, turning the dial counterclockwise will set the focal length to 600 mm.
Auto Zooming in Response to Subject Movement (Auto Zoom)

The camera automatically zooms in and out to keep a detected face (90) at a constant size. If the person moves closer, the camera automatically zooms out, and vice versa. This size can also be adjusted, as needed.

1 Enter [Auto] Auto mode.
   - Press and release the [Auto] button quickly.
   - [Auto] is displayed.
   - A white frame is displayed around the detected face, and the camera zooms in and out to keep the subject on the screen.
   - When multiple faces are detected, a white frame is displayed around the main subject’s face and up to two gray frames around other faces, as the camera zooms to keep these subjects on the screen.

2 Shoot.
   - Auto zooming continues even after you shoot, and the frames are still displayed.
   - To cancel auto zooming, press the [Auto] button again. [Auto: Off] is displayed.

- A face may not be displayed at a constant size relative to the screen at some zoom factors, or if the person’s head is tilted or facing the camera indirectly.
- During movie recording, a changed zoom factor and camera operating sounds are recorded.
- When Auto is on, some shooting information is not displayed, and some shooting settings cannot be configured.
- Auto zooming to keep multiple subjects on the screen is not performed during movie recording, even if faces are detected.
- You can zoom in or out with the zoom lever, but the original zoom factor will be restored in a few seconds after you release the lever.
- Auto zooming is not performed during continuous shooting.

- If multiple faces are detected in step 2, you can change the face used as the main subject by touching the face or pressing the [Auto] button. However, the [Auto] button cannot be used for selection during movie recording.
- When a detected subject moves toward the edge of the screen, the camera zooms out to keep the subject on the screen.
- The zoom factor cannot be changed after you press the shutter button all the way down in self-timer mode (45).
- The camera prioritizes zooming to keep subjects on the screen. For this reason, it may not be possible to maintain a constant face display size, depending on subject movement and shooting conditions.
- When no face is detected, the camera zooms to a certain level and stops zooming until a face is detected.
### Easily Reacquiring Subjects with Auto Zooming (Seek Assist)

If you lose track of a subject while zoomed in and move the camera to look for it, the camera detects this movement and automatically zooms out, which makes it easier to find the subject.

1. Enter [\(\text{\textcopyright}\)] Auto mode (\(\text{\textcopyright}\) 43).

2. **Look for the lost subject.**
   - When you move the camera to look for the subject, the camera zooms out to help you find it.

3. **Reacquire the subject.**
   - Once you find the subject and stop moving the camera, the camera zooms in again.

4. **Shoot.**
   - To cancel this mode, press the [\(\text{\textcopyright}\)] button again. [\(\text{\textcopyright}\) Auto: Off] is displayed.

---

#### Adjusting the Constant Face Display Size

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto</td>
<td>Auto zoom to prevent subjects from moving off the screen. When multiple faces are detected, the camera zooms to keep these subjects on the screen.</td>
</tr>
<tr>
<td>Face</td>
<td>Keep faces large enough to show facial expressions clearly.</td>
</tr>
<tr>
<td>Upper Body</td>
<td>Keep faces small enough to show the person’s upper body.</td>
</tr>
<tr>
<td>Whole Body</td>
<td>Keep faces small enough to show the person’s entire body.</td>
</tr>
<tr>
<td>Manual</td>
<td>Keep faces at the size specified by moving the zoom lever. Release the zoom lever once the desired size has been obtained.</td>
</tr>
</tbody>
</table>

- When [\(\text{\textcopyright}\) Auto is on, press the \([\square]\) buttons or turn the \([\triangle]\) dial to choose the desired option.
- The camera zooms automatically to keep faces at the specified size.

- The face size can also be adjusted in MENU (43) \([\square]\) tab \(\square\) [Auto Settings] \([\square]\) [Auto Zoom]. You can choose [Off] to deactivate this feature and use only the feature described in “Easily Reacquiring Subjects with Auto Zooming (Seek Assist)” (44).
- You can zoom in or out with the zoom lever when [Face], [Upper Body], or [Whole Body] is selected, but the original zoom factor will be restored in a few seconds after you release the lever.
- You can clear your specified face size during movie recording by pressing the \([\triangle]\) button.
- When [\(\text{\textcopyright}\) Auto is on, you can also choose options by touching \([\square]\).
Using the Self-Timer

1 Configure the setting.
- Press the [ ] button, choose [ ] in the menu, and then choose [ ] ( ).
- 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.

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” ( ) and choose [ ].
- Once the setting is complete, [ ] is displayed.
- Follow step 2 in “Using the Self-Timer” ( ) to shoot.
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” (45), choose [ ] and press the [DISP] 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.
   - Once the setting is complete, [ ] is displayed.
   - Follow step 2 in “Using the Self-Timer” (45) to shoot.

- For movies recorded using the self-timer, recording begins after your specified delay time, but specifying the number of shots has no effect.

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

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 touch-shutter function.
   - Press the [ ] button, choose [Touch Shutter] on the [ ] tab, and then choose [On] (31).

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 [Off] in step 1.

- Even while the shot is displayed, you can prepare for the next shot by touching [ ].
Continuous Shooting

In [AUTO] mode, hold the shutter button all the way down to shoot continuously.
For details on the continuous shooting speed, see “Continuous Shooting Speed” (213).

1 Configure the setting.
- Press the [ ] button, turn the [ ] dial to choose [ ], and then press the [ ] button.
- Once the setting is complete, [ ] is displayed.

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

During continuous shooting, the focus, exposure, and colors are locked at the position/level determined when you pressed the shutter button halfway.
- Cannot be used with the self-timer (45).
- 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.] (53)
  - [Blink Detection] (56)
- With Touch Shutter (46), 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.

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.
- Grouped images can be played back individually (113) and ungrouped (113).
- Protecting (116) a grouped image will protect all images in the group.
- Grouped images can be viewed individually when played back using Image Search (110). In this case, images are temporarily ungrouped.
- The following actions are not available for grouped images: editing Face ID information (114), magnifying (115), tagging as favorites (121), editing (124), printing (180), setting up individual image printing (184), or adding to a photobook (185). To do these things, either view grouped images individually (113) or cancel grouping (113) first.
Using Face ID

If you register a person ahead of time, the camera will detect that person’s face, and prioritize focus, brightness, and color for that person when shooting. In [AUTO] mode, the camera can detect babies and children based on registered birthdays and optimize settings for them when shooting. This function is also useful when searching for a specific registered person among a large number of images (111).

Personal Information

- Information such as images of a face (face info) registered with Face ID, and personal information (name, birthday) will be saved on the camera. Additionally, when registered people are detected, their names will be recorded in still images. When using the Face ID function, be careful when sharing the camera or images with others, and when posting images online where many others can view them.

- When disposing of a camera or transferring it to another person after using Face ID, be sure to erase all information (registered faces, names, and birthdays) from the camera (52).

Registering Face ID Information

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

1. Access the setting screen.

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

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   - 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 [2] 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 [3] dial), and then press the [2] button.

- Press the [4], [6] buttons to choose an option.

- Press the [△], [▼] buttons or turn the [3] dial to specify the date.


4 Save the settings.

- Press the [△], [▼] buttons or turn the [3] dial to choose [Save], and then press the [2] button.

- After a message is displayed, press the [4], [6] buttons or turn the [3] dial to choose [Yes], and then press the [2] 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 (39) 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 (48).

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.
Checking and Editing Registered Information

1. Access the [Check/Edit Info] screen.
   - Following step 1 in “Registering Face ID Information” (48), choose [Check/Edit Info] and press the [button.

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 [ ] 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 [ ] dial), and then press the [ ] button. On the screen displayed, you can edit the name or birthday as described in step 3 of “Registering Face ID Information” (48).
   - To check face information, choose [Face Info List] (either press the [ ] buttons or turn the [ ] dial), and then press the [ ] button. Press the [ ] button on the screen displayed, choose face information to erase by pressing the [ ] buttons or turning the [ ] dial, and then press the [ ] button. After [Erase?] is displayed, choose [OK] (either press the [ ] buttons or turn the [ ] dial), and then press the [ ] button.

- 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 (114).
- Because faces of babies and children change quickly as they grow, you should update their face info regularly (48).
- Names will still be recorded in images even if you clear the [Shooting Info] check box in “Customizing the Information Displayed” (103) 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) (110).
- In [ ] mode, names are not displayed on the shooting screen, but they will be recorded in still images.
- Names recorded in continuous shooting (47) continue to be recorded in the same position as the first shot, even if subjects move.
- Names will still be recorded in images even if you clear the [Shooting Info] check box in “Customizing the Information Displayed” (103) so that the names are not displayed.
Overwriting and Adding Face Information

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

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

1. Access the [Add Face Info] screen.
   ● Following step 1 in “Registering Face ID Information” (p.48), choose [Add Face Info] and press the [SET] button.

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 five items of face info have already been registered, a message will be displayed. Choose [OK] (either press the [△] [△] [△] buttons or turn the [ ] dial), and then press the [SET] button.
   ● If less than five items of face info are registered, go to step 4 to add face information.

3. Choose the face info to overwrite.
   ● Press the [△] [△] [△] [△] buttons or turn the [ ] dial to choose the face info to overwrite, and then press the [SET] button.

4. Register face information.
   ● Follow step 2 in “Registering Face ID Information” (p.48) 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.
- 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 (p.150), and then register new face information (p.48) as needed.

- Even if you change names in [Edit Profile], the names recorded in previously shot images will remain the same.
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” (48) 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 [OK] button.
   - If [Erase?] is displayed, press the [△] buttons or turn the [△] dial to choose [OK], and then press the [OK] button.

- If you erase a registered person’s info, you will not be able to display their name (110), overwrite their info (114), or search images for them (111).
- You can also erase names in image information (114).

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 (36).
- Once the setting is complete, the screen aspect ratio will be updated.
- To restore the original setting, repeat this process but choose [1:1].

| 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. |

- Not available in [P] mode.
- You can also configure this setting by choosing MENU (31) ► [1] 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.

2. Once the setting is complete, [Hg Lamp Corr.] is displayed.
3. 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 (47), this setting is set to [Off] and cannot be changed.

## 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).

1. Press the [ ] button, choose [ ] in the menu, and choose the desired option (30).
2. The option you configured is now displayed.
3. To restore the original setting, repeat this process but choose [ ].

### Guidelines for Choosing Recording Pixel Setting Based on Paper Size (for 3:2 Images)

<table>
<thead>
<tr>
<th>Paper Size</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2 (16.5 x 23.4 in.)</td>
<td>16 M</td>
</tr>
<tr>
<td>A3 – A5 (11.7 x 16.5 – 5.8 x 8.3 in.)</td>
<td>4 M</td>
</tr>
<tr>
<td>3.5 x 5 in., 5 x 7 in., Postcard</td>
<td>2 M</td>
</tr>
<tr>
<td>4S For e-mailing and similar purposes</td>
<td>1 M</td>
</tr>
</tbody>
</table>

- Not available in [ ] mode.
- You can also configure this setting by choosing MENU (31) ➤ [1] tab ➤ [Image quality].

- Try taking some test shots first to make sure you obtain the desired results.
- In continuous shooting (47), 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 (page 160). For guidelines on the maximum movie length at each level of image quality that will fit on a memory card, see “Recording Time per Memory Card” (page 213).

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

For NTSC Video

<table>
<thead>
<tr>
<th>Image Quality</th>
<th>Number of Recording Pixels</th>
<th>Frame Rate</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920 x 1080</td>
<td>59.94 fps</td>
<td>For shooting in Full HD</td>
<td></td>
</tr>
<tr>
<td>1920 x 1080</td>
<td>29.97 fps</td>
<td>Enables movies with smoother motion</td>
<td></td>
</tr>
<tr>
<td>1920 x 1080</td>
<td>23.98 fps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1280 x 720</td>
<td>29.97 fps</td>
<td>For shooting in HD</td>
<td></td>
</tr>
<tr>
<td>640 x 480</td>
<td>29.97 fps</td>
<td>For shooting in standard definition</td>
<td></td>
</tr>
</tbody>
</table>

For PAL Video

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

- Black bars (displayed on the left and right in [ ] and [ ] modes and on the top and bottom in [ ], [ ], [ ], [ ], and [ ] modes) indicate image areas not recorded.
- You can also configure this setting by choosing MENU (page 31) ► [ ] tab ► [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 settings.

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 (169)
- Not available in [ mode.

Using the Electronic Level

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

1 Display the electronic level.
- Press the DISP button to display the electronic level.

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

- If the electronic level is not displayed in step 1, press the MENU button and check the setting in [1] tab ► [Shooting information display].
- Tilting the camera too far forward or backward will prevent you from using the electronic level, which will turn gray.
- 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 (161).
- Not available in [ mode.
### Checking for Closed Eyes

#### Still Images

When the camera detects that people may have closed their eyes, a ![ ] icon is displayed.

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 (47).

### 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 [4] 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 (31).

<table>
<thead>
<tr>
<th>Continuous</th>
<th>Optimal image stabilization for the shooting conditions is automatically applied (Intelligent IS) (40).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>Deactivates image stabilization.</td>
</tr>
</tbody>
</table>
Recording Movies with Subjects at the Same Size Shown before Recording

Normally, once movie recording begins, the image display area changes and subjects are enlarged to allow for correction of significant camera shake. To record movies with subjects at the same size shown before shooting, you can reduce image stabilization.

Follow step 1 in “Deactivating Image Stabilization” (56) 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] (56).
- Only [Standard] is available when the movie quality is [720p] (NTSC) or [576p] (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.


To restore the original setting, repeat this process but choose [On].

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.

Press the [MENU] button, choose [AF-assist Beam] on the [3] tab, and then press the [ ] button (31).

2 Configure the setting.

Choose [Red-Eye Lamp], and then choose [Off] (31).

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 (31).
   - To restore the original setting, repeat this process but choose [Quick].

<table>
<thead>
<tr>
<th>Quick</th>
<th>Displays images only until you can shoot again.</th>
</tr>
</thead>
<tbody>
<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>

Changing the Screen Displayed after Shots

Change the way images are displayed after shots as follows.


2. Configure the setting.
   - Choose [Display Info], and then choose the desired option (31).
   - To restore the original setting, repeat this process but choose [Off].

<table>
<thead>
<tr>
<th>Off</th>
<th>Displays only the image.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detailed</td>
<td>Displays shooting details (194).</td>
</tr>
</tbody>
</table>

- When [Display Time] is set to [Off] or [Quick], [Display Info] is set to [Off] and cannot be changed.
- By pressing the [DISP] 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 [Fn] button.
Other Shooting Modes

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

Enjoying a Variety of Images from Each Shot (Creative 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. For full-screen display in this state, choose an image 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 ([113]).
- Simultaneous display of the six images as shown in step 2 is only available immediately after you shoot.
Choosing Effects

Moving Subjects (Sports)

Shoot continuously as the camera focuses on moving subjects.

1 Enter \([\bigtriangleup]\) mode.
   - Set the mode dial to \([\bigtriangleup]\).

2 Focus.
   - While you are pressing the shutter button halfway, the camera will continue to adjust focus and image brightness where the blue frame is displayed.

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

- In \([\bigtriangleup]\) mode, shots may look grainy because the ISO speed \((80)\) is increased to suit the shooting conditions.
- For details on the shooting range in \([\bigtriangleup]\) mode, see “Shooting Range” (213).
- There may be a delay after continuous shooting before you can shoot again. Note that some types of memory cards may delay your next shot even longer.
- Shooting may slow down depending on shooting conditions, camera settings, and the zoom position.

| \([\bigtriangleup]\) Auto | All effects |
| \([\bigtriangleup]\) Retro | Images resemble old photos |
| \([\bigtriangleup]\) Monochrome | Images are generated in one color |
| \([\bigtriangleup]\) Special | Bold, distinctive-looking images |
| \([\bigtriangleup]\) Natural | Subdued, natural-looking images |
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 Portraits (Portrait)]
   - Take shots of people with a softening effect.

   ![Shooting Evening Scenes without Using a Tripod (Handheld Night Scene)]
   - Beautiful shots of evening scenes or portraits with evening scenery in the background, without the need to hold the camera very still (as with a tripod).
   - A single image is created by combining consecutive shots, reducing camera shake and image noise.

   ![Shooting with Snowy Backgrounds (Snow)]
   - Bright, natural-colored shots of people against snowy backgrounds.

   ![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 (80) is increased to suit the shooting conditions.
   - Because the camera will shoot continuously in [ ] mode, hold it steady while shooting.
   - In [ ] mode, excessive motion blur or certain shooting conditions may prevent you from obtaining the desired results.
   - In [ ] mode, mount the camera on a tripod or take other measures to keep it still and prevent camera shake. Additionally, you should set [IS Mode] to [Off] when using a tripod or other means to secure the camera (56).
   - When you use a tripod for evening scenes, shooting in [ ] mode instead of [ ] mode will give better results (35).
   - In [ ] mode, although no frames are displayed when you press the shutter button halfway, optimal focus is still determined.
   - You can also choose the shooting mode by accessing MENU (31) ► [ ] tab ► [Rec. Mode].

Before Use
Basic Guide
Advanced Guide
Camera Basics
Auto Mode / Hybrid Auto Mode
Other Shooting Modes
P Mode
Tv, Av, M, C1, and C2 Mode
Playback Mode
Wi-Fi Functions
Setting Menu
Accessories
Appendix
Index
Image Effects (Creative Filters)

Add a variety of effects to images when shooting.

1. **Enter \[\text{Creative Filters}\] mode.**
   - Set the mode dial to \[\text{Creative Filters}\].

2. **Choose a shooting mode.**
   - Press the \[\text{Creative Filters}\] button, choose \[\text{Creative Filters}\] in the menu, and then choose a shooting mode (\[\text{Creative Filters}\]).

3. **Shoot.**

   - **Shooting in Vivid Colors (Super Vivid)**
     - \[\text{Still Images}\]  \[\text{Movies}\]
     - Shots in rich, vivid colors.

   - **Posterized Shots (Poster Effect)**
     - \[\text{Still Images}\]  \[\text{Movies}\]
     - Shots that resemble an old poster or illustration.

   - In \[\text{Creative Filters}\] and \[\text{Creative Filters}\] modes, try taking some test shots first, to make sure you obtain the desired results.

## Shooting High-Contrast Scenes (High Dynamic Range)

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

1. **Choose \[\text{Creative Filters}\].**
   - Follow steps 1 – 2 in “Image Effects (Creative Filters)” (\[\text{Creative Filters}\]) and choose \[\text{Creative Filters}\].

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

   - Excessive motion blur or certain shooting conditions may prevent you from obtaining the desired results.
Shooting with Faded Colors (Nostalgic)

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

1. Choose [ ].
   - Follow steps 1 – 2 in “Image Effects (Creative Filters)” (62) and choose [ ].
   - Turn the [ ] dial to choose an effect level.
   - A preview is shown of how your shot will look with the effect applied.

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

3. Shoot.

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

- Colors will look faded on the shooting screen, but the image aging effect is not shown. Review the image in Playback mode to see the effect (106).
- The image aging effect is not shown in movies.

Adding Artistic Effects

- Follow steps 1 – 2 in “Image Effects (Creative Filters)” (62) and choose [ ].
- Turn the [ ] dial to choose an effect level.
- A preview is shown of how your shot will look with the effect applied.

<table>
<thead>
<tr>
<th>Natural</th>
<th>Images are natural and organic.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Standard</td>
<td>Images resemble paintings, with subdued contrast.</td>
</tr>
<tr>
<td>Art Vivid</td>
<td>Images resemble vivid illustrations.</td>
</tr>
<tr>
<td>Art Bold</td>
<td>Images resemble oil paintings, with bold edges.</td>
</tr>
<tr>
<td>Art Embossed</td>
<td>Images resemble old photos, with bold edges and dark ambiance.</td>
</tr>
</tbody>
</table>
Shots Resembling 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 [\(\text{\#}\)].
   - Follow steps 1 – 2 in “Image Effects (Creative Filters)” (62) and choose [\(\text{\#}\)].
   - A white frame is displayed, indicating the image area that will not be blurred.

2 Choose the area to keep in focus.
   - Press the [\(\text{\#}\)] button.
   - Move the zoom lever to resize the frame, and turn the [\(\text{\#}\)] dial to move it.

3 For movies, choose the movie playback speed.
   - Turn the [\(\text{\#}\)] dial to choose the speed.

4 Return to the shooting screen and shoot.
   - Press the [\(\text{\#}\)] button to return to the shooting screen, and then shoot.

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

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

1 Choose [\(\text{\#}\)].
   - Follow steps 1 – 2 in “Image Effects (Creative Filters)” (62) and choose [\(\text{\#}\)].

2 Choose an effect level.
   - Turn the [\(\text{\#}\)] dial to choose an effect level.
   - A preview is shown of how your shot will look with the effect applied.

3 Shoot.
   - Try taking some test shots first, to make sure you obtain the desired results.
Shooting 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 (Toy Camera Effect).
   - Follow steps 1–2 in “Image Effects (Creative Filters)” (62) and choose (Toy Camera Effect).

