Canon

PowerShot G7X Mark III

Advanced User Guide

Contents
Camera Basics
Shooting
Playback
Wireless Features
Function Settings
Accessories
Appendix
Index

ENGLISH

These operating instructions assume you are using PowerShot G7X Mark III firmware version 1.3.0 or later.

CT0-D226-E

© CANON INC. 2019

Preliminary Notes and Legal Information

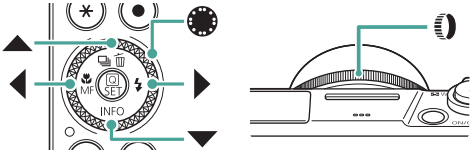
- Take and review some test shots initially to make sure the images were recorded correctly. Please note that Canon Inc., its subsidiaries and affiliates, and its distributors are not liable for any consequential damages arising from any malfunction of a camera or accessory, including memory cards, that result in the failure of an image to be recorded or to be recorded in a way that is machine readable.
- The user's unauthorized photographing or recording (video and/or sound) of people or copyrighted materials may invade the privacy of such people and/or may violate others' legal rights, including copyright and other intellectual property rights. Note that restrictions may apply even when such photographing or recording is intended solely for personal use.
- The camera warranty is valid only in the area of purchase. In case of camera problems while abroad, return to the area of purchase before contacting a Customer Support Help Desk.
- Although the screen is produced under extremely high-precision manufacturing conditions and more than 99.99% of the pixels meet design specifications, in rare cases some pixels may be defective or may appear as red or black dots. This does not indicate camera damage or affect recorded images.
- When the camera is used over an extended period, it may become warm. This does not indicate damage.

Introduction

- To jump to the beginning of a chapter, click the chapter title along the right side of the top page.
- For basic page navigation, click the icons at the bottom of each page.
  : Go to the top page
  : Return to the previous page
  : Go back a page
  : Go forward a page
- Instructions in this guide apply to the camera under default settings.
- Tabs such as AUTO identify which modes are used in the shooting instructions. Some features are also available in other modes.
- : Important information, or tips for expert use

Text Conventions

- 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 controls are represented by icons.



- On-screen icons and text are indicated in brackets.
- Numbers in some figures and illustrations correspond to numbers in the steps.
- 📖 xx: Pages with related information (in this example, “xx” represents a page number)
- For convenience, all supported memory cards are simply referred to as the “memory card”.

Contents

Preliminary Notes and Legal Information 2
Introduction 3
Text Conventions 3
Common Camera Operations 13
Safety Instructions 16

Camera Basics 19

Getting Ready 20
Attaching the Strap 20
Charging the Battery Pack 21
Preparing a Memory Card 22
Inserting/Removing the Battery Pack and Memory Card 23
Setting the Date, Time, Time Zone, and Language 25
Holding the Camera 28
Trying the Camera Out 29
Shooting 29
Viewing 31
Part Names 32
Front 32
Back 33
Adjusting the Screen Angle 34
Tilting the Screen Downward 34
Tilting the Screen Upward 34
Indicator Display 35
Setting a Shooting Mode 36
Configuring Camera Features 37
Quick Control Screen 37
Menu Screen 39
Features Available on the Quick Control Screen 41

Menu Settings 42
Shooting Mode Screen 44
Frames on the Shooting Screen 45
Shooting Display Options 46
Playback Display Options 47
Touch Operation 48
Choosing Subjects 48
Quick Control Screen 49
Menu Screen 50
Viewing 52
On-Screen Keyboard 54
Shooting 55
Shooting with Camera-Determined Settings (Auto Mode/Hybrid Auto Mode) 56
Image Stabilization Icons 59
Shooting with Effects Applied (Creative Assist) 60
Shooting in Hybrid Auto Mode 62
Shooting Specific Scenes (Special Scene Mode) 63
Shooting Yourself under Optimal Settings (Self Portrait Mode) 67
Shooting Panoramas (Panorama Mode) 68
Capturing Subjects Against Flowing Backgrounds (Panning Mode) 70
Shooting People against Starry Skies (Star Portrait Mode) 71
Shooting Night Scenes under Starry Skies (Star Nightscape Mode) 74
Shooting Star Trails (Star Trails Mode) 76
Recording Movies of Star Movement (Star Time-Lapse Movie Mode) 78
Shooting with Image Effects (Creative Filters Mode) 82
Shots Resembling Miniature Models (Miniature Effect) 87
Recording a Variety of Movies (Movie Mode) 88

Vlogging (Video blog recording mode) 89
Recording Movies at Specific Shutter Speeds and Aperture Values (Movie Manual Exposure) 90
Recording HDR Movies 91
Shooting in Program AE (P Mode) 92
Shooting at Specific Shutter Speeds (Tv Mode) 93
Shooting at Specific Aperture Values (Av Mode) 94
Shooting at Specific Shutter Speeds and Aperture Values (M Mode) 95
Shooting Long Exposures (Bulb) 97
Zooming In Closer on Subjects (Digital Zoom) 98
Locking Image Brightness / Exposure (AE Lock) 99
Shooting Close-Ups (Macro) 100
Shooting in Manual Focus Mode 101
Easily Identifying the Focus Area (MF Peaking) 103
Shooting with AF Lock 104
Shooting at Preset Focal Lengths (Step Zoom) 105
Changing Image Quality 106
Capturing in RAW Format 106
Changing the Aspect Ratio 108
Changing the Image Display Period after Shots 109
Changing the Flash Mode 110
Locking Brightness / Exposure in Flash Photography (FE Lock) 111
Configuring Flash Settings 113
Adjusting Flash Exposure Compensation 113
Adjusting Flash Output 114
Changing the Flash Timing 115
Reducing Red-Eye 115
Configuring Safety FE 116

Continuous Shooting 117
Using the Self-Timer 118
Shooting in RAW Burst Mode 119
Adding a Date Stamp 121
Adjusting Image Brightness (Exposure Compensation) 122
Auto Exposure Bracketing (AEB Shooting) 123
Changing the ISO Speed for Stills 125
Changing the ISO Speed Range 125
Adjusting ISO Auto Range 126
Setting the Minimum Shutter Speed for ISO Auto 126
Changing the ISO Speed for Movies 128
Changing the ISO Speed Range 128
Adjusting the Maximum ISO Auto Setting 129
Auto Correction of Brightness and Contrast (Auto Lighting Optimizer) 130
Shooting Bright Subjects (Highlight Tone Priority) 131
Adjusting ND Filter Settings 132
Changing the Metering Method 133
Setting the Metering Timer 134
Easily Adjusting Exposure (Zebra Settings) 135
Configuring Exposure Simulation 137
Capturing Natural Colors (White Balance) 138
Custom White Balance 140
Customizing Colors (Picture Style) 142
Customizing Picture Styles 144
Saving Customized Picture Styles 147
Reducing Noise in High-ISO Shooting 148
Using Multi Shot Noise Reduction 148
Shooting by Touching the Screen (Touch Shutter) 150
Shooting with the Electronic Shutter 151

Shooting with Servo AF 152
Choosing the AF Method 153
Moving the AF Point 154
Changing the Focus Setting 155
Configuring the AF-Assist Beam 156
Continuous Shooting as the Focal Distance is Changed (Focus Bracketing) 157
Fine-Tuning the Focus 160
Changing the IS Mode Settings 161
Correcting Severe Camera Shake 162
Using Auto Level 163
Using Digital Tele-Converter 164
Changing Movie Recording Size 165
Recording Movies for Slow-Motion Playback (High Frame Rate) 166
Configuring Sound Recording Settings 167
Adjusting the Recording Volume 167
Wind Filter 168
Attenuator 168
Configuring Movie Servo AF 169
Using Auto Slow Shutter 170
Miniature Model Effect in Movies (Miniature Effect Movie) 171
Recording Video Snapshots 173
Recording Time-Lapse Movies 175
Recording Movies of Yourself 177
Using the Movie Self-Timer 178
Configuring Information Display for HDMI Output 179
Setting the Type of Digest Movie 180
Playback 181
Viewing 182

Magnifying Images 184
Viewing Digest Movies 185
Finding Images in an Index 186
Editing Movies 187
Removing the Beginning/End of Movies 187
Extracting Frames of 4K Movies as Stills 189
Editing Digest Movies 190
Extracting Stills from RAW Burst Images 192
Protecting Images 194
Protecting Multiple Images 195
Rotating Images 197
Changing Movie Rotation Information 198
Erasing Images 199
Erasing Multiple Images at Once 200
Adding Images to Print Orders (DPOF) 202
Printing Images Added to the Print Order (DPOF) 203
Adding Images to a Photobook 204
Applying Filter Effects to Images (Creative Filters) 205
Processing RAW Images 206
Applying Your Favorite Effects (Creative Assist) 208
Enabling Quick Control RAW Processing 209
Correcting Red-Eye 210
Combining Video Snapshots 211
Cropping 213
Resizing Images 215
Rating Images 216
Viewing Slideshows 217
Finding Images Matching Specified Conditions 218
Using the Control Ring to Find Images 219
Customizing Playback Information Display 220

Starting Playback from the Last Image Displayed 221

Wireless Features 222

Available Wireless Features..... 223

Saving Camera Images to a Smartphone 225

Connecting to Smartphones via Wi-Fi with the Wi-Fi Button.....229

Restricting Image Viewing 231

Features Used with Smartphones..... 232

Sending Images to a Smartphone Automatically as You Shoot...232

Shooting Remotely as You View a Live Image on the Smartphone 232

Controlling the Camera from a Smartphone.....233

Geotagging Images as You Shoot 233

Connecting to Printers via Wi-Fi..... 235

Establishing a Connection via an Access Point.....237

Sending Images to a Computer Automatically 239

Uploading Images to Web Services 243

Registering image.canon.....243

Uploading Images to image.canon 246

Streaming Images 247

Live Streaming.....249

Reconnecting via Wi-Fi 253

Ending Wi-Fi Connections..... 254

Clearing Information of Devices Paired via Bluetooth..... 255

Changing or Deleting Connection Settings 256

Function Settings..... 257

Selecting and Creating Folders..... 258

Changing File Numbering 259

Configuring Auto Rotation of Vertical Images..... 260

Adding Orientation Information to Movies 261

Formatting Memory Cards 262

Setting Start-up Screen Display 264
Using Eco Mode 265
Adjusting Power-Saving Features 266
Adjusting Screen Brightness 267
Switching the Color of Screen Information 268
Adjusting the Date, Time, and Time Zone 269
Changing the Language 270
Lens Retraction Timing 271
Setting the Video System 272
Adjusting the Touch-Screen Panel 273
Adjusting Beeping 274
Adjusting the Volume 275
Setting the HDMI Output Resolution 276
RAW Playback on an HDR TV 277
Customizing Shooting Information Display 278
Setting Reverse Display 280
Metric / Non-Metric Display 281
Configuring the Feature Guide 282
Configuring Custom Functions 283
Customizing Buttons 284
Custom Shooting Modes (C Mode) 286
Restoring Default Camera Settings 288
Setting Copyright Information to Record in Images 289
Downloading Manuals/Software from a QR Code 290
Displaying Certification Logos 291
Saving Commonly Used Shooting Menu Items (My Menu) 292
Renaming My Menu Tabs 293
Deleting a My Menu Tab 293
Deleting All My Menu Tabs 293

Deleting All Added Items 294
Customizing My Menu Display 294

Accessories 295

Optional Accessories 296
Power Supplies 296
Flash 296
Others 297
Printers 297
Using Optional Accessories 298
Playback on a TV 298
Using a USB Power Adapter to Charge/Power the Camera 300
Shooting Remotely 302
Using an External Microphone 303
Saving Images to a Computer 304
Printing Images 305

Appendix 307

Handling Precautions 308
Troubleshooting 309
On-Screen Information 314
When Shooting 314
During Playback 316
Precautions for Wireless Features 318
Security Precautions 319
Third-Party Software 320
Personal Information and Security Precautions 323
Trademarks and Licensing 324
Disclaimer 326
Index 327

Common Camera Operations

Shoot

- Use camera-determined settings (Auto Mode, Hybrid Auto Mode)
  - 29, 62
- Shoot yourself under optimal settings (Self Portrait)
  - 67
- Shoot panoramas (Panoramic Shot)
  - 68

Shooting people well



Portraits
(63)

Matching specific scenes



Handheld Night Scene
(63)



Fireworks
(63)



HDR Backlight Control
(63)



Food
(63)

Applying special effects



Smooth Skin
(63)



Monochrome
(82)



Background Defocus
(82)



Soft Focus
(📖82)



Fish-Eye Effect
(📖82)



Like Watercolor Paintings
(📖82)



Toy Camera Effect
(📖82)



Miniature Effect
(📖87, 📖171)

- Focus on faces
  - 📖29, 📖63, 📖153
- Without using the flash (Flash Off)
  - 📖110
- Include yourself in the shot (Self-Timer)
  - 📖118
- Add a date stamp
  - 📖121
- Movie clips and photos together
  - 📖62
- Convey a sense of speed with a blurred background
  - 📖70
- Shoot starry skies
  - 📖71, 📖74, 📖76, 📖78

▶ View

- View images
  - 📖31, 📖181
- Automatic playback (Slide Show)
  - 📖217
- On a TV
  - 📖298

- Browse through images quickly
  - 📖186
- Erase images
  - 📖199

Record/View Movies

- Record movies
  - 📖29, 📖88
- View movies
  - 📖31

Print

- Print pictures
  - 📖305

Save

- Save images to a computer
  - 📖304

Use Wi-Fi Features

- Send images to a smartphone
  - 📖225, 📖232
- Print pictures
  - 📖235
- Share images online
  - 📖243
- Stream images
  - 📖247
- Send images to a computer
  - 📖239

Safety Instructions

- Be sure to read these instructions in order to operate the product safely.
- Follow these instructions to prevent injury or harm to the operator of the product or others.

⚠ WARNING	Denotes the risk of serious injury or death.

- Keep the product out of the reach of young children.

A strap wrapped around a person's neck may result in strangulation.

- Use only power sources specified in this instruction manual for use with the product.
- Do not disassemble or modify the product.
- Do not expose the product to strong shocks or vibration.
- Do not touch any exposed internal parts.
- Stop using the product in any case of unusual circumstances such as the presence of smoke or a strange smell.
- Do not use organic solvents such as alcohol, benzine or paint thinner to clean the product.
- Do not get the product wet. Do not insert foreign objects or liquids into the product.
- Do not use the product where flammable gases may be present.

This may cause electric shock, explosion or fire.

- Observe the following instructions when using commercially available batteries or provided battery packs.
  - Use batteries/battery packs only with their specified product.
  - Do not heat batteries/battery packs or expose them to fire.
  - Do not charge batteries/battery packs using non-authorized battery chargers.
  - Do not expose the terminals to dirt or let them come into contact with metallic pins or other metal objects.
  - Do not use leaking batteries/battery packs.
  - When disposing of batteries/battery packs, insulate the terminals with tape or other means.

This may cause electric shock, explosion or fire.

If a battery/battery pack leaks and the material contacts your skin or clothing, flush the exposed area thoroughly with running water. In case of eye contact, flush thoroughly with copious amounts of clean running water and seek immediate medical assistance.

- Observe the following instructions when using a battery charger or AC adapter.
  - Periodically remove any dust buildup from the power plug and power outlet using a dry cloth.
  - Do not plug in or unplug the product with wet hands.
  - Do not use the product if the power plug is not fully inserted into the power outlet.
  - Do not expose the power plug and terminals to dirt or let them come into contact with metallic pins or other metal objects.
  - Do not touch the battery charger or AC adapter connected to a power outlet during lightning storms.
  - Do not place heavy objects on the power cord. Do not damage, break or modify the power cord.
  - Do not wrap the product in cloth or other materials when in use or shortly after use when the product is still warm in temperature.
  - Do not leave the product connected to a power source for long periods of time.

This may cause electric shock, explosion or fire.

- Do not allow the product to maintain contact with the same area of skin for extended periods of time during use.

This may result in low-temperature contact burns, including skin redness and blistering, even if the product does not feel hot. The use of a tripod or similar equipment is recommended when using the product in hot places and for people with circulation problems or less sensitive skin.

- Follow any indications to turn off the product in places where its use is forbidden.

Not doing so may cause other equipment to malfunction due to the effect of electromagnetic waves and even result in accidents.

⚠ CAUTION	Denotes the risk of injury.

- Do not fire the flash near the eyes.

It may hurt the eyes.

- Strap is intended for use on the body only. Hanging the strap with any product attached on a hook or other object may damage the product. Also, do not shake the product or expose the product to strong impacts.
- Do not apply strong pressure on the lens or allow an object to hit it.

This may cause injury or damage to the product.

- Flash emits high temperatures when fired. Keep fingers, any other part of your body, and objects away from the flash unit while taking pictures.

This may cause burns or malfunction of the flash.

- Do not leave the product in places exposed to extremely high or low temperatures.

The product may become extremely hot/cold and cause burns or injury when touched.

- If any abnormal skin reaction or irritation occurs during or following the use of this product, refrain from further use and get medical advice/attention.

CAUTION	Denotes the possibility of property damage.

- Do not aim the camera at intense light sources, such as the sun on a clear day or an intense artificial light source.

Doing so may damage the image sensor or other internal components.

- When using the camera on a sandy beach or at a windy location, be careful not to allow dust or sand to enter the camera.
- 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 card reading/writing is in progress, do not turn the camera off, open the memory card/battery cover, or shake or hit the camera.

Doing so may corrupt images or damage the camera or memory card.

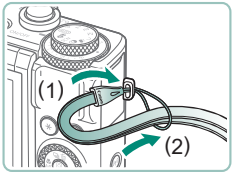
- Do not force the memory card into the camera facing the wrong way.

This could damage the camera.

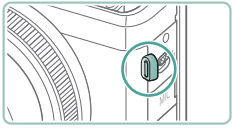
Camera Basics

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

Attaching the Strap

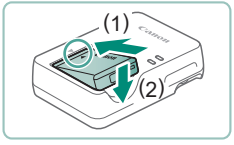


1 Attach the included strap to the strap mount.

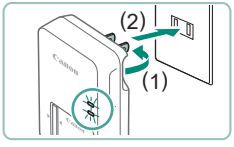


- The strap can also be attached to the left side of the camera.

Charging the Battery Pack

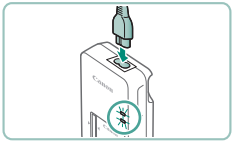


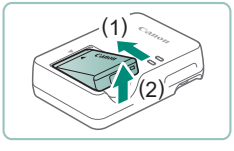
1 **Insert the battery pack in the charger.**



2 **Charge the battery pack.**

- Lamp colors
  - Charging: Orange
  - Fully charged: Green





3 **Remove the battery pack.**

- To protect the battery pack and keep it in optimal condition, do not charge it continuously for more than 24 hours.
- The charger can be used in areas with 100 – 240 V AC power (50/60 Hz). For power outlets in a different format, use a commercially available adapter for the plug. Never use an electrical transformer designed for traveling, which may damage the battery pack.
- Charged battery packs gradually lose their charge, even when they are not used. Charge the battery pack on (or immediately before) the day of use.

Preparing a Memory Card

Use the following memory cards (sold separately), in any capacity.

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

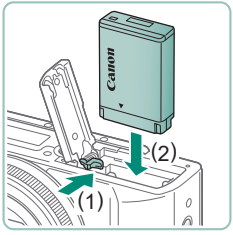
*1 Cards conforming to SD standards. However, not all memory cards have been verified to work with the camera.

*2 UHS-I memory cards are also supported.