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

3 Shoot.

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

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

- 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 [ ] (52). These quality settings cannot be changed.
- The zoom factor cannot be changed with the [(][)] button on the screens in steps 2 and 3, or while shooting movies.
- You can also move the frame by touching or dragging across the screen.
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 [ ].
   - Follow steps 1 – 2 in “Image Effects (Creative Filters)” (62) and choose [ ].

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 [ ] 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 this effect, 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 [ ] dial.

Shooting with a Soft Focus Effect

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

1 Choose [ ].
   - Follow steps 1 – 2 in “Image Effects (Creative Filters)” (62) and choose [ ].

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

3 Shoot.

   - Try taking some test shots first, to make sure you obtain the desired results.
Special Modes for Other Purposes

Auto Shooting after Smile Detection (Smile)

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

1. Choose [ ].
   - Follow steps 1 – 2 in “Specific Scenes” (61) and choose [ ].
   - Press the [ ] buttons or turn the [ ] dial to choose [ ], and then press the [ ] button.
   - The camera now enters shooting standby mode, and [Smile Detection on] is displayed.

2. Aim the camera at a person.
   - Each time the camera detects a smile, it will shoot after the lamp lights up.
   - To pause smile detection, press the [ ] button. Press the [ ] button again to resume detection.

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

Shooting in Monochrome

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

1. Choose [ ].
   - Follow steps 1 – 2 in “Image Effects (Creative Filters)” (62) and choose [ ].

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

3. Shoot.

<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>
Auto Shooting after Wink Detection (Wink Self-Timer)

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

1. Choose [ ].
   - Follow steps 1 – 2 in “Specific Scenes” (61) and choose [ ], and then press the [ ] button.
   - Press the [ ] buttons or turn the [ ] dial to choose [ ], and then press the [ ] button.

2. Compose the shot and press the shutter button halfway.
   - On the screen, touch the face of the person who will wink to choose it (Touch AF), and then press the shutter button halfway.
   - Make sure a green frame is displayed around the face of the person who will wink.

3. Press the shutter button all the way down.
   - The camera now enters shooting standby mode, and [Wink to take picture] is displayed.
   - The lamp blinks and the self-timer sound is played.

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

- If the wink is not detected, wink again slowly and deliberately.
- Winking may not be detected if eyes are obscured by hair, a hat, or glasses.
- Closing and opening both eyes at once will also be detected as a wink.
- If winking is not detected, the camera will shoot about 15 seconds later.
- To change the number of shots, press the [ ] buttons after choosing [ ] in step 1. [Blink Detection] (56) is only available for the final shot.
- If no one is in the shooting area when the shutter button is pressed all the way down, the camera will shoot after a person enters the shooting area and winks.
- The zoom factor cannot be changed with the [ ] button after you press the shutter button all the way down.

- You can also choose the shooting mode by choosing [ ] in steps 1 – 2 of “Specific Scenes” (61), touching [ ] to access the setting screen, touching [ ], and then touching the same option or [ ].
Auto Shooting after Detecting New Person
(Face Self-Timer)

The camera will shoot about two seconds after detecting that the face of another person (such as the photographer) has entered the shooting area (page 90). This is useful when including yourself in group photos or similar shots.

1 Choose [ ].
- Follow steps 1 – 2 in “Specific Scenes” (page 61) and choose [ ], and then press the [ ] button.
- Press the [ ] buttons or turn the [ ] dial to choose [ ], and then press the [ ] button.

2 Compose the shot and press the shutter button halfway.
- Make sure a green frame is displayed around the face you focus on and white frames around other faces.

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

4 Join the subjects in the shooting area and look at the camera.
- After the camera detects a new face, the lamp blinking and self-timer sound will speed up. (When the flash fires, the lamp will remain lit.) About two seconds later, the camera will shoot.
- To cancel shooting after you have triggered the self-timer, press the [MENU] button.

- Even if your face is not detected after you join the others in the shooting area, the camera will shoot about 15 seconds later.
- To change the number of shots, press the [ ] buttons after choosing [ ] in step 1. [Blink Detection] (page 56) is only available for the final shot.
- The zoom factor cannot be changed with the [ ] button after you press the shutter button all the way down.

- You can also choose the shooting mode by choosing [ ] in steps 1 – 2 of “Specific Scenes” (page 61), touching [ ] to access the setting screen, touching [ ], and then touching the same option or [ ].
Shooting Starry Skies (Star)

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 [A].
   - Follow steps 1 – 2 in “Specific Scenes” (161) and choose [A], and then press the [1] 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 [A].
   - Follow steps 1 – 2 in “Specific Scenes” (161) and choose [A], and then press the [1] button.
   - Zoom is set to maximum wide angle and cannot be adjusted.

   - To make stars brighter, choose MENU ▶ [31] ▶ [Star Emphasis] ▶ [Soft]. 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 (86) to more accurately specify the focal position before shooting.

   - You can also choose the shooting mode by choosing [A] in steps 1 – 2 of “Specific Scenes” (61), touching [A], and then touching the same option or [SET].
2 Specify the duration of the shooting session.
   ● Turn the [ ] dial to choose the shooting duration.

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

4 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 60 seconds.

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

   ● For easier viewing, try choosing MENU ► [ ] tab ► [Night Display] ► [On] (161) before shooting.
   ● Try switching to manual focus mode (86) to more accurately specify the focal position before shooting.

   ● You can also choose the shooting mode by choosing [ ] in steps 1 – 2 of “Specific Scenes” (61), touching [ ] to access the setting screen, touching [ ] , and then touching the same option or [ SET ].

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” (61) 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 [DISP] 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.

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

   ● For easier viewing, try choosing MENU ► [ ] tab ► [Night Display] ► [On] (161) before shooting.
   ● Try switching to manual focus mode (86) to more accurately specify the focal position before shooting.

   ● You can also choose the shooting mode by choosing [ ] in steps 1 – 2 of “Specific Scenes” (61), touching [ ] to access the setting screen, touching [ ], and then touching the same option or [ SET ].
4 Check the brightness.
- Press the shutter button all the way down to shoot a single still image.
- Switch to Playback mode (106) 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 60 seconds.
- The camera operates in Eco mode (161) while shooting.

### 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>15 sec.</td>
<td>47:59</td>
<td>16 sec.</td>
</tr>
<tr>
<td>15 sec.</td>
<td>47:59</td>
<td>8 sec.</td>
</tr>
<tr>
<td>30 sec.</td>
<td>47:59</td>
<td>8 sec.</td>
</tr>
<tr>
<td>30 sec.</td>
<td>47:59</td>
<td>4 sec.</td>
</tr>
<tr>
<td>1 min.</td>
<td>47:59</td>
<td>4 sec.</td>
</tr>
<tr>
<td>1 min.</td>
<td>47:59</td>
<td>2 sec.</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: [ ].

#### Table of Movie Settings

<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>47:59 (NTSC), 47:50 (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>
Adjusting Colors

Colors can be manually adjusted in \( \text{Mode} \) mode.

1. **Choose a shooting mode.**
   - Choose \( \text{Still Images} \) (\( \text{70} \)) or \( \text{Movies} \) (\( \text{70} \)) or \( \text{71} \).

2. **Choose color adjustment.**
   - Press the \( \text{B} \) button, and then choose \( \text{C} \) in the menu (\( \text{30} \)).

3. **Adjust the setting.**
   - Turn the \( \text{B} \) dial or press the \( \text{C} \) buttons to adjust the correction level for \( \text{B} \) and \( \text{A} \), and then press the \( \text{SET} \) button.
   - Once the setting is complete, \( \text{C} \) is displayed.

- **Sound is not recorded.**
- **For easier viewing, try choosing MENU \( \text{2} \) tab \( \text{Night Display} \) \( \text{On} \) (\( \text{161} \)) before shooting.
- You can also access the screen in step 2 by choosing MENU \( \text{31} \) \( \text{5} \) tab \( \text{Star Time-Lapse Movie Setting} \).
- To save each shot collected before the movie is created, choose MENU \( \text{31} \) \( \text{5} \) tab \( \text{Stills} \) \( \text{On} \). 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, \( \text{C} \) is displayed in the upper left of the screen. If you erase a grouped image (\( \text{118} \)), all images in the group are also erased. Be careful when erasing images.
- Try switching to manual focus mode (\( \text{86} \)) to more accurately specify the focal position before shooting.
- You can also choose the shooting mode by choosing \( \text{C} \) in steps 1 – 2 of “Specific Scenes” (\( \text{61} \)), touching \( \text{ISO} \) to access the setting screen, touching \( \text{C} \), and then touching the same option or \( \text{SET} \).

- **Advanced settings can be accessed by pressing the \( \text{MENU} \) button when the screen in step 2 is displayed (\( \text{84} \)).**

- **Try switching to manual focus mode (\( \text{86} \)) to more accurately specify the focal position before shooting.**
- **You can also choose the correction level by touching or dragging the bar in step 2.**
- **Advanced settings can be accessed by touching \( \text{MENU} \) when the screen in step 2 is displayed (\( \text{84} \)).**
Shooting Still Images during Movie Recording

Shoot still images during movie recording as follows.

1 While shooting a movie, focus on a subject.
   - Make sure that [Ⅲ] is displayed, and then press the shutter button halfway.
   - Focus and exposure are now readjusted. (However, the camera does not beep.)
   - Movie recording will continue.

2 Shoot.
   - Press the shutter button all the way down.
   - Your shot will be recorded.

● Shooting still images during movie recording may not be possible when the memory card’s recording speed is slow, or when there is not enough free internal memory.
   - [Ⅲ] (blinking): Image processing for recording is in progress. You can shoot when the icon stops blinking.
   - [Ⅲ]: Still images cannot be shot. In [Ⅲ] mode, [Ⅲ] is displayed during movie recording, and still images cannot be shot.

● Focus can be adjusted during recording by touching [Ⅰ] and turning the [Ⅰ] ring while [Ⅲ] is displayed.
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 Recording” (57) to choose [High].

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

The attenuator can reduce audio distortion in noisy environments. However, in quiet environments, it lowers the sound-recording level.

- Access the [Sound rec.] screen as described in step 1 of “Adjusting the Recording Volume” (p. 76).
- Choose [Wind filter/Attenuator], and then press the \( \text{[ ]} \) button.
- Choose [Attenuator], and then choose [Auto] or [On] (p. 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 (p. 130).

1. Enter \( \text{[ ]} \) mode.
   - Set the mode dial to \( \text{[ ]} \).
   - Press the \( \text{[ ]} \) button, choose \( \text{[ ]} \) in the menu, and then choose \( \text{[ ]} \) (p. 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 \( \text{[ ]} \) button.
   - Turn the \( \text{[ ]} \) dial to set the shooting time (4 – 6 sec.), and turn the \( \text{[ ]} \) dial to set the playback effect (p. 77).

3. Shoot (p. 74).
   - A bar showing the elapsed time is displayed.
Playback Effects

- **2x** Record a clip that is played back in fast motion.
- **1x** Record a clip that is played back at normal speed.
- **1/2x** Record a clip that is played back in slow motion.
- ** şişkiş** Record a clip that is played back normally before it appears to be rewound two seconds to show a replay of the last part. During recording, a mark indicating the last two seconds is added to the bar showing the elapsed time.

- Sound is not recorded in these clips.
- The movie quality is [240P] (for NTSC) or [350P] (for PAL) ([154, 154]) and cannot be changed.

## Recording iFrame Movies

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

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

2. **Shoot ([74])**.
   - iFrame is a video format developed by Apple Inc.
   - The movie quality is [240P] (for NTSC) or [350P] (for PAL) ([154, 154]) and cannot be changed.
P Mode

More discerning shots, in your preferred shooting style

- Instructions in this chapter apply to the camera with the mode dial set to [P] mode.
- [P]: Program AE; AE: Auto Exposure
- Before using a function introduced in this chapter in modes other than [P], make sure the function is available in that mode (195).

Shooting in Program AE ([P] Mode)

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

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

2. Customize the settings as desired (79 – 97), 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 (80) or activating the flash (if subjects are dark, 93), 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.
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.

Changing the Metering Method

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

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

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluative</td>
<td>For typical shooting conditions, including backlit shots. Automatically adjusts exposure to match the shooting conditions.</td>
</tr>
<tr>
<td>Center Weighted Avg.</td>
<td>Determines the average brightness of light across the entire image area, calculated by treating brightness in the central area as more important.</td>
</tr>
<tr>
<td>Spot</td>
<td>Metering restricted to within the [Q] (Spot AE Point frame). You can also link the Spot AE Point frame to the AF frame (Q80).</td>
</tr>
</tbody>
</table>

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 [Q] button.
- [Q] is displayed, and the exposure is locked.
- To unlock AE, press the [Q] button again. [Q] is no longer displayed.

2 Compose the shot and shoot.
Linking the Spot AE Point Frame to the AF Frame

1. Set the metering method to [ ].
   - Follow the steps in “Changing the Metering Method” (79) to choose [ ].

2. Configure the setting.
   - Press the [MENU] 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 (89).

   ![Spot AE Point Frame](image)

   ![AF Frame](image)

   ![Linked Spot AE Point Frame](image)

   ![Linked AF Frame](image)

   ![Not available](image)

   - Not available when [AF method] is set to [ +Tracking] (90).

Changing the ISO Speed

1. Press the [ ] button and turn the [ ] dial to choose an ISO speed.
2. The option you configured is now displayed.

<table>
<thead>
<tr>
<th>AUTO</th>
<th>Automatically adjusts the ISO speed to suit the shooting mode and conditions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>125, 160, 200</td>
<td>For shooting outdoors in fair weather.</td>
</tr>
<tr>
<td>250, 320, 400, 500, 640, 800</td>
<td>For shooting in cloudy conditions, or at twilight.</td>
</tr>
<tr>
<td>1000, 1250, 1600, 2000, 2500, 3200, 4000, 5000, 6400</td>
<td>For shooting night scenes, or in dark rooms.</td>
</tr>
<tr>
<td>8000, 10000, 12800</td>
<td></td>
</tr>
</tbody>
</table>

Choose a higher ISO speed for higher sensitivity, or a lower value for lower sensitivity.

- 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].
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. Press the [MENU] button, choose [High ISO NR] on the [3] tab, and then choose the desired option (31).

- Not available when images are captured in RAW format (96).

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 [a].

- Press the [MENU] button, choose [Bracketing] on the [4] tab, choose [a], and then press the [DISP] button.
2 Configure the setting.

- Press the [า] buttons or turn the [่] dial to adjust the setting.

- AEB shooting is only available in [ร] mode (๑๙๓).
- Continuous shooting (๘๔) is not available in this mode.

- If exposure compensation is already in use (๑๗๙), 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 [ร]-[ร] button when the exposure compensation screen (๑๗๙) is displayed.
- Three shots are taken, regardless of any quantity specified in [ร] (๘๔).
- In [Blink Detection] mode (๕๖), this function is only available for the final shot.

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

Dynamic Range Correction (DR Correction)

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

- Press the [ร] button, choose [ร] in the menu, and choose the desired option (๑๙๐).
- The option you configured is now displayed.

<table>
<thead>
<tr>
<th>Options</th>
<th>Details</th>
<th>Available ISO Speed (๘๐)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ร</td>
<td>Automatic adjustment to prevent washed-out highlights</td>
<td>[AUTO], [125] – [12800]</td>
</tr>
<tr>
<td>ร</td>
<td>Tone down highlights by about 200% relative to the brightness level of [ร].</td>
<td>[AUTO], [250] – [6400]</td>
</tr>
</tbody>
</table>

- ISO speed (๘๐) will be adjusted to a speed within the supported range if you have specified a value outside the supported range indicated here.
**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 [MENU] button, choose [WB] in the menu, and choose the desired option (\(\Rightarrow\) 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 ((\Rightarrow) 84).</td>
</tr>
</tbody>
</table>

**Shadow Correction**

Automatically preserve image detail in shadows as follows.

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

**Using the ND Filter**

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

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

- 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 (\(\Rightarrow\) 56).

- ND: Neutral Density
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.

1. Follow the steps in “Capturing Natural Colors (White Balance)” (p. 83) to choose [B] or [A].
2. Aim the camera at a plain white subject, so that the entire screen is white. Press the [DISP] button.
3. 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.
- You can also record white balance data on the screen above by touching [DISP].

Manually Correcting White Balance

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

1. Configure the setting.
   - Follow the steps in “Capturing Natural Colors (White Balance)” (p. 83) to choose [B] or [A].
   - Turn the [B] dial to adjust the correction level for B and A.
   - Once the setting is complete, [WB] is displayed.

2. Configure advanced settings.
   - To configure more advanced settings, press the [MENU] button and adjust the correction level by turning the [B] or [A] dial or pressing the [B] buttons.
   - To reset the correction level, press the [DISP] button.
   - Press the [WB] button to complete the setting.

- The camera will retain white balance correction levels even if you switch to another white balance option (by following steps in “Capturing Natural Colors (White Balance)” (p. 83)), but correction levels will be reset if you record custom white balance data.

- B: blue; A: amber; M: magenta; G: green
- You can customize camera operation so that the B and A adjustment screen is accessed simply by turning the [B] or [A] dial (p. 103).
- One level of blue/amber correction is equivalent to about 7 mireds on a color temperature conversion filter. (Mired: Color temperature unit representing color temperature conversion filter density)
- You can also configure this setting by choosing MENU (p. 31) ► [B] tab ► [WB Correction].

- You can also choose the correction level by touching or dragging the bar in step 1 or the frame in step 2.
- You can also access the screen in step 2 by touching [MENU] in step 1.
- On the screen in step 2, you can touch [DISP] to restore the original level and touch [MENU] to return to the shooting screen.
### Changing Image Color Tones (My Colors)

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

- Press the \( \text{\[\text{\#}\]} \) button, choose \( \text{\[\text{\#}\]} \) in the menu, and choose the desired option (p. 30).
- The option you configured is now displayed.

| \( \text{\[\text{\#}\]} \) | My Colors Off | – |
| \( \text{\[\text{\#}\]} \) | Vivid | Emphasizes contrast and color saturation, making images sharper. |
| \( \text{\[\text{\#}\]} \) | Neutral | Tones down contrast and color saturation for subdued images. |
| \( \text{\[\text{\#}\]} \) | Sepia | Creates sepia tone images. |
| \( \text{\[\text{\#}\]} \) | B/W | Creates black and white images. |
| \( \text{\[\text{\#}\]} \) | 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. |
| \( \text{\[\text{\#}\]} \) | Lighter Skin Tone | Lightens skin tones. |
| \( \text{\[\text{\#}\]} \) | Darker Skin Tone | Darkens skin tones. |
| \( \text{\[\text{\#}\]} \) | Vivid Blue | Emphasizes blues in images. Makes the sky, ocean, and other blue subjects more vivid. |
| \( \text{\[\text{\#}\]} \) | Vivid Green | Emphasizes greens in images. Makes mountains, foliage, and other green subjects more vivid. |
| \( \text{\[\text{\#}\]} \) | Vivid Red | Emphasizes reds in images. Makes red subjects more vivid. |
| \( \text{\[\text{\#}\]} \) | Custom Color | Adjust contrast, sharpness, color saturation, and other qualities as desired (p. 85). |

- White balance (p. 83) cannot be set in \( \text{\[\text{\#}\]} \) or \( \text{\[\text{\#}\]} \) modes.
- With \( \text{\[\text{\#}\]} \) and \( \text{\[\text{\#}\]} \) 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. 85) to choose \( \text{\[\text{\#}\]} \), and then press the \( \text{\[\text{\#}\]} \) button.

2. **Configure the setting.**
   - Press the \( \text{\[\text{\#}\]} \) \( \text{\[\text{\#}\]} \) buttons to choose an item, and then specify the value by turning the \( \text{\[\text{\#}\]} \) 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 \( \text{\[\text{\#}\]} \) button to complete the setting.

- You can also specify a value by touching or dragging the bar.
Shooting Close-Ups (Macro)

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

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

2. Specify the general focal position.
   - Referring to the on-screen MF indicator (which shows the distance and focal position) and the magnified display, turn the [ ] ring or [ ] 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 [ ], [ ], [ ], [ ] buttons.

3. Fine-tune the focus.
   - Press the shutter button halfway to have the camera fine-tune the focal position (Safety MF).
   - To cancel this mode, press the [MF] button.

Shooting Range and Focusing

Shooting Close-Ups (Macro)

Still Images
Movies

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

1. Choose [MF].
   - Press the [MF] button.
   - [MF] and the MF indicator are displayed.

2. Specify the general focal position.
   - Referring to the on-screen MF indicator (which shows the distance and focal position) and the magnified display, turn the [ ] ring or [ ] 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 [ ], [ ], [ ], [ ] buttons.

3. Fine-tune the focus.
   - Press the shutter button halfway to have the camera fine-tune the focal position (Safety MF).
   - To cancel this mode, press the [MF] button.

● 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 [ ] ( ).

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

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

1 **Configure the setting.**

2 **Focus.**
   - Press the shutter button halfway to focus on the subject, and continue holding the button halfway down.

3 **Fine-tune the focus.**
   - Turn the [0] ring. Referring to the on-screen MF indicator bar (which shows the distance and focal position) and the magnified display area, turn the [0] ring to adjust the focus.
   - To enlarge or reduce the magnified display, press the [DISP] button.
   - To cancel focusing, release the shutter button.

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

- When you focus manually, the AF method (89) is [1-point AF] and AF frame size (89) is [Normal], and these settings cannot be changed.
- Focusing is possible when using the digital zoom (41) or digital tele-converter (89), or when using a TV as a display (169), but the magnified display will not appear.

- To focus more accurately, try attaching the camera to a tripod to stabilize it.
- You can enlarge or hide the magnified display area by adjusting MENU (31) ► [4] tab ► [MF-Point Zoom] settings.
- To deactivate automatic focus fine-tuning when the shutter button is pressed halfway, choose MENU (31) ► [4] tab ► [Safety MF] ► [Off].

- You can move the focusing frame by dragging on the screen in step 2.

- ● When you focus manually, the AF method (89) is [1-point AF] and AF frame size (89) is [Normal], and these settings cannot be changed.
- ● Focusing is possible when using the digital zoom (41) or digital tele-converter (89), or when using a TV as a display (169), but the magnified display will not appear.

- ● To focus more accurately, try attaching the camera to a tripod to stabilize it.
- ● You can enlarge or hide the magnified display area by adjusting MENU (31) ► [4] tab ► [MF-Point Zoom] settings.
- ● To deactivate automatic focus fine-tuning when the shutter button is pressed halfway, choose MENU (31) ► [4] tab ► [Safety MF] ► [Off].

- ● You can move the focusing frame by dragging on the screen in step 2.

- ● When you focus manually, the AF method (89) is [1-point AF] and AF frame size (89) is [Normal], and these settings cannot be changed.
- ● Focusing is possible when using the digital zoom (41) or digital tele-converter (89), or when using a TV as a display (169), but the magnified display will not appear.

- ● To focus more accurately, try attaching the camera to a tripod to stabilize it.
- ● You can enlarge or hide the magnified display area by adjusting MENU (31) ► [4] tab ► [MF-Point Zoom] settings.
- ● To deactivate automatic focus fine-tuning when the shutter button is pressed halfway, choose MENU (31) ► [4] tab ► [Safety MF] ► [Off].

- ● You can move the focusing frame by dragging on the screen in step 2.

- ● When you focus manually, the AF method (89) is [1-point AF] and AF frame size (89) is [Normal], and these settings cannot be changed.
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- ● You can move the focusing frame by dragging on the screen in step 2.

- ● When you focus manually, the AF method (89) is [1-point AF] and AF frame size (89) is [Normal], and these settings cannot be changed.
- ● Focusing is possible when using the digital zoom (41) or digital tele-converter (89), or when using a TV as a display (169), but the magnified display will not appear.

- ● To focus more accurately, try attaching the camera to a tripod to stabilize it.
- ● You can enlarge or hide the magnified display area by adjusting MENU (31) ► [4] tab ► [MF-Point Zoom] settings.
- ● To deactivate automatic focus fine-tuning when the shutter button is pressed halfway, choose MENU (31) ► [4] tab ► [Safety MF] ► [Off].

- ● You can move the focusing frame by dragging on the screen in step 2.

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- ● Focusing is possible when using the digital zoom (41) or digital tele-converter (89), or when using a TV as a display (169), but the magnified display will not appear.

- ● To focus more accurately, try attaching the camera to a tripod to stabilize it.
- ● You can enlarge or hide the magnified display area by adjusting MENU (31) ► [4] tab ► [MF-Point Zoom] settings.
- ● To deactivate automatic focus fine-tuning when the shutter button is pressed halfway, choose MENU (31) ► [4] tab ► [Safety MF] ► [Off].

- ● You can move the focusing frame by dragging on the screen in step 2.
Easily Identifying the Focus Area (MF Peaking)

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)

1. Choose [ ].

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

   ● Focus bracketing is only available in [ ] mode (93).
   ● Continuous shooting (47) 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” (31).
   ● Three shots are taken, regardless of any quantity specified in [ ] (46).
   ● In [Blink Detection] mode (56), 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 [ ].
Digital Tele-Converter

The focal length of the lens can be increased by approximately 1.6x or 2.0x. This can reduce camera shake because the shutter speed is faster than it would be if you zoomed (including using digital zoom) in to the same zoom factor.

- Press the [MENU] button, choose [Digital Zoom] on the [2] tab, and then choose the desired option (53).
- 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 [4] 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)” (54).

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 (192).

- 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] (55) 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 [DISP] button.
2 Resize the AF frame.
- To reduce the AF frame size, turn the INFO ring. Turn it again to restore it to the original size.

3 Finish the setup process.
- Press the MENU button.

- AF frames are displayed at normal size when you use the digital zoom (page 41) or digital tele-converter (page 89), and in manual focus mode (page 86).
- You can also access the screen in step 1 by pressing the INFO button.
- You can also return the AF frame to the original position in the center by holding down the INFO button.
- You can also link the Spot AE Point frame to the AF frame (page 80).
- You can also configure the AF frame size by pressing the MENU button and choosing [AF Frame Size] on the [3] tab (page 31).
- On the screen in step 2, you can also move the AF frame by touching the screen, restore the AF frame to the original position by touching DISP or exit the setting by touching SET.

$

\text{Tracking}

\begin{itemize}
\item Detects people's faces, and then sets the focus, exposure (evaluative metering only), and white balance ([ ] only).
\item 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.
\item When the camera detects movement, frames will follow moving subjects, within a certain range.
\item After you press the shutter button halfway, up to nine green frames are displayed around faces in focus.
\item 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 setting.
\item If no faces are detected in Servo AF (page 91) mode, the AF frame is displayed in the center of the screen when you press the shutter button halfway.
\item 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
\item The camera may misinterpret non-human subjects as faces.
\item No AF frames are displayed if the camera cannot focus when you press the shutter button halfway.
\end{itemize}

- [ ] or [ ]: 31 frames
- [ ]: 25 frames
- [ ]: 21 frames

- 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 setting.
  - [3:2] or [4:3]: 31 frames
  - [1:1]: 25 frames
  - [16:9]: 21 frames

- You can also link the Spot AE Point frame to the AF frame (page 80).
- You can also configure the AF frame size by pressing the INFO button and choosing [AF Frame Size] on the [3] tab (page 31).
- On the screen in step 2, you can also move the AF frame by touching the screen, restore the AF frame to the original position by touching DISP or exit the setting by touching SET.
### 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 (47) 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 (45).

   - To have the camera keep adjusting the focus during continuous shooting (47), 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).

<table>
<thead>
<tr>
<th>On</th>
<th>Helps avoid missing sudden photo opportunities, because the camera constantly focuses on subjects until you press the shutter button halfway.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>Conserves battery power, because the camera does not focus constantly.</td>
</tr>
</tbody>
</table>
### 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 [Face Select : On].**
   - 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 (48).

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.

### 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 [Face Select : On].**
   - 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 (48).

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.
Changing the Flash Mode

You can change the flash mode to match the shooting scene. For details on the flash range, see "Flash Range" (p.213).

1. **Raise the flash.**
   - Move the \[\(\)\] switch.

2. **Configure the setting.**
   - Press the \[\(\)\] button, choose a flash mode (either press the [\(\)\][\(\)\] buttons or turn the [\(\)] dial), and then press the [\(\)] button.
   - The option you configured is now displayed.

! The setting screen cannot be accessed by pressing the [\(\)] button when the flash is lowered. Move the \[\(\)\] switch to raise the flash, then configure the setting.

   - If the flash fires, vignetting may occur.

Shooting with the AF Lock

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

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

2. **Compose the shot and shoot.**

! Cannot be used with Touch Shutter (p.46).

! When [AF method] is set to [1-point AF], you can lock the focus during movie recording by touching the screen. To unlock the focus, touch [\(\)].

## Flash

### Auto

Fires automatically in low-light conditions.

### On

Fires for each shot.

- If you prefer the camera not to shoot when you touch the screen, make sure [Touch Shutter] mode is deactivated. Press the [MENU] button, choose [Touch Shutter] on the [\(\)] tab, and then choose [Off] (p.31).
- Tracking may not be possible when subjects are too small or move too rapidly, or when there is inadequate contrast between subjects and the background.
- Even if you are shooting in \([\) mode (p.86), the camera will revert to \([\) mode if you touch the screen to specify where to focus.
- If [Face ID] is set to [On], names will not display when registered people are detected, but the names will be recorded in the still images (p.48). However, a name will display if the subject chosen to focus on is the same as a person detected with Face ID.

- If 
[Face ID] is set to 
[On], names will not display when registered people are detected, but the names will be recorded in the still images (p.48). However, a name will display if the subject chosen to focus on is the same as a person detected with Face ID.

Before Use
Basic Guide
Advanced Guide
Camera Basics
Auto Mode / Hybrid Auto Mode
Other Shooting Modes
P Mode
Tv, Av, M, C1, and C2 Mode
Playback Mode
Wi-Fi Functions
Setting Menu
Accessories
Appendix
Index
Adjusting the Flash Exposure Compensation

Just as with regular exposure compensation (§79), you can adjust the flash exposure from –2 to +2 stops, in 1/3-stop increments.

- Raise the flash, press the [Q] button and immediately turn the [f] dial to choose the compensation level, and then press the [Q] 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 (§31) and choosing [5] tab ► [Flash Control] ► [Safety FE] ► [Off].
- You can also configure the flash exposure compensation by accessing MENU (§31) and choosing [5] tab ► [Flash Control] ► [Flash Exp. Comp].
- You can also access the [Built-in Flash Settings] screen (§31) as follows (except when an optional external flash is mounted).
  - Press and hold the [Q] button for at least one second.
  - When the flash is up, press the [Q] button and immediately press the [Q] button.

- You can also access the [Built-in Flash Settings] screen (§31) by pressing the [Q] button and touching [MENU].

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 (§56).
- 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.

- Adjustment is also possible by pressing the [Q] button, touching the desired option, and then touching it again.
Changing the Flash Timing

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

1. Access the setting screen.

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

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

1. Raise the flash and set it to [§] (93).

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 [Set] button.
   - The flash fires, and when [§] is displayed, the flash output level is retained.
   - To unlock FE, release the shutter button and press the [Set] 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

Shooting with the FE Lock

Just as with the AE lock (79), you can lock the exposure for flash shots.

1. Raise the flash and set it to [§] (93).

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 [Set] button.
   - The flash fires, and when [§] is displayed, the flash output level is retained.
   - To unlock FE, release the shutter button and press the [Set] 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.
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, 178) to convert images to ordinary JPEG or TIFF files. Images can be adjusted with minimal loss of image quality.

- Press the [DISP.] 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 [DISP.] button. A [ ] mark is displayed next to [RAW]. To undo this setting, follow the same steps and remove the [ ] mark next to [RAW].

### 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 (96). 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” (53) to adjust the settings.

- [ ] and [ ] indicate different levels of image quality depending on the extent of compression. At the same size (number of pixels), [ ] offers higher image quality. Although [ ] images have slightly lower image quality, more fit on a memory card.

- When transferring RAW images (or RAW and JPEG images recorded together) to a computer, always use the dedicated software (178).
- Digital zoom (41) is not available when capturing images in RAW format. Additionally, noise reduction level (81), dynamic range correction (82), shadow correction (83), and My Colors (85) cannot be configured.
● For details on the relationship between the number of recording pixels and the number of shots that will fit on a card, see “Number of Shots per Memory Card” (212).
● The file extension for JPEG images is .JPG, and the extension for RAW images is .CR2.

Using the Menu

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

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

Changing the IS Mode Settings

Image stabilization is active only at the moment of shooting.

- Follow the steps in “Deactivating Image Stabilization” (56) to choose [Shoot Only].
Specific Shutter Speeds ([Tv] Mode)

Set your preferred shutter speed before shooting as follows. The camera automatically adjusts the aperture value to suit your shutter speed. For details on available shutter speeds, see “Shutter Speed” (214).

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

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

<table>
<thead>
<tr>
<th>Shutter Speed (Sec.)</th>
<th>Available ISO Speed ([214])</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] ([56]).
- The speed you set may be lowered automatically as needed if the flash fires.
- 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 ([99]).

- [Tv]: Time value
Specific Shutter Speeds and Aperture Values ([M] Mode)

Follow these steps before shooting to set your preferred shutter speed and aperture value to obtain the desired exposure. For details on available shutter speeds and aperture values, see “Shutter Speed” (214) and “Aperture” (214).

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

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

Specific Aperture Values ([Av] Mode)

Set your preferred aperture value before shooting as follows. The camera automatically adjusts the shutter speed to suit your aperture value. For details on available aperture values, see “Aperture” (214).

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

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

Orange display of 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.

- Still Images
- Movies

- Still Images
- Movies

- Before Use
- Basic Guide
- Advanced Guide
- Camera Basics
- Auto Mode / Hybrid Auto Mode
- Other Shooting Modes
- P Mode
- Tv, Av, M, C1, and C2 Mode
- Playback Mode
- Wi-Fi Functions
- Setting Menu
- Accessories
- Appendix
- Index
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)” (99).

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.

   - 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 (56).

   - To avoid camera shake that may otherwise occur when pressing the shutter button directly, you can shoot remotely (156) or use an optional remote switch (172).

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

Modify 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 $§$. 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 (56).

- Calculation of optimum exposure is based on the specified metering method (79).
- The following operations are available when ISO speed is set to [AUTO].
  - Adjust exposure by turning the exposure compensation dial.
  - Press the button to lock the ISO speed. Screen brightness changes accordingly.

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

Table: Shutter Speed (Sec.) x Available ISO Speed (80)

<table>
<thead>
<tr>
<th>Shutter Speed (Sec.)</th>
<th>Available ISO Speed</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>
Recording Movies at Specific Shutter Speeds and Aperture Values

Set your preferred shutter speed, aperture value, and ISO speed. For details on available shutter speeds, aperture values, and ISO speeds, see “Shutter Speeds” (214), “Aperture” (214), and “Changing the ISO Speed” (80).

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

2 Configure the settings.
- Press the [Q] button to choose whether to configure shutter speed or ISO speed, and then turn the [Q] dial to set the value.
- Turn the [Q] dial to set the aperture value.

3 Shoot.
- Press the movie button.
- During recording, you can switch the setting to configure by pressing the [Q] button repeatedly and adjust the value by turning the [0] ring.

- 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 [DISP] button on the shooting screen. You can also customize what information is displayed.

1 Access the setting screen.
   - Choose [1] tab ► [Shooting information display] ► [Display switching], and then press the [SET] button (13).

2 Configure the setting.
   - Press the [button] buttons or turn the [ ] dial to choose any screen you prefer not to display, and then press the [ ] button to remove the [ ] mark. Pressing the [ ] 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.
Assigning Functions to Controls

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

1. Access the setting screen.
   - Press the [ ] button, choose [Function Assignment] on the [ ] tab, and then press the [ ] button (page 102).

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 [ ] 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 [ ] 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.
Before Use
Basic Guide
Advanced Guide
Camera Basics
Auto Mode / Hybrid Auto Mode
Other Shooting Modes
P Mode
Tv, Av, M, C1, and C2 Mode
Playback Mode
Wi-Fi Mode
Setting Menu
Accessories
Appendix
Index

104

Saving Shooting Settings

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

Settings that can be saved

- Shooting modes (P, TV, AV, and M)
- Items set in P, TV, AV, and M modes (79 – 99)
- Shooting menu settings
- Zoom positions
- Manual focus positions (86)
- My Menu settings (105)

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

2 Configure the setting.
- Press the [MENU] button, choose [Save Settings] on the [C2] tab, and then press the [C2] button.

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

By assigning [ ] in M mode you can set the shutter speed with the [ ] dial and the aperture value with the [ ] dial.

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

- To restore default functions to the [ ] button, [ ] button, movie button, and [ ] button, choose [ ] and [ ], and [ ].
- Icons labeled [X] indicate that the function is not available in the current shooting mode or under current function conditions.
- With [ ], you can move and resize the AF frame by pressing the assigned button in [1-point AF] mode (89, 89).
- With [ ] or [ ], each press of the assigned button records white balance data (84), and the white balance setting changes to [ ] or [ ].
- With [AF], each press of the button that it is assigned to adjusts and locks the focus, and [AF] is displayed on the screen.
- With [ ], pressing the button that it is assigned to deactivated screen display. To restore the display, do any of the following.
  - Press any button other than the power button.
  - Hold the camera in another orientation.
  - Raise or lower the flash.
  - Either open the screen and rotate it toward the front, or close the screen if it is already open and facing the front.
- You can still record movies in [ ], [ ], [ ], or [ ] mode even if you assign a function to the movie button.

You can also configure settings by touching a desired option and then touching it again or touching [ ].
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 to these items quickly from a single screen.

1 Access the setting screen.

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

3 Rearrange menu items, as needed.
- Press the [Cursor] buttons or turn the [?] dial to choose [Sort], and then press the [OK] button.
- Choose a menu item to move (either press the [Cursor] buttons or turn the [?] dial), and then press the [OK] button.
- Press the [Cursor] buttons or turn the [?] dial to change the order, and then press the [OK] 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.
Playback Mode

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

1. Enter Playback mode.
   - Press the [Playback] 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 [Playback] button.
   - To browse images grouped by shooting date, press the [◄] [►] buttons in Scroll Display mode.

3. Viewing

   - Still Images
   - Movies

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

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

Before Use
Basic Guide
Advanced Guide
Camera Basics
Auto Mode / Hybrid Auto Mode
Other Shooting Modes
P Mode
Tv, Av, M, C1, and C2 Mode
Playback Mode
Wi-Fi Functions
Setting Menu
Accessories
Appendix
Index
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 choose 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, drag up or down.
- To start movie playback, touch [ ] in step 2 of “Viewing” (page 106).
- To adjust the volume during movie playback, quickly drag up or down across the screen.
- 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” (page 106).

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.

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 (page 31) ► [5] tab ► [Scroll Display] ► [Off].
- To have the most recent shot displayed when you enter Playback mode, choose MENU (page 31) ► [5] tab ► [Resume] ► [Last shot].
- To change the transition shown between images, access MENU (page 31) and choose your desired effect on the [5] tab ► [Transition Effect].
### Switching Display Modes

Press the [DISP] button to view other information on the screen, or to hide the information. For details on the information displayed, see “Playback (Detailed Information Display)” (p.194).

<table>
<thead>
<tr>
<th>No Information Display</th>
<th>Simple Information Display</th>
<th>Detailed Information Display</th>
<th>RGB Histogram, GPS Information Display</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="No Information Display" /></td>
<td><img src="image" alt="Simple Information Display" /></td>
<td><img src="image" alt="Detailed Information Display" /></td>
<td><img src="image" alt="RGB Histogram, GPS Information Display" /></td>
</tr>
</tbody>
</table>

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

### Overexposure Warning (for Image Highlights)

Washed-out highlights in the image flash on the screen in detailed information display (p.108).

### Histogram

- The graph in detailed information display (p.108) 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 (p.102, p.193).

### RGB Histogram, GPS Information Display

- The RGB histogram shows the distribution of shades of red, green, and blue in an image. The horizontal axis represents R, G, or B brightness, and the vertical axis, how much of the image is at that level of brightness. Viewing this histogram enables you to check image color characteristics.
Using a smartphone connected to the camera via Wi-Fi, you can geotag images on the camera, adding information such as latitude, longitude, and elevation (155). You can review this information in the GPS information display.

Latitude, longitude, elevation, and UTC (shooting date and time) are listed from top to bottom.

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

UTC: Coordinated Universal Time, essentially the same as Greenwich Mean Time

GPS information display is not available for images that lack this information.

You can also switch between the RGB histogram (still images only) and GPS information display by dragging the lower half of the screen upward or downward in detailed information display.

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

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

2. Play the digest movie.
   - Press the [ ] button, and then choose [ ] in the menu (30).
   - 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 (108).

   - You can also play digest movies by touching [ ] on the screen in step 1 and touching [Play] on the screen in step 2.

**Viewing by Date**

Digest movies can be viewed by date.

1. Choose a movie.
   - Press the [ ] button, choose [List/Play Digest Movies] on the [ ] tab, and then choose a date (31).

2. Play the movie.
   - Press the [ ] button to start playback.
Checking People Detected in Face ID

Still Images  Movies

If you switch the camera to simple information display mode ([108]), the names of up to five detected people registered in Face ID ([48]) will be displayed.

1 Press the [DISP] button several times until simple information display is activated, and then press the [†][‡] buttons or turn the [¶] dial to choose an image.

2 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].

Browsing and Filtering Images

Navigating through Images in an Index

Still Images  Movies

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

1 Display images in an index.

- Move the zoom lever toward [†] to display images in an index. Moving the lever again will increase the number of images shown.
- To display fewer images, move the zoom lever toward [‡]. 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 [■] 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]) ► [5] tab ► [Index Effect] ► [Off].