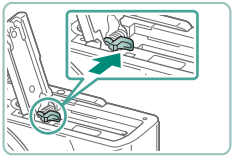
Inserting/Removing the Battery Pack and Memory Card



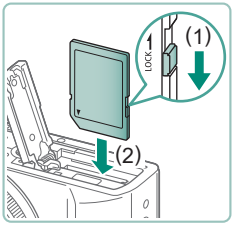
1 **Open the cover.**



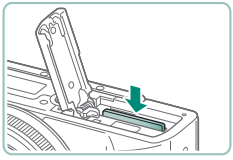
2 **Insert the battery pack.**



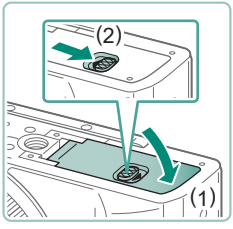
To remove:



3 Insert the memory card.



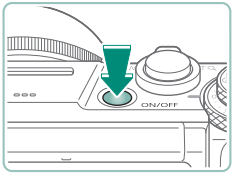
To remove:



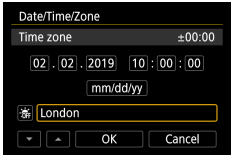
4 Close the cover.

- 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.
- Before using a new memory card or a card formatted in another device, you should format the card with this camera.
- Recording is not possible on memory cards with a write-protect switch when the switch is in the locked position. Slide the switch to unlock it.
- If [Change the battery pack] is displayed, change the battery pack after the camera turns off automatically.

Setting the Date, Time, Time Zone, and Language



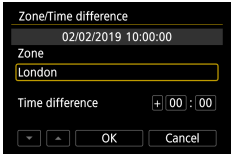
1 Turn the camera on.



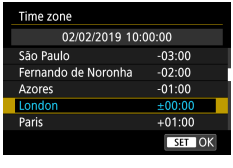
2 Set the time zone.

- ◀/▶ buttons or dial to choose a time zone → (SET) button

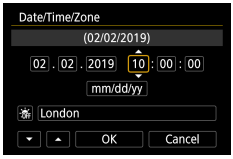




- (SET) button

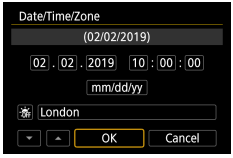


- ▲/▼ buttons or dial to choose a time zone → (SET) button → ◀/▶ buttons or dial to choose [OK] → (SET) button

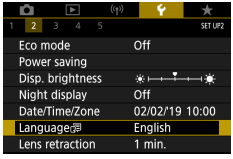


3 Set the date and time.

- ◀/▶ buttons or dial to choose the date or time → (SET) button → ▲/▼ buttons or dial to adjust → (SET) button



- Choose [OK] → (SET) button



4 Set the display language.

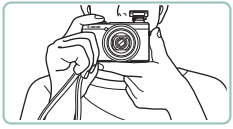
- ▲/▼ buttons to choose [Language] → (SET) button



- ▲/▼/◀/▶ buttons to choose a language → (SET) button

- Set the current date, time, and zone correctly if the [Date/Time/Zone] 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.
- To set daylight saving time (1 hour ahead), set [OFF] to [☀] on the [Date/Time/Zone] screen.
- If the date/time/zone settings have been cleared, set them again correctly.
- The date/time/zone must be set to enable normal camera temperature control. Once the date/time/zone are set, temperature warnings can be displayed correctly.

Holding the Camera

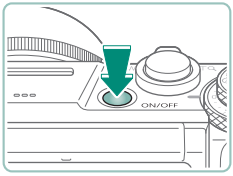


- Place the strap around your wrist.
- When shooting, keep your arms close to your body and hold the camera securely to prevent it from moving. If you have raised the flash, do not rest your fingers on it.

Trying the Camera Out

Try out the camera by turning it on, shooting some stills or movies, and then viewing them.

Shooting

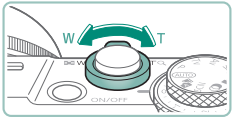


1 Turn the camera on.

- To turn the camera off, press the power button again.

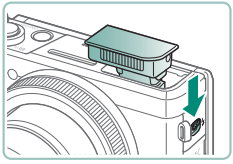


2 Enter AUTO mode.

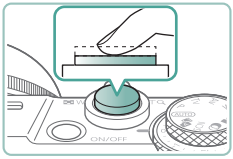


3 Zoom in or out, as needed.

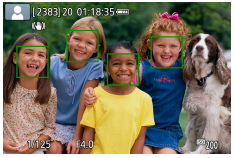
- Move the zoom lever as you watch the screen.



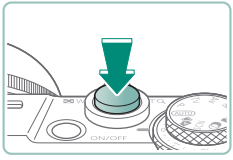
When using the flash:



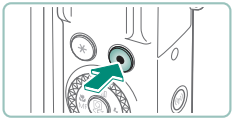
4 Focus (press halfway).



- The camera beeps after focusing.
- An AF point is displayed around positions in focus.



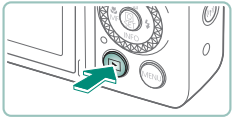
5 Shoot (press fully).



When recording movies:

- [●REC] is displayed during recording.
- To stop movie recording, press the movie shooting button again.

Viewing



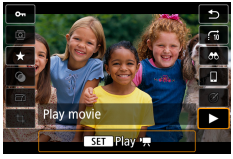
1 Press the ▶ button.



2 Choose images.



- Movies are labeled with [SET].



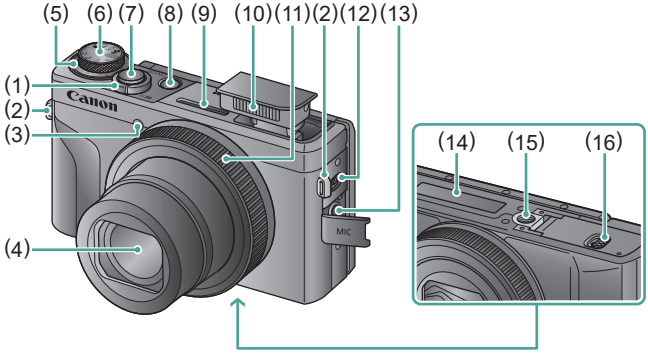
Playing movies:

- (SET) button (twice)
- Press the ▲/▼ buttons to adjust the volume.



Part Names

Front



(1) Zoom lever
Shooting: W (wide angle) / T (telephoto)
Playback: (index) / (magnify)

(2) Strap mount

(3) Lamp

(4) Lens

(5) Exposure compensation dial
●: Dial/Ring Assign Position

(6) Mode dial

(7) Shutter button

(8) Power button

(9) Microphone (stereo)

(10) Flash

(11) Control ring (ring)

(12) (Flash up) lever

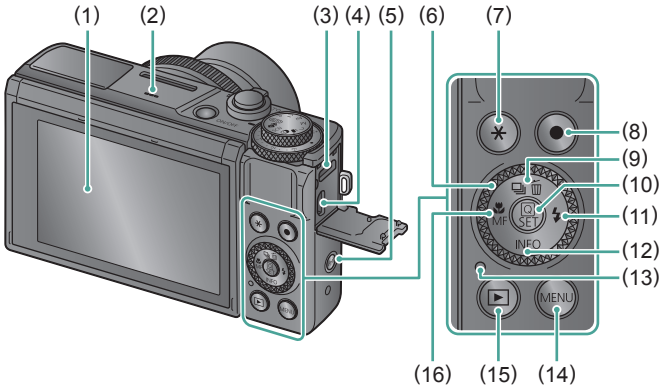
(13) External microphone IN terminal

(14) Serial number

(15) Tripod socket

(16) Memory card/battery cover

Back



(1) Screen
Opens upward about 180° and downward about 45°.

(2) Speaker

(3) DIGITAL terminal

(4) HDMI™ terminal

(5) (Wi-Fi) button

(6) Control dial (dial)

(7) (AE lock) button

(8) Movie shooting button
Movies can also be recorded in modes other than Movie mode.

(9) (Drive mode) / (Single-image erase) / ▲ Up button

(10) (Quick Control) button
Displays the Quick Control screen. Also used to confirm selected settings.

(11) (Flash) / ▶ Right button

(12) INFO / ▼ Down button

(13) Indicator

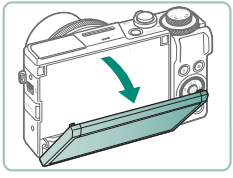
(14) MENU button
Used to display menu screens.

(15) (Playback) button

(16) (Macro) / MF (Manual focus) / ◀ Left button

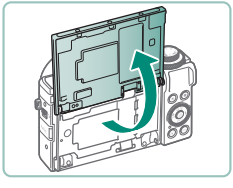
Adjusting the Screen Angle

Tilting the Screen Downward



- Pull the top of the screen downward toward you.
- The screen opens to about 45°.

Tilting the Screen Upward

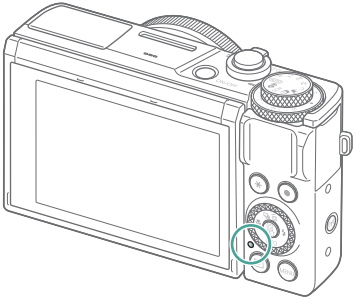


- The screen lifts upward and opens to about 180°.
- View a mirror image of yourself when shooting with the screen rotated around toward the front.
- When finished, return the screen to the original position.

- When the camera is not in use, keep the screen closed.
- Do not force the screen open any wider, which may damage the camera.

Indicator Display

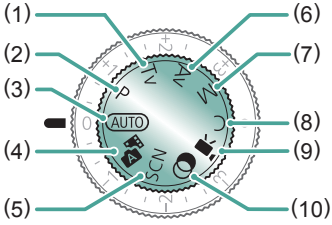
Indicator display varies depending on the camera status.



Color	Indicator Status	Camera Status
Green	On	● Recording stills to the memory card, or reading stills from the card
	Slow blinking	● Display off
	Blinking	● Recording movies to the memory card, or reading movies from the card ● Transmitting via Wi-Fi
Orange	On	● Charging via USB
	Blinking	● USB charging error

Setting a Shooting Mode

Use the mode dial to access each shooting mode.



(1) Tv Mode **Tv**
Set the shutter speed before shooting (93). Set with the ring. The camera automatically adjusts the aperture value to suit your shutter speed.

(2) P Mode **P**
Shutter speed and aperture value are automatically adjusted to suit subject brightness. Set a variety of settings freely before shooting (92).

(3) Auto Mode **AUTO**
Fully automatic shooting, with camera-determined settings (56).

(4) Hybrid Auto Mode
Automatically record a clip of the scene before each shot (62).

(5) Special Scene Mode **SCN**
Shoot with settings for specific scenes (63).

(6) Av Mode **Av**
Set the aperture value before shooting (94). Set with the ring. The camera automatically adjusts the shutter speed to suit your aperture value.

(7) M Mode **M**
Set the shutter speed and aperture value before shooting to obtain the desired exposure (95). Turn the dial to set the shutter speed, and turn the ring to set the aperture value.

(8) C Mode **C**
Save commonly used shooting modes and your configured function settings for reuse (286).

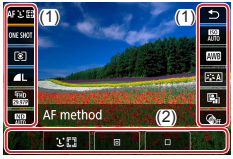
(9) Movie Mode
Record a variety of movies (88).

(10) Creative Filters Mode
Add a variety of effects to images when shooting (82).

Quick Control Screen



1 **Press the (SET) button.**



- (1) Setting items
- (2) Setting options



2 **Choose a setting item.**



3 **Choose a setting option.**



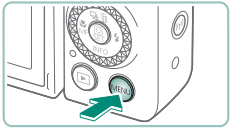
- Configure items labeled with a [MENU] icon by pressing the MENU button.



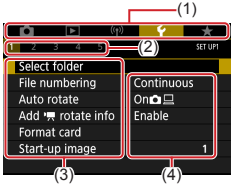
4 Complete the setting.

- You can also choose options by turning the dial.
- You can also configure Quick Control features from the Menu screen.

Menu Screen

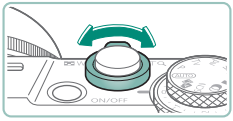


1 **Press the MENU button.**



2 **Choose a tab.**

- (1) Main tab
- (2) Sub-tab
- (3) Setting items
- (4) Setting options

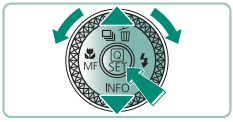


- Use the zoom lever to choose a main tab.



- Use the ◀/▶ buttons or ◑ ring to choose a sub-tab.





3 Choose a setting item.

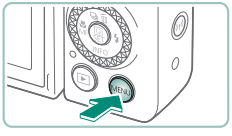
- Some items are selected with the ▲/▼ buttons or ◉ dial on a different screen, after you press the (SET) button initially.



4 Choose a setting option.



5 Complete the setting.



6 Return to the shooting screen.

Features Available on the Quick Control Screen



Press the [SET] button on shooting or playback screens to access the Quick Control screen, where you can adjust settings. Choose a setting item on the right or left to display setting options for it on the bottom.

(1) Setting items
(2) Setting options

The following settings are available in **P** mode. Available setting items and options vary by shooting mode.

AF	AF method	Choose an auto focus (AF) mode for the scene you are shooting.
ONE SHOT	AF operation	Choose [SERVO] to keep subjects in focus while you press the shutter button halfway.
	Metering mode	Choose how brightness is measured.
L	Image quality	Choose the size (number of pixels) and compression (quality) of your shots.
FHD 29.97	Movie rec. size	Choose the recording size and frame rate for movies.
ND AUTO	ND filter	Reduce light intensity to obtain suitable brightness.
ISO AUTO	ISO speed	Choose the ISO speed.
AWB	White balance	Shoot with natural-looking colors under specific types of lighting.
A	Picture Style	Choose color settings that express scenes or subjects well.
	Auto Lighting Optimizer	Choose the level of auto correction for brightness and contrast.
OFF	Creative filters	Add a variety of effects to images when shooting.

Menu Settings

Use menu screens to configure a variety of camera features. To access menu screens, press the MENU button. Setting items are organized into five main groups and multiple tabs for each group.
You can configure the following setting items on menu screens. Available setting items vary by shooting mode.

Shooting settings

- Shooting mode
- Image quality
- Still img aspect ratio
- Image review
- Flash settings
- Drive mode
- RAW burst mode
- Date stamp
- Expo.comp./AEB
- ISO speed settings
- ISO speed settings
- Auto Lighting Optimizer
- Highlight tone priority
- ND filter
- Metering mode
- Metering timer
- Expo. simulation
- White balance
- Custom White Balance
- WB Shift/Bkt.
- HDMI info disp
- Picture Style
- High ISO speed NR
- Retain Creative Assist data
- Touch Shutter
- Shutter mode
- AF operation
- AF method
- Continuous AF
- AF-assist beam firing
- Focus bracketing
- AF+MF
- MF peaking settings
- Safety MF
- MF-point zoom
- IS settings
- Auto level
- Digital zoom
- Digest type
- Movie rec quality
- Movie self-timer
- Sound recording
- Movie Servo AF
- Auto slow shutter
- Star time-lapse movie setting
- Star emphasis
- Star portrait settings
- Color adjustment
- Video snapshot
- Time-lapse movie
- Remote control
- Zebra settings

Playback settings

- Protect images
- Rotate stills
- Change mov rotate info
- Erase images
- Print order
- Photobook Set-up
- Creative filters
- RAW image processing
- Creative Assist
- Quick Control RAW processing
- Red-eye correction
- Create album
- Cropping
- Resize
- Rating
- Slide show
- Set image search conditions
- Image jump w/
- Playback information display
- View from last seen

Wireless settings

- Wi-Fi/Bluetooth connection
- Wi-Fi settings
- Bluetooth settings
- Nickname
- GPS settings
- Clear wireless settings

Function settings

- Select folder
- File numbering
- Auto rotate
- Add rotate info
- Format card
- Start-up image
- Eco mode
- Power saving
- Disp. brightness
- Night display
- Date/Time/Zone
- Language
- Lens retraction
- Video system
- Touch control
- Beep
- Volume
- HDMI resolution
- HDMI HDR output
- Shooting info. disp.
- Reverse display
- Units
- Feature guide
- Custom Functions(C. Fn)
- Custom shooting mode (C mode)
- Reset camera
- Copyright information
- Manual/software URL
- Certification Logo Display
- Firmware

★ My Menu

- Add My Menu tab
- Delete all My Menu tabs
- Delete all items
- Menu display

Shooting Mode Screen



(1) Shooting mode/Scene icon
(2) Recordable shots
(3) Maximum continuous shots
(4) Movie recording time available
(5) Battery level

Frames on the Shooting Screen

Frames for focusing (AF points) are displayed on the shooting screen.

White frame	Displayed around the subject or person's face detected as the main subject.
Green frame	Displayed after the camera focuses when you press the shutter button halfway.
Blue frame	Displayed as the camera continues to focus on moving subjects. Displayed as long as you press the shutter button halfway.
Yellow frame	Displayed if the camera cannot focus when you press the shutter button halfway.

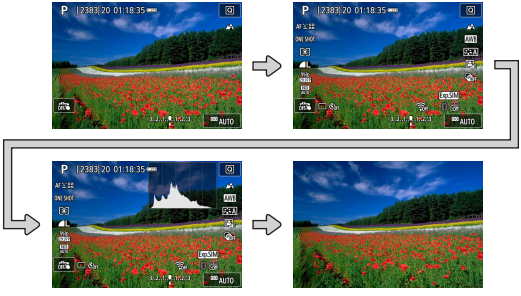
- Try shooting in **P** mode if no frames are displayed, if frames are not displayed around desired subjects, or if frames are displayed in the background or similar areas.

Shooting Display Options

You can switch shooting screen display to view other information.



1 Press the ▼ button.



Playback Display Options

You can switch playback screen display to view other information.



1 Press the ▼ button.



- Overexposed highlights blink over the information display image when you access screens showing detailed information.
- A graph called a brightness histogram on the top of screens with detailed information shows the distribution of brightness in images. The horizontal axis represents the degree of brightness, and the vertical axis, how much of the image is at each level of brightness. Viewing this histogram enables you to check exposure.

Switching Histograms

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

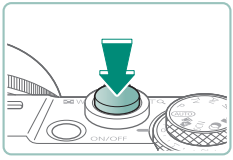
Touch Operation

Choosing Subjects

You can choose subjects by touching a person's face or other things displayed on the screen.



1 **Choose a subject.**



2 **Shoot.**

- 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.

Quick Control Screen



Accessing the setting screen

- Touch [Q].



Setting up the camera

- Touch a setting item → a setting option



Switching screens

- Configure items labeled with a [MENU] icon by touching [MENU].



Returning to the previous screen

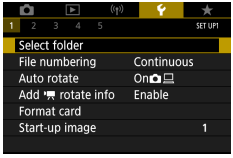
- Touch [↩].



Adjusting amounts on bars

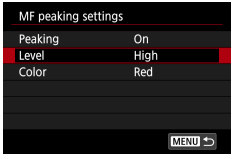
- Touch or drag the bar.

Menu Screen



Setting up the camera

- Touch a main tab → sub-tab → setting item → option



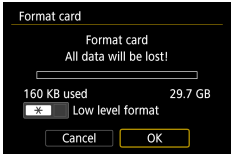
Returning to the previous screen

- Touch [MENU].



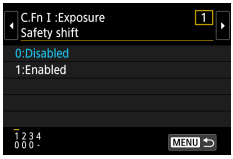
Adding/removing check marks

- Touch a check box.



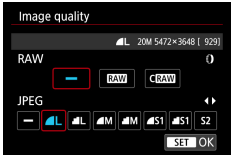
Instead of pressing the ✳ button

- Touch [✳].



Instead of pressing the MENU button

- Touch [MENU].



Instead of pressing the (SET) button

- Touch [SET].

Viewing



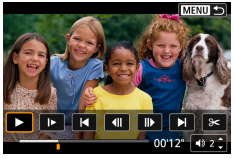
Viewing images individually

- Next image: Drag left
- Previous image: Drag right



Playing movies

- Play: Touch [▶]



Operations during movies

- Stop: Touch the screen
- Resume: Touch [▶]
- Adjust volume: Touch [🔊]



Switching to index display



Displaying fewer images



Magnifying images

- Quickly touch twice.





Reducing magnified images

- Restore original size: Touch [↩], or quickly touch the screen twice

- The movie playback panel can also be displayed by touching the screen during movie playback.
- During index display, drag up or down to scroll through images.
- Drag to move the display position during magnified display.

On-Screen Keyboard





Entering characters

- Touch the characters to enter them.

Moving the cursor

- [◀]/[▶] or ring

Switching input modes

- [⇧]: Switch to uppercase
- [!?]: Switch to numbers or symbols

Deleting characters

- [⌫]

Entering line breaks

- [↵]

Returning to the previous screen

- [MENU]

Shooting

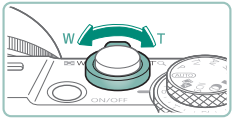
Easily shoot in simple modes, or take more sophisticated shots using a variety of features.

Shooting with Camera-Determined Settings (Auto Mode/Hybrid Auto Mode)

Use Auto mode for fully automatic selection of the optimal settings for the scene, based on the subject and shooting conditions determined by the camera.

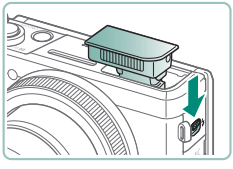


1 **Enter AUTO mode.**

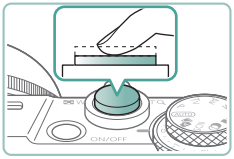


2 **Zoom in or out, as needed.**

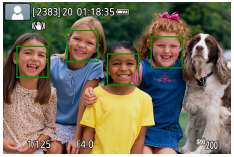
- Move the zoom lever as you watch the screen.



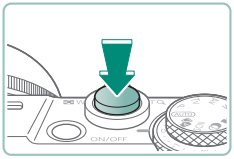
When using the flash:



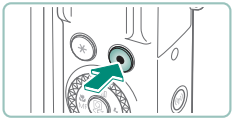
3 Focus (press halfway).



- The camera beeps after focusing.
- An AF point is displayed around positions in focus.



4 Shoot (press fully).



When recording movies:

- [●REC] is displayed during recording.
- To stop movie recording, press the movie shooting button again.

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.
- To assist in focusing, the lamp may be activated when you press the shutter button halfway in low-light conditions.

Movies

- The black bars on the top and bottom of the screen are not recorded.
- When you recompose shots, the focus, brightness, and colors will be automatically adjusted.
- Recording stops automatically when the memory card becomes full or a single recording reaches the maximum length.
- The maximum recording time per movie is 29 min. 59 sec.
- Although the camera may become warm when recording movies repeatedly over an extended period, this does not indicate a problem.
- Keep your fingers away from the microphone while recording movies. Blocking the microphone may prevent audio from being recorded or may cause the recording to sound muffled.
- Audio is recorded by the built-in microphone in stereo.
- Avoid touching camera controls other than the movie shooting button or screen when recording movies, because sounds made by the camera will be recorded. To adjust settings or perform other operations during recording, use the touch-screen panel if possible.
- Sounds from Wi-Fi operations may be captured with built-in or external microphones. During sound recording, using the wireless communication function is not recommended.
- Once movie recording begins, the image display area changes and subjects are enlarged to allow for correction of significant camera shake. To record subjects at the same size shown before recording, adjust the image stabilization setting.
- During movie recording, lens operating noises from auto focusing may also be recorded.
- Individual movies that exceed 4 GB may be divided into multiple files. Automatic playback of divided movie files one after another is not supported. Play each movie separately.

Scene Icons

- In AUTO/ modes, shooting scenes determined by the camera are indicated by the icon displayed, and corresponding settings are automatically selected for optimal focusing, subject brightness, and color.
- Try shooting in **P** mode if the scene icon does not match actual shooting conditions, or if it is not possible to shoot with your expected effect, color, or brightness.

Image Stabilization Icons

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

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

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

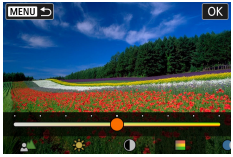
Shooting with Effects Applied (Creative Assist)

Choose your preferred effects when shooting.

AUTO



1 Press the (SET) button.



2 Choose an effect.

- ◆/◆ buttons → (SET) button

3 Choose the effect level and other details.

- ◆/◆ buttons → (SET) button
- Reset: ✳ button

Preset	Choose one of the preset effects.
Background blur	Adjust background blur. Choose higher values to make backgrounds sharper. Choose lower values to make them blurrier. [AUTO] adjusts background blurring to match the brightness.
Brightness	Adjust image brightness.
Contrast	Adjust contrast.
Saturation	Adjust the vividness of colors.
Color tone 1	Adjust blue/amber color tone.

Color tone 2	Adjust magenta/green color tone.
Monochrome	Adjust the toning effect when shooting in monochrome. Set to [Off] to shoot in color.

- [Background blur] is not available when the flash is used.
- These settings are reset when you switch modes or turn the camera off. To save the settings, set [Retain Creative Assist data] to [Enable].
- You can save up to three current effects in [Preset] by touching [Register].

Shooting in Hybrid Auto Mode

Also record 2 – 4 second clips of scenes before each shot automatically, just by shooting stills. Each clip, which ends with the still image and a shutter sound, forms an individual chapter. The camera creates a short digest movie of the day by combining the clips.



1 **Enter mode.**

2 **Focus and shoot.**

- For more impressive digest movies, aim the camera at subjects about four seconds before shooting still images.
- Battery life is shorter in this mode than in AUTO mode, because digest movies are recorded for each shot.
- A digest movie may not be recorded if you shoot a still image immediately after turning the camera on, choosing mode, or operating the camera in other ways.
- Any sounds and vibrations from your camera or lens operations will be recorded in digest movies.
- Digest movie image quality is [FHD 29.97P] for NTSC or [FHD 25.00P] for PAL. This varies depending on the video system setting.
- Sounds are not played when you press the shutter button halfway or trigger the self-timer.
- Digest movies are saved as separate movie files in the following cases even if they were recorded on the same day in mode.
  - The digest movie recording time reaches approx. 29 minutes and 59 seconds. (May also be saved as separate files if the size exceeds approx. 4 GB.)
  - The digest movie is protected.
  - Daylight saving time, video system, or time zone settings are changed.
- Recorded shutter sounds cannot be modified or erased.

Shooting Specific Scenes (Special Scene Mode)

Choose a mode matching the shooting scene, and the camera will automatically configure the settings for optimal shots. Try taking some test shots first to make sure you obtain the desired results.

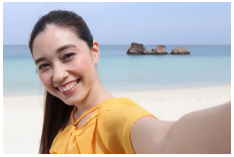


1 **Enter SCN mode.**



2 **(SET) button → [ ] → choose an option**

3 **Shoot.**



Self Portrait

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



Portrait

Capture subjects that stand out against a blurred background, with smooth skin tone and soft-looking hair.



Smooth skin

Process images to make skin look smoother.

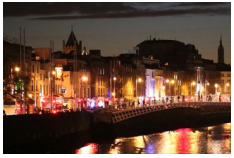
- Areas other than people's skin may be modified, depending on the shooting conditions.
- Setting details in [ ] mode are not applied in [ ] mode.



Food

Adjust color tones to make food look fresh and vibrant.

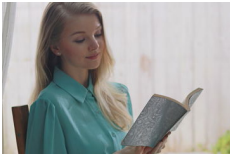
- These color tones may not look suitable when applied to people.
- In flash photography, [Color tone] changes to the standard setting.



Handheld Night Scene

Take beautiful shots of evening scenes or portraits with evening scenery in the background.

- Image noise is reduced by combining consecutive shots into a single image.
- Hold the camera steady as it shoots continuously.
- There will be a delay before you can shoot again, as the camera processes and combines the images.
- Shots may look grainy because the ISO speed is increased to suit the shooting conditions.
- Excessive motion blur or certain shooting conditions may prevent you from obtaining the desired results.
- Try to keep the camera still when using the flash, because the shutter speed may be slower.



HDR Backlight Control

Three consecutive images are captured at different brightness levels each time you shoot, which are automatically combined to create a single image. This mode can reduce the loss of detail in highlights and shadows that tends to occur in shots with mixed bright and dark image areas.

- Hold the camera steady as it shoots continuously.
- Excessive motion blur or certain shooting conditions may prevent you from obtaining the desired results.
- If excessive camera shake interferes with shooting, mount the camera on a tripod or take other measures to keep it still. In this case, also disable image stabilization.
- Any subject movement will cause images to look blurry.
- There will be a delay before you can shoot again, as the camera processes and combines the images.

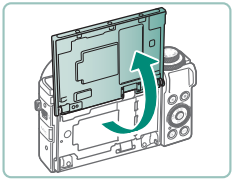


Fireworks

Vivid shots of fireworks.

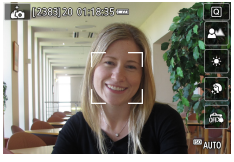
- Mount the camera on a tripod or take other measures to keep it still and prevent camera shake. Additionally, you should set [IS mode] to [Off] when using a tripod or other means to secure the camera.
- Although no frames are displayed when you press the shutter button halfway, optimal focus is still determined.

Shooting Yourself under Optimal Settings (Self Portrait Mode)



1 **Choose [ ].**

2 **Open the screen.**



3 **Configure the settings.**

- On the screen, touch the icon of the item to configure.
- Choose an option.
- To return to the previous screen, touch [ ].

4 **Shoot.**

- Areas other than people's skin may be modified, depending on the shooting conditions.
- [Smooth skin effect] settings specified in [ ] mode are not applied in [ ] mode.
- Set [Background blur] to [AUTO] if you have set the flash mode to [ ] for flash photography (because the flash will not fire in modes other than [AUTO]).

Shooting Panoramas (Panorama Mode)

Create a panorama combining shots captured continuously as you move the camera one direction while holding the shutter button all the way down.



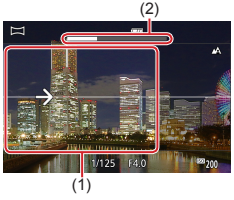
1 **Choose [ ].**

2 **Choose a shooting direction.**

- Use the ▶ button to choose the direction you will shoot.
- An arrow is displayed showing the direction to move the camera.

3 **Press the shutter button halfway.**

- Keeping the shutter button halfway down, focus on the subject.

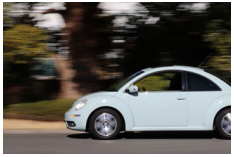


4 **Shoot.**

- Holding the shutter button all the way down, move the camera at a constant speed in the direction of the arrow.
- The area displayed clearly (1) is captured.
- A shooting progress indicator (2) is displayed.
- Shooting stops when you release the shutter button, or when the progress indicator is completely white.

- In some scenes, expected images may not be saved, and images may not look as expected.
- Shooting may stop midway if you move the camera too slowly or quickly. However, the panorama created up to that point will still be saved.
- Images created from shots in mode are large. Use a computer or other device to reduce panorama images if you will print them by inserting a memory card in a Canon printer. If panoramas are not compatible with certain software or Web services, try resizing them on a computer.
- The following subjects and scenes may not be stitched correctly.
  - Subjects that are moving
  - Subjects that are nearby
  - Scenes where the contrast varies greatly
  - Scenes with long stretches of the same color or pattern, such as the sea or sky

Capturing Subjects Against Flowing Backgrounds (Panning Mode)



By panning, you can blur the background to convey a sense of speed.



1 **Choose [🚗].**

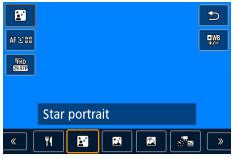
2 **Shoot.**

- Before shooting, press the shutter button halfway as you move the camera so that it follows the subject.
- Keep the moving subject in the frame displayed, and press the shutter button all the way down.
- Even after you have pressed the shutter button fully, continue moving the camera to follow the subject.

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

Shooting People against Starry Skies (Star Portrait Mode)

Capture beautiful shots of people against starry skies. After initially firing the flash to capture the person, the camera shoots twice without flash. These three images are automatically combined to create a single image.



1 Choose [ ].

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

Adjusting colors

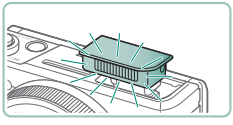
- (SET) button → [WB] → ◀/▶ buttons
- Fine-tuning: (SET) button → [WB] → MENU button → ▲/▼/◀/▶ buttons

2 Raise the flash.

- Move the ⚡ lever to raise the flash.

3 Secure the camera.

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



4 Shoot.

- Press the shutter button. The flash fires as the camera takes the first shot.
- The second and third shots are now taken, without firing the flash.





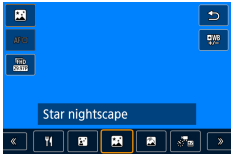
5 **Have the person stay still until the lamp blinks.**

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

- For better shots, have the person stand away from illumination such as street lights, and make sure the flash is raised.
- There will be a delay before you can shoot again, as the camera processes the images.
- To avoid blurry shots, make sure the person you shoot stays still.
- B: blue; A: amber; M: magenta; G: green
- Skin tones remain the same when you adjust colors.
- Try setting [Night display] to [On] in this mode.
- To adjust subject brightness, try changing the flash exposure compensation.
- To adjust background brightness, try changing the exposure compensation. Note that images may not look as expected under some shooting conditions, and the person should stay still in steps 4 – 5, because shooting takes longer (up to about 15 seconds).
- To capture more stars and brighter starlight, choose [Star portrait settings] → [Star visibility] → [Prominent]. Note that images may not look as expected under some shooting conditions, and the person should stay still in steps 4 – 5, because shooting takes longer (up to about 30 seconds).
- To make stars brighter, choose [Star emphasis] → [Sharp]. To emphasize the bright stars in a starry sky, set to [Soft]. This setting can produce eye-catching shots by enlarging bright stars while de-emphasizing dimmer stars. To disable starlight processing, select [Off]. Note that in bright scenes, images are not processed to emphasize stars, even when set to [Sharp] or [Soft].

Shooting Night Scenes under Starry Skies (Star Nightscape Mode)

Capture impressive shots of starry skies above night scenes.



1 Choose [🏞].

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

Adjusting colors

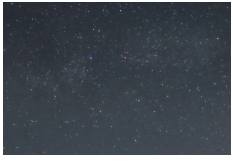
- (SET) button → [WB] → ◀/▶ buttons
- Fine-tuning: (SET) button → [WB] → MENU button → ▲/▼/◀/▶ buttons

2 Secure the camera.

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

Adjusting the focus

- ◀ button → [MF] → (SET) button
- Press the MENU button, and then tilt the camera so that the stars to capture are inside the frame displayed.
- Press the (SET) button to start adjustment.
- Adjustment may take some time, so do not move the camera until a message indicates that adjustment is complete.

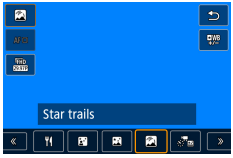


3 Shoot.

- There will be a delay before you can shoot again, as the camera processes the images.
- B: blue; A: amber; M: magenta; G: green
- Try setting [Night display] to [On] in this mode.
- To make stars brighter, choose [Star emphasis] → [Sharp]. To emphasize the bright stars in a starry sky, set to [Soft]. This setting can produce eye-catching shots by enlarging bright stars while de-emphasizing dimmer stars. To disable starlight processing, select [Off]. Note that in bright scenes, images are not processed to emphasize stars, even when set to [Sharp] or [Soft].
- Try switching to manual focus mode to more accurately specify the focal position before shooting.

Shooting Star Trails (Star Trails Mode)

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 [ ].

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

Adjusting colors

- (SET) button → [WB] → ◀▶ buttons
- Fine-tuning: (SET) button → [WB] → MENU button → ▲/▼/◀▶ buttons

2 Specify the duration of the shooting session.

- Turn the ring to choose the shooting duration.

3 Secure the camera.

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

Adjusting the focus

- ◀ button → [MF] → (SET) button
- Press the MENU button, and then tilt the camera so that the stars to capture are inside the frame displayed.
- Press the (SET) button to start adjustment.
- Adjustment may take some time, so do not move the camera until a message indicates that adjustment is complete.



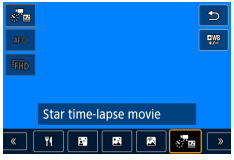
4 Shoot.

- Do not disturb the camera while shooting.
- To cancel shooting, press the shutter button all the way down again. Note that cancellation may take up to about 30 seconds.

- If the camera runs out of battery power, shooting stops and a composite image created from the images up to that point is saved.
- There will be a delay before you can shoot again, as the camera processes the images.
- B: blue; A: amber; M: magenta; G: green
- Try setting [Night display] to [On] in this mode.
- Try switching to manual focus mode to more accurately specify the focal position before shooting.

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

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 time, and requires many shots. Check the battery level and memory card space in advance.

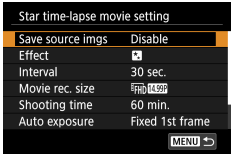


1 Choose [ ].

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

Adjusting colors

- (SET) button → [WB] → ◀▶ buttons
- Fine-tuning: (SET) button → [WB] → MENU button → ▲/▼/◀▶ buttons



2 Configure movie settings.

- ▶ button → choose an item → choose an option

3 Secure the camera.

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

Adjusting the focus

- ◀ button → [MF] → (SET) button
- Press the MENU button, and then tilt the camera so that the stars to capture are inside the frame displayed.
- Press the (SET) button to start adjustment.

- Adjustment may take some time, so do not move the camera until a message indicates that adjustment is complete.

4 Check the brightness.

- Press the shutter button all the way down to capture a single image.
- Switch to playback and check image brightness.
- To adjust brightness, on the shooting screen, turn the exposure compensation dial to change the exposure level, and then shoot again.

5 Start recording.

- Movie shooting button → press the shutter button all the way down
- Do not disturb the camera while recording.
- No image is shown on the camera during recording.
- To cancel recording, press the shutter button or the movie shooting button again. Note that cancellation may take up to about 30 seconds.

Items	Options	Details
Save source imgs	Disable/Enable	You can choose to save each shot collected before the movie is created. Note that when [Enable] is selected, [Effect] is not available.
Effect		Choose movie effects, such as star trails.
Interval	15 sec./30 sec./1 min.	Choose the interval between each shot.
Movie rec. size	FHD 14.99P, FHD 29.97P, 4K 14.99P, 4K 29.97P (NTSC) FHD 12.50P, FHD 25.00P, 4K 12.50P, 4K 25.00P (PAL)	Choose the movie recording size.
Shooting time	60 min./90 min./120 min./Unlimited	Choose the length of the recording session. To record until the battery runs out, choose [Unlimited].
Auto exposure	Fixed 1st frame/Each frame	Choose whether exposure is determined by the first shot or updated for each shot.
Remote control	Disable/Enable	Choose whether to shoot with a wireless remote control.
Beep as img taken	Enable/Disable	Choose whether the camera beeps for each shot.

- You can also configure this setting by choosing [Star time-lapse movie setting].
- Using USB Power Adapter PD-E1 (sold separately) enables you to shoot without worrying about the remaining battery level.
- Even if you specify [Unlimited] in [Shooting time], recording stops after about 8 hours, at most.

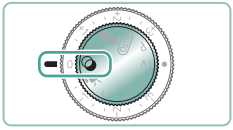
Estimated playback time based on shooting interval and frame rate (for a one-hour session)

Shot Interval	Movie Recording Size		Playback Time (Approx.)	
	NTSC	PAL	NTSC	PAL
15 sec.	FHD 14.99P, 4K 14.99P	FHD 12.50P, 4K 12.50P	16 sec.	19.2 sec.
15 sec.	FHD 29.97P, 4K 29.97P	FHD 25.00P, 4K 25.00P	8 sec.	9.6 sec.
30 sec.	FHD 14.99P, 4K 14.99P	FHD 12.50P, 4K 12.50P	8 sec.	9.6 sec.
30 sec.	FHD 29.97P, 4K 29.97P	FHD 25.00P, 4K 25.00P	4 sec.	4.8 sec.
1 min.	FHD 14.99P, 4K 14.99P	FHD 12.50P, 4K 12.50P	4 sec.	4.8 sec.
1 min.	FHD 29.97P, 4K 29.97P	FHD 25.00P, 4K 25.00P	2 sec.	2.4 sec.