Checking People Detected in Face ID

Still Images  Movies

If you switch the camera to simple information display mode ([108]), the names of up to five detected people registered in Face ID ([48]) will be displayed.

1 Press the [DISP] button several times until simple information display is activated, and then press the [†][‡] buttons or turn the [¶] dial to choose an image.

2 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].
Finding Images Matching Specified Conditions

Find desired images quickly on a memory card full of images by filtering image display according to your specified conditions. You can also protect (116) or delete (118) these images all at once.

- **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 (48).

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

- **Before Use**
  - Basic Guide
  - Advanced Guide
    - Camera Basics
    - Auto Mode / Hybrid Auto Mode
    - Other Shooting Modes
    - P Mode
    - Tv, Av, M, C1, and C2 Mode
  - Playback Mode
    - Wi-Fi Functions
    - Setting Menu
    - Accessories
    - Appendix
  - Index

- **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**

- **Still Images**
  - [ ] Favorites
  - [ ] Shot Date
  - [ ] People
  - [ ] Still image/Movie
  - [ ] Name

- **Movies**
  - [ ] Favorites
  - [ ] Shot Date
  - [ ] People
  - [ ] Still image/Movie
  - [ ] Name

- **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.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jump to Favorites</td>
<td>Displays images tagged as favorites (121).</td>
</tr>
<tr>
<td>Jump Shot Date</td>
<td>Jumps to the first image in each group of images that were shot on the same date.</td>
</tr>
<tr>
<td>Jump 10 Images</td>
<td>Jumps by 10 images at a time.</td>
</tr>
<tr>
<td>Jump 100 Images</td>
<td>Jumps by 100 images at a time.</td>
</tr>
</tbody>
</table>

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

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

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" (112) by dragging left or right with two fingers.
Viewing Individual Images in a Group

Images shot continuously (47, 60), images shot in (59), and individual still images saved as source data in (71) 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” (110) and magnify them “Magnifying Images” (115). By choosing [Protect All Images in Group] in “Protecting Images” (116), [All Images in Group] in “Erasing Multiple Images at Once” (119), or [Select All in Group] in “Adding Images to the Print List (DPOF)” (183) or “Adding Images to a Photobook” (185), all images in the group can be manipulated at once.
- To ungroup images so that they are displayed only as single still images, choose MENU (31) ► [5] tab ► [Group Images] ► [Off] (31). However, grouped images cannot be ungrouped during individual playback.
- In ( ) mode, the simultaneous display after step 2 in “Enjoying a Variety of Images from Each Shot (Creative Shot)” (59) is only shown immediately after you shoot.

- You can also view group images individually by touching ( ) on the screen in steps 1 and 2.
Editing Face ID Information

If you notice that a name is incorrect during playback, you can change it or erase it.
However, you cannot add names for people who are not detected by Face ID (names are not displayed), and for people whose names have been erased.

### Changing Names

1. **Access the setting screen.**
   - Press the [ up/ down] buttons or turn the [ dial to choose [Edit ID Info], and then press the [ ] button.

2. **Choose an image.**
   - Following the procedure in “Checking People Detected in Face ID” (110), choose an image and press the [ ] button.
   - An orange frame is displayed around the selected face. When multiple names are displayed in an image, press the [ left/ right] buttons or turn the [ dial to choose the name to change, and then press the [ ] button.

3. **Choose the editing option.**
   - Press the [ up/ down] buttons or turn the [ dial to choose [Overwrite], and then press the [ ] button.

4. **Choose the name of the person to overwrite with.**
   - Follow step 2 in “Overwriting and Adding Face Information” (51) 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

- On the screen displayed in step 3 in “Changing Names” (114), choose [Erase] and press the [ ] button.
- After [Erase?] is displayed, press the [ left/ right] buttons or turn the [ dial to choose [OK], and then press the [ ] button.

- You can also erase names by touching [OK] after [Erase?] is displayed.
Required tool: 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 [W]. 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 [ ] button.
   You can check the focus when [SET] is displayed by pressing the [ ] button to show the position in focus (Focus Check). When multiple positions are in focus, press the [ ] button repeatedly to switch to other positions.

**Viewing Slideshows**

Automatically play back images from a memory card as follows.

- Press the [ ] button, and then choose [Slideshow] on the [ ] tab (131).
- Press the [ ] buttons or turn the [ ] dial to choose [Start], and then press the [ ] button.
- The slideshow will start after [Loading image] is displayed for a few seconds.
- Press the [ ] button to stop the slideshow.

- 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 [ ] to restore single-image display.

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

Protect important images to prevent accidental erasure (118).

- Press the \[\(\text{\text{button}}\) button, choose \(\) in the menu, and then choose \(\) (either press the \(\) buttons or turn the \(\) dial). \(\) is displayed.
- To cancel protection, choose \(\text{OFF}\). \(\) 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 \[\(\text{\text{button}}\) button and choose \[\text{Protect}\] on the \[\text{\text{tab}}\) (31).

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

1. **Choose [Select].**
   - Following the procedure in “Using the Menu” (116), 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 cancel selection, press the [ ] button again. [ ] is no longer displayed.
   - Repeat this process to specify other images.

3. **Protect the image.**
   - Press the [ ] button. A confirmation message is displayed.
   - Press the [ ] buttons or turn the [ ] dial to choose [OK], and then press the 
     [ ] button.
   - Images will not be protected if you switch to Shooting mode or turn the camera off before finishing the setup process in step 3.

   - You can also select or clear images by touching the screen in step 2, and you can access the confirmation screen by touching [ ].
   - 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” (116), choose [Select Range] and press the 
     [ ] button.

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

3. **Choose an ending image.**
   - Press the [ ] button to choose [Last image], and then press the [ ] button.
   - Images before the first image cannot be selected as the last image.

   - You can also select or clear images by touching the screen in step 2, and you can access the confirmation screen by touching [ ].
   - You can also protect images by touching [OK] on the screen in step 3.
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 ([116]) 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.

Protecting All Images at Once

1 Choose [Protect All Images].
   - Following the procedure in “Using the Menu” ([116]), choose [Protect All Images] and press the [ ] button.

2 Protect the images.
   - Press the [ ] buttons or turn the [ ] dial to choose [OK], and then press the [ ] 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.
### 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 (116) cannot be erased.

#### Choosing a Selection Method

1. **Access the setting screen.**
   - Press the [MENU] button, and then choose [Erase] on the [1] 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.

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

### Choosing Images Individually

1. **Choose [Select].**
   - Following the procedure in “Choosing a Selection Method” (119), choose [Select] and press the [ ] button.

2. **Choose an image.**
   - Once you choose an image following step 2 in “Choosing Images Individually” (117), [ ] is displayed.
   - To cancel selection, press the [ ] 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 [ ] buttons or turn the [ ] dial to choose [OK], and then press the [ ] 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” (119), choose [Select Range] and press the button.

2 Choose images.
   ● Follow steps 2 – 3 in “Selecting a Range” (117) to specify images.

3 Erase the images.
   ● Press the button to choose [Erase], and then press the button.

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] (121).

Specifying All Images at Once

1 Choose [Select All Images].
   ● Following the procedure in “Choosing a Selection Method” (119), choose [Select All Images] and press the button.

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

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 [Favorites] 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].

2. Choose an image.
   - Press the [button 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.

Deactivating Auto Rotation

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


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

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

1 Choose [Set Shortcut button].

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

2 Configure the setting.

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

3 Use the assigned function as needed.

- Press the [ ] button to activate the assigned function.

- To restore default settings, choose [ ].
- Pressing the [ ] button with [ ] assigned when the camera is not connected to a printer adds the image to the print list. When the camera is connected to a printer, pressing the button starts printing.

Convenient Control: Assigned Buttons

You can quickly and easily activate functions that you assign to 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 (130).
Favorite images will have a three-star rating (★★★) when transferred to computers running Windows 8 or Windows 7. (Does not apply to movies or RAW images.)

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 (123).
Convenient Control: Touch Actions

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

Using Touch Actions Functions

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

Changing Touch Actions Functions

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

1. Access the setting screen.
   - Press the [Menu] button, and then choose [Set Touch Actions] on the [ ] tab (31).

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.

Assignable Functions

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<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>Access the Wi-Fi connection screen.</td>
</tr>
<tr>
<td>To Computer</td>
<td>Access the Wi-Fi connection screen.</td>
</tr>
<tr>
<td>To Printer</td>
<td>Access the Wi-Fi connection screen.</td>
</tr>
<tr>
<td>To Web Service</td>
<td>Access the Wi-Fi connection screen.</td>
</tr>
<tr>
<td>Slideshow</td>
<td>Start a slideshow.</td>
</tr>
<tr>
<td>Erase</td>
<td>Erase an image.</td>
</tr>
<tr>
<td>Protect</td>
<td>Protect an image or cancel protection.</td>
</tr>
<tr>
<td>Rotate</td>
<td>Rotate an image.</td>
</tr>
</tbody>
</table>
Editing Still Images

- Image editing (124 – 127) is only available when the memory card has sufficient free space.
- To access the screen for each kind of editing, choose the editing function with [MENU], touch an image, and then touch [SET].
- 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 [OK] 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 [SET] button, choose the [ ] in the menu, and choose an image size (30).
   - Press the [SET] button.

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

Using the Menu

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

2. **Choose an image.**
   - Press the [ ] buttons or turn the [ ] dial to choose an image, and then press the [OK] button.
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 [Cropping] in the menu, and then press the [MENU] 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 Choose an image size.
- Press the [ ] buttons or turn the [ ] dial to choose the size, and then press the [ ] button.

4 Save as a new image and review.
- Follow step 2 in “Resizing Images” (124).
- Press the [MENU] button, and then follow step 3 in “Resizing Images” (124).

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.
- Turn the [ ] dial to choose [ ], and then press the [ ] button.
- Follow steps 2 – 3 in “Resizing Images” (124).

- Editing is not possible for images shot at a recording pixel setting of [S] or resized to [S] (124).
- 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 [Cropping], pressing the [ ] button, choosing an image, and pressing the [ ] button again.
- If you crop still images shot using Face ID (148), 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 (115) on the screen.
- Operations are also possible by touching [ ], [ ], [ ], and [ ] on the top of the screen in step 2.
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 [][][] buttons or turn the [()] dial to choose an image, and then press the [()] button.

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

4. Save as a new image and review.
   - Follow steps 2 – 3 in “Resizing Images” (124).

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)” (85).

1. Choose [My Colors].

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

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

4. Save as a new image and review.
   - Follow steps 2 – 3 in “Resizing Images” (124).

- The color of images edited using this function may vary slightly from the color of images shot using My Colors (85).
- You can also configure this setting by touching an option to select it on the screen in step 3 and then touching it again.

- 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 Red-Eye

Still Images  Movies

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” (115).

4 Save as a new image and review.
   - 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.

Editing Movies

You can remove unneeded portions from the beginning and end of movies (excluding digest movies, 37).

1 Choose [凯].
   ● Following steps 1 – 5 in “Viewing” (106), choose [凯] and press the [播放] 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 [ ▲ ] buttons to choose [ ▼ ] or [ ◄ ].
   ● To view the portions you can cut (identified by [ ▼ ] on the screen), press the [ ▲ ] buttons or turn the [ ● ] dial to move [ ▼ ]. Cut the beginning of the movie (from [ ▼ ]) by choosing [ ▼ ], and cut the end of the movie by choosing [ ▼ ].
   ● If you move [ ▼ ] to a position other than a [ ▼ ] mark, in [ ▼ ] the portion before the nearest [ ▼ ] mark on the left will be cut, while in [ ▼ ] the portion after the nearest [ ▼ ] mark on the right will be cut.
   ● 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, 168).
   ● You can also edit movies by touching the movie editing panel or editing bar.

3 Review the edited movie.
   ● Press the [ ▲ ] buttons to choose [ ▼ ], and then press the [播放] button. The edited movie is now played.
   ● To edit the movie again, repeat step 2.
   ● To cancel editing, press the [MENU] button, choose [OK] (either press the [ ▲ ] buttons or turn the [ ● ] dial), and then press the [播放] button.

4 Save the edited movie.
   ● Press the [ ▲ ] buttons to choose [ ▼ ], and then press the [播放] button.
   ● Press the [ ▲ ] buttons or turn the [ ● ] dial to choose [New File], and then press the [播放] button.
   ● Choose [Save w/o Comp.], and then press the [播放] button.
   ● The movie is now saved as a new file.
Reducing File Sizes

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

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

Image Quality of Compressed Movies

<table>
<thead>
<tr>
<th>Before Compression</th>
<th>After Compression</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] 2597</td>
<td>[ ] 1597</td>
</tr>
<tr>
<td>[ ] 2357</td>
<td>[ ] 2357</td>
</tr>
<tr>
<td>[ ] 60.00</td>
<td>[ ] 25.00</td>
</tr>
</tbody>
</table>

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

Editing Digest Movies

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

1 Select the clip to erase.
- Play a movie recorded in [ ] mode as described in “Viewing Short Movies Created When Shooting Still Images (Digest Movies)” ( = 109), and then press the [ ] button to access the movie control panel.
- Press the [ ] buttons or turn the [ ] dial to choose [ ], and then press the [ ] button.

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

3 Confirm erasure.
- Press the [ ] buttons or turn the [ ] dial to choose [OK], and then press the [ ] button.
- The clip is erased, and the short movie is overwritten.

- [ ] is not displayed if you select a clip when the camera is connected to a printer.
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 themes 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.

- **Date**: 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.
- **Person’s name**: 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.
- **Event**: 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.
- **Custom**: Includes images based on your specified images, dates, or people registered in Face ID.

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 [5] button.
   - After [Loading] is displayed for a few seconds, the album is played.

4. Save the album.
   - Press the [5][<] buttons to choose [Save Album as Movie], and then press the [5] button.
   - Once the album is saved, [Saved] is displayed.

5. Play the album (106).
The screen at left is displayed when you use a new or recently formatted memory card. Choose [OK] (either press the [ ] buttons or turn the [ ] dial), press the [ ] button, and wait about a minute and a half until the three types of music are registered to the card.

When using a memory card with music already registered to it, go to step 2.

2 Create the album.

Follow steps 1 – 3 in “Viewing Albums (Story Highlights)” (130) to create an album.

3 Configure background music settings.

Press the [ ] buttons or turn the [ ] dial to choose the desired item, press the [ ] button, and then press the [ ] buttons or turn the [ ] dial to choose an option (31).

4 Save the album.

Follow step 4 in “Viewing Albums (Story Highlights)” (130) to save albums.

- Once albums are saved, background music cannot be added later. Background music in albums cannot be removed or changed.
- Chapters of albums with background music cannot be edited (129).
Creating Your Own Albums

Still Images  Movies

Create your own albums by choosing desired images.

1 Choose to create a Custom album.
- Following steps 1 – 3 in “Viewing Albums (Story Highlights)” (130), choose [Custom] and press the [SELECT] button.

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

3 Choose album elements.
- Once you select the elements for your album and press the [SELECT] button, your selected elements are labeled with [✓].
- Press the [MENU] button after you are finished selecting still images, digest movies, or short clips in [Image Selection], dates in [Date Selection], or people in [Person Selection].
- Press the [◄] [►] buttons or turn the [SELECT] dial to choose [Preview], and then press the [SELECT] 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” (131), and then press the [MENU] button.

5 Choose a color effect.
- On the screen in step 4 of “Viewing Albums (Story Highlights)” (130), choose [Change Color Effect].
- Press the [◄] [►] buttons to choose a color effect, and then press the [SELECT] button.

6 Save the album.
- Follow step 4 in “Viewing Albums (Story Highlights)” (130) to save albums.

- Up to 40 images can be selected if you choose [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 images are labeled with [✓], and multiple images are displayed at once.
- Up to 15 dates can be selected if you choose [Date Selection].
- The color effect may not be applied to some images.

- If you prefer not to add background music, set [Add BGM] to [No] on the screen in step 3.
- To use only background music instead of movie audio, set [Audio Mixer] to [BGM only] on the screen in step 3.
- To listen to a sample of the background music selected in [Track], choose [Sample BGM] on the screen in step 3 and press the [SELECT] button.
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.

Send images wirelessly from the camera to a variety of compatible devices, and use the camera with Web services.
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 (138)
  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 users who connect their camera to a smartphone via Wi-Fi should consider switching from the CameraWindow mobile app 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 once the devices are 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 ("Using a Smartphone to View Camera Images and Control the Camera" (115)). 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-Mark (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 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 [①] dial to choose [OK], and then press the [⑥] button.

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

3 Adjust the privacy setting.
- After this screen is displayed, press the [◄],[▼] buttons or turn the [①] dial to choose [Yes], and then press the [⑥] 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 [①] dial to choose an image to send, press the [◄],[▼] buttons to choose [Send this image], and then press the [⑥] 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 [①] dial), and then press the [⑥] 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 (147).
● 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 (3). For details, refer to the smartphone user manual.
● You can also send multiple images at once and change the image size before sending (151).
● 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 [ ] button to turn the camera on.

Touch the smartphone with Camera Connect installed (134) against the camera’s N-Mark (3).

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.

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 “Sending Images to an NFC-Compatible Smartphone” (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 (151).

Sending to a Smartphone Assigned to the Button

Once you have connected to a smartphone initially by pressing the [ ] 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.
3 Choose \( \Box \).  
- Press the \( \Box \rightarrow \Box \) buttons or turn the \( \Box \) dial to choose \( \Box \), and then press the \( \Box \) button.

- The camera’s SSID is displayed.

4 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.

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

6 Choose the smartphone to connect to.  
- Choose the smartphone (either by pressing the \( \Box \uparrow \Box \) buttons or by turning the \( \Box \) dial), and then press the \( \Box \) 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.)

7 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 (136).
- For better security, you can display a password on the screen in step 3 by accessing MENU (31) and choosing \( \Box \) tab \( \Box \) [Wi-Fi Settings] \( \Box \) [Password] \( \Box \) [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 \( \Box \) button. To assign a different one, first clear the current one in MENU (31) \( \Box \) [4] tab \( \Box \) [Mobile Device Connect Button].
- Not all NFC-compatible smartphones have an N-Mark \( \Box \). For details, refer to the smartphone user manual.
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 [ ] button to turn the camera on.
   - Press the [ ] button.
   - If the [Device Nickname] screen is displayed, choose [OK] (136).

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.
   - The camera's SSID is displayed.
   - Choose the smartphone to connect to, as described in steps 4 – 6 of "Sending to a Smartphone Assigned to the Button" (136).

5 **Adjust the privacy setting.**
   - 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.

6 **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 [ ] 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.
   - To add multiple smartphones, repeat the above procedure starting from step 1.

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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, C1, and C2 Mode

Playback Mode

Wi-Fi Functions

Setting Menu

Accessories

Appendix

Index
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” (138).

2 Connect the smartphone to the access point.
   - 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.

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.

● All images in the camera can be viewed from the connected smartphone when you choose [Yes] in step 5. To keep camera images private, so that they cannot be viewed from the smartphone, choose [No] in step 5.

● Once you have registered a smartphone, you can change privacy settings for it on the camera (157).

● 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 ► [ ] tab ► [Wi-Fi Settings] ► [Target History] ► [Off].

● You can also send multiple images at once and change the image size before sending (151).
5 Configure the privacy settings and send images.
- Follow steps 5 – 6 in “Adding a Smartphone Using the Wi-Fi Menu” (138) 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” (138).
- 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](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.**
   - With a computer connected to the Internet, access [http://www.canon.com/icpd/](http://www.canon.com/icpd/).
   - Access the site for your country or region.
   - Download the software.
Configuring the Computer for a Wi-Fi Connection
(Windows Only)

On a computer running Windows, configure the following settings before connecting the camera to the computer wirelessly.

1 Confirm that the computer is connected to 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. This will enable the camera to see (find) the computer to access via Wi-Fi.
     - Turn on network discovery. This will enable the computer to see (find) the camera.
     - Turn on ICMP (Internet Control Message Protocol). This allows you to check the network connection status.
     - Enable Universal Plug & Play (UPnP). This will enable network devices to detect each other automatically.
   - Some security software may prevent you from completing the settings as described here. Check the settings of your security software.
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 “Wi-Fi” (142). 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.

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 information on WPS compatibility and for instructions on checking settings, refer to the access point user manual.
   - A router is a device that creates a network (LAN) structure for connecting multiple computers. A router that contains an internal Wi-Fi function is called a “Wi-Fi router”.
   - This guide refers to all Wi-Fi routers and base stations as “access points”.
   - If you use MAC address filtering on your Wi-Fi network, be sure to add the camera’s MAC address to your access point. You can check your camera’s MAC address by choosing MENU (31) ► [4] tab ► [Wi-Fi Settings] ► [Check MAC Address].