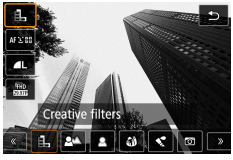
- If the camera runs out of battery power or memory card space, shooting stops and a movie created from the images up to that point is saved.
- There will be a delay before you can shoot again, as the camera processes the images.
- A shooting interval of [1 min.] is not available with these effects: [ ], [ ], [ ], or [ ].
- B: blue; A: amber; M: magenta; G: green
- Sound is not recorded.
- Try setting [Night display] to [On] in this mode.
- Try switching to manual focus mode to more accurately specify the focal position before shooting.

Shooting with Image Effects (Creative Filters Mode)

Add a variety of effects to images when shooting. Try taking some test shots first to make sure you obtain the desired results.



1 **Enter mode.**



2 **button → [ ] → choose an option**



3 **Choose an effect level.**

- Turn the ring to set the level.

4 **Shoot.**



Grainy B/W

Take black and white shots with a rough, gritty feeling.



Background blur

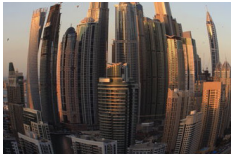
You can shoot subjects so that they stand out from the background.

- Excessive motion blur or certain shooting conditions may prevent you from obtaining the desired results.
- For the best results with background defocusing, try shooting close to the subject, and ensure ample distance between the subject and background.
- There may be a delay after shooting before you can shoot again.



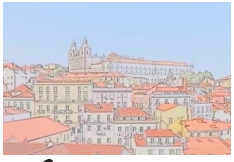
Soft focus

Shoot with a simulated soft focus filter effect, for a gentle ambiance.



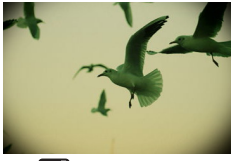
Fish-eye effect

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



Water painting effect

Soften colors, for photos resembling watercolor paintings.



Toy camera effect

Shoot images that resemble shots from a toy camera, with vignetting and different color overall.



Miniature effect

Create the effect of a miniature model, by blurring image areas outside a selected area.



HDR art standard

Add an effect to make shots resemble low-contrast paintings with flat tones.



HDR art vivid

Add an effect to make shots resemble vivid illustrations.



HDR art bold

Add an effect to make shots resemble oil paintings, with bold edges.



HDR art embossed

Add an effect to make shots resemble faded old photos, with bold edges and dark ambiance.

HDR Art Standard, HDR Art Vivid, HDR Art Bold, and HDR Art Embossed

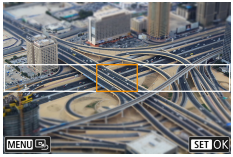
- This mode can reduce the washed-out highlights and loss of detail in shadows that tend to occur in high-contrast shots.
- When you press the shutter button all the way down, the camera will take three shots and combine them. Hold the camera steady as you shoot.
- Excessive motion blur or certain shooting conditions may prevent you from obtaining the desired results.
- If excessive camera shake interferes with shooting, mount the camera on a tripod or take other measures to keep it still. In this case, also disable image stabilization.
- There will be a delay before you can shoot again, as the camera processes and combines the images.

Art Bold Effect

- [ ] is not available in mode (but available in P mode).

Shots Resembling Miniature Models (Miniature Effect)





1 **Choose [🏞].**

2 **Set the area to keep in focus (miniature effect scene frame).**

- ▼ button → ▲/▼ buttons to move the frame → (SET) button

3 **Set the position in focus (AF point).**

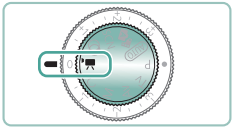
- ▲/▼/◀/▶ buttons to move the AF point → (SET) button

4 **Shoot.**

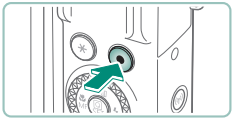
- The frame in horizontal orientation displayed when you press the ▼ button in step 2 can be changed to vertical orientation by pressing the ◀/▶ buttons.

Recording a Variety of Movies (Movie Mode)

Full-featured mode offers miniature effect movies (📖171), video snapshots (📖173), time-lapse movies (📖175), and more.



1 Enter mode.



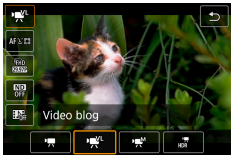
2 Start recording.

- [●REC] is displayed during recording.
- To stop movie recording, press the movie shooting button again.

- You can also start or stop recording by touching [●]/[■] on the screen.
- Black bars are displayed on the top and bottom edges of the screen in mode. The black bars indicate image areas not recorded.
- In mode, the image display area narrows and subjects are enlarged.
- Exposure can be adjusted by turning the exposure compensation dial.
- To switch between recording with auto focus and a fixed focus, touch [SERVO AF] on the screen or press the ▶ button before or during recording. (Auto focus is indicated by a green ◯ in the upper left of the [SERVO AF] icon.) Note that this icon is not displayed when [Movie Servo AF] is set to [Disable].

Vlogging (Video blog recording mode)

Record in a mode designed for video blogs.



1 (SET) **button → [🎥] → choose [🎥]**

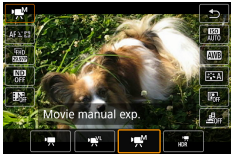
2 **Start recording.**

- Focus rapidly follows changes in the scene.

- Exposure compensation and AE lock are not available.

Recording Movies at Specific Shutter Speeds and Aperture Values (Movie Manual Exposure)

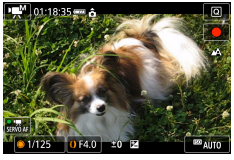
Set the shutter speed, aperture value, and ISO speed before recording.



1 **(SET) button → [🎥] → choose [🎥]**



2 **Set the ISO speed → (SET) button**



3 **Set the shutter speed and aperture value.**

- Shutter speed: ◉ dial
- Aperture value: ◐ ring

4 **Start recording.**

- Some shutter speeds may cause flickering on the screen when recording under fluorescent or LED lighting, which may be recorded.
- When the ISO speed is fixed, you can compare your specified value (where the exposure level indicator moves) to the standard exposure level by pressing the shutter button halfway. The exposure level indicator appears as [◀] or [▶] when the difference from standard exposure exceeds 3 stops.
- You can check the ISO speed in [AUTO] mode by pressing the shutter button halfway. If standard exposure cannot be obtained with your specified shutter speed and aperture value, the exposure level indicator shows the difference from standard exposure. The exposure level indicator appears as [◀] or [▶] when the difference from standard exposure exceeds 3 stops.

Recording HDR Movies

You can record high dynamic range movies that retain detail in highlights of high-contrast scenes.



1 **(SET) button → [🎥] → choose [HDR]**

2 **Start recording.**

Shooting in Program AE (P Mode)

Shutter speed and aperture value are automatically adjusted to suit subject brightness.
P mode offers flexibility in setting AF operation, metering modes, and several other features.



1 **Enter P mode.**

2 **Configure each feature as needed.**

3 **Shoot.**

- **P**: Program AE; AE: Auto Exposure
- If standard exposure cannot be obtained when you press the shutter button halfway, the shutter speed and aperture value blink in white. In this case, try adjusting the ISO speed or activating the flash (if subjects are dark), which may enable standard exposure.
- Movies can be recorded in **P** mode as well, by pressing the movie shooting button. However, some items on Quick Control and Menu screens may be automatically adjusted for movie recording.
- After you press the shutter button halfway, you can adjust the combination of shutter speed and aperture value by turning the ◑ ring (Program Shift).

Shooting at Specific Shutter Speeds (Tv Mode)

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



Slow



Fast



1 Enter Tv mode.



2 Set the shutter speed.

- ring

3 Shoot.

- **Tv**: Time value
- We recommend deactivating image stabilization when shooting at slow shutter speeds on a tripod.
- Blinking display of the aperture value when you press the shutter button halfway indicates that the standard exposure has not been obtained. Adjust the shutter speed until the aperture value stops blinking.

Shooting at Specific Aperture Values (Av Mode)

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



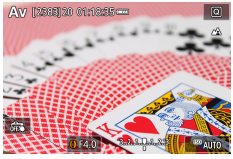
Small value



Large value



1 Enter Av mode.



2 Set the aperture value.

- ring

3 Shoot.

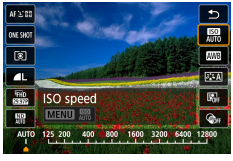
- **Av**: Aperture value (size of the opening made by the diaphragm in the lens)
- Blinking display of the shutter speed when you press the shutter button halfway indicates that the standard exposure has not been obtained. Adjust the aperture value until the shutter speed stops blinking.

Shooting at Specific Shutter Speeds and Aperture Values (M Mode)

Set the shutter speed and aperture value before shooting to obtain the desired exposure.



1 **Enter M mode.**



2 **(SET) button → [ISO AUTO] → set the ISO speed**



3 **Set the shutter speed and aperture value.**

- Shutter speed: dial
- Aperture value: ring

4 **Shoot.**

- **M**: Manual
- When the ISO speed is fixed, you can compare your specified value (where the exposure level indicator moves) to the standard exposure level by pressing the shutter button halfway. The exposure level indicator appears as [◀] or [▶] when the difference from standard exposure exceeds 3 stops.
- After you set the shutter speed and aperture value, the exposure level indicator may change if you adjust the zoom or recompose the shot.
- When the ISO speed is fixed, 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 [ϟ].
- Exposure may not be as expected when the ISO speed is set to [AUTO], because the ISO speed is adjusted to ensure standard exposure relative to your specified shutter speed and aperture value.
- Image brightness may be affected by Auto Lighting Optimizer. To keep the Auto Lighting Optimizer disabled in **M** mode, add a [✓] mark to [Disable during man expo] on the Auto Lighting Optimizer setting screen.
- Calculation of standard exposure is based on the specified metering method.
- To adjust exposure when ISO speed is set to [AUTO], turn the exposure compensation dial.

Shooting Long Exposures (Bulb)



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

M



1 **dial → [BULB]**

- Turn the dial counterclockwise. After [30"] is displayed, the next option is [BULB].

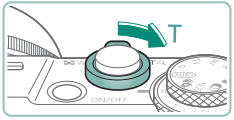
2 **Shoot.**

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

Zooming In Closer on Subjects (Digital Zoom)

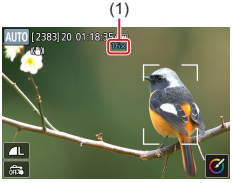
When distant subjects are too far away to enlarge using the optical zoom, use digital zoom for up to about 16x enlargement.

AUTO



1 Move the zoom lever toward T.

- Press and hold the lever.
- Zooming stops at the largest zoom factor before the image becomes noticeably grainy, which is then indicated on the screen.



2 Press toward T again.

- The camera zooms in even closer on the subject.
- (1) is the current zoom factor.

- Using the zoom lever will show the current position on the zoom bar. The zoom bar is color-coded to indicate the zoom range.
  - White range: optical zoom range where the image will not appear grainy.
  - Yellow range: digital zoom range where the image is not noticeably grainy (ZoomPlus).
  - Blue range: digital zoom range where the image will appear grainy.
- No blue range is displayed under certain pixel count settings, and you can zoom in to the maximum level in one zoom operation.
- To deactivate digital zoom, choose [Digital zoom] → [Off].

Locking Image Brightness / Exposure (AE Lock)

Exposure can be locked when shooting stills and recording movies, or focus and exposure can be set separately.



Without AE lock



AE lock

P

1 Aim at a subject for fixed exposure.



2 Press the ✳ button.



- [✳] is displayed, and the exposure is locked.
- To unlock it, press the button again.

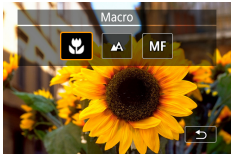
3 Compose the shot and shoot.

- AE: Auto Exposure

Shooting Close-Ups (Macro)

To restrict the focus to subjects at close range, set the camera to [🌷].

P



1 **Press the ◀ button to choose [🌷].**

2 **Shoot.**

- If the flash fires, vignetting may occur.
- To prevent camera shake, try mounting the camera on a tripod, pressing the ▲ button, and choosing [⏲2] before shooting.

Shooting in Manual Focus Mode

When focusing is not possible in AF mode, use manual focus. To make focusing easier, magnify the display.

P



1 Set the camera to manual focus.

- Press the ◀ button and choose [MF].
- [MF] and the MF indicator are displayed.



(1)

2 Focus.

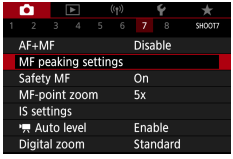
- Using the MF indicator (1, which shows distance and focal position) as a guide, press and hold the ▲/▼ buttons to specify the general focal position.
- Briefly press the ▲/▼ buttons to fine-tune the focal position as you watch the magnified display. To adjust the magnification, press the ▶ button.
- You can move the magnified display area by dragging it. To return it to the center, press the MENU button.

3 Shoot.

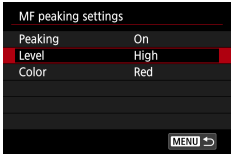
- To focus more accurately, try attaching the camera to a tripod to stabilize it.
- You can start manual focus with magnified display (MF-point zoom).
- Press the shutter button halfway to have the camera fine-tune the focal position (Safety MF).
- Magnified display in step 2 is not available during RAW burst shooting.

Easily Identifying the Focus Area (MF Peaking)

Edges of subjects in focus are displayed in color to make manual focusing easier. You can adjust the color and display level.



1 **[MF peaking settings] → [Peaking] → [On]**



2 **Configure the settings.**

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

Shooting with 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.

P



1 **Lock the focus.**

- With the shutter button pressed halfway, press the ◀ button.
- The focus is now locked, and [MF] and the MF indicator are displayed.

2 **Compose the shot and shoot.**

- To unlock the focus, press the ◀ button again, and choose [AF] or [MF].

- AF Lock is not available when set to Servo AF (📖152).

Shooting at Preset Focal Lengths (Step Zoom)

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

AUTO



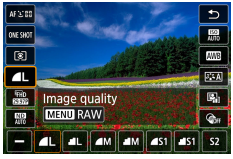
- To zoom in, turn the ◑ ring counterclockwise. To zoom out, turn the ◑ ring clockwise.

- Step zoom is not available when recording movies even if you turn the ◑ ring.
- When you are using digital zoom, you cannot adjust the zoom factor by turning the ◑ ring counterclockwise. However, you can set the focal length to 100 mm by turning it clockwise.

Changing Image Quality

Choose from 7 combinations of size (number of pixels) and compression (image quality). Also specify whether to capture images in RAW format.

P



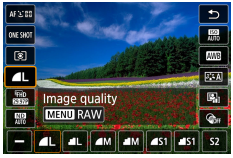
1 (SET) **button → [◢L] → choose an option**

- [◢] and [▟] indicate different levels of image quality depending on the extent of compression. At the same size (pixel count), [◢] offers higher image quality. Although [▟] images have slightly lower image quality, more fit on a memory card. Note that [S2]-size images are of [◢] quality.

Capturing in RAW Format

The camera can capture images in JPEG and RAW format.
RAW images are “raw” data, before processing to create JPEGs.

P



1 (SET) **button → [◢L] → press the MENU button**



2 Choose the method of shooting in RAW.

- [RAW] produces RAW images with maximum image quality. [CRAW] produces RAW images with more compact file sizes.
- RAW image data cannot be used as-is for viewing on a computer or printing. You must first process it on this camera or use the Canon application Digital Photo Professional to convert images to ordinary JPEG or TIFF files.
- Digital zoom is not available when capturing images in RAW format.
- The file extension for JPEG images is .JPG, and the extension for RAW images is .CR3. File names of JPEG and RAW images captured together have the same image number.
- You can also configure this setting in [Image quality]. To capture images in both JPEG and RAW format simultaneously, choose [RAW] or [CRAW] in [RAW].
- Only JPEG images are captured when [RAW] is set to [–] on the [Image quality] screen, and only RAW images are captured when [JPEG] is set to [–].

Changing the Aspect Ratio

The image aspect ratio (ratio of width to height) can be changed.

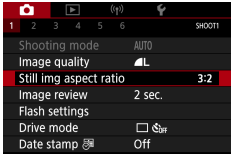


3:2



4:3

AUTO

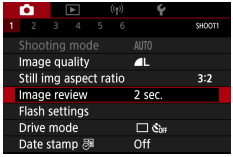


1 **[Still img aspect ratio]**

Changing the Image Display Period after Shots

How long images are shown after shots is adjustable.

AUTO



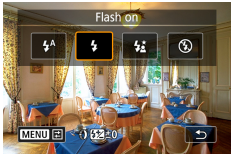
1 **[Image review]**

Off	No image display after shots.
2 sec./4 sec./8 sec.	Images are displayed for the specified time. Even while the shot is displayed, you can prepare for the next shot by pressing the shutter button halfway again.
Hold	Images are displayed until you press the shutter button halfway.

Changing the Flash Mode

You can change the flash mode to match the shooting scene.

P



1 Press the ▶ button to choose a flash mode.

Auto flash	Fires automatically in low-light conditions.
Flash on	Fires for each shot.
Slow synchro	Fires to illuminate the main subject (such as people) while shooting at a slower shutter speed to illuminate backgrounds out of flash range.
Flash off	For shooting without the flash.

- If the flash fires, vignetting may occur.
- 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.
- In [ ] mode, even after the flash fires, ensure that the main subject does not move until the shutter sound is finished playing.

Locking Brightness / Exposure in Flash Photography (FE Lock)

Retain the flash output level.



FE lock



Without FE lock (overexposed)

P



1 **Raise the flash and set it to [ϟ] or [ϟ*].**

2 **Aim at a subject for fixed exposure.**



3 **Press the ✳ button.**



- The flash fires, a circle is displayed showing the metering range, and [ϟ*] is displayed, indicating that the flash output level has been retained.

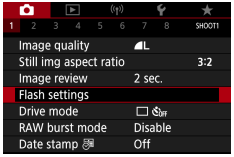
4 **Compose the shot and shoot.**

- FE: Flash Exposure
- [ϟ] blinks when standard exposure is not possible, even if you press the ✳ button to fire the flash. Enable FE lock by pressing the ✳ button when subjects are within flash range.

Configuring Flash Settings

Several flash settings are available.

P



1 **[Flash settings]**

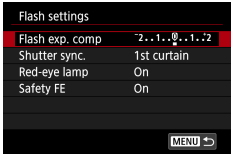
- You can also access the [Flash settings] screen by pressing the ▶ button and immediately pressing the MENU button.

Adjusting Flash Exposure Compensation

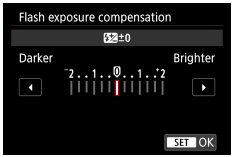
You can adjust the flash exposure from –2 to +2 stops, in 1/3-stop increments.


Set toward −


Set toward +



1 **[Flash exp. comp]**



2 **Set the amount of compensation.**

Adjusting Flash Output

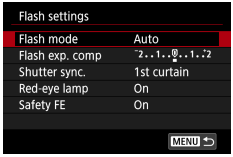
Choose from three flash levels in **Tv**/**Av**/**M** modes.



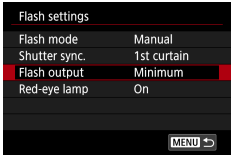
Flash output: Minimum



Flash output: Maximum



1 **[Flash mode] → [Manual]**



2 **[Flash output]**

Changing the Flash Timing

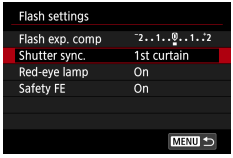
The timing of flash firing relative to shutter release is adjustable.



1st curtain



2nd curtain



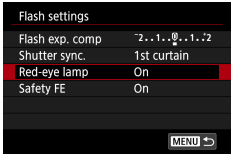
1 [Shutter sync.]

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

- [1st curtain] is used whenever the shutter speed is 1/100 or faster, even if you select [2nd curtain].

Reducing Red-Eye

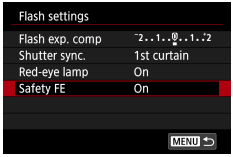
To help prevent red-eye, the camera can illuminate the red-eye reduction lamp before firing the flash in low-light shots.



1 [Red-eye lamp]

Configuring Safety FE

To ensure suitable exposure in flash photography under unfavorable exposure conditions, the camera can automatically adjust the shutter speed, aperture value, and ISO speed.



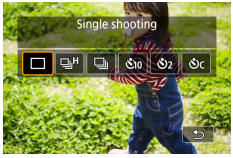
1 [Safety FE]

- Shots may be captured using settings different from the values displayed when you press the shutter button halfway.

Continuous Shooting

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

AUTO



1 ▲ **button →** [ ] **or** [ ]

2 **Shoot.**

- The camera shoots continuously as long as you hold the shutter button all the way down.

- During continuous shooting in AUTO mode, focus is locked at the position determined for the first shot.
- Shooting may stop momentarily or continuous shooting may slow down depending on shooting conditions and camera settings.
- As more shots are taken, shooting may slow down.
- There may be a delay before you can shoot again, depending on shooting conditions, the type of memory card, and how many shots you took continuously.
- Shooting may slow down if the flash fires.
- Screen display in continuous shooting differs from the images actually captured and may look out of focus.
- Fewer continuous shots may be available under some shooting conditions or camera settings.

Using the Self-Timer

With the self-timer, you can include yourself in group photos or other timed shots. The camera will shoot about 10 seconds after you press the shutter button all the way down. By setting the timer to two seconds, you can also avoid any camera shake from pressing the shutter button.

AUTO



1 ▲ **button →** [ⓒ10], [ⓒ2] **or** [ⓒC]

2 **Shoot.**

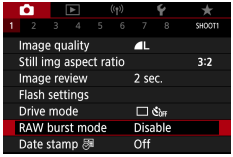
- Focus on the subject and press the shutter button all the way down.
- Once you start the self-timer, the lamp will blink and the camera will play a self-timer sound.

- Even when set, the self-timer has no effect if you press the movie shooting button to start recording.
- 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.

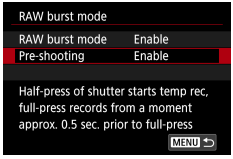
Shooting in RAW Burst Mode

This mode enables fast continuous shooting of RAW images. Useful when you want to choose the best shot taken at exactly the right moment from your captured images. Shots are captured as a single file (roll) with multiple images. You can extract any image from the roll to save it separately (📖192).

P



1 **[RAW burst mode] → [RAW burst mode] → [Enable]**



2 **[Pre-shooting]**

Enable	Shooting begins slightly before (up to approx. 0.5 sec. before) you press the shutter button all the way down, after you initially hold it down halfway momentarily.
Disable	Shooting begins when you press the shutter button all the way down.

3 **Shoot.**

- An on-screen indicator shows buffer status.

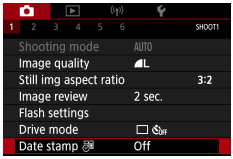
- Pressing the shutter button all the way down shoots continuously until the buffer becomes full, or until you release the button.

- Use memory cards with enough free space (4 GB or more).
- SD Speed Class 10 or higher memory cards are recommended in RAW burst shooting. Writing will finish faster on cards with a fast write speed.
- RAW burst shooting is not available when the battery level indicator is blinking.
- Images may not be captured correctly if the battery runs out during image processing while you are shooting in RAW burst mode with a slow-writing card and low battery.
- ISO speed cannot be set manually in **P**, **Tv**, or **Av** mode, because ISO Auto is used.
- Shutter speeds slower than 1/30 sec. are not available in **Tv** or **M** mode.
- The camera does not autofocus as you shoot, and focus is determined by the first shot.
- The exposure setting for the first shot will apply to subsequent shots.
- Picture Style, white balance, and other settings configured for the first shot also apply to the next shots.
- The camera does not beep during continuous shooting, regardless of the [Beep] setting.
- File names of RAW burst images begin with CSI_ and end with the .CR3 file extension.
- Images are captured using the electronic shutter. Before shooting in RAW burst mode, read the notes and tips about the electronic shutter (📖151).
- RAW burst image data cannot be used as-is for viewing on a computer. You must first process it on this camera or use the Canon application Digital Photo Professional.

Adding a Date Stamp

The camera can add the shooting date to images, in the lower-right corner. However, note that date stamps cannot be edited or removed, so confirm beforehand that the date and time are correct (📖25).

AUTO



1 [Date stamp] → [Date] or [Date & time]



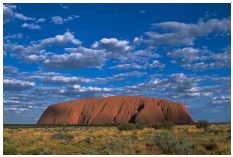
2 Shoot.

- As you take shots, the camera adds the shooting date or time to the lower-right corner of images.

- Shots taken without adding a date stamp can be printed with one as follows.
  However, adding a date stamp this way to images that already have one may cause it to be printed twice.
  - Print using printer functions
  - Use camera DPOF print settings to print

Adjusting Image Brightness (Exposure Compensation)

Standard exposure set by the camera for stills or movies can be adjusted in 1/3-stop increments in a range of ±3 stops.



Set toward −



Set toward +

P



1 Set the exposure compensation.

- Turn the exposure compensation dial to set the level.



2 Compose the shot and shoot.

- For details on the [●] (assign) position of the exposure compensation dial, see (285).

Auto Exposure Bracketing (AEB Shooting)

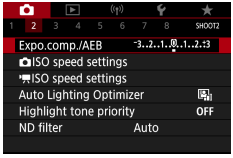
Three images are captured at different exposure levels. Bracketing width is adjustable in 1/3-stop increments in a range of ±2 stops, centered on the exposure compensation level.



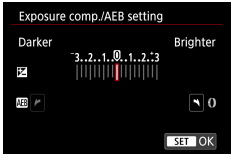
Underexposure



Overexposure



1 [Expo.comp./AEB]



2 Configure the setting → button

- Exposure compensation: Exposure compensation dial
- AEB: ring

3 Shoot.

- Over a series of three images captured as you press the shutter button, exposure is adjusted relative to the level set in step 2, from standard exposure to underexposure to overexposure.

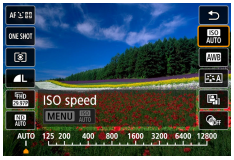
- When the drive mode is set to [High speed continuous] or [Low speed continuous], three images are captured each time you hold the shutter button all the way down, before the camera stops shooting.

- To clear the AEB setting, set the AEB amount to 0, following the configuration procedure.
- AEB shooting is available only in **P**/**Tv**/**Av**/**M**/**C** modes without using the flash.
- If exposure compensation is already in use, the value specified for that function is treated as the standard exposure level for AEB.

Changing the ISO Speed for Stills

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

P

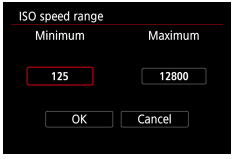


1 **(SET) button → [ISO AUTO] → choose an option**

- 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.
- Choosing a higher ISO speed will increase shutter speed, which may reduce subject and camera shake and enable sufficient flash illumination for subjects farther away. However, shots may look grainy.
- ISO speed can be set to H (25600) when [Maximum] for [ISO speed range] is set to [H(25600)].

Changing the ISO Speed Range

You can set the manually-settable ISO speed range (minimum and maximum limits).



1 **[ISO speed settings] → [ISO speed range]**

- Because H (equivalent to ISO 25600) is an expanded ISO speed, image noise (including graininess, dots of light, and banding), irregular colors, and color shift will be more noticeable, and apparent resolution will be lower than usual.

Adjusting ISO Auto Range

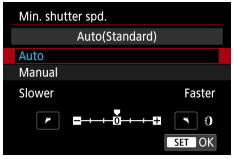
You can specify the range used for ISO Auto.



1 **[Auto range]**

Setting the Minimum Shutter Speed for ISO Auto

You can specify the minimum shutter speed used for ISO Auto in **P** or **Av** mode.



1 **[Min. shutter spd.]**

2 **[Auto] or [Manual]**

Auto	Turn the ring to set the difference (slower or faster) from standard.
Manual	Turn the ring to set the minimum shutter speed.

- If a correct exposure cannot be obtained with the maximum ISO speed limit set with [Auto range], a shutter speed slower than the [Min. shutter spd.] will be set to obtain the standard exposure.

Changing the ISO Speed for Movies

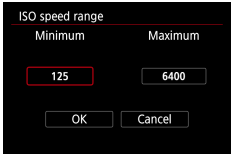
In [🎥] mode, you can set the ISO speed manually.
Set the ISO speed to [AUTO] for automatic adjustment to suit the shooting conditions. Otherwise, set a higher ISO speed for higher sensitivity, or a lower value for lower sensitivity.



1 **(SET) button → [ISO AUTO] → choose an option**

Changing the ISO Speed Range

You can specify the range (minimum and maximum) used when ISO speed is set manually for HD, Full HD, or 4K movies.
This setting applies to [🎥] mode.

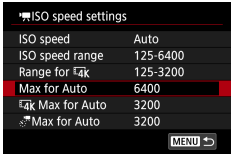


1 **[📷] [🎥ISO speed settings] → [ISO speed range] or [Range for 4K]**

- [ISO speed range] applies to HD and Full HD movies.

Adjusting the Maximum ISO Auto Setting

You can choose the maximum ISO speed set automatically for HD, Full HD, 4K, or time-lapse movies.



1 **[ISO speed settings] → [Max for Auto]/[4K Max for Auto]/[Max for Auto]**

- [Max for Auto] applies to HD and Full HD movies.

Auto Correction of Brightness and Contrast (Auto Lighting Optimizer)

Correct brightness and contrast automatically to avoid images that are too dark or have too little or too much contrast.



Low



High

P



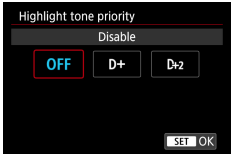
1 (SET) button → [ ] → choose an option

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

Shooting Bright Subjects (Highlight Tone Priority)

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

P



1 [Highlight tone priority]

- Setting highlight tone priority to [D+] or [D+2] will prevent you from setting ISO speeds lower than [200]. Auto Lighting Optimizer is also set to [Off] and cannot be changed, in this case.
- Under some shooting conditions, images may not look as expected even if you choose [D+2].

Adjusting ND Filter Settings

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

P



1 (SET) **button → [ND AUTO] → choose an option**

- When selecting [ND ON], 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.
- ND: Neutral Density

Changing the Metering Method

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

P



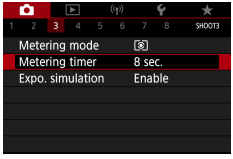
1 (SET) **button → [◉] → choose an option**

◉ Evaluative metering	For typical shooting conditions, including backlit shots. Automatically adjusts exposure to match the shooting conditions.
⊡ Spot metering	Metering restricted to within the [◯] (Spot AE Point frame), displayed in the center of the screen.
⬚ Center-weighted average	Determines the average brightness of light across the entire image area, calculated by treating brightness in the central area as more important.

Setting the Metering Timer

Adjust how long the exposure value is displayed after you press the shutter button halfway.

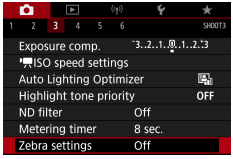
P



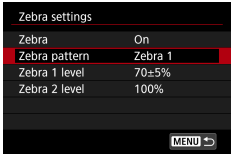
1 **[Metering timer]**

Easily Adjusting Exposure (Zebra Settings)

To help you adjust exposure before or during movie recording, you can display a striped pattern over or around image areas of a specified brightness.



1 **[Zebra settings]**



2 **[Zebra] → [On]**
[Zebra pattern] → choose an option

Zebra 1	Displays left-slanting stripes around areas of the specified brightness.
Zebra 2	Displays right-slanting stripes over areas that exceed the specified brightness.
Zebra 1+2	Displays both [Zebra 1] and [Zebra 2]. An overlapping zebra pattern is displayed where the [Zebra 1] and [Zebra 2] display areas overlap.

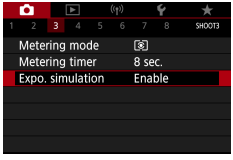
3 **[Zebra 1 level], [Zebra 2 level] → set the brightness level**

- A zebra pattern is displayed by image areas that are at your specified brightness, relative to a maximum brightness value of 100%.

Configuring Exposure Simulation

With exposure simulation, image brightness more closely matches the actual brightness (exposure) of your shots. Image brightness changes in response to exposure compensation. Do not use this feature if you prefer image display at standard brightness, which is usually easier to see.

P



1 **[Expo. simulation]**

Capturing Natural Colors (White Balance)

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


Daylight


Cloudy


Tungsten light

P



1 (SET) button → [AWB] → choose an option

Setting white balance

- ✳ button → ◀/▶ buttons

Adjusting white balance

- MENU button → ▲/▼/◀/▶ buttons

Setting white balance bracketing

- MENU button → ◉ dial
- Three images are captured per shot, each with different color tones.

Setting white balance color temperature

- [K] → ✳ button → ◀/▶ buttons

- Any correction level you set is retained even if you change the white balance option.
- On the advanced settings screen for correction, B is for blue, A for amber, M for magenta, and G for green.
- One level of blue/amber correction is equivalent to about 5 mireds on a color temperature conversion filter. (Mired: Color temperature unit representing color temperature conversion filter density)
- Color temperature can be set at 100K increments in a range of 2500 – 10000K.

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.

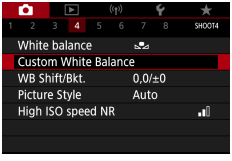


1 Shoot a white object.

- Focus and shoot with a plain white object filling the screen.
- Press the (SET) button.



2 [AWB] → [ ]



3 [Custom White Balance]



4 Load the white data.

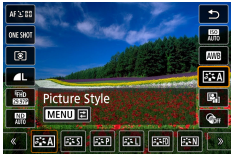
- Select your image from step 1 → (SET) button → [OK]
- Use the MENU button to return to the shooting screen.

- Capturing a white subject that is too bright or dark may prevent you from setting the white balance correctly.
- Choose [Cancel] to choose a different image. Choose [OK] to use that image for loading white data, but note that it may not produce a suitable white balance.
- Instead of a white object, a gray chart or 18% gray reflector (commercially available) can produce a more accurate white balance.
- The current white balance and related settings are disregarded when you capture a white subject.

Customizing Colors (Picture Style)

Choose color settings that express scenes or subjects well.

P



1 (SET) **button → [Picture Style] → choose an option**

[Auto]	Auto	The color tone is adjusted automatically to suit the scene. The colors look vivid, especially for blue skies, greenery, and sunsets in nature, outdoor, and sunset scenes.
[Standard]	Standard	The image looks vivid, sharp, and crisp. Suitable for most scenes.
[Portrait]	Portrait	For smooth skin tones, with slightly less sharpness. Suited for close-up portraits. To modify skin tones, adjust [Color tone].
[Landscape]	Landscape	For vivid blues and greens, and very sharp and crisp images. Effective for impressive landscapes.
[Fine Detail]	Fine Detail	For detailed rendering of fine subject contours and subtle textures. Makes images slightly more vivid.
[Neutral]	Neutral	For retouching later on a computer. Makes images subdued, with lower contrast and natural color tones.

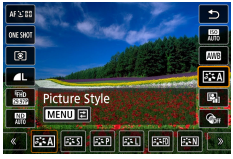
F	Faithful	For retouching later on a computer. Faithfully reproduces the actual colors of subjects as measured under ambient light with a color temperature of 5200K. Vivid colors are suppressed for a subdued look.
M	Monochrome	Creates black and white images.
1 2 3	User Def.	Add a new style based on presets such as [Portrait] or [Landscape] or a Picture Style file, and then adjust it as needed.

- Default [Auto] settings are used for [1], [2], and [3] until you add a Picture Style.

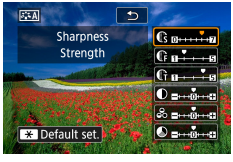
Customizing Picture Styles

Customize parameters of Picture Styles, such as contrast or saturation.

P



1 (SET) **button →** [ ] **→ choose an option →** MENU **button**



2 Configure the settings.

- Item: ▲/▼ buttons
- Option: ◀/▶ buttons

Sharpness	Strength	Adjust the level of edge enhancement. Choose lower values to soften (blur) subjects, or higher values to sharpen them.
	Fineness	Indicates the edge thinness that enhancement applies to. Choose lower values for more enhanced details.
	Threshold	Contrast threshold between edges and surrounding image areas, which determines edge enhancement. Choose lower values to enhance edges that do not stand out much from surrounding areas. Note that with lower values, noise may also be emphasized.
Contrast		Adjust the contrast. Choose lower values to decrease the contrast, or higher values to increase it.
Saturation*1		Adjust the intensity of colors. Choose lower values to make colors faded, or higher values to make them deeper.
Color tone*1		Adjust skin color tone. Choose lower values to produce redder hues, or higher values to produce yellower hues.

Filter effect*2	Emphasize white clouds, the green of trees, or other colors in monochrome images. N: Normal black-and-white image with no filter effects. Ye: The blue sky will look more natural, and the white clouds will look crisper. Or: The blue sky will look slightly darker. The sunset will look more brilliant. R: The blue sky will look quite dark. Fall leaves will look crisper and brighter. G: Skin tones and lips will appear muted. Green tree leaves will look crisper and brighter.
Toning effect*2	Choose from the following monochrome hues: [N:None], [S:Sepia], [B:Blue], [P:Purple], or [G:Green].

*1 Not available with [M].
*2 Only available with [M].

- In [Sharpness], [Fineness] and [Threshold] settings are not applied to movies.
- [Filter effect] results are more noticeable with higher [Contrast] values.

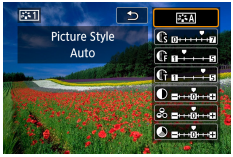
Saving Customized Picture Styles

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

P



1 **(SET) button → [A] → choose [1], [2], or [3] → MENU button**



2 **Configure the settings.**

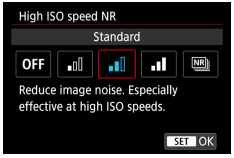
- Item: ▲/▼ buttons
- Option: ◀/▶ buttons

Reducing Noise in High-ISO Shooting



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

P

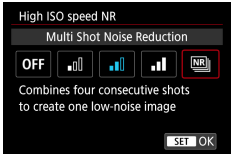


1 **[High ISO speed NR]**

Using Multi Shot Noise Reduction



Automatically combine four images captured at once to reduce noise. Compared to setting [High ISO speed NR] to [High], this feature minimizes loss of image quality while reducing noise.



1 **[High ISO speed NR]→[Multi Shot Noise Reduction]**

- Unexpected results may occur if images are quite misaligned (from camera shake, for example). Mount the camera on a tripod or take other measures to keep it still, if possible.
- If you shoot a moving subject, the subject's movement may leave afterimages or the surrounding area of the subject may become dark.
- Depending on shooting conditions, noise may appear on the image periphery.
- Flash shooting is not possible.
- Recording the image to the card will take longer than with normal shooting. You cannot take another shot until processing is finished.

Shooting by Touching the Screen (Touch Shutter)

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

AUTO



1 Configure the setting.

- Touch [ ] and change it to [ ].



2 Shoot.

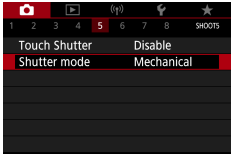
- Touch an area where you want to focus.

- A yellow AF point indicates that the camera could not focus on subjects.

Shooting with the Electronic Shutter

A mechanical shutter is normally used for shooting, but switching to the electronic shutter enables faster shutter speeds.