2. Access the Wi-Fi menu.
   - For instructions on checking the connection, refer to the device and access point user manuals.
   - Press the [ ] button to turn the camera on.
   - 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.
8 Choose the target device.
- Choose the target device name (either press the [▲] buttons or turn the [▲] dial), and then press the [⑤] 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.

3 Choose [④].
- Press the [▲] buttons or turn the [▲] dial to choose [④], and then press the [⑤] button.

4 Choose [Add a Device].
- Press the [▲] buttons or turn the [▲] dial to choose [Add a Device], and then press the [⑤] button.

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

6 Choose [PBC Method].
- Press the [▲] buttons or turn the [▲] dial to choose [PBC Method], and then press the [⑤] button.

7 Establish the connection.
- On the access point, hold down the WPS connection button for a few seconds.

- On the camera, press the [⑤] 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.
**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 [◄] 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 [◄] dial to choose [Next], and then press the [▶] button.

4. **Choose [Auto].**
   - Press the [▲][▼] buttons or turn the [◄] 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).

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**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 (142).
- 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.
Sending Images to a Registered Web Service

Registering Web Services

Use a smartphone or computer to add to the camera Web services that you want to use.

- A smartphone or computer with a browser and Internet connection is required to complete camera settings for CANON iMAGE GATEWAY and other Web services.
- Check the CANON iMAGE GATEWAY website for details on browser requirements, including settings and version information.
- For information on countries and regions where CANON iMAGE GATEWAY is available, visit the Canon website (http://www.canon.com/cig/).
- You must have an account with Web services other than CANON iMAGE GATEWAY if you desire to use them. For further details, check the websites for each Web service you want to register.
- Separate ISP connection and access point fees may be applicable.

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

After linking the camera and CANON iMAGE GATEWAY, add CANON iMAGE GATEWAY as a destination Web service on the camera.

1 Log in to CANON iMAGE GATEWAY and access the camera link settings page.
   - From a computer or smartphone, access http://www.canon.com/cig/ to visit CANON iMAGE GATEWAY.
   - Once the login screen is displayed, enter your user name and password to log in. If you do not have a CANON iMAGE GATEWAY account, follow the instructions to complete member registration (free of charge).

2 Choose the type of camera.
   - On this camera model, [ ] is displayed in the Wi-Fi menu.
   - Once you choose [ ], a page is displayed for entering the authentication code. On this page in step 7, you will enter the authentication code displayed on the camera after steps 3 – 6.

3 Access the Wi-Fi menu.
   - Press the [ ] button to turn the camera on.
   - 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.

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

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

6 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).
   - Once the camera is connected to CANON iMAGE GATEWAY via the access point, an authentication code is displayed.
   - Keep this screen displayed until you are finished with step 7.

7 Enter the authentication code.
   - On the smartphone or computer, enter the authentication code displayed on the camera and go to the next step.
   - A six-digit confirmation number is displayed.
8 Check the confirmation number and complete the setup process.

- Check the confirmation number on the second screen in step 6 (displayed after you pressed the [.] and [.] buttons or turned the [.] dial to choose [OK], and then pressed the [.] button).
- Make sure the confirmation number on the camera matches the number on the smartphone or computer.
- Press the [.] and [.] buttons or turn the [.] dial to choose [OK], and then press the [.] button.
- Complete the setup process on the smartphone or computer.

- ([.]) ([.] 153) and CANON IMAGE GATEWAY are now added as destinations, and the [.] icon changes to [].
- A message is displayed on the smartphone or computer to indicate that this process is finished. You can add other Web services, as needed. In this case, follow the instructions from step 2 in “Registering Other Web Services” ([.] 147).

- Connections require that a memory card with saved images be in the camera.
- You can also change the camera nickname on the screen in step 3 ([.] 146).
- Once you have connected to devices via the Wi-Fi menu, recent destinations will be listed first when you access the menu. Press the [.] and [.] buttons to access the device selection screen and then configure the setting.

### Registering Other Web Services

You can also add Web services besides CANON IMAGE GATEWAY to the camera. Note that CANON IMAGE GATEWAY must be registered on the camera first ([.] 146).

1 **Access the Web service settings screen.**

   - Follow step 1 in “Registering CANON IMAGE GATEWAY” ([.] 146) to log in to CANON IMAGE GATEWAY, and then access the Web service settings screen.

2 **Configure the Web service you want to use.**

   - Follow the instructions displayed on the smartphone or computer to set up the Web service.

3 **Choose [.]**

   - In Playback mode, press the [.] button to access the Wi-Fi menu.
   - Press the [.] and [.] buttons or turn the [.] dial to choose [ ], and then press the [.] button.
   - The Web service settings are now updated.

   - If any configured settings change, follow these steps again to update the camera settings.
Uploading Images to Web Services

1 Access the Wi-Fi menu.
- Press the [Wi-Fi] button to turn the camera on.
- Press the [Wi-Fi] button.

2 Choose the destination.
- Choose the icon of the Web service to connect to (either press the [Wi-Fi] buttons or turn the [Wi-Fi] dial), and then press the [Wi-Fi] button.
- If multiple recipients or sharing options are used with a Web service, choose the desired item on the [Select Recipient] screen (either press the [Wi-Fi] buttons or turn the [Wi-Fi] dial), and then press the [Wi-Fi] button.

3 Send an image.
- Turn the [Wi-Fi] dial to choose an image to send, press the [Wi-Fi] buttons to choose [Send this image], and then press the [Wi-Fi] button.
- When uploading to YouTube, read the terms of service, choose [I Agree], and press the [Wi-Fi] button.
- Image transfer will begin. The screen darkens during image transfer.
- After the image is sent, [OK] is displayed. Press the [Wi-Fi] button to return to the playback screen.

- 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 ([151]).
- To view images uploaded to CANON IMAGE GATEWAY on a smartphone, try the dedicated Canon Online Photo Album app. Download and install the Canon Online Photo Album app for iPhones or iPads from the App Store or for Android devices from Google Play.
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.
   - Access the Wi-Fi menu as described in step 2 in “Adding a Smartphone Using the Wi-Fi Menu” (138).

2 Choose [Print].
   - Press the [△] or [▼] buttons or turn the [○] dial to choose [Print], and then press the [播放] button.

3 Choose [Add a Device].
   - Press the [△] or [▼] buttons or turn the [○] dial to choose [Add a Device], and then press the [播放] button.
   - The camera’s SSID is displayed.

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

5 Choose the printer.
   - Choose the printer name (either press the [△] or [▼] buttons or turn the [○] dial), and then press the [播放] button.

6 Choose an image to print.
   - Press the [△] or [▼] buttons or turn the [○] dial to choose an image.
   - Press the [播放] button.
   - Press the [△] or [▼] buttons to choose [Print], and then press the [播放] button.
   - For detailed printing instructions, see “Printing Images” (180).
   - To end the connection, press the [播放] button, choose [OK] on the confirmation screen (either press the [△] or [▼] buttons or turn the [○] dial), and then press the [播放] button.

● 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 [△] or [▼] buttons to choose the device and then pressing the [播放] button. To add a new device, display the device selection screen by pressing the [△] or [▼] 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).
Sending Images to Another Camera

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

- Only Canon-brand cameras equipped with a Wi-Fi function can be connected to wirelessly. You cannot connect to a Canon-brand camera that does not have a Wi-Fi function, even if it supports Eye-Fi cards.

1. Access the Wi-Fi menu.
   - Access the Wi-Fi menu as described in step 2 in “Adding a Smartphone Using the Wi-Fi Menu” (138).

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

3. Choose [Add a Device].
   - Press the [ ] buttons or turn the [ ] dial to choose [Add a Device], and then press the [ ] button.
   - Follow steps 1 – 3 on the target camera too.
   - Camera connection information will be added when [Start connection on target camera] is displayed on both camera screens.

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 [ ] button, choose [OK] on the confirmation screen (either press the [ ] buttons or turn the [ ] dial), and then 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.
- 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 (153).
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 
     [ ]
     [ ]
     [ ] buttons to choose [Select and send], and then press the [ ] button.

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

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 [ ] to access single-image display and then pressing the [ ]
     [ ]
     [ ] buttons or turning the [ ] dial.

Choosing Images Individually

1. **Choose [Select].**
   - Following step 2 in “Sending Multiple Images” (151), choose [Select] and press the [ ] button.

Selecting a Range

1. **Choose [Select Range].**
   - Following step 2 in “Sending Multiple Images” (151), choose [Select Range] and press the [ ] button.
In step 1, [Favorite Images] is not available unless you have tagged images as favorites.

### Notes on Sending Images

- Keep your fingers or other objects off the Wi-Fi antenna area. Covering this may decrease the speed of your image transfers.
- Depending on the condition of the network you are using, it may take a long time to send movies. Be sure to keep an eye on the camera battery level.
- Web services may limit the number of images or length of movies you can send.
- For movies that you do not compress, 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.
- 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 [ escolar] 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 [M2] 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.

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 [ ] as the destination. You can also assign [ ] to the [ ] button, so that you can simply press the [ ] button to send any unsent images on the memory card to a computer via CANON IMAGE GATEWAY.

1 Add [ ] as a destination.
- Add [ ] as a destination, as described in “Registering CANON IMAGE GATEWAY” (146).
- 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 [ ] button and choose [Wi-Fi Settings] on the [ ] tab (31).
- Press the [ ] buttons to choose [Image Sync], and then press the [ ] buttons to choose [Stills/Movies].
3 Assign [ ] to the [ ] button (only when sending images by pressing the [ ] button).
- Clear the [ ] button setting if a smartphone is already assigned to the button (136).
- Press the [ ] button to access the mobile connection screen, choose [ ] (either press the [ ] button or turn the [ ] dial), and then press the [ ] button.

Preparation of 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 [ ], and then click [Add new camera].
- Mac OS: In the menu bar, click [ ], and then click [Add new camera].
- A list of cameras linked to CANON iMAGE GATEWAY is displayed. Choose the camera from which images are to be sent.
- Once the camera is registered and the computer is ready to receive images, the icon changes to [ ].

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” (148).
- 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, 188).

- Even if images were imported to the computer through a different method, any images not sent to the computer via CANON iMAGE GATEWAY will be sent to the computer.
- Sending is faster when the destination is a computer on the same network as the camera, because images are sent via the access point instead of CANON iMAGE GATEWAY. Note that images stored on the computer are sent to CANON iMAGE GATEWAY, so the computer must be connected to the Internet.
Viewing Images Sent via Image Sync on a Smartphone

By installing the Canon Online Photo Album (Canon OPA) app, you can use your smartphone to view and download images sent via Image Sync while they are stored temporarily on the CANON iMAGE GATEWAY server.

In preparation, enable smartphone access as follows.

- Make sure you have completed the settings described in “Preparing the Computer” (154).
- Download and install the Canon Online Photo Album app for iPhones or iPads from the App Store or for Android devices from Google Play.
- Log in to CANON IMAGE GATEWAY (145), select your camera model, access the Web service settings screen, and enable viewing and downloading from a smartphone in the Image Sync settings. For details, refer to CANON iMAGE GATEWAY Help.

- Once images stored temporarily on the CANON iMAGE GATEWAY server have been deleted, they can no longer be viewed.
- Images you sent before enabling smartphone viewing and downloading in Image Sync settings cannot be accessed this way.

- For Canon Online Photo Album instructions, refer to Canon Online Photo Album Help.

Using a Smartphone to View Camera Images and Control the Camera

You can do the following with the dedicated smartphone app Camera Connect.

- Browse images on the camera and save them to the smartphone
- Geotag images on the camera (155)
- Shoot remotely (156)

- Privacy settings must be configured in advance to allow image viewing on the smartphone (136, 138, 157).

Geotagging Images on the Camera

GPS data recorded on a smartphone using the dedicated Camera Connect application can be added to images on the camera. Images are tagged with information including the latitude, longitude, and elevation.

- Before shooting, make sure the date and time and your home time zone are set correctly, as described in “Setting the Date and Time” (21). Also follow the steps in “World Clock” (162) to specify any shooting destinations in other time zones.
- Others may be able to locate or identify you by using location data in your geotagged still images or movies. Be careful when sharing these images with others, as when posting images online where many others can view them.
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], [C1], or [C2] 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, 138).
   ● 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. Do not press near 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.

- **P** mode is used for shooting in modes other than **P**, **Tv**, **Av**, **M**, **C1**, and **C2**. 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.
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 to turn the camera on.
   - Press the [▲] button.
   - Press the [▲,▼,◄,►] buttons or turn the [■] dial to choose the icon of a device to edit, and then press the [■] button.

2. Choose [Edit a Device].
   - Press the [▲,▼,◄,►] buttons or turn the [■] dial to choose [Edit a Device], and then press the [■] button.

3. Choose the device to edit.
   - Press the [▲,▼,◄,►] buttons or turn the [■] dial to choose the device to edit, and then press the [■] button.

4. Choose the item to edit.
   - Press the [▲,▼,◄,►] buttons or turn the [■] dial to choose the item to edit, and then press the [■] button.
   - The items you can change depend on the device or service.

#### Configurable Items

<table>
<thead>
<tr>
<th>Configurable Items</th>
<th>Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Change Device Nickname] (157)</td>
<td>O</td>
</tr>
<tr>
<td>[View Settings] (136)</td>
<td>-</td>
</tr>
<tr>
<td>[Erase Connection Info] (157)</td>
<td>O</td>
</tr>
</tbody>
</table>

- : Configurable  – : Not configurable

### Changing a Device Nickname

You can change the device nickname (display name) that is displayed on the camera.

- Following step 4 in “Editing Connection Information” (157), choose [Change Device Nickname] and press the [■] button.
- Select the input field and press the [■] button. Use the keyboard displayed to enter a new nickname (32).

### Erasing Connection Information

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

- Following step 4 in “Editing Connection Information” (157), choose [Erase Connection Info] and press the [■] button.
- After [Erase?] is displayed, press the [◄,►] buttons or turn the [■] dial to choose [OK], and then press the [■] button.
- The connection information will be erased.
Changing the Camera Nickname

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

1. Choose [Wi-Fi Settings].

2. Choose [Change Device Nickname].
   - Press the [▲,▼] buttons or turn the [●] dial to choose [Change Device Nickname], and then press the [●] button.

3. Change the nickname.
   - Press the [●] button to access the keyboard (32), and then enter a nickname.

   - A message is displayed if the nickname you enter begins with a symbol or space. Press the [●] button and enter a different nickname.
   - You can also change the nickname from the [Device Nickname] screen displayed when you first use Wi-Fi. In this case, select the text box, press the [●] button to access the keyboard, and then enter a new nickname.

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.

<table>
<thead>
<tr>
<th>Continuous</th>
<th>Images are numbered consecutively (until the 9999th shot is taken/saved) even if you switch memory cards.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Reset</td>
<td>Image numbering is reset to 0001 if you switch memory cards, or when a new folder is created.</td>
</tr>
</tbody>
</table>
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.


2. Choose [OK].
   - The memory card is now formatted.

Low-level formatting takes longer than “Formatting Memory Cards” (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.

- Choose [Video system] on the [7] tab, and then choose an option.

- 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 (102) 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.
- Choose [Calibrate] and press the [8] button. A confirmation message is displayed.
- Choose [OK], and then press the [8] button.

Resetting the Electronic Level

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

- Choose [Reset], and then press the [8] button.
- Choose [OK], and then press the [8] 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 (70).


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.
- [Eco] is now shown on the shooting screen (193).
- 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 (p. 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 (p. 161) to [On].

Screen Brightness

Adjust screen brightness as follows.

- Choose [2] tab ► [LCD Brightness], press the [ ] button, and then press the [▲▼] buttons or turn the [ ] dial to adjust the brightness.
- For maximum brightness, press and hold the [DISP] button for at least one second when the shooting screen is displayed or when in single-image display. (This will override the [LCD Brightness] setting on the [2] tab.) To restore the original brightness, press and hold the [DISP] 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” (p. 21).

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 [X World], and then press the [ ] button.
- Press the [▲▼] buttons to choose the destination.
- To set daylight saving time (1 hour ahead), choose [5] by pressing the [▲▼] buttons or turning the [ ] dial, and then choose [X] by pressing the [▲▼] buttons.
- Press the [ ] button.

2 Switch to the destination time zone.

- Press the [▲▼] buttons or turn the [ ] dial to choose [X World], and then press the [MENU] button.
- [X] is now shown on the shooting screen (p. 193).

- Adjusting the date or time while in [X] mode (p. 21) will automatically update your [Home] time and date.
### Changing the Date and Time

Adjust the date and time as follows.

- Choose [Date/Time] on the \( \text{[Quick Menu]} \) tab, and then press the \( \text{[SET]} \) button.
- Press the \( \text{[\(\uparrow\downarrow\leftarrow\rightarrow\)]} \) buttons to choose an option, and then adjust the setting, either by pressing the \( \text{[\(\uparrow\downarrow\leftarrow\rightarrow\)]} \) buttons or turning the \( \text{[\(\bigcirc\)]} \) dial.

### Lens Retraction Timing

The lens is normally retracted for safety about one minute after you press the \( \text{[SET]} \) button in Shooting mode (\( \text{[26]} \)). To have the lens retracted immediately after you press the \( \text{[SET]} \) button, set the retraction timing to \( \text{[0 sec.]} \).

- Choose [Lens Retraction] on the \( \text{[Quick Menu]} \) tab, and then choose \( \text{[0 sec.]} \).

### Display Language

Change the display language as needed.

- Choose [Language] on the \( \text{[Quick Menu]} \) tab, and then press the \( \text{[SET]} \) button.
- Press the \( \text{[\(\uparrow\downarrow\leftarrow\rightarrow\)]} \) buttons or turn the \( \text{[\(\bigcirc\)]} \) dial to choose a language, and then press the \( \text{[SET]} \) button.

### Silencing Camera Operations

Silence camera sounds and movies as follows.

- Choose [Mute] on the \( \text{[Quick Menu]} \) tab, and then choose [On].
- Operation can also be silenced by holding down the \( \text{[DISP]} \) button as you turn the camera on.
- Sound is not played during movies (\( \text{[106]} \)) if you mute camera sounds. To restore sound during movies, press the \( \text{[\(\uparrow\downarrow\leftarrow\rightarrow\)]} \) buttons or drag up across the screen. Adjust volume as needed by pressing the \( \text{[\(\uparrow\downarrow\leftarrow\rightarrow\)]} \) buttons or by dragging up or down quickly.

### Adjusting the Volume

Adjust the volume of individual camera sounds as follows.

- Choose [Volume] on the \( \text{[Quick Menu]} \) tab, and then press the \( \text{[SET]} \) button.
- Choose an item, and then press the \( \text{[\(\uparrow\downarrow\leftarrow\rightarrow\)]} \) buttons to adjust the volume.

You can also access the [Language] screen in Playback mode by pressing and holding the \( \text{[SET]} \) button and immediately pressing the \( \text{[MENU]} \) button.
### 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 [4] tab ➤ [Touch Operation], 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 (86), and elsewhere from m/cm to ft/in as needed.

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

### Checking Certification Logos

Some logos for certification requirements met by the camera can be viewed on the screen. Other certification logos are printed in this guide, on the camera packaging, or on the camera body.

Setting Copyright Information to Record in Images

To record the author’s name and copyright details in images, set this information beforehand as follows.

- Press the [豊], [一] buttons or turn the [露] dial to choose [Enter Author’s Name] or [Enter Copyright Details]. Press the [事先] button to access the keyboard, and enter the name (露32).
- Press the [MENU] button. When [Accept changes?] is displayed, choose [Yes] (either press the [豊], [一] buttons or turn the [露] dial), and then press the [事先] button.
- The information set here will now be recorded in images.

Adjusting Other Settings

The following settings can also be adjusted.
- [4] tab setting [Wi-Fi Settings] (露133)

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 [4] tab, and then press the [事先] button.

2. Restore default settings.

   - Press the [豊], [一] buttons or turn the [露] dial to choose [OK], and then press the [事先] button.
   - Default settings are now restored.

Deleting All Copyright Information

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

- Follow the steps in “Setting Copyright Information to Record in Images” (露165) and choose [Delete Copyright Info].
- Press the [豊], [一] buttons or turn the [露] dial to choose [OK], and then press the [事先] button.

The following functions are not restored to default settings.
- Information registered using Face ID (露48)
- [4] tab setting [Video system] (露160)
- Custom white balance data you have recorded (露84)
- Shooting mode chosen in [-modal] (露61) and [modal] (露62) modes
- Exposure compensation (露79) setting
- Movie mode (露74)
- Wi-Fi settings (露133)
- Calibrated value for the electronic level (露161)
- Copyright information (露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 this warranty does not apply to repairs arising out of the malfunction of non-genuine Canon accessories, although you may request such repairs on a chargeable basis.