P



1 **[Shutter mode]→[Electronic]**

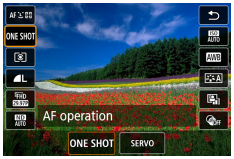
2 **Shoot.**

- Suitable for shooting under bright conditions with a fast shutter speed.
- The fastest shutter speed is 1/25600 sec.
- Camera shake or subject motion may cause image distortion.
- Under fluorescent lighting or other flickering light sources, the screen may flicker and images may be affected by horizontal stripes (noise) or irregular exposure. If so, it may be helpful to reduce the shutter speed.
- During exposure, a white frame is displayed around the screen as you shoot. Note that it is not displayed at shutter speeds slower than 1 sec.
- Lens aperture adjustment is still audible, even when set to [Electronic]. Other mechanical sounds may also be audible, depending on shooting conditions.
- The mechanical shutter may be activated for image processing after you shoot, under some shooting conditions.
- Bands of light may be displayed and captured images may be affected by light and dark banding if you shoot with electronic shutter during flash firing by other cameras or under fluorescent lighting or other flickering light sources.
- Continuous shooting and flash photography are not available.

Shooting with Servo AF

Focus and exposure are maintained where the blue AF point is displayed while you press the shutter button halfway. This helps you avoid missing shots of subjects in motion.

P



1 (SET) **button → [ONE SHOT] → [SERVO]**

2 **Press the shutter button halfway to focus.**

3 **Press all the way down to shoot.**

- The camera may not be able to shoot while focusing, even if you press the shutter button all the way down. Keep holding down the shutter button as you follow the subject.
- Exposure is not locked in Servo AF mode when you press the shutter button halfway but is determined the moment you shoot.
- Continuous shooting with auto focus is possible by specifying Servo AF. Note that continuous shooting is slower at this time.
- Depending on the distance to the subject and the subject's speed, the camera may not be able to achieve correct focus.

Choosing the AF Method

Choose a method of auto focusing (AF) for the subject and scene you are shooting.

P



1 **(SET) button → [AF] → choose an option**

+Tracking	Shoot with the focus on the face of the main subject, as determined by the camera. Subjects are tracked within a certain range.
Spot AF	Autofocus with an AF point smaller than for 1-point AF.
1-point AF	The camera focuses using a single AF point. Effective for reliable focusing.

- Focusing may take longer or be incorrect when subjects are dark or lack contrast, or in very bright conditions.

+Tracking

- After you aim the camera at the subject, a white frame is displayed around the face of the main subject as determined by the camera.
- If no faces are detected when you aim the camera at people, pressing the shutter button halfway displays green frames around other areas in focus.
- With the following subjects, faces may not be detected.
  - Subjects that are distant or extremely close
  - Subjects that are dark or light
  - Faces in profile, at an angle, or partly hidden
- The camera may misinterpret non-human subjects as faces.

Moving the AF Point

The AF point can be moved when the AF method is [1-point AF] or [Spot AF].



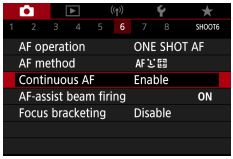
1 Touch the screen.

- Touch a spot to perform focusing on the spot (Touch AF).
- Center (original position): MENU button

Changing the Focus Setting

Continuous AF constantly focuses on subjects the camera is aimed at, even when the shutter button is not pressed. This setting can be changed to limit autofocusing to the moment you press the shutter button halfway.

P



1 **[Continuous AF]**

Enable	Helps avoid missing sudden photo opportunities, because the camera constantly focuses on subjects until you press the shutter button halfway.
Disable	Conserves battery power, because the camera does not focus constantly. However, this may delay focusing.

Configuring the AF-Assist Beam

The lamp lights up to help you focus when you press the shutter button halfway in low-light conditions. You can configure whether the beam is activated.

P

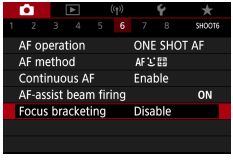


1 **[AF-assist beam firing]**

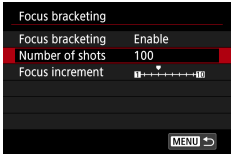
Continuous Shooting as the Focal Distance is Changed (Focus Bracketing)

Focus bracketing enables continuous shooting with the focal distance changed automatically after a single shot.
From these images, you can create a single image in focus over a wide area by using an application that supports depth compositing, such as the Canon application Digital Photo Professional.

P



1 **[Focus bracketing] → [Focus bracketing] → [Enable]**



2 **Configure the settings.**

Number of shots	Specify the number of images captured per shot.
Focus increment	Specify how much to shift the focus. This amount is automatically adjusted to suit the aperture value at the time of shooting.

3 Shoot.

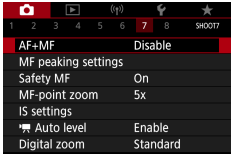
- To create a new folder: touch [📁+] → [OK]
- Focus at the nearer end of your preferred focal range, then press the shutter button completely.
- Once shooting begins, release the shutter button.
- The camera shoots continuously, shifting the focal position toward infinity.
- Shooting ends after your specified number of images, or at the far end of the focal range.

- Mount the camera on a tripod or take other measures to keep it still.
- Shooting with a wider angle of view is recommended.
- Because larger aperture values increase the focus shift, focus bracketing covers a wider range under the same [Focus increment] and [Number of shots] settings in that case.
- Suitable [Focus increment] settings vary by subject. An unsuitable [Focus increment] setting may cause unevenness in composite images, or shooting may take more time because more shots are taken. Take some test shots to decide a suitable [Focus increment] setting.
- Flash shooting is not possible.
- Details such as shutter speed, aperture value, and ISO speed are determined by conditions for the first shot.
- To cancel shooting in progress, press the shutter button all the way down again.
- Canceling shooting in progress may cause exposure problems in the last image. Avoid using the last image when combining the images in Digital Photo Professional.
- Images are captured using the electronic shutter. Before shooting with focus bracketing, read the notes and tips about the electronic shutter (📖151).
- If [Picture Style] is set to [Auto], [Standard] will be applied for shooting.
- [Focus bracketing] switches to [Disable] when the camera is turned off.
- After depth compositing, you can crop the image if necessary.
- Combining images may take some time when the [Number of shots] setting is high.

Fine-Tuning the Focus

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

P



1 **[AF+MF] → [Enable]**

2 **Focus.**

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

3 **Fine-tune the focus.**

- Turn the ring. Referring to the on-screen MF indicator (which shows the distance and focal position) and the magnified display, turn the ring to adjust the focus.
- To enlarge or reduce the magnified display, press the ▶ button.

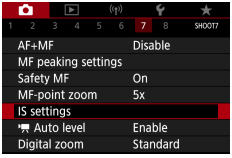
4 **Shoot.**

- Cannot be used with Servo AF.

Changing the IS Mode Settings

Image stabilization is adjustable.

P



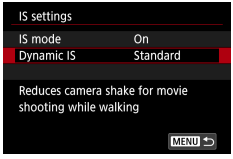
1 [IS settings] → [IS mode]

Off	Deactivates image stabilization.
On	Optimal image stabilization for the shooting conditions is automatically applied.
Shoot only	Image stabilization is active only at the moment of shooting.

- The [IS mode] setting changes to [On] for movie recording, even if [Shoot only] is set.
- If image stabilization cannot prevent camera shake, mount the camera on a tripod or take other measures to hold it still. Additionally, you should set [IS mode] to [Off] when using a tripod or other means to secure the camera.

Correcting Severe Camera Shake

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



1 **[Dynamic IS] → [High]**

Using Auto Level

Auto leveling helps keep movies straight as you record them. Once recording begins, the display area may narrow, and subjects may be enlarged.

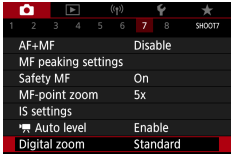


1 [Auto level]

Using 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.

P



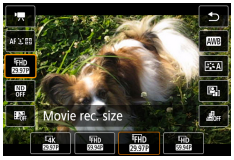
1 **[Digital zoom] → [1.6x] or [2.0x]**

- The view is enlarged and the zoom factor is displayed.

- The shutter speed at maximum telephoto (when you move the zoom lever all the way toward T) may match the speed when zooming in to enlarge subjects with digital zoom.

Changing Movie Recording Size

Adjust the movie recording size. The frame rate indicates how many frames are recorded per second, and available options depend on the NTSC or PAL setting.

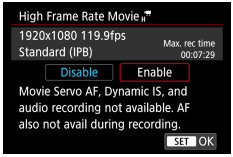


1 **button → [FHD 29.97P] → choose an option**

- [4K 29.97P], [4K 23.98P], and [4K 25.00P] are only available in mode.
- Maximum recording time per movie is 9 min. 59 sec. for 4K movies and 29 min. 59 sec. for Full HD and HD movies.
- Movie file names begin with MVI_ and end with the .MP4 file extension.
- The camera may overheat after repeated movie recording, which may temporarily disable shooting.
- To avoid overheating, turn the camera off when you are not using it.
- The date/time/zone must be set to enable normal camera temperature control. Once the date/time/zone are set, temperature warnings can be displayed correctly.
- If [Overheated! Shutting down.] is displayed, turn off the camera and wait at least 5 min. Note that the camera should be off for 20 min. or more if you will record a 4K movie up to 9 min. 59 sec. or a high frame rate movie up to 7 min. 29 sec. (Actual movie recording times may be shorter, depending on the recording environment and conditions of use.)

Recording Movies for Slow-Motion Playback (High Frame Rate)

Record Full HD movies at a high frame rate of 119.9 fps or 100.0 fps. Because high frame rate movies are recorded as 29.97 fps/25.00 fps movie files, they are played back in slow motion at 1/4 speed.

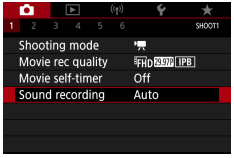


1 **[Movie rec quality]→[High Frame Rate]**

- Before recording, press the shutter button halfway to focus.
- The maximum recording time per movie is 7 min. 29 sec.
- Sound is not recorded.

Configuring Sound Recording Settings

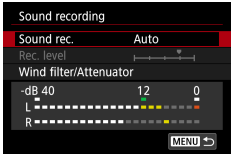
Several sound recording settings are available.



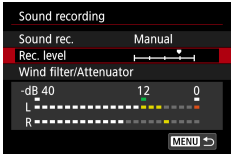
1 **[Sound recording]**

Adjusting the Recording Volume

When set to [Auto], the recording level (volume) is automatically adjusted during recording. If you prefer to adjust the level manually to suit the scene, change it to [Manual].



1 **[Sound rec.] → [Manual]**

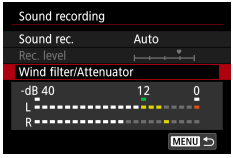


2 **[Rec. level]**

- (SET) button → ◀/▶ buttons

Wind Filter

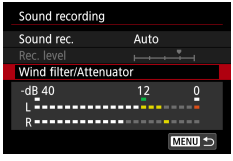
Noise from windy recording sites can be reduced with the wind filter. If there is no wind, recordings may sound unnatural when this option is used. In this case, set [Wind filter] to [Disable].



1 **[Wind filter/Attenuator] → [Wind filter]**

Attenuator

The attenuator can prevent audio distortion at noisy recording sites. Three options are available: [Enable], [Disable], or [Auto] for automatic activation/deactivation as needed.



1 **[Wind filter/Attenuator] → [Attenuator]**

Configuring Movie Servo AF

Specify your preferred characteristics for AF operation in movie recording, which includes whether subjects are always kept in focus.



1 [Movie Servo AF]

Mode 1 (Responsive)	Emphasizes fast, responsive focusing. Suitable for responsive subject tracking, or if you will walk or move in other ways while recording. Keeps subjects in focus, even when the shutter button is not pressed halfway.
Mode 2 (Smooth)	Emphasizes natural focusing and smoothness in movie recording. Suitable for landscapes or relatively still subjects. Keeps subjects in focus, even when the shutter button is not pressed halfway.
Disable	Focus remains constant as movies are recorded.

- To keep the focus at a specific position, or if you prefer not to record mechanical sounds from the lens, you can temporarily stop Movie Servo AF by touching [Movie Servo AF] or pressing the ▶ button.

Using Auto Slow Shutter

Specify whether to reduce the shutter speed automatically under low light when recording [FHD 59.94P], [HD 59.94P], [FHD 50.00P], or [HD 50.00P] movies.



1 [Auto slow shutter]

Enable	Enables you to record movies that are brighter and less affected by image noise by automatically reducing the shutter speed to 1/30 sec. (or 1/25 sec.) under low light.
Disable	Enables you to record movies with smoother, more natural movement, less affected by subject shake than when set to [Enable]. Note that under low light, movies may be darker than when set to [Enable].

- Set to [Disable] when recording moving subjects under low light, or when afterimages such as trails may occur.

Miniature Model Effect in Movies (Miniature Effect Movie)



Miniature effect movie

Creates the effect of a miniature model in movies, by blurring image areas outside a selected area.

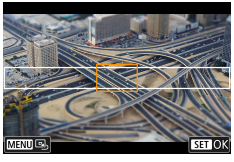


1 **(SET) button → [Miniature effect movie OFF] → choose an option**



2 **Set the area to keep in focus (miniature effect scene frame).**

- ▼ button → ▲/▼ buttons to move the frame → (SET) button



3 **Set the position in focus (AF point).**

- ▲/▼/◀/▶ buttons to move the AF point → (SET) button

4 **Start recording.**

- Press the shutter button halfway to focus, and then press the movie shooting button.

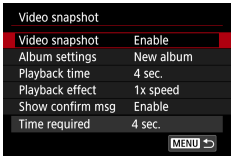
Estimated playback speed and time for a movie recorded for one minute:

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

- Sound is not recorded.
- To make people and objects in the scene move quickly during playback, choose [5x], [10x], or [20x] before recording the movie. The scene will resemble a miniature model.
- To change the miniature effect scene frame orientation, press the ◀/▶ buttons in step 2.

Recording Video Snapshots

Record a series of 4, 6, or 8 sec. video snapshots, and the camera will combine them to create a video snapshot album that shows these highlights of your trip or event.

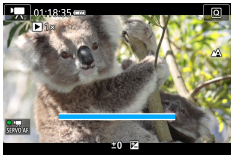


1 [Video snapshot] → [Video snapshot] → [Enable]

2 Configure the settings.

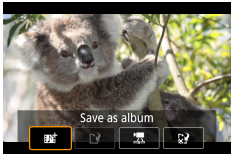
Playback time	Choose the video snapshot playback time.
Playback effect	Choose the video snapshot playback effect.
Show confirm msg	Choose whether to display a confirmation message after each video snapshot is recorded.

- The time required to record a video snapshot ([Time required]) is displayed, based on [Playback time] and [Playback effect].
- After your first video snapshot is recorded, in [Album settings], you can choose which album to save your next video snapshot to.



3 Start recording.

- Press the MENU button to return to the shooting screen, and then press the movie shooting button.
- A bar showing the elapsed time is displayed, and recording stops automatically when finished.



4 Save to an album.

- This message is not displayed if you set [Show confirm msg] to [Disable] in step 2, and the video snapshot is automatically saved to the album you selected in [Album settings] in step 2.
- Repeat steps 3 – 4 as needed.

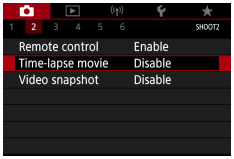
5 Stop recording video snapshots.

- (SET) button → [▶4] → [▶OFF]

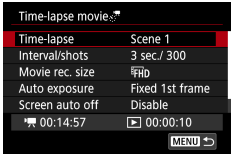
- Video snapshots are saved to a new album when the recording time of the current album exceeds 5 min.
- The indicated playback time per video snapshot is only a guideline.
- Set the movie recording size to [FHD 29.97P] or [FHD 25.00P].
- Any video snapshots that you manually stop recording are saved as normal movies.
- No sound is recorded when you set [Playback effect] to [2x speed] or [1/2x speed].

Recording Time-Lapse Movies

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



1 [Time-lapse movie] → [Time-lapse] → [Scene *] or [Custom]

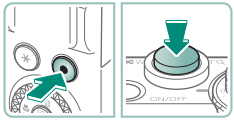


2 Configure the settings.

- Set the shooting interval and other settings.

3 Return to the shooting screen and prepare for recording.

- Mount the camera on a tripod or take other measures to keep it still.
- Set the exposure.
- To take a test shot: Press the shutter button all the way down.

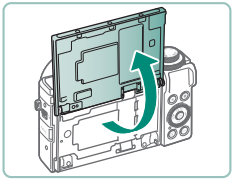


4 Start recording.

- Movie shooting button → press the shutter button all the way down

- As you configure the items, the time required [🎬] and movie playback time [▶] are displayed.
- Set [Screen auto off] to [Disable] to keep the screen on for 30 minutes after you start shooting. Set it to [Enable] to turn the screen off about 10 seconds after the first frame is captured.
- Do not disturb the camera while recording.
- To cancel recording, press the shutter button or the movie shooting button again.
- Fast-moving subjects may look distorted in movies.
- Sound is not recorded.

Recording Movies of Yourself



1 **Enter mode.**

2 **Open the screen.**



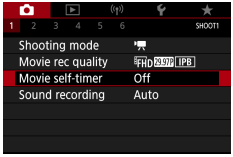
3 **Touch [●].**

- Movie recording begins. To stop recording, touch [■].

- To lock the exposure (AE Lock) during movie recording, touch [✳].
- To focus manually during movie recording, touch [AF] to change it to [MF], and then adjust the focus by touching [▲] [▼].

Using the Movie Self-Timer

Movie recording can be started by the self-timer.



1 [Movie self-timer] → [10 sec] or [2 sec]

2 Shoot.

- After you touch [●] or press the movie shooting button, the camera beeps and displays number of seconds left before recording.

- You can also use the movie self-timer for regular movie recording.

Configuring Information Display for HDMI Output

Specify whether to show on-screen information over images in HDMI output.

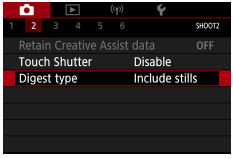


1 **[HDMI info disp]**

With info	Information display is included in HDMI output as movies are recorded. No image is shown on the camera. Movies can be recorded on the camera.
Clean/ 4K output	HDMI output consists only of 4K content, without information display. On the camera, information display is shown over images. Movies cannot be recorded on the camera.
Clean/ FHD output	HDMI output consists only of Full HD content, without information display. On the camera, information display is shown over images. Movies cannot be recorded on the camera.

Setting the Type of Digest Movie

When shooting in mode, both stills and digest movies are recorded. Specify whether to include a still moment in digest movies.



1 [Digest type]

Include stills	Digest movies include a still moment.
No stills	Digest movies do not include a still moment.

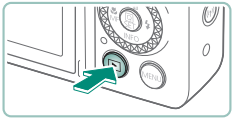
Playback

Enjoy browsing through your shots, and find and edit images in several ways.

- To prepare the camera for these operations, press the ▶ button to switch to playback.

Viewing

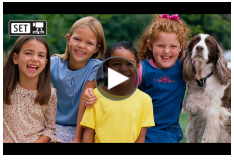
After shooting stills or movies, you can view them on the screen as follows.



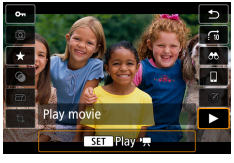
1 Press the ▶ button.



2 Choose images.



- Movies are labeled with [SET].



Playing movies

- (SET) button (twice)
- Press the ▲/▼ buttons to adjust the volume.



(1)

- (1) Highlight scene

- Pressing the ▶ button when the camera is off starts playback, and pressing it again turns the camera off.
- The lens is retracted after about a minute during playback. You can turn the camera off when the lens is retracted by pressing the ▶ button.
- To switch to a shooting mode during playback, press the shutter button halfway, press the movie shooting button, or turn the mode dial.
- It may not be possible to play back or edit images that were renamed or already edited on a computer.
- To pause or resume movies, press the (SET) button.
- Lines indicating the aspect ratio are displayed when you view RAW images. These lines are shown on the top and bottom of images shot at an aspect ratio of [16:9] and on the left and right of images shot at an aspect ratio of [4:3] or [1:1].
- Pressing the ◀ or ▶ button skips about 4 sec. backward or forward during movie playback. During digest movie playback, this skips to the previous or next clip.

Highlight Scenes

- Sections in blue on the movie playback panel are highlight scenes detected by the camera. Depending on the movie, it may take some time until blue sections are displayed. Note that the blue section for a long highlight scene may be automatically divided into a few parts.
- Turning the ring during movie playback skips to the beginning of the highlight scene. When there are multiple highlight scenes, this skips to the beginning of the previous or next highlight scene.
- Highlight scenes are not detected in the following movies.
  - Digest movies
  - Miniature effect movies
  - Video snapshots
  - High frame rate movies
  - HDR movies
  - Time-lapse movies

Magnifying Images

Images you play back can be magnified.







1 Choose an image.

2 Magnify or reduce the image.

- Magnify: Zoom lever toward Q
- Reduce: Zoom lever toward ▪



- Move the display position: ▲/▼/◀/▶ buttons

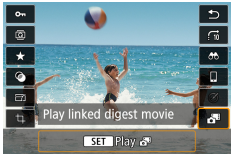
- When viewing a magnified image, you can switch to other images while maintaining magnified display by turning the ◉ dial.

Viewing Digest Movies

A short movie of scenes when you shoot in mode is created automatically. Playing a digest movie shows the scenes captured that day.



1 Choose a [SET] image.



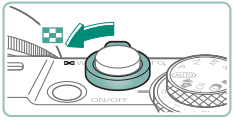
2 button → choose [ ]

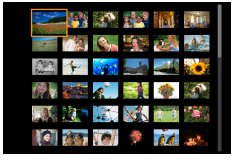
- The digest movie recorded automatically on the day of still shooting is played back from the beginning.

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

Finding Images in an Index

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





1 **Move the zoom lever toward .**

- Display more images: Zoom lever toward
- Display fewer images: Zoom lever toward

2 **Find the images.**

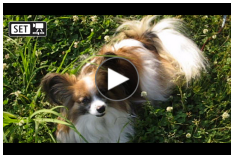
- ▲/▼/◀/▶ buttons or dial
- ring: Previous/next screen

3 **Choose an image.**

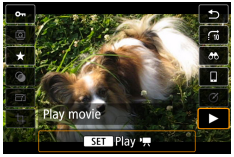
- button

Removing the Beginning/End of Movies

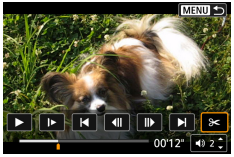
You can remove unneeded portions from the beginning and end of movies.



1 Choose a [SET] movie.

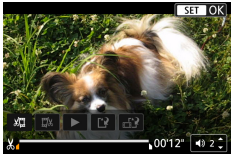


2 button → [▶]



3 Choose [✂].

- During playback, press the button to choose [✂].
- The movie editing panel and editing bar are displayed.

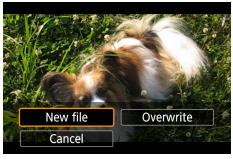


4 Specify portions to cut.

- Choose [] or [].
- To view the portions you can cut (identified by [] on the screen), press the ◀/▶ buttons to move [] or []. At the position to cut, press the button.

5 Review the edited movie.

- Playback: [▶]
- Cancel editing: MENU button



6 Save the movie.

- [] → [New file]
- Save a compressed version: [] → [OK]

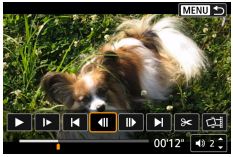
Image quality after compression when you choose [Save compressed version]

Before Compression	After Compression
4K 29.97P, FHD 59.94P, FHD 29.97P	FHD 29.97P
4K 23.98P, FHD 23.98P	FHD 23.98P
4K 25.00P, FHD 50.00P, FHD 25.00P	FHD 25.00P
HD 59.94P	HD 29.97P
HD 50.00P	HD 25.00P

- When you are specifying portions to cut, moving [] or [] to a position not identified with a [] icon will cut from the beginning to the nearest [] mark on the left (for []) or from the nearest [] mark on the right to the end (for []).
- For digest movies (📖62) and video snapshots (📖173), deletion is performed on the basis of clips.
- To erase and overwrite the original movie with the edited one, choose [Overwrite] on the screen for saving edited movies.
- 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.

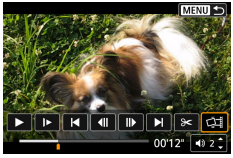
Extracting Frames of 4K Movies as Stills

Frames of your choice in [4K 29.97P], [4K 23.98P], or [4K 25.00P] movies can be saved as stills.



1 Choose a frame to extract.

- During playback, press the (SET) button, and then use [◀|| or ||▶] to choose a frame.



2 Save the image.

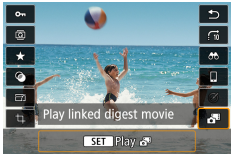
- [🖼] → [OK]

Editing Digest Movies

Individual chapters (clips) (📖62) recorded in A mode can be erased.
Be careful when erasing clips, because they cannot be recovered.



1 Choose a [SET] image.



2 (SET) button → choose [ ]



3 Choose a clip.

- During playback, press the (SET) button, and then use [◀] or [▶] to choose a clip.



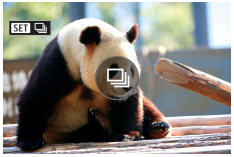
4 Erase the selected clip.

- [🗑] → [OK]

- After [Erase this clip?] is displayed, the chapter is erased and the digest movie is overwritten when you choose [OK] and press the (SET) button.
- Albums created when recording video snapshots can also be edited. Albums created with ▶ [Create album] cannot be edited.

Extracting Stills from RAW Burst Images

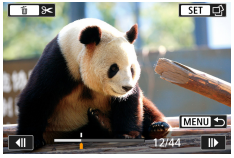
You can extract any image (as a JPEG or RAW image) from sets (rolls, 119) captured in RAW burst mode.



1 Choose the roll of images: [SET].

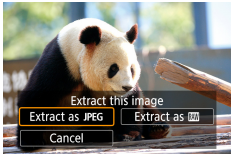


2 button → [ ] → button



3 Choose an image.

- Press the ◀▶ buttons to choose an image to extract.
- To delete unneeded portions at the beginning and end of the roll, press the ▲ button.



4 Save the image.

- button → [Extract as JPEG] or [Extract as RAW]
- When extracting JPEGs, you can choose [Edit and save] and apply RAW image processing (206) before saving.

- Images saved when [Extract as JPEG] is selected are in [L] quality.
- Creative filters, cropping, and resizing are not available when processing JPEGs extracted from RAW burst images or from RAW images extracted from RAW burst images.

Protecting Images

Important images can be selected and protected to prevent accidental erasure from the camera.
Protected images are labeled with a [🔑] icon.



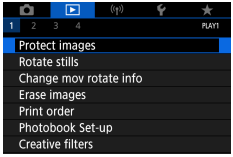
1 **Choose an image.**

2 **(SET) button → [🔑] → [Enable]**

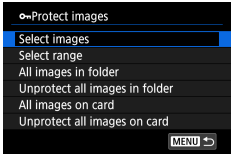
- Protected images on a memory card will be erased if you format the card.
- Protected images cannot be erased using the camera's erasure function. To erase them this way, first cancel protection.
- You can choose [All found images] or [Unprotect all found] by using [▶] [Protect images] or (SET) button → [🔑] → ✳ button when results are displayed for your specified image search conditions.
  - Choose [All found images] to protect all found images.
  - Choose [Unprotect all found] to clear protection of all found images.
- To cancel protection and remove [🔑] display, press the (SET) button again when [🔑] is displayed on the screen after you have chosen [▶] [Protect images] → [Select images].

Protecting Multiple Images

You can choose multiple images to protect at once.



1 [Protect images]



2 Choose images.



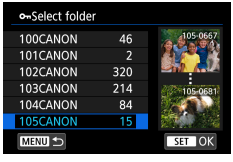
Selecting images individually

- [Select images] → choose an image → (SET) button → MENU button



Selecting a range

- [Select range] → choose the first image → (SET) button → choose the last image → (SET) button → MENU button



Selecting all images in a folder

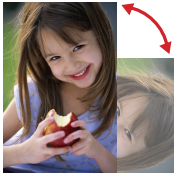
- [All images in folder] → choose a folder → [OK]



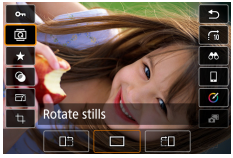
Selecting all images on a card

- [All images on card] → [OK]

Rotating Images



Change the orientation of images and save them.

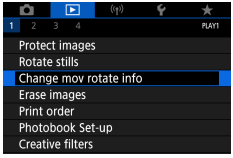


1 **Choose an image.**

2 **(SET) button → [⟲] → choose an option**

Changing Movie Rotation Information

Manually change movie rotation information (which determines which side is up).



1 ▶ **[Change mov rotate info]**

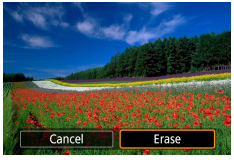
2 **Choose a movie.**

3 **Press the (SET) button.**

- As you watch the camera orientation icon in the upper left, press the (SET) button to specify which side is up.

Erasing Images

Unneeded images can be erased. Be careful when erasing images, because they cannot be recovered.



1 Choose an image.

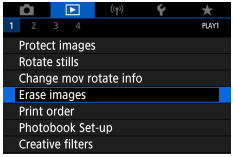
2 Press the ▲ button.

- Choose the erasure option → (SET) button

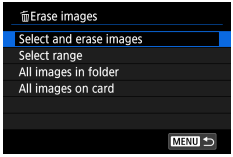
- Protected images cannot be erased.
- During display of images captured in both RAW and JPEG format, pressing the ▲ button displays [Erase RAW], [Erase JPEG], and [Erase RAW+JPEG]. Choose an option to erase the image.
- You can choose [All found images] by using ▶ [Erase images] when results are displayed for your specified image search conditions.
  - Choose [All found images] to erase all found images.
- To clear selection and remove [✓] display, press the (SET) button again when [✓] is displayed on the screen after you have chosen ▶ [Erase images] → [Select and erase images].

Erasing Multiple Images at Once

You can choose multiple images to erase at once.



1 [▶] [Erase images]

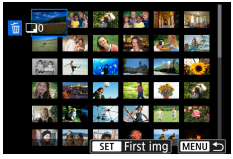


2 Choose images.



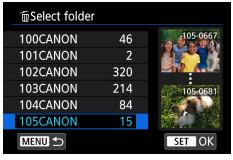
Selecting images individually

- [Select and erase images] → choose an image → (SET) button
- The image is labeled with [✓].
- MENU button → [OK]



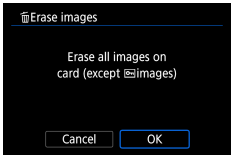
Selecting a range

- [Select range] → choose the first image → (SET) button → choose the last image → (SET) button → MENU button → [OK]



Selecting all images in a folder

- [All images in folder] → choose a folder → [OK]



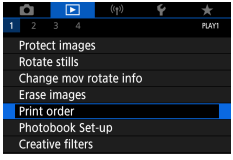
Selecting all images on a card

- [All images on card] → [OK]

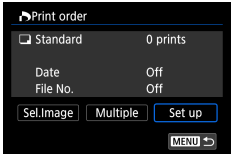
- Choosing an image captured in both RAW and JPEG format will erase both versions.

Adding Images to Print Orders (DPOF)

Set up batch printing (up to 400 images) or ordering prints from a photo development service (up to 998 images) by choosing the images on a memory card and the number of copies. The printing information you prepare this way will conform to DPOF (Digital Print Order Format) standards.



1 [Print order]



2 Add images to the print list.

Choosing images

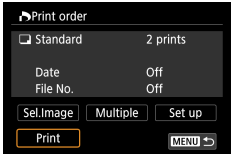
- [Sel.Image] or [Multiple] → choose images and the number of copies
- Press the MENU button to return to the printing screen.

Other settings

- [Set up] → choose an item → choose an option
- Press the MENU button to return to the printing screen.

- RAW images and movies cannot be selected.
- Not all of your DPOF settings may be applied in printing by the printer or photo development service, in some cases.
- Setting [Date] to [On] may cause some printers to print the date twice.

Printing Images Added to the Print Order (DPOF)



1 Connect the camera to a PictBridge-compatible printer.

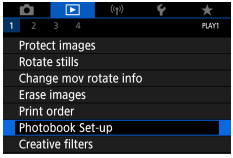
- The playback screen is displayed.
- (SET) button → [Print order]

2 Print the images.

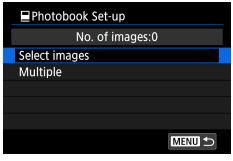
- [Print] → [OK]

Adding Images to a Photobook

Photobooks can be set up by choosing up to 998 images on a memory card.



1 [Photobook Set-up]



2 Choose images.

Selecting images individually

- [Select images] → choose an image → (SET) button → MENU button

Selecting a range

- [Multiple] → [Select range] → choose the first image → (SET) button → choose the last image → (SET) button → MENU button

Selecting all images in a folder

- [Multiple] → [All images in folder] → choose a folder → [OK]

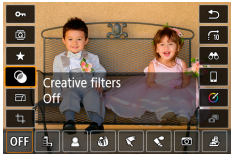
Selecting all images on a card

- [Multiple] → [All images on card] → [OK]

- RAW images and movies cannot be selected.

Applying Filter Effects to Images (Creative Filters)

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



1 (SET) button → [] → choose an option



2 Adjust the effect as needed.

- Set the level: ◀▶ buttons → (SET) button
- Move the [] frame: ▲/▼ buttons → (SET) button

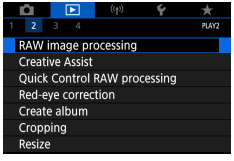
3 Save the image.

- For [], you can also choose the type of filter effect.
- For [], you can also move the frame by touching or dragging across the screen.
- For [], you can switch to vertical orientation by pressing [] and restore horizontal orientation by pressing [] again.

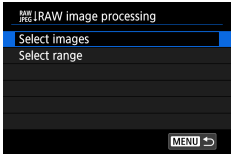
Processing RAW Images



Process images captured in RAW format on the camera. The original RAW image is retained, and a copy is saved as a JPEG.
Available when the mode dial is set to **P**/**Tv**/**Av**/**M**/.



1 [RAW image processing]

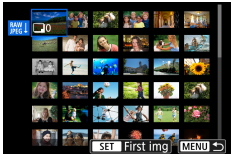


2 Choosing images



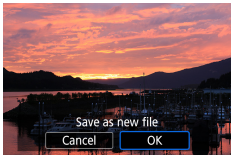
Selecting images individually

- [Select images] → choose an image → (SET) button
- The image is labeled with [✓].
- MENU button → [Use shot settings]



Selecting a range

- [Select range] → choose the first image → (SET) button → choose the last image → (SET) button → MENU button → [Use shot settings]



3 Save the image.



4 Choose the image to display.

- Images produced by in-camera processing will not match those processed with Digital Photo Professional exactly.
- To clear selection and remove [✓] display, press the (SET) button again when [✓] is displayed on the screen after you have chosen [Select images].
- This method of image processing is not available for images in sets (rolls) captured in RAW burst mode. Process the images after extracting them from rolls as RAW images (📖192).

Customizing RAW Processing

- By choosing [Customize RAW processing], you can manually adjust image brightness, Picture Styles, and other details before processing.
- On the processing conditions screen, you can also choose an effect for the selected processing condition by turning the dial.
- For magnified display on the processing conditions screen, move the zoom lever toward T.
- You can compare the current image (“After change”) to the original image (“Shot settings”) by pressing the ✳ button and turning the dial.

Applying Your Favorite Effects (Creative Assist)

Process RAW images by applying your preferred effects and saving as JPEGs.

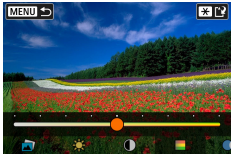


1 (SET) **button → [ ]**



2 Choose an effect.

- ◀▶ buttons → (SET) button



3 Choose the effect level and other details.

- ◀▶ buttons → (SET) button
- To reset the setting, touch [Reset].

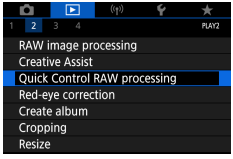
4 Save the image.

- ✳ button

- For details on Creative Assist effects, see the table in “Shooting with Effects Applied (Creative Assist)” (📖60).

Enabling Quick Control RAW Processing

Change [] on the Quick Control screen during playback to [RAW+JPEG]. Available when the mode dial is set to P/Tv/Av/M/.



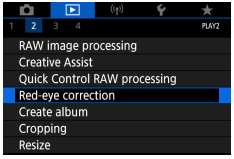
1 [Quick Control RAW processing] → [RAW image processing]

- [RAW+JPEG] is now available on the Quick Control screen during playback.

Correcting Red-Eye



Automatically corrects images affected by red-eye. You can save the corrected image as a separate file.



1 ▶ **[Red-eye correction]**

2 **Choose an image.**

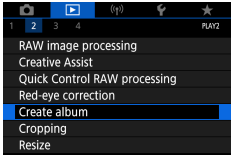
3 **Press the (SET) button.**

4 **Save the image.**

- Once red-eye is corrected, frames are displayed around corrected image areas.
- Some images may not be corrected accurately.

Combining Video Snapshots

Combine video snapshots to create a new movie (album).



1 [Create album]



2 Specify video snapshots.

- Choose a movie (an existing album) → (SET) button → MENU button → [OK]



3 Edit the album.

- Video snapshots in the movie selected in step 2 are displayed.
- Choose an item in the editing menu at the bottom and press the (SET) button.
- Along the top of the screen, choose video snapshots to edit, and edit them as needed.

Rearrange video snapshots	Rearrange video snapshots. Choose a video snapshot to move and press the (SET) button. To move it, use the ◀/▶ buttons.
Remove video snapshot	Choose video snapshots to exclude from the new album. Video snapshots labeled with a [🗑] icon are not included in the new album, but they are not deleted from the original album.
▶ Play video snapshot	Play the selected video snapshot.
Finish editing	Exit album editing.

4 Exit editing.

- Press the MENU button to return to the editing menu.
- Choose [Finish editing] to exit editing.

5 Save the album.

- Choose [Save].
- To add background music, choose [Background music].
- Choose [Preview] to preview the album you edited.

- Albums created with [Create album] cannot be edited.

Cropping



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



1 (SET) button → [⌗]



2 Adjust the cropping area.

- Reduce the frame: Zoom lever toward 🔍
  Enlarge the frame: Zoom lever toward ⬛
- Move the frame: ▲/▼/◀/▶ buttons
- Straighten the image: ◉ dial → [⟋] → (SET) button → ◉ dial
- Change the aspect ratio: ◉ dial → [⟷] → (SET) button
- Preview the image: ◉ dial → [⧉] → (SET) button



3 Save the image.

- ◉ dial → [💾] → [OK]

- RAW images cannot be edited.
- Cropped images cannot be cropped again.
- Cropped images cannot be resized or have creative filters applied.
- Cropped images will have a lower pixel count than uncropped images.
- While previewing the cropped image, you can adjust the cropping frame size, position, and aspect ratio.
- You can also specify the cropping frame size, position, orientation, and aspect ratio by choosing [▶] [Cropping], choosing an image, and pressing the (SET) button.

Resizing Images



Save a smaller version of an image, with fewer pixels.



1 (SET) **button → [Resize] → choose an option**

2 **Save the image.**

- JPEG [S2] images and RAW images cannot be edited.

Rating Images

Organize images by rating them on a scale of 1 – 5.



1 Choose an image.

2 (SET) button → [★] → choose an option

- Choose multiple images: ✳ button → choose an item



- [Select range]: Choose the first image → choose the last image → MENU button → ◑ ring to set the rating → [OK]

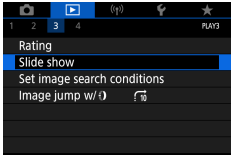


- [All images on card]: ◑ ring to set the rating → [OK]

- By viewing only images with a specified rating, you can restrict the following operations to all images with that rating.
  - Viewing, protecting, erasing, or adding images to a print list or photobook, viewing slideshows
- To remove ratings, press the (SET) button, choose [OFF] in the [★] setting item, and then press the (SET) button.
- When rating images using ▶ [Rating], you can apply a rating to all images in a folder.