Accessories

Enjoy the camera in more ways with optional Canon accessories and other compatible accessories sold separately.
System Map

Included Accessories
- Neck Strap
- Battery Pack NB-10L*1 (with terminal cover)
- Battery Charger CB-2LC/CB-2LCE**
- USB Cable (camera end: Mini-B)**
- Memory Card
- Card Reader
- Computer

Power
- AC Adapter Kit ACK-DC80

Cables
- HDMI Cable HTC-100
- TV/Video System

Flash Units
- Speedlite*3
  600EX-RT, 600EX, 580EX II, 430EX II, 320EX, 270EX II

Lens Accessories
- Canon-Brand Lens Filter (67 mm dia.)**
- Lens Hood LH-DC100/Filter Adapter FA-DC67B

PictBridge-Compatible Printers

Other Accessories
- Electronic Viewfinder EVF-DC1
- Remote Switch RS-60E3

*1 Also available for purchase separately.
*2 A genuine Canon accessory is also available (Interface Cable IFC-400PCU).
*3 The following accessories are also supported: Speedlite 580EX, 430EX, 270EX, and 220EX, Speedlite Transmitter ST-E2, ST-E3-RT, Speedlite Bracket SB-E2, and Off-Camera Shoe Cord OC-E3.
*4 Requires Filter Adapter FA-DC67B.
Optional Accessories

The following camera accessories are sold separately. Note that availability varies by area, and some accessories may no longer be available.

Power Supplies

Battery Pack NB-10L
- Rechargeable lithium-ion battery

Battery Charger CB-2LC/CB-2LCE
- Charger for Battery Pack NB-10L

AC Adapter Kit ACK-DC80
- For powering the camera using household power. Recommended when using the camera over extended periods, or when connecting the camera to a printer or computer. Cannot be used to charge the battery pack in the camera.

- The battery charger and AC adapter kit can be used in areas with 100 – 240 V AC power (50/60 Hz).
- For power outlets in a different format, use a commercially available adapter for the plug. Never use an electrical transformer designed for traveling, which may damage the battery pack.

Flash Units

Speedlite 600EX-RT/600EX/580EX II/430EX II/320EX/270EX II
- Shoe-mounted flash unit that enables many styles of flash photography. Speedlites 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).

Other Accessories

Interface Cable IFC-400PCU
- For connecting the camera to a computer or printer.

HDMI Cable HTC-100
- For connecting the camera to an HDMI input of a high-definition TV.
Remote Switch RS-60E3
- Enables remote shutter button operation (pressing the button halfway or all the way down).

Lens Hood LH-DC100/Filter Adapter FA-DC67B
- Prevents extraneous light outside the angle of view from entering the lens and causing flares or ghosting, which reduce image quality.
- Adapter required when mounting a 67 mm filter.

Canon Lens Filter (67 mm dia.)
- Protects the lens and enables a variety of shooting effects.

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.

Using Optional Accessories

Playback on a TV

Connecting the camera to an HDTV with the HDMI Cable HTC-100 (sold separately) enables you to view your shots on the larger screen of the TV. Movies shot at an image quality of [4K UHD], [4K UHD], [4K UHD], [4K UHD], [4K UHD], [4K UHD], or [4K UHD] 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.
Powering the Camera with Household Power

Powering the camera with AC Adapter Kit ACK-DC80 (sold separately) eliminates the need to monitor the remaining battery level.

1 Make sure the camera is off.

2 Open the cover.

3 Connect the adapter to the coupler.

4 Insert the coupler.

- Touch-screen operations are not supported while the camera is connected to a television.
- Some information may not be displayed when viewing images on a TV (194).
- 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 (55), MF-Point Zoom (86), MF Peaking (88) and Night Display (161) are not available.
Using Lens Filters (Sold Separately)

Attaching a lens filter to the camera protects the lens and allows you to shoot with various effects. To attach a lens filter, you will need Filter Adapter FA-DC67B, which is included with Lens Hood LH-DC100 (sold separately).

1 Attach the filter adapter.
   - Make sure the camera is off.
   - Align the notches on the camera and the filter adapter and turn the adapter in the direction of the arrow until locked.
   - To remove the filter adapter, turn it in the opposite direction.

2 Attach a filter.
   - Turn the filter in the direction of the arrow to attach it to the camera.
   - Make sure not to attach the filter too tightly. Doing so could prevent removal of the filter and damage the camera.

- 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.

- We recommend the use of genuine Canon filters (67 mm dia.).
- When not using auto focus to shoot, set the manual focus option [Safety MF] to [On].
- If you use the built-in flash with the filter adapter attached, portions of the image may appear darker.
- When using the filter adapter, be sure to use only one filter at a time. Attaching multiple filters, or accessories such as a heavy lens, may cause the attachments to fall off and become damaged.
- Do not grip the filter adapter tightly.
- Remove the filter adapter when not using a filter or a hood.
Using a Lens Hood (Sold Separately)

For wide-angle shots of backlit subjects without using the flash, attach optional Lens Hood LH-DC100/Filter Adapter FA-DC67B to prevent light outside the angle of view from entering the lens. To attach a hood, you will need Filter Adapter FA-DC67B, which is included with the lens hood.

- Make sure the camera is off.
- Attach the filter adapter as described in step 1 of “Using Lens Filters (Sold Separately)” (171).
- Align the lens hood mark (2) with the filter adapter mark (1), and turn the lens hood in the direction of the arrow until it locks in place.

To remove the hood, hold down the hood release button (3) and turn the hood in the opposite direction.

To attach the lens hood inverted (as shown) when the hood is not used, align the lens hood mark (2) with the filter adapter mark (1), and turn the lens hood in the direction of the arrow until it locks in place.

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.

- Vignetting may occur if you use the built-in flash when the lens hood is attached.
Using the Hot Shoe

Use the hot shoe to attach an optional electronic viewfinder or external flash.

1 Remove the hot shoe cap.
   - Pull off the cap as shown.
   - To avoid losing the cap after removal, store it in the viewfinder or flash case.

2 Attaching the Hot Shoe Cap
   - After removing a viewfinder or flash, reattach the hot shoe cap to protect the hot shoe.
   - Insert the cap as shown.

Using an Electronic Viewfinder (Sold Separately)

Shooting is easier with an optional electronic viewfinder, which helps you concentrate on keeping subjects in focus. Note that fewer shots and less recording time are available than when using the screen (LCD monitor) on the back of the camera. For guidelines on the number of shots and recording time available, see “Number of Shots/Recording Time, Playback Time” (212).

1 Make sure the camera is off.

2 Attach the electronic viewfinder to the hot shoe.
   - Remove the viewfinder cover.

3 Adjust the electronic viewfinder to the desired angle.
   - You can adjust the angle of the viewfinder up to about 90° to suit the scene or how you are shooting.
4 Turn the camera on and 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.

5 Adjust the diopter.
   ● Turn the dial to bring viewfinder images into sharp focus.

6 When finished, remove the electronic viewfinder.
   ● To remove the viewfinder from the camera, turn the camera off and hold down the viewfinder’s [UNLOCK] button as you remove it.
   ● Remove and store the viewfinder when you are not using it.

   ● 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 (\(\frac{5}{2}\)) 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.
   ● You can switch between viewfinder and screen display by pressing the viewfinder’s [ ] button.
   ● If you have selected MENU (\(\text{31}\)) ► [ ] tab ► [Display Control] ► [Manual], the screen will not be activated when you move your eye away from the viewfinder. To activate the screen, press the viewfinder’s [ ] button.
   ● Motion is displayed more smoothly (whether on the viewfinder or on the screen) in \(\text{AUTO}\), \(\text{P}\), \(\text{Av}\), \(\text{Tv}\), or \(\text{M}\) mode when a viewfinder is used. If you prefer normal display and longer battery life, choose MENU (\(\text{31}\)) ► [ ] tab ► [Display Mode] ► [Power Saving].
   ● Display will switch to the camera screen during Wi-Fi communication (\(\text{133}\)) or when the on-screen keyboard (\(\text{32}\)) or Story Highlights home screen (\(\text{130}\)) is displayed.
   ● You can configure display brightness (\(\text{162}\)) for the viewfinder and camera screen separately.

   ● The viewfinder display and camera screen cannot be activated at the same time.
   ● Touch operations on the camera screen are not possible while the viewfinder display is in use.
Using an External Flash (Sold Separately)

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

- This camera does not support some Speedlite EX series functions.
- Non-EX series Canon flash units may not fire correctly or may not fire at all, in some cases.
- Use of non-Canon flash units (especially high-voltage flash units) or flash accessories may prevent normal camera operation and may damage the camera.

Also refer to the Speedlite EX series manual for additional information.

Speedlite EX Series

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

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

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

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

4 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 (176).

   ● 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 an External Flash (Sold Separately)

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

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

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

4 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 (176).

   ● 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.

   ● Also refer to the Speedlite EX series manual for additional information.
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.

Camera Settings Available with an External Flash (Sold Separately)

The following items are available in [P], [Tv], [Av], or [M] mode. In other shooting modes, only [Red-Eye Corr.] 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 (1195).

<table>
<thead>
<tr>
<th>Item</th>
<th>Options</th>
<th>Shooting Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Mode</td>
<td>Auto*1</td>
<td>P  T v  A v  M</td>
</tr>
<tr>
<td></td>
<td>Manual*2</td>
<td>O  O  O  O</td>
</tr>
<tr>
<td>Flash Exp. Comp.*3</td>
<td>–3 to +3</td>
<td>O  O  O  O</td>
</tr>
<tr>
<td>Flash Output*4</td>
<td>1/128s to 1/1 (in 1/3-stop increments)</td>
<td>O  O  O  O</td>
</tr>
<tr>
<td>Shutter Sync.*5</td>
<td>1st-curtain/2nd-curtain/Hi-speed</td>
<td>O  O  O  O</td>
</tr>
<tr>
<td>Wireless Func.*6</td>
<td>Off/Optical/Radio</td>
<td>O  O  O  O</td>
</tr>
<tr>
<td>Red-Eye Lamp</td>
<td>On/Off</td>
<td>O  O  O  O</td>
</tr>
<tr>
<td>Safety FE*7</td>
<td>On</td>
<td>O  O  O  –</td>
</tr>
<tr>
<td>Clear Flash Settings*8</td>
<td></td>
<td>O  O  O  O</td>
</tr>
</tbody>
</table>

*1 E-TTL mode is used for the flash.
*2 M mode is used for the flash.
In [M] shooting mode, E-TTL mode is also available for the flash. In this case, when the flash fires, flash exposure compensation set on the flash is applied to the flash output level set on the camera.
*3 Can be configured only when [Flash Mode] is [Auto] and flash exposure compensation set on the flash is [+0]. When you adjust flash exposure compensation on 600EX-RT, 600EX, 580EX II, or 430EX II Speedlites, the camera display will be updated accordingly.
*4 Can be configured when [Flash Mode] is [Manual]. Linked to settings on the flash unit.
*5 1/64 for Speedlite 430EX II/430EX/320EX/270EX II/270EX.
*6 Can be configured when [Flash Mode] is [Manual]. Linked to settings on the flash unit.
*7 Can only be configured when [Flash Mode] is [Auto].
Using an External Microphone

An external microphone with a mini plug (3.5 mm diameter) can be connected to the external microphone IN terminal (4) for use in recording. Note that the built-in microphone is not used for recording when an external microphone is connected.

Open the cover and connect the external microphone.

- Any attenuator settings you have configured are also applied to recording with the external microphone (76).
- Connecting an external microphone will deactivate [Wind Filter] (76).

Using Headphones (Sold Separately)

Headphones can be used to listen to audio as the camera captures it when you shoot, or when you play back movies.

1. Connect the headphones.
   - Open the cover and connect the headphones.

2. Configure the setting.
   - Press the [MENU] button, choose [3] tab ► [Headphones], press the [3] button, and then press the [▲][▼] buttons to set the volume to [0].
   - Put the headphones on and press the [▲][▼] buttons to adjust the volume.

   - Audio will no longer be recorded in movies you are recording if you accidentally connect headphones to the external microphone IN terminal during recording.

   - In shooting modes other than Movie mode, audio is only sent to headphones during movie recording and when you are adjusting the volume for [Headphones] (177) or [Level] (76).
   - No audio is sent to headphones during remote shooting (156) or during other Wi-Fi connections.
   - Audio is not sent to headphones connected to the external microphone IN terminal. Connect headphones to the headphone jack.
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: Mini-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 (1). With the smaller plug of the USB cable in the orientation shown, insert the plug fully into the camera terminal (2).
   - Insert the larger plug of the USB cable in the computer's USB port. For details about USB connections on the computer, refer to the computer user manual.

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

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 10.9
- Mac OS X 10.8

When sending images to a computer via Wi-Fi, check the system requirements in “Checking Your Computer Environment” (140).
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.

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.

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.
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Windows 7: If the screen in step 2 is not displayed, click the [ ] icon in the taskbar.
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  - 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.
Printing Images

Your shots can easily be printed by connecting the camera to a printer. On the camera, you can specify images to set up batch printing, prepare orders for photo development services, and prepare orders or print images for photobooks.

A Canon SELPHY CP series compact photo printer is used here for the sake of illustration. Screens displayed and available functions vary by printer. Also refer to the printer manual for additional information.

Easy Print

Print your shots by connecting the camera to a PictBridge-compatible printer with a USB cable (sold separately; camera end: Mini-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.

4. Turn the camera on.
   - Press the [ ] button to turn the camera on.

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

6. Access the printing screen.
   - Press the [ ] button, choose [ ], and press the [ ] button again.

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

- For Canon-brand PictBridge-compatible printers (sold separately), see “Printers” (169).
- RAW images cannot be printed.
**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” (181) to access the printing screen, choose [Cropping] and press the 
   
2. **Adjust the cropping frame as needed.**
   - To resize the frame, move the zoom lever or turn the 
   
3. **Print the image.**
   - Follow step 7 in “Easy Print” (180) to print.

! Cropping may not be possible at small image sizes, or at some aspect ratios.

---

**Configuring Print Settings**

1. **Access the printing screen.**
   - Follow steps 1 – 6 in “Easy Print” (180) 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>Cropping</th>
<th>Default</th>
<th>Matches current printer settings.</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>Default</td>
<td>Prints images with the file number added.</td>
</tr>
<tr>
<td>Both</td>
<td>Default</td>
<td>Prints images with both the date and file number added.</td>
</tr>
<tr>
<td>Off</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Red-Eye 1</th>
<th>Default</th>
<th>Corrects red-eye.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No. of Copies</th>
<th>Default</th>
<th>Choose the number of copies to print.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cropping</td>
<td>–</td>
<td>Specify a desired image area to print (181).</td>
</tr>
<tr>
<td>Paper Settings</td>
<td>–</td>
<td>Specify the paper size, layout, and other details (182).</td>
</tr>
</tbody>
</table>
Choosing Paper Size and Layout before Printing

1. Choose [Paper Settings].
   - After following step 1 in “Configuring Print Settings” (181), choose [Paper Settings] and press the [SET] button.

2. Choose a paper size.
   - Press the [△][▼] buttons or turn the [△] dial to choose an option, and then press the [SET] button.

3. Choose a type of paper.
   - Press the [△][▼] buttons or turn the [△] dial to choose an option.

4. Choose a layout.
   - Press the [△][▼] buttons or turn the [△] dial to choose an option.

5. Print the image.

Available Layout Options

| Default | Matches current printer settings. |
| Border | Prints with blank space around the image. |
| Borderless | Borderless, edge-to-edge printing. |
| N-up | Choose how many images to print per sheet. |
| ID Photo | Prints images for identification purposes. Only available for images with a recording pixel setting of L and an aspect ratio of 3:2. |
| Fixed Size | Choose the print size. Choose from 3.5 x 5 in., postcard, or wide-format prints. |

Printing ID Photos

1. Choose [ID Photo].
   - Followings steps 1 – 4 in “Choosing Paper Size and Layout before Printing” (181), choose [ID Photo] and press the [SET] button.

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

3. Choose the printing area.
   - Follow step 2 in “Cropping Images before Printing” (181) to choose the printing area.

4. Print the image.
Adding Images to the Print List (DPOF)

Batch printing (185) 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.


<table>
<thead>
<tr>
<th>Print Type</th>
<th>Standard</th>
<th>One image is printed per sheet.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Index</td>
<td>Smaller versions of multiple images are printed per sheet.</td>
</tr>
<tr>
<td>Both</td>
<td>Both standard and index formats are printed.</td>
<td></td>
</tr>
<tr>
<td>File No.</td>
<td>On</td>
<td>Images are printed with the file number.</td>
</tr>
<tr>
<td>Clear DPOF data</td>
<td>On</td>
<td>All image print list settings are cleared after printing.</td>
</tr>
</tbody>
</table>

Movie Printing Options

| Single | Prints the current scene as a still image. |
| Sequence | Prints a series of scenes, a certain interval apart, on a single sheet of paper. You can also print the folder number, file number, and elapsed time for the frame by setting [Caption] to [On]. |

To cancel printing in progress, press the [SET] button, choose [OK], and then press the [SET] button again.

[ID Photo] and [Sequence] cannot be chosen on Canon-brand PictBridge-compatible printers from CP720/CP730 and earlier models.

Printing Movie Scenes

1. Access the printing screen.
   - Follow steps 1 – 6 in “Easy Print” (180) to choose a movie. This screen is displayed.

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

3. Print the image.

Movie Printing Options

- Single: Prints the current scene as a still image.
- Sequence: Prints a series of scenes, a certain interval apart, on a single sheet of paper. You can also print the folder number, file number, and elapsed time for the frame by setting [Caption] to [On].

To cancel printing in progress, press the [SET] button, choose [OK], and then press the [SET] button again.

[ID Photo] and [Sequence] cannot be chosen on Canon-brand PictBridge-compatible printers from CP720/CP730 and earlier models.
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

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

2. Choose an image.
   - Press the [◄][►] buttons or turn the [●] dial to choose an image, and then press the [●] 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 [●] button again. [☑] is no longer displayed.

3. 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 All Images

1. Following step 1 in “Setting Up Printing for Individual Images” (184), choose [Select All Images] and press the [●] button.
2. Press the [▲][▼] buttons or turn the [●] dial to choose [Select All Images].
3. Press the [▲][▼] buttons 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” (184), choose [Clear All Selections] and press the [OK] button.
- Press the [4] buttons or turn the [ ] dial to choose [OK], and then press the [SET] button.

Printing Images Added to the Print List (DPOF)

- When images have been added to the print list (183 – 184), this screen is displayed after you connect the camera to a PictBridge-compatible printer. Press the [4] buttons to choose [Print now], and then simply press the [SET] button to print the images in the print list.
- Any DPOF print job that you temporarily stop will be resumed from the next image.

Adding Images to a Photobook

Photobooks can be set up on the camera by choosing up to 998 images on a memory card and importing them into the software on your computer, where they are stored in their own folder. This is convenient when ordering printed photobooks online or printing photobooks with your own printer.

Choosing a Selection Method

- Press the [MENU] button, choose [Photobook Set-up] on the [4] tab, and then choose how you will select images.

Choosing a Selection Method

- [] 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” (185), choose [Select] and press the [ ] button.

2. Choose an image.
   - Press the [4] buttons or turn the [ ] dial to choose an image, and then press the [SET] button.
   - [] is displayed.
   - To remove the image from the photobook, press the [SET] 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.

Clearing All Images from the Print List

- Following step 1 in “Setting Up Printing for Individual Images” (184), choose [Clear All Selections] and press the [OK] button.
- Press the [4] buttons or turn the [ ] dial to choose [OK], and then press the [SET] button.

Printing Images Added to the Print List (DPOF)

- When images have been added to the print list (183 – 184), this screen is displayed after you connect the camera to a PictBridge-compatible printer. Press the [4] buttons to choose [Print now], and then simply press the [SET] button to print the images in the print list.
- Any DPOF print job that you temporarily stop will be resumed from the next image.

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- Press the [MENU] button, choose [Photobook Set-up] on the [4] tab, and then choose how you will select images.

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- [] 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” (185), choose [Select] and press the [ ] button.

2. Choose an image.
   - Press the [4] buttons or turn the [ ] dial to choose an image, and then press the [SET] button.
   - [] is displayed.
   - To remove the image from the photobook, press the [SET] 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

- **Still Images**

1. Following the procedure in “Choosing a Selection Method” (185), choose [Select All Images] and press the [OK] button.
2. Press the [ ] buttons or turn the [ ] dial to choose [OK], and then press the [OK] button.

- **Movies**

Removing All Images from a Photobook

- **Still Images**

1. Following the procedure in “Choosing a Selection Method” (185), choose [Clear All Selections] and press the [OK] button.
2. Press the [ ] buttons or turn the [ ] dial to choose [OK], and then press the [OK] button.

- **Movies**
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 (19).
- Confirm that the battery pack is inserted facing the correct way (20).
- 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 (20).

The battery pack is swollen.
- Battery swelling is normal and does not pose any safety concerns. However, if battery swelling prevents the battery pack from fitting in the camera, contact a Canon Customer Support Help Desk.

### Display on a TV

Camera images look distorted or not displayed on a TV (169).
Shooting

Cannot shoot.
- In Playback mode (Page 106), press the shutter button halfway (Page 27).

Strange display on the screen under low light (Page 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 (Page 96).

$\text{[S]}$ flashes on the screen when the shutter button is pressed, and shooting is not possible (Page 38).

$\text{[Q]}$ is displayed when the shutter button is pressed halfway (Page 38).
- Set [IS Mode] to [Continuous] (Page 56).
- Raise the flash and set the flash mode to $\text{[S]}$ (Page 93).
- Increase the ISO speed (Page 80).
- 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 (Page 56).

Shots are out of focus.
- Press the shutter button halfway to focus on subjects before pressing it all the way down to shoot (Page 27).
- Make sure subjects are within focusing range (Page 213).
- Confirm that unneeded functions such as macro are deactivated.
- Try shooting with focus lock or AF lock (Page 89, 93).

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 $\text{[S]}$ (Page 93).
- Adjust brightness by using exposure compensation (Page 79).
- Use AE lock or spot metering (Page 79, 179).

Subjects look too bright, highlights are washed-out.
- Lower the flash and set the flash mode to $\text{[S]}$ (Page 35).
- Adjust brightness by using exposure compensation (Page 79).
- Use AE lock or spot metering (Page 179, 179).
- Reduce the lighting on subjects.

Shots look too dark despite the flash firing (Page 38).
- Shoot within flash range (Page 213).
- Adjust brightness by using flash exposure compensation or changing the flash output level (Page 94, 101).
- Increase the ISO speed (Page 80).

Subjects in flash shots look too bright, highlights are washed-out.
- Shoot within flash range (Page 213).
- Lower the flash and set the flash mode to $\text{[S]}$ (Page 35).
- Adjust brightness by using flash exposure compensation or changing the flash output level (Page 94, 101).

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 (Page 80).
- High ISO speeds in some shooting modes may cause grainy images (Page 61).

Subjects are affected by red-eye.
- Set [Red-Eye Lamp] to [On] (Page 57). The red-eye reduction lamp (Page 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 (Page 127).

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 (Page 160).

Shooting settings or Quick Set menu settings are not available.
The Babies or Children icon does not display.
- The Babies and Children icons will not display if the birthday is not set in face information (110). If the icons still do not display even when you set the birthday, re-register face information (110), or make sure that the date/time are set correctly (113).

Touch AF or Touch Shutter does not work.
- Touch AF or Touch Shutter will not work if you touch the edges of the screen. Touch closer to the center of the screen.

Shooting Movies

The elapsed time shown is incorrect, or recording is interrupted.
- Use the camera to format the memory card, or switch to a card that supports high-speed recording. Note that even if the elapsed time display is incorrect, the length of movies on the memory card corresponds to the actual recording time (160, 213).

Audio
- If ( ) is displayed and shooting stops automatically.
  - The camera's internal memory buffer filled up as the camera could not record to the memory card quickly enough. Try one of the following measures.
    - Use the camera to perform low-level formatting of the memory card (160).
    - Lower the image quality (54).
    - Switch to a memory card that supports high-speed recording (213).

Zooming is not possible.
- Zooming is not possible in ( ) mode (70).
- Zooming is not possible when shooting movies in ( ) mode (64).

Subjects look distorted.
- Subjects that pass in front of the camera quickly may look distorted. This is not a malfunction.

Playback

Playback is not possible.
- Image or movie playback may not be possible if a computer is used to rename files or alter the folder structure.

Memory Card

The memory card is not recognized.
- Image or movie playback may not be possible if a computer is used to rename files or alter the folder structure.
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 (153).
- Movies may take a long time to send.
- Do not use the camera near sources of Wi-Fi signal interference, such as microwave ovens, Bluetooth devices, or other equipment operating on the 2.4 GHz band.

Cannot connect to the access point.
- Confirm that the access point channel is set to a channel supported by the camera (211). Note that instead of auto channel assignment, it is advisable to specify a supported channel manually.

Wi-Fi

Cannot access the Wi-Fi menu by pressing the [Wi-Fi] 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 (157).
- 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, 142).
- 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 (211). Note that instead of auto channel assignment, it is advisable to specify a supported channel manually.
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 (120).

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 (120).

Cannot record!
- Shooting was attempted without a memory card in the camera. To shoot, insert a memory card facing the correct way (120).

Memory card error (160)
- If the same error message is displayed even after you have formatted a supported memory card (122) and have inserted it facing the correct way (120), contact a Canon Customer Support Help Desk.

Insufficient space on card
- There is not enough free space on the memory card to shoot (35, 69, 78, 98) or edit images (124). Either erase unneeded images (118) or insert a memory card with enough free space (20).

Touch AF unavailable
- Touch AF is not available in the current shooting mode (195).

Touch AF canceled
- The subject selected for Touch AF can no longer be detected (192).

Charge the battery (19)

No Image.
- The memory card does not contain any images that can be displayed.

Protected! (116)

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* (114), Magnify* (115), Rotate* (120), Favorites (121), Edit* (124), Print List* (183), and Photobook Set-up* (185).

Invalid selection range
- When specifying a range for image selection (117, 120, 184), 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 (183) or Photobook Set-up (185). Choose 998 images or less.
- Print List (183) or Photobook Set-up (185) 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 (116), Erase (116), Favorites (121), Print List (183), or Photobook Set-up (185).

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 [1] 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.

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 (120).

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 (120).

Cannot record!
- Shooting was attempted without a memory card in the camera. To shoot, insert a memory card facing the correct way (120).

Memory card error (160)
- If the same error message is displayed even after you have formatted a supported memory card (122) and have inserted it facing the correct way (120), contact a Canon Customer Support Help Desk.

Insufficient space on card
- There is not enough free space on the memory card to shoot (35, 69, 78, 98) or edit images (124). Either erase unneeded images (118) or insert a memory card with enough free space (20).

Touch AF unavailable
- Touch AF is not available in the current shooting mode (195).

Touch AF canceled
- The subject selected for Touch AF can no longer be detected (192).

Charge the battery (19)

No Image.
- The memory card does not contain any images that can be displayed.

Protected! (116)

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* (114), Magnify* (115), Rotate* (120), Favorites (121), Edit* (124), Print List* (183), and Photobook Set-up* (185).

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- Print List (183) or Photobook Set-up (185) 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 (116), Erase (116), Favorites (121), Print List (183), or Photobook Set-up (185).

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 [1] 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 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.
- If this error message is displayed when the setting is correct, restart the printer and complete the setting on the camera again.

Print error
- Check the paper size setting. If this error message is displayed when the setting is incorrect, restart the printer and complete the setting on the camera again.
- 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.
- 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.

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.

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 in the camera to receive the images is set to the locked position. Slide the write-protect switch to the unlocked position.

Receiving failed
Naming error!
- When the highest folder number (999), and the highest image number (9999) have been reached on the receiving camera, images cannot be received.

Insufficient space on server
- Delete unnecessary images uploaded to CANON iMAGE GATEWAY to create space.
- Save the images sent via Image Sync to your computer.

Check network settings
- Check to make sure your computer can connect to the Internet with the current network settings.

Other Accessories

The camera rattles when shaken.
- If you shake the camera when it is off, the lens will make a noise as it moves. This does not indicate damage.
On-Screen Information

Shooting (Information Display)

- **(1) Shooting mode (195), Scene icon (139)**
- **(2) Flash mode (93)**
- **(3) Flash exposure compensation / Flash output level (94, 101)**
- **(4) Shadow correction (83)**
- **(5) Metering method (79)**
- **(6) ND filter (83)**
- **(7) Self-timer (45)**
- **(8) Drive mode (47), AEB shooting (81), Focus bracketing (88)**

- **(10) White balance (83), Mercury lamp correction (53)**
- **(11) My Colors (85)**
- **(12) IS mode icon (40)**
- **(13) Battery level (193)**
- **(14) Still image compression (96), Recording pixel setting (96)**
- **(15) Recordable shots (212)**
- **(16) Zoom magnification (41), Digital tele-converter (89)**
- **(17) Movie quality (84)**
- **(18) Remaining time (213)**
- **(19) Histogram (108)**

- **(20) Quick Set menu (30)**
- **(21) Focus range (86, 86), AF lock (93)**
- **(22) AF frame (89), Spot AE point frame (79)**
- **(23) Shutter speed (98, 99)**
- **(24) Aperture value (99, 99)**
- **(25) Electronic level (85)**
- **(26) Exposure level (99)**
- **(27) ISO speed (80)**
- **(28) Grid lines (102)**

* In [103] mode, indicates the number of shots available.

### 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>![Battery Icon]</td>
<td>Slightly charge</td>
</tr>
<tr>
<td>![Battery Icon] (Blinking red)</td>
<td>Nearly depleted, but sufficient</td>
</tr>
<tr>
<td>![Battery Icon]</td>
<td>Depleted—charge the battery pack immediately</td>
</tr>
</tbody>
</table>

(29) DR correction (82)
(30) Hybrid Auto mode (37)
(31) Touch Shutter (46)
(32) Camera shake warning (38)
(33) Zoom bar (35)
(34) Audio recording mode (76)
(35) Time zone (162)
(36) Image stabilization (56)
(37) MF indicator (86)
(38) Exposure compensation (79)
Playback (Detailed Information Display)

(1) Movies (135, 1106)
(2) Current image no. / Total no. of images
(3) Histogram (1108)
(4) Battery level (1193)
(5) Wi-Fi signal strength (152)
(6) Image Sync (153)
(7) Image editing (124), Movie compression (129)
(8) Favorites (121)
(9) Protection (116)
(10) Folder number - File number (1159)
(11) Shooting date/time (21)
(12) Shooting mode (195)
(13) Shutter speed (138, 199)
(14) Aperture value (199, 199)
(15) Exposure value compensation level (179)
(16) ISO speed (180)

(17) Metering method (79)
(18) Flash (93), Flash exposure compensation (94)
(19) White balance (83)
(20) White balance correction (84), Mercury lamp correction (83), Creative Shot effect (60)
(21) My Colors (85, 126)
(22) Focus range (86, 86)
(23) ND filter (183)
(24) Red-eye correction (127), Short clip playback effect (76)
(25) High ISO NR (81)
(26) DR correction (82)
(27) Shadow correction (183)
(28) Image quality / Frame rate (movies) (54)
(29) Group playback (113)

Summary of Movie Control Panel

The following operations are available on the movie control panel, accessed as described in “Viewing” (106).

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 (129) (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 (129) (To continue skipping forward, keep holding down the [■] button.)

Erase Clip (displayed when a digest movie is selected, 129)

Edit (128)

Shown when the camera is connected to a PictBridge-compatible printer (180).

* Displays the frame approx. 4 sec. before or after the current frame.

During movie playback, you can skip back or forward (or to the previous or next clip) by pressing the [■] / [■] buttons.
## Functions and Menu Tables

### Functions Available in Each Shooting Mode

Icons in black, such as \(\text{C2}\), indicate that the function is available or automatically set in that shooting mode. Gray icons, such as \(\text{C2}\), indicate that the function is unavailable in that shooting mode.

#### Exposure Compensation (p.79)

- \(\text{C2} \cup \text{C1} \cup \text{M} \cup \text{Av} \cup \text{Tv} \cup \text{P} \cup \text{AUTO} \cup \text{ } \)

#### ISO Speed (p.80)

- **Auto**
- \(\text{125 – 12800}\)

#### AF operation (p.91)

- **ONE SHOT**
- **SERVO**

### Drive Mode (p.47)

- \(\text{C2} \cup \text{C1} \cup \text{M} \cup \text{Av} \cup \text{Tv} \cup \text{P} \cup \text{AUTO} \cup \text{ } \)

### Flash (p.93)

- \(\text{C2} \cup \text{C1} \cup \text{M} \cup \text{Av} \cup \text{Tv} \cup \text{P} \cup \text{AUTO} \cup \text{ } \)
Flash Exposure Compensation (94)

C2*/C1*/M/Av/Tv/P AUTO/CR/CH/CB/CA

Flash Output Level (101)

C2*/C1*/M/Av/Tv/P AUTO/CR/CH/CB/CA

Av/Tv Settings (98, 100)

Aperture Value

C2*/C1*/M/Av/Tv/P AUTO/CR/CH/CB/CA

Shutter Speed

C2*/C1*/M/Av/Tv/P AUTO/CR/CH/CB/CA

Bulb Setting

C2*/C1*/M/Av/Tv/P AUTO/CR/CH/CB/CA

Program Shift (79)

C2*/C1*/M/Av/Tv/P AUTO/CR/CH/CB/CA

AE Lock/FE Lock in Standby (79, 95)

C2*/C1*/M*/Av/Tv/P AUTO/CR/CH/CB/CA

AE Lock (during recording)/Exposure Compensation (75)

C2*/C1*/M/Av/Tv/P AUTO/CR/CH/CB/CA

AF Lock (when assigned to the or movie button) (93)

C2*/C1*/M/Av/Tv/P AUTO/CR/CH/CB/CA

Focus Range (86, 86)

C2*/C1*/M/Av/Tv/P AUTO/CR/CH/CB/CA

Manual Focus Switching When Recording Movies (74)

C2*/C1*/M/Av/Tv/P AUTO/CR/CH/CB/CA

Move AF Frame (89)

Center

C2*/C1*/M/Av/Tv/P AUTO/CR/CH/CB/CA

Periphery

C2*/C1*/M*/Av/Tv/P AUTO/CR/CH/CB/CA
Quick Set Menu

AF method (189)

- *1+Tracking
  - C2'' / C1'' / M / Av / Tv / P / AUTO / O I / O I / O I  / O I

- *1+Tracking
  - C2'' / C1'' / M / Av / Tv / P / AUTO / O I / O I / O I  / O I

Face Select (192)

- C2'' / C1'' / M / Av / Tv / P / AUTO / O I / O I / O I  / O I

Touch Shutter (46)

- C2'' / C1'' / M / Av / Tv / P / AUTO / O I / O I / O I  / O I

Still Image Shooting When Recording Movies (74)

- C2'' / C1'' / M / Av / Tv / P / AUTO / O I / O I / O I  / O I

Change Display (29)

- C2'' / C1'' / M / Av / Tv / P / AUTO / O I / O I / O I  / O I

Image quality

For details, see “Shooting Tab” (200).

Movie Quality (54, 54)

When Set to NTSC

- C2'' / C1'' / M / Av / Tv / P / AUTO / O I / O I / O I  / O I

- C2'' / C1'' / M / Av / Tv / P / AUTO / O I / O I / O I  / O I

- C2'' / C1'' / M / Av / Tv / P / AUTO / O I / O I / O I  / O I

- C2'' / C1'' / M / Av / Tv / P / AUTO / O I / O I / O I  / O I

- C2'' / C1'' / M / Av / Tv / P / AUTO / O I / O I / O I  / O I

- C2'' / C1'' / M / Av / Tv / P / AUTO / O I / O I / O I  / O I

*1 Options vary depending on the assigned shooting mode.
*2 [SERVO] when subject movement is detected.
*3 Not available, but switches to [ ] in some cases.
*4 FE lock not available in [ ] flash mode.
*5 Only when [MF] is selected.
*6 Only available when faces are detected.
*7 Only available for shooting, Subject designation not available.
When Set to PAL

Self-Timer Settings (46)

Delay³

C2"/C1"/M/Av/Tv/P/ND Filter

Shots⁴

ND Filter (83)

ND

Still Image Aspect Ratio (52)

16:9

3:2

4:3
Metering Method (79)

- *1 Options vary depending on the assigned shooting mode.
- *2 Synchronizes with the aspect ratio setting and is automatically set (65).
- *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 Quality].
- *6 White balance is not available.
- *7 Set in a range of 1 – 5: contrast, sharpness, color saturation, red, green, blue, and skin tone.

Shooting Tab

[1] Tab

Rec. Mode (61, 62, 74)

Image quality (53, 96)

JPEG

P Mode

Tv, Av, M, C1, and C2 Mode

Playback Mode

Wi-Fi Functions

Setting Menu

Accessories

Appendix

Index
Reverse Disp. (p. 28)
- On/Off

Display Mode (p. 173)
- Power Saving
  - Smooth

Still Image Aspect Ratio (p. 52)
- For details, see “Quick Set Menu” (p. 197).

Shooting information display (p. 102)

Display switching
- Grid1 ↔ Grid2

Grid display
- Grid1 ↔ Grid2

2.35:1/1.85:1/1.75:1/1.66:1/4:3

Histogram
- Brightness/RGB

Review image after shooting (p. 58)

Display Time
- Off/Quick

2 sec./4 sec./8 sec.

Index
- 201
Display Info
- Off
- Detailed

Touch Shutter ([ ]46)
- On
- Off

Face ID Settings ([ ]48)
- On/Off

Function Assignment ([ ]103)
- [ ] ring[/ ] dial[/ ] dial

Shortcut Button
- Off

Before Use
Basic Guide
Advanced Guide
Camera Basics
Auto Mode / Hybrid Auto Mode
Other Shooting Modes
P Mode
Tv, Av, M, C1, and C2 Mode
Playback Mode
Wi-Fi Mode
Setting Functions
Accessories
Appendix
Index
<table>
<thead>
<tr>
<th>Option</th>
<th>Setting Menu</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.6x/2.0x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AF-Point Zoom (55)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[3] Tab</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AF operation (91)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AF method (89)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AF Frame Size (89)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuous AF (91)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AF+MF (87)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AF-assist Beam (57)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Default value

For details, see “Functions Available in Each Shooting Mode” (195).

For details, see “Quick Set Menu” (197).
<table>
<thead>
<tr>
<th>MF Memory</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>On</td>
<td><img src="image1.png" alt="Image" /></td>
</tr>
<tr>
<td>Off</td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MF Peaking Settings</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Peaking</td>
<td></td>
</tr>
<tr>
<td>On/Off</td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Safety MF</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>On</td>
<td><img src="image4.png" alt="Image" /></td>
</tr>
<tr>
<td>Off</td>
<td><img src="image5.png" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recall Zoom/MF Settings</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoom Memory</td>
<td></td>
</tr>
<tr>
<td>On</td>
<td><img src="image6.png" alt="Image" /></td>
</tr>
<tr>
<td>Off</td>
<td><img src="image7.png" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IS Settings</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IS Mode</td>
<td></td>
</tr>
<tr>
<td>Off</td>
<td><img src="image8.png" alt="Image" /></td>
</tr>
</tbody>
</table>
**[5] Tab**

**ISO speed (81)**

**ISO Speed**

For details, see “Functions Available in Each Shooting Mode” (195).

**ISO Auto Settings**

**Max ISO Speed**

For details, see “Quick Set Menu” (197).

**Rate of Change**

For details, see “Quick Set Menu” (197).

**DR Correction (82)**

For details, see “Quick Set Menu” (197).

**Shadow Correct (83)**

For details, see “Quick Set Menu” (197).

**Light Metering (79)**

For details, see “Quick Set Menu” (197).

**ND Filter (83)**

For details, see “Quick Set Menu” (197).
**Flash Control (57, 94, 95, 101)**

**Flash Mode**

- Auto

- Manual

**Flash Exp. Comp**

For details, see “Functions Available in Each Shooting Mode” (195).

**Flash Output**

For details, see “Functions Available in Each Shooting Mode” (195).

**Shutter Sync.**

- 1st-curtain

- 2nd-curtain

**Red-Eye Lamp**

On/Off

**Safety FE**

- On

- Off

**[6] Tab**

**WB Correction (64)**

For details, see “Quick Set Menu” (197).

**My Colors (126)**

For details, see “Quick Set Menu” (197).

**High ISO NR (81)**

- Low/Standard/High

**Hg Lamp Corr. (53)**

On/Off

**Spot AE Point (79)**

Center/AF Point
<table>
<thead>
<tr>
<th>Safety Shift (99)</th>
<th>On</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C2/1/M/Av/Tv/P/AUTO/Obj/1/2</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
<tr>
<td></td>
<td>C2/1/M/Av/Tv/P/AUTO/Obj/1/2</td>
</tr>
<tr>
<td>[7] Tab</td>
<td></td>
</tr>
<tr>
<td>Blink Detection (56)</td>
<td>On</td>
</tr>
<tr>
<td></td>
<td>C2/1/M/Av/Tv/P/AUTO/Obj/1/2</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
<tr>
<td></td>
<td>C2/1/M/Av/Tv/P/AUTO/Obj/1/2</td>
</tr>
<tr>
<td>Display Area (42)</td>
<td>Large/Medium/Small</td>
</tr>
<tr>
<td></td>
<td>C2/1/M/Av/Tv/P/AUTO/Obj/1/2</td>
</tr>
<tr>
<td>Auto Settings (44)</td>
<td>Seek Assist</td>
</tr>
<tr>
<td></td>
<td>On</td>
</tr>
<tr>
<td></td>
<td>C2/1/M/Av/Tv/P/AUTO/Obj/1/2</td>
</tr>
</tbody>
</table>

**Before Use**

**Basic Guide**

**Advanced Guide**

**Camera Basics**

**Auto Mode / Hybrid Auto Mode**

**Other Shooting Modes**

**P Mode**

**Playback Mode**

**Wi-Fi Functions**

**Setting Menu**

**Accessories**

**Appendix**

**Index**
<table>
<thead>
<tr>
<th>Tab</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[8] Tab</td>
<td></td>
</tr>
<tr>
<td>Digest Type</td>
<td></td>
</tr>
<tr>
<td>Include Stills/No Stills</td>
<td>C2/C1/M/Av/Tv/P/ AUTO/ HDR/ 30s/ 60s</td>
</tr>
<tr>
<td>Movie Quality</td>
<td>For details, see “Quick Set Menu” (197).</td>
</tr>
<tr>
<td>Sound rec.</td>
<td></td>
</tr>
<tr>
<td>Manual</td>
<td>C2&quot;/C1&quot;/M/Av/Tv/P/ AUTO/ 37.5s/ 54s/ 76s</td>
</tr>
<tr>
<td>Disable</td>
<td>C2&quot;/C1&quot;/M/Av/Tv/P/ AUTO/ HDR/ 30s/ 60s/ 76s</td>
</tr>
<tr>
<td>Level</td>
<td></td>
</tr>
<tr>
<td>Wind Filter:Auto</td>
<td>C2&quot;/C1&quot;/M/Av/Tv/P/ AUTO/ 37.5s/ 54s/ 76s</td>
</tr>
<tr>
<td>Wind Filter: Off</td>
<td>C2&quot;/C1&quot;/M/Av/Tv/P/ AUTO/ HDR/ 30s/ 60s/ 76s</td>
</tr>
<tr>
<td>Attenuator: On/Off</td>
<td>C2&quot;/C1&quot;/M/Av/Tv/P/ AUTO/ HDR/ 30s/ 60s/ 76s</td>
</tr>
<tr>
<td>Attenuator: Auto</td>
<td>C2&quot;/C1&quot;/M/Av/Tv/P/ AUTO/ HDR/ 30s/ 60s/ 76s</td>
</tr>
</tbody>
</table>

*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.
## Set Up Tab

<table>
<thead>
<tr>
<th>Tab</th>
<th>Item</th>
<th>Reference Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Create Folder</td>
<td>159</td>
</tr>
<tr>
<td></td>
<td>File Numbering</td>
<td>159</td>
</tr>
<tr>
<td></td>
<td>Format</td>
<td>160</td>
</tr>
<tr>
<td></td>
<td>Video system</td>
<td>160</td>
</tr>
<tr>
<td></td>
<td>Electronic Level</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>Start-up Image</td>
<td>164</td>
</tr>
<tr>
<td>2</td>
<td>Eco Mode</td>
<td>161</td>
</tr>
<tr>
<td></td>
<td>Power Saving</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>LCD Brightness</td>
<td>162</td>
</tr>
<tr>
<td></td>
<td>Night Display</td>
<td>161</td>
</tr>
<tr>
<td></td>
<td>Time Zone</td>
<td>162</td>
</tr>
<tr>
<td></td>
<td>Date/Time</td>
<td>163</td>
</tr>
<tr>
<td></td>
<td>Lens Retraction</td>
<td>163</td>
</tr>
<tr>
<td>3</td>
<td>Language</td>
<td>163</td>
</tr>
<tr>
<td></td>
<td>Mute</td>
<td>163</td>
</tr>
<tr>
<td></td>
<td>Volume</td>
<td>163</td>
</tr>
<tr>
<td></td>
<td>Sound Options</td>
<td>164</td>
</tr>
<tr>
<td></td>
<td>Headphones</td>
<td>177</td>
</tr>
<tr>
<td></td>
<td>Hints &amp; Tips</td>
<td>164</td>
</tr>
</tbody>
</table>

## My Menu Tab

<table>
<thead>
<tr>
<th>Tab</th>
<th>Item</th>
<th>Reference Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>My Menu settings</td>
<td>105</td>
</tr>
</tbody>
</table>

## Playback Tab

<table>
<thead>
<tr>
<th>Tab</th>
<th>Item</th>
<th>Reference Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Protect</td>
<td>116</td>
</tr>
<tr>
<td></td>
<td>Rotate</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>Erase</td>
<td>118</td>
</tr>
<tr>
<td></td>
<td>Favorites</td>
<td>121</td>
</tr>
<tr>
<td></td>
<td>Slideshow</td>
<td>115</td>
</tr>
<tr>
<td>2</td>
<td>Album Playback</td>
<td>130</td>
</tr>
<tr>
<td></td>
<td>List/Play Digest Movies</td>
<td>109</td>
</tr>
</tbody>
</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.

### Print Tab

<table>
<thead>
<tr>
<th>Item</th>
<th>Reference Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print</td>
<td>–</td>
</tr>
<tr>
<td>Select Images &amp; Qty.</td>
<td>184</td>
</tr>
<tr>
<td>Select Range</td>
<td>184</td>
</tr>
<tr>
<td>Select All Images</td>
<td>184</td>
</tr>
<tr>
<td>Clear All Selections</td>
<td>185</td>
</tr>
<tr>
<td>Print Settings</td>
<td>183</td>
</tr>
</tbody>
</table>

### Handling Precautions

- ● The camera is a high-precision electronic device. Avoid dropping it or subjecting it to strong impact.
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Specifications

Camera Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camera Effective Pixels (Max.)</td>
<td>Approx. 20.2 million pixels</td>
</tr>
<tr>
<td>Lens Focal Length</td>
<td>25x zoom: 8.8 (W) – 220.0 (T) mm (35mm film equivalent: 24 (W) – 600 (T) mm)</td>
</tr>
<tr>
<td>LCD Monitor</td>
<td>3.2-type color TFT LCD</td>
</tr>
<tr>
<td></td>
<td>Effective Pixels: Approx. 1,620,000 dots</td>
</tr>
<tr>
<td>File Format</td>
<td>Design rule for Camera File system, DPOF (version 1.1) compliant</td>
</tr>
<tr>
<td>Data Type</td>
<td>Still Images: Exif 2.3 (JPEG), RAW (CR2 (Canon Original))</td>
</tr>
<tr>
<td></td>
<td>Movies: MP4 (Video: MPEG-4 AVC/H.264; Audio: MPEG-4 AAC-LC (stereo))</td>
</tr>
<tr>
<td>Interface</td>
<td>Hi-speed USB</td>
</tr>
<tr>
<td></td>
<td>HDMI output</td>
</tr>
<tr>
<td></td>
<td>Microphone input</td>
</tr>
<tr>
<td></td>
<td>Headphone output</td>
</tr>
<tr>
<td>Power Source</td>
<td>Battery Pack NB-10L</td>
</tr>
<tr>
<td></td>
<td>AC Adapter Kit ACK-DC80</td>
</tr>
<tr>
<td>Dimensions (Based on CIPA Guidelines)</td>
<td>123.3 x 76.5 x 105.3 mm (4.85 x 3.01 x 4.15 in.)</td>
</tr>
<tr>
<td>Weight (Based on CIPA Guidelines)</td>
<td>Approx. 733 g (approx. 1.62 lb.; including the battery pack/batteries and memory card)</td>
</tr>
<tr>
<td></td>
<td>Approx. 690 g (approx. 1.52 lb.; camera body only)</td>
</tr>
</tbody>
</table>

Wi-Fi

- Standards: IEEE 802.11b/g/n*
  * 2.4 GHz band only
- Transmission Methods: OFDM modulation (IEEE 802.11g/n)
  DSSS modulation (IEEE 802.11b)
- Communication Modes: Infrastructure mode**1, Ad hoc mode**2
  **1 Supports Wi-Fi Protected Setup
  **2 Wi-Fi CERTIFIED IBSS
- Supported Channels: 1 – 11
- Security: WEP, WPA-PSK (AES/TKIP), WPA2-PSK (AES/TKIP)

Digital Zoom Focal Length (35mm equivalent)

- Digital Zoom [Standard]: 24 – 2400 mm
  (Represents the combined focal length of optical and digital zoom.)
- Digital Tele-Converter 1.6x: 38.4 – 960 mm
- Digital Tele-Converter 2.0x: 48.0 – 1200 mm
Number of Shots/Recording Time, Playback Time

<table>
<thead>
<tr>
<th>Number of Shots</th>
<th>Approx. 300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Shots (Eco Mode On)</td>
<td>Approx. 410</td>
</tr>
<tr>
<td>Movie Recording Time*1</td>
<td>Approx. 1 hour, 5 minutes</td>
</tr>
<tr>
<td>Movie Recording Time (Continuous Shooting*2)</td>
<td>Approx. 2 hours, 5 minutes</td>
</tr>
<tr>
<td>Playback Time*3</td>
<td>Approx. 6 hours</td>
</tr>
</tbody>
</table>

*1  Time under these conditions.
- 1:1 mode
- Quality: [ ]
- With repeated recording, stopping, zooming, and turning the camera on and off

*2  Time under these conditions.
- 1:1 mode
- Quality: [ ]
- Without zooming or other operations
- Recording is resumed immediately after stopping automatically at a file size of 4 GB or a time of about 29:59

*3  Time when playing back a slideshow of still images.
- The number of shots that can be taken is based on measurement guidelines of the Camera & Imaging Products Association (CIPA).
- Under some shooting conditions, the number of shots and recording time may be less than mentioned above.
- Number of shots/time with a fully charged battery pack.

Number of Shots per Memory Card

The number of shots at an aspect ratio (52) of 3:2 per memory card is as follows. Note that the number of shots available varies by aspect ratio.

<table>
<thead>
<tr>
<th>Number of Recording Pixels</th>
<th>Compression Ratio</th>
<th>Number of Shots per Memory Card (Approx. shots)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L (Large) 20M/5472x3648</td>
<td>[ ]</td>
<td>1686</td>
</tr>
<tr>
<td>M1 (Medium 1) 12M/4320x2880</td>
<td>[ ]</td>
<td>2729</td>
</tr>
<tr>
<td>M2 (Medium 2) 4M/2304x1536</td>
<td>[ ]</td>
<td>4152</td>
</tr>
<tr>
<td>S (Small) 0.3M/720x480</td>
<td>[ ]</td>
<td>69418</td>
</tr>
<tr>
<td>RAW Images 5472x3648</td>
<td>–</td>
<td>610</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.
### Flash Range

<table>
<thead>
<tr>
<th>Maximum wide angle ((\text{HI}))</th>
<th>60 cm – 6.8 m (2.0 – 22 ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum telephoto ((\text{LO}))</td>
<td>85 cm – 3.1 m (2.8 – 10 ft.)</td>
</tr>
</tbody>
</table>

### Continuous Shooting Speed

- Speed when using an 16 GB UHS-I memory card specified in Canon testing standards. Note that the number of shots varies depending on subjects, the brand of memory card, and other factors.

<table>
<thead>
<tr>
<th>Continuous Shooting Mode</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Approx. 5.9 shots/sec.</td>
</tr>
</tbody>
</table>

*1 Actual frame rate: 23.976 fps.  
*2 52 min. 12 sec. for iFrame movies (\(\text{II}\)).

- The values in the table are based on Canon measurement conditions and may change depending on the subject, memory card and camera settings.
- Recording will automatically stop when the clip file size reaches 4 GB, or when the recording time reaches approximately 29 minutes and 59 seconds when shooting in \(\text{AUTO}\), \(\text{Wide Zoom}\), or \(\text{Wide Zoom}\) or \(\text{1}\) or \(\text{2}\), or approximately 1 hour when shooting in \(\text{Wide Zoom}\) or \(\text{1}\) or \(\text{2}\).
- Recording may stop even if the maximum clip length has not been reached on some memory cards. SD Speed Class 10 or higher memory cards are recommended.
Shutter Speed

<table>
<thead>
<tr>
<th>Mode</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO</td>
<td>1 – 1/2000 sec</td>
</tr>
<tr>
<td>(sec.)</td>
<td></td>
</tr>
<tr>
<td>Availability</td>
<td>30, 25, 20, 15, 13, 10, 8, 6, 5, 4, 3.2, 2.5, 2, 1.6, 1.3, 1, 0.8, 0.6, 0.5, 0.4, 0.3, 1/4, 1/5, 1/6, 1/8, 1/10, 1/13, 1/15, 1/20, 1/25, 1/30, 1/40, 1/50, 1/60, 1/80, 1/100, 1/125, 1/160, 1/200, 1/250, 1/320, 1/400, 1/500, 1/640, 1/800, 1/1000, 1/1250, 1/1600, 1/2000</td>
</tr>
<tr>
<td>Note</td>
<td>In mode, shutter speeds of 1/25 seconds or slower are not available.</td>
</tr>
</tbody>
</table>

Aperture

<table>
<thead>
<tr>
<th>Mode</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Av)</td>
<td>f/2.8, f/3.2, f/3.5, f/4.0, f/4.5, f/5.0, f/5.6, f/6.3, f/7.1, f/8.0, f/9.0, f/10, f/11</td>
</tr>
<tr>
<td>Available</td>
<td>f/2.8 / f/11 (W) – f/5.6 / f/11 (T)</td>
</tr>
<tr>
<td>Note</td>
<td>Depending on the zoom position, some aperture values may not be available.</td>
</tr>
</tbody>
</table>

Battery Pack NB-10L

<table>
<thead>
<tr>
<th>Type</th>
<th>Rechargeable lithium-ion battery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Voltage</td>
<td>7.4 V DC</td>
</tr>
<tr>
<td>Nominal Capacity</td>
<td>920 mAh</td>
</tr>
<tr>
<td>Charging Cycles</td>
<td>Approx. 300 times</td>
</tr>
<tr>
<td>Operating Temperatures</td>
<td>0 – 40 °C (32 – 104 °F)</td>
</tr>
</tbody>
</table>

Battery Charger CB-2LC/CB-2LCE

<table>
<thead>
<tr>
<th>Rated Input</th>
<th>100 – 240 V AC (50/60 Hz), 0.18 A (100 V) – 0.12 A (240 V)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Output</td>
<td>8.4 V DC, 0.7 A</td>
</tr>
<tr>
<td>Charging Time</td>
<td>Approx. 1 hr. 50 min. (when using NB-10L)</td>
</tr>
<tr>
<td>Charge Indicator</td>
<td>Charging: orange / Fully charged: green</td>
</tr>
<tr>
<td>Operating Temperatures</td>
<td>5 – 40 °C (41 – 104 °F)</td>
</tr>
</tbody>
</table>
### Index

**A**  
AC adapter kit 168, 170  
Accessories 168  
AEB shooting 81  
AE lock 79  
AF frames 89  
AF lock 93  
AF method 89  
Aspect ratio 52  
Attenuator 76  
AUTO mode (shooting mode) 23, 35  
Av (shooting mode) 99

**B**  
Background defocus  (shooting mode) 66  
Batteries  
→ Date/time (date/time battery)  
Battery charger 2, 168  
Battery pack  
Charging 19  
Eco mode 161  
Level 193  
Power saving 27  
Black and white images 85  
Blink detection 56

**C**  
Camera  
Reset all 165  
Camera access point mode 140  
Camera Connect 134  
CameraWindow 178  
CANON iMAGE GATEWAY 145  
Clock 34  
Color (white balance) 83  
Compression 96  
Connecting via an access point 142  
Continuous shooting 40, 47  
Creative filters (shooting mode) 62  
Creative shot 59  
Cropping 125, 181  
Custom white balance 84

**D**  
Date/time  
Changing 21  
Date/time battery 22  
Settings 21  
World clock 162  
DC coupler 170  
Defaults → Reset all  
Digital tele-converter 89  
Digital zoom 41  
Display language 22  
DPOF 183  
Dynamic Range Correction 82

**E**  
Eco mode 161  
Editing  
Cropping 125  
i-Contrast 126  
My Colors 126  
Red-eye correction 127  
Resizing images 124  
Editing or erasing connection information 157  
Electronic level 55  
Erasing 118  
Erasing all 119  
Error messages 191  
Exposure  
AE lock 79  
Compensation 79  
FE lock 95  
External microphone 177

**F**  
Face ID 48  
Face select 92  
Face self-timer (shooting mode) 69  
Favorites 121  
FE lock 95  
File numbering 159  
Fireworks (shooting mode) 61  
Fish-eye effect (shooting mode) 64  
Flash  
Deactivating flash 94  
Flash exposure compensation 94  
On 93  
Slow synchro 94  
Focus bracketing 88  
Focus check 115  
Focusing  
AF frames 89  
AF lock 93  
AF-point zoom 55  
MF peaking 88  
Servo AF 91  
Touch AF 92  
Focus lock 89  
Focus range  
Macro 86  
Manual focus 86  
Framing assist 42

**G**  
Geotagging images 155  
GPS information display 108  
Grid lines 102

**H**  
Handheld nightscene (shooting mode) 61  
HDMI cable 169  
High dynamic range (shooting mode) 62  
High ISO NR 81  
Household power 170  
Hybrid Auto (shooting mode) 37

**I**  
i-Contrast 126  
iFrame movies (movie mode) 77  
Image quality → Compression ratio (image quality)  
Images  
Display period 58  
Erasing 118  
Playback → Viewing  
Protecting 116  
Image stabilization 56, 97  
Image Sync 153  
Indicator 33, 57  
ISO speed 80

**J**  
Jump display 112

**L**  
LCD monitor 28
M
M (shooting mode) 99
Macro (focus range) 86
Magnified display 115
Manual focus (focus range) 86
Manual (movie mode) 101
Memory cards 2 → Memory cards
Recording time 213
Menu
Basic operations 31
Table 195
Mercury lamp correction 53
Metering method 79
Miniature effect (shooting mode) 64
Mobile device connection button 136
Monochrome (shooting mode) 67
Movies
Editing 128
Image quality (recording pixels/frame rate) 54
Recording time 213
Multi-area White Balance 53
My Colors 85, 126

N
ND filter 83
Neck strap → Strap
Nostalgic (shooting mode) 63

P
P (shooting mode) 78
Package contents 2
Photobook set-up 185
PictBridge 169, 180
Playback → Viewing
Portrait (shooting mode) 61
Poster effect (shooting mode) 62
Power 168
→ AC adapter kit,
→ Battery charger,
→ Battery pack
Power saving 27
Printing 180 → Printing
Program AE 78
Protecting 116

Q
Quick Set menu
Table 197

R
RAW 96
Recording pixels (image size) 53, 96
Red-eye correction 127
Remote shooting 156
Reset all 165
Resizing images 124
Rotating 120

S
Saving images to a computer 178
Screen
Display language 22
Icons 193, 194
Menu → FUNC. menu, Menu
SD/SDHC/SDXC memory cards
→ Memory cards
Searching 111
Self-timer 45
2-second self-timer 45
Customizing the self-timer 46
Face self-timer (shooting mode) 69
Wink self-timer (shooting mode) 68
Sending images 150
Sending images to another camera 150
Sending images to a smartphone 134
Sending images to Web services 145
Sepia tone images 85
Servo AF 91
Shadow correction 83
Shooting
→ Shooting date/time → Date/time
→ Shooting information 102, 193
Short clips (movie mode) 76
Slideshow 115
Smart Shutter (shooting mode) 67
Smile (shooting mode) 67
Snow (shooting mode) 61
Soft focus (shooting mode) 66
Software
Installation 140, 178
→ Saving images to a computer 178
Sounds 163
Sports (shooting mode) 60
Standard (movie mode) 74
Star (shooting mode) 70
Star nightscape (shooting mode) 70
Star time-lapse movie (shooting mode) 71
Star trails (shooting mode) 70
Story Highlights 130
Strap 2
Super vivid (shooting mode) 62

T
Terminal 169, 180
Touch Actions 123
Touch AF 92
Touch Shutter 46
Toy camera effect (shooting mode) 65
Traveling with the camera 162
Troubleshooting 187
TV display 169
Tv (shooting mode) 98

V
Viewing 24
→ Image search 111
→ Index display 110
→ Jump display 112
→ Magnified display 115
→ Single-image display 24
→ Slideshow 115
→ TV display 169

W
White balance (color) 83
Wi-Fi functions 133
Wi-Fi menu 138
Wind filter 38, 76
Wink self-timer (shooting mode) 68
World clock 162

Z
Zoom 23, 36, 41, 42
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 of earnings resulting from a degradation or disappearance of content.
- When transferring this product to another person, disposing of it, or sending it for repair, be sure to note the wireless LAN settings and reset the product to its default settings (erase settings) if necessary.
- Canon will not make compensation for damages resulting from loss or theft of the product. Canon accepts no responsibility for damages or loss resulting from unauthorized access or use of target devices registered on this product due to loss or theft of the product.

- Be sure to use the product as directed in this guide. Be sure to use the wireless LAN function of this product within the guidelines noted in this guide. Canon accepts no responsibility for damages or loss if the function and product are used in ways other than as described in this guide.
- Do not use the wireless LAN function of this product near medical equipment or other electronic equipment. Use of the wireless LAN function near medical equipment or other electronic equipment may affect operation of those devices.

Radio Wave Interference Precautions

- This product may receive interference from other devices that emit radio waves. To avoid interference, be sure to use this product as far away as possible from such devices, or avoid using the devices at the same time as this product.

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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