Viewing Slideshows

Automatically play back images from a memory card.



1 **[Slide show] → [Start]**

- After you start playback and [Loading image...] is displayed, the slideshow starts in a few seconds.
- Press the MENU button to stop the slideshow.
- The camera's power-saving functions are deactivated during slideshows.
- To pause or resume slideshows, press the (SET) button.
- During a slideshow, you can also pause playback by touching the screen.
- You can switch to other images during playback by pressing the ◀/▶ buttons or turning the dial. For fast-forward or fast-rewind, hold the ◀/▶ buttons down.
- On the slideshow start screen, you can choose [Set up] to configure slideshow repetition, display time per image, and the transition between images.

Finding Images Matching Specified Conditions

Find images quickly on a memory card full of images by filtering image display according to your specified conditions.



1 (SET) button → [🔭]



2 Specify conditions.

- Item: ▲/▼ buttons
- Option: ◀/▶ buttons



3 Complete the setting.

- MENU button → [OK]
- Matching images are displayed in yellow frames.

Canceling filtered display

- (SET) button → [🔭] → ✳ button → MENU button → [OK]

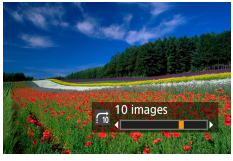
- You can apply protection or ratings exclusively to the found images in yellow frames by pressing the (SET) button.
- If you edit images and save them as new images, a message is displayed, and the images that were found are no longer shown.

Using the Control Ring to Find Images

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



1 **button → [ ] → choose an option**

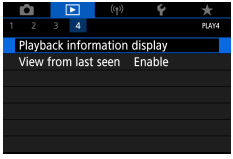


2 **Find the images.**

- ring

Customizing Playback Information Display

The shooting information displayed changes each time you press the ▼ button when display is set to playback. You can customize the information displayed.



1 ▶ [Playback information display]

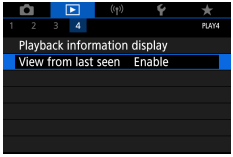


2 Press the ▲/▼ buttons and select screens.

- For screens to display, press the (SET) button to add [✓].
- For screens you prefer not to display, press the (SET) button to clear [✓].
- To specify a histogram to display, press the ✳ button.
- Choose [OK] to apply your settings.

Starting Playback from the Last Image Displayed

You can specify how image display begins when you switch to the playback screen after turning the camera off and on.



1 **[View from last seen]**

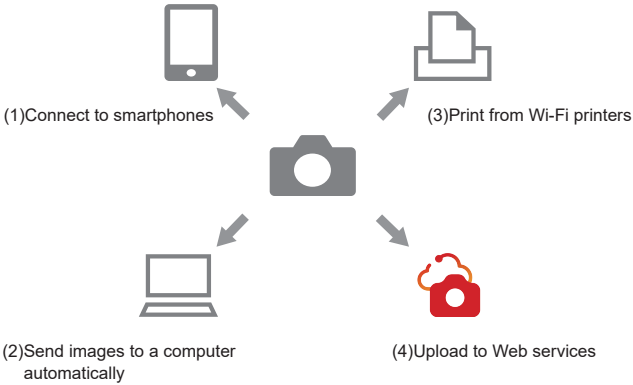
Enable	The last image displayed on the playback screen is displayed.
Disable	The most recent image is displayed.

Wireless Features

Send images wirelessly to a variety of compatible devices, or share them via Web services.
Before using wireless features, be sure to read “Precautions for Wireless Features” (📖318).

- Note that Canon cannot be held liable for any loss or damage from erroneous wireless communication settings when using the camera. In addition, Canon cannot be held liable for any other loss or damage caused by use of the camera.
- When using wireless communication functions, establish appropriate security at your own risk and discretion. Canon cannot be held liable for any loss or damage caused by unauthorized access or other security breaches.

Available Wireless Features



(1) Connect to smartphones (📖225, 📖232)
Control the camera remotely and browse images on the camera over a Wi-Fi connection by using the dedicated Camera Connect app on smartphones or tablets.
You can also geotag images and use other features when connected by Bluetooth®*.
For convenience in this guide, smartphones, tablets, and other compatible devices are collectively referred to as “smartphones”.
* Bluetooth low energy technology (hereafter referred to as “Bluetooth”)

(2) Send images to a computer automatically (📖239)
With Image Transfer Utility 2, camera images can be automatically sent to a computer connected via Wi-Fi.

(3) Print from Wi-Fi printers (235)
Print images over a Wi-Fi connection from printers compatible with PictBridge (wireless LAN) technology.

(4) Upload to Web services (243)
Images can be sent directly from the camera to the image.canon cloud service for Canon customers after you complete member registration (free of charge). Original files of images sent to image.canon are retained for 30 days, without storage limitations, and can be downloaded to computers or transferred to other Web services.

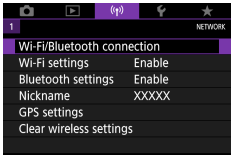
- Other devices, such as computers, cannot be used with the camera by connecting them with an interface cable while the camera is connected to devices via Wi-Fi. Terminate the connection before connecting the interface cable.
- Wireless communication settings cannot be configured while the camera is connected to a computer or other device via an interface cable. Disconnect the interface cable before changing any settings.
- The camera cannot be connected via Wi-Fi if there is no memory card in the camera (except for [ ]). Also, for [ ] and Web services, the camera cannot be connected via Wi-Fi if there are no images saved on the card.
- Wi-Fi connections are terminated if you set the camera's power to OFF or remove the memory card or battery pack.

Saving Camera Images to a Smartphone

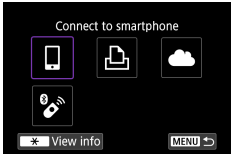
Images on the camera can be saved to a Bluetooth enabled smartphone connected via Wi-Fi.
Prepare the smartphone as follows.

- The free dedicated Camera Connect app must be installed on the smartphone.
- For details on this app (supported smartphones and included functions), refer to the Canon website.
- Camera Connect can be installed from Google Play or the App Store. You can also access Google Play or the App Store from a QR code that you can display on the camera when registering the smartphone on the camera.
- Use the latest version of the smartphone OS.
- Activate Bluetooth and Wi-Fi on the smartphone. Note that pairing with the camera is not possible from the smartphone's Bluetooth settings screen.

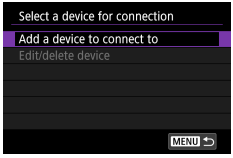
- For the operating system versions supported by Camera Connect, refer to the download site of Camera Connect.
- Interface or functions of the camera and Camera Connect are subject to change for firmware update of the camera or application update of Camera Connect, Android, iOS, etc. In this case, features of the camera or Camera Connect may differ from sample screens or operation instructions in this manual.



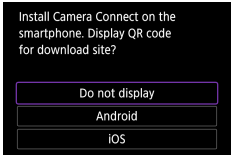
1 [Wi-Fi/Bluetooth connection]



2 [Connect to smartphone]



3 [Add a device to connect to]

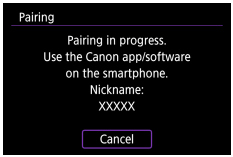


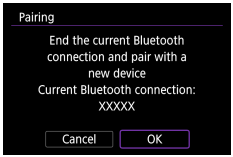
4 Choose an item.

- If Camera Connect is already installed, select [Do not display].
- If Camera Connect is not installed, select [Android] or [iOS], scan the displayed QR code with the smartphone to access Google Play or App Store and install Camera Connect.



5 [Pair via Bluetooth]





- To pair with a different smartphone after pairing with one initially, choose [OK] on the screen at left.



6 **Start Camera Connect.**

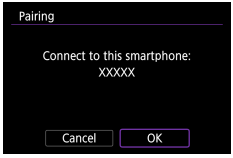
7 **Choose the camera to pair with.**

In Android

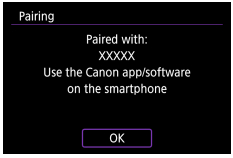
- Touch the nickname of the camera.

In iOS

- Touch the nickname of the camera → [Pair]



8 **On the camera, choose [OK].**



- Pairing is now complete, and the camera is connected to the smartphone via Bluetooth.



9 **In Camera Connect, touch [Images on camera].**

- A Wi-Fi connection is established automatically.
- In iOS, touch [Join] when a message is displayed to confirm camera connection.

10 **Confirm that the devices are connected via Wi-Fi.**

- Images on the camera are listed on the smartphone.
- [Wi-Fi on] is displayed on the camera.



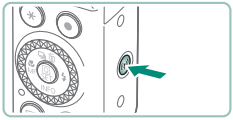
11 **Save images on the camera to the smartphone.**

- Choose listed camera images and save them to the smartphone.

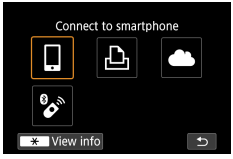
- Any active Bluetooth connections will be lost if you remove the camera battery pack. The connection will be reestablished when you insert the battery pack and turn on the camera.
- Battery life may be shorter when you use the camera after pairing with a smartphone, because power is consumed even when the camera is off.
- Before bringing the camera to places where the use of electronic devices is restricted, disable active Bluetooth communication (which is used even when the camera is off) by choosing [Bluetooth settings] → [Bluetooth] → [Disable].
- To turn off Wi-Fi signal transmission, choose [Wi-Fi settings] → [Wi-Fi] → [Disable].
- You can change the camera nickname in [Nickname].
- You can send images to a smartphone connected via Wi-Fi or paired via Bluetooth (Android devices only) by choosing the images from the camera's playback screen. Press the (SET) button and choose [].

Connecting to Smartphones via Wi-Fi with the Wi-Fi Button

You can also establish a Wi-Fi connection with smartphones from the (( )) button.



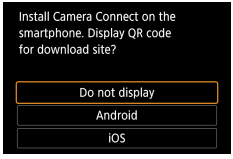
1 **Press the (( )) button.**



2 **[Connect to smartphone]**



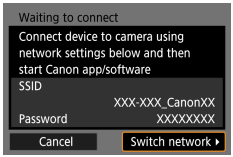
3 **[Add a device to connect to]**



4 **[Do not display]**



5 **[Connect via Wi-Fi]**



6 Check the SSID and password.



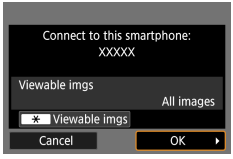
7 Connect the smartphone to the camera.

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

8 Start Camera Connect.

9 Select the camera to connect to.

- In the [Cameras] list in Camera Connect, touch the camera to connect to via Wi-Fi.



10 Establish a Wi-Fi connection.

- [OK] → (SET) button
- [Wi-Fi on] is displayed on the camera.
- The main Camera Connect screen is displayed on the smartphone.
- The devices are now connected via Wi-Fi.

Restricting Image Viewing

Restrict the images that can be sent to the smartphone or browsed from the smartphone.



1. **Before connecting via Wi-Fi, press the ((•)) button.**
2. **[Connect to smartphone]**
3. **Choose [Edit/delete device], and then choose the smartphone.**
4. **Choose [Viewable imgs], and then specify which images can be viewed.**

- Before reconnecting, check the setting for viewable images.
- Remote live view shooting in Camera Connect is not possible unless [Viewable imgs] is set to [All images].

Features Used with Smartphones

The features described below are available over a wireless connection with smartphones.
Pair the camera with a smartphone via Bluetooth as described in steps 1 – 8 of “Saving Camera Images to a Smartphone” (📖225), and connect via Wi-Fi as described in steps 1 – 10.

Sending Images to a Smartphone Automatically as You Shoot

Your shots can be automatically sent to a smartphone connected via Wi-Fi.
Do the following with the main Camera Connect screen displayed.



1 **[Wi-Fi settings] → [Send to smartphone after shot]**

2 **[Auto send] → [Enable]**

- Choose a size in [Size to send].

3 **Shoot.**

- Your shots are sent to the smartphone.

Shooting Remotely as You View a Live Image on the Smartphone

As you view a live image on a smartphone connected via Wi-Fi, you can shoot remotely.



1 **Start Camera Connect.**

2 **Touch [Remote live view shooting].**

- Focusing may take longer when shooting remotely.
- Depending on the communication status, image display or shutter release timing may be delayed.

Controlling the Camera from a Smartphone

You can control the camera by using a smartphone paired via Bluetooth as a remote control. (Not available when connected via Wi-Fi.)



1 **Start Camera Connect.**

- If connected via Wi-Fi, end the connection.

2 **Touch [Bluetooth remote controller].**

- Auto power off is disabled while you are using the Bluetooth remote controller feature.

Geotagging Images as You Shoot

Your shots can be geotagged using GPS information (such as latitude, longitude, and elevation) from a smartphone paired via Bluetooth. On the playback screen, you can check the location information added to your shots.
On the smartphone, activate location services.



1 **Start Camera Connect.**

- If connected via Wi-Fi, end the connection.



2 **[GPS settings]**

3 **[GPS via mobile] → [Enable]**

4 Shoot.

- Before shooting, confirm that [Bluetooth] and [GPS] are shown on the camera.
- Your shots are now geotagged.
- From now on, shots you take with Camera Connect running will be geotagged.

- The location information added to movies is acquired initially, when you start recording.
- Shots may not be geotagged immediately after the camera is turned on.
- 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.
- By accessing playback screens with detailed information, you can check location information added to your shots. Latitude, longitude, elevation, and UTC (shooting date and time) are listed from top to bottom.
- UTC: Coordinated Universal Time, essentially the same as Greenwich Mean Time
- [---] is shown instead of numerical values for items not available on your smartphone or items not recorded correctly.

Connecting to Printers via Wi-Fi

Images on the camera can be printed on a printer connected to the camera via Wi-Fi.

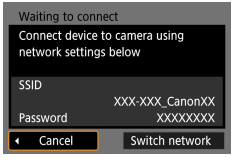
1 **Press the (( )) button.**



2 **[ ]**



3 **[Add a device to connect to]**

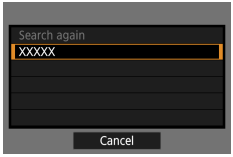


4 **Check the SSID and password.**



5 Connect to the camera from the printer.

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



6 Choose the printer.

- Choose the printer to connect to via Wi-Fi and press the (SET) button.
- Images on the memory card are displayed after the devices are connected via Wi-Fi.

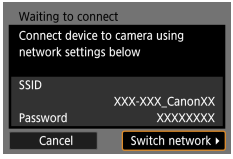


7 Choose an image to print.

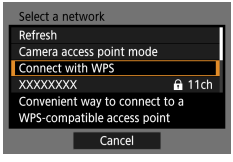
- Choose an image and press the (SET) button.
- Select or specify the items displayed, and then print.

Establishing a Connection via an Access Point

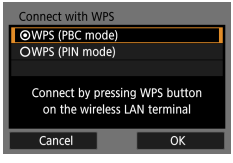
The camera can connect to an access point that a printer is connected to, to print via the access point.
Connect the devices near the access point, because you will need to press the WPS button.



1 **In step 4 of "Connecting to Printers via Wi-Fi" (📖235), choose [Switch network].**



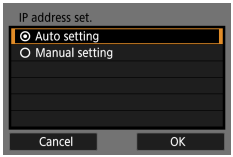
2 **[Connect with WPS]**



3 **[WPS (PBC mode)] → [OK]**



4 **Press the WPS button on the access point.**



5 **[Auto setting] → [OK]**

- The camera will connect to the access point.

6 **Go to step 6 of “Connecting to Printers via Wi-Fi” (📖235).**

- The PIN code displayed when you choose [WPS (PIN mode)] in [Connect with WPS] is entered on the access point. Choose a device on the [Select a device for connection] screen. For further details, refer to the user manual included with your access point.

Sending Images to a Computer Automatically

Images on the camera can be automatically sent to a computer connected to an access point (also set up for camera Wi-Fi connections) when the camera is within range, as when you bring the camera home after shooting.

Connecting via Wi-Fi



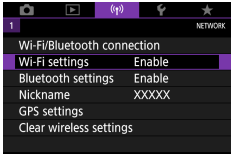
1 Connect the computer to the access point.

- Install Image Transfer Utility 2 on the computer.

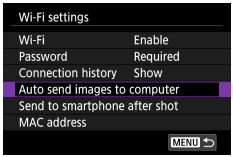
2 Start Image Transfer Utility 2.

3 In Image Transfer Utility 2, access the pairing settings screen.

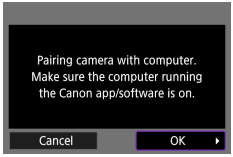
- The screen to set up pairing is shown when you follow the instructions displayed the first time Image Transfer Utility 2 starts up.



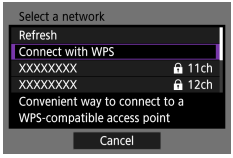
4 [Wi-Fi settings]



5 **[Auto send images to computer] → [Auto send] → [Enable]**



6 **[OK]**

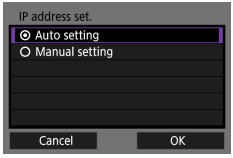


7 **[Connect with WPS] → [WPS (PBC mode)] → [OK]**

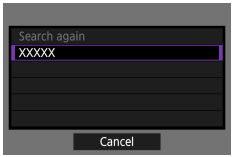


8 **Press the WPS button.**

- Press the WPS button on the access point to allow the camera to connect.



9 **[Auto setting] → [OK]**



10 Choose a computer.

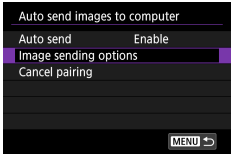
- Choose a computer for auto image transfer and press the (SET) button.



11 On the computer, choose the camera for pairing.

- Camera nicknames are shown on the pairing screen in Image Transfer Utility 2.
- Choose the camera to connect to and click [Pairing] to connect the computer and camera.

Setting Up Auto Image Transfer



12 Specify the sending options.

- For [Auto send images to computer] in step 5, choose [Image sending options] and specify the transfer conditions.

13 Turn the camera off.

Sending Images Automatically

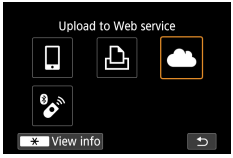
- Following the sending options in step 12, images on the camera are automatically sent to the computer you are logged in to when you bring the camera within range of the access point and turn the camera on.

- When using auto image transfer, ensure that the battery pack has sufficient charge. Power saving on the camera is deactivated during image transfer.
- Any images captured after auto image transfer are not sent to the computer then. They are sent automatically when the camera is restarted.
- If auto image transfer to a computer does not begin automatically, try restarting the camera.
- To stop sending images automatically, choose [Auto send images to computer] → [Auto send] → [Disable].
- Images are not sent to a computer automatically while connected via USB (including connection to PD-E1).

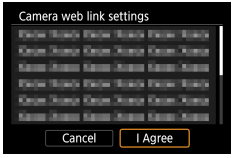
Registering image.canon

Connect the devices near the access point, because you will need to press the WPS button.
Note that you will need to enter an email address used on your computer or smartphone to receive a notification message for completing linkage settings.

1 **Press the ((•)) button.**



2 **[☁]**

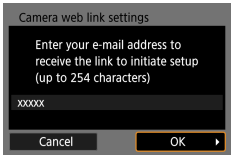


3 **Accept the agreement to enter an email address.**

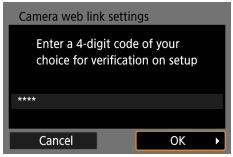
- Read the agreement displayed and choose [I Agree].

4 **Establish a connection with an access point.**

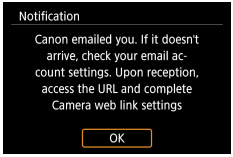
- [Connect with WPS] → [WPS (PBC mode)] → [OK]
- Press the WPS button on the access point.
- Choose [Auto setting] on the camera's [IP address set.] screen.



5 Enter your email address.

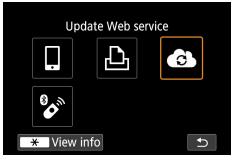


6 Enter a four-digit number of your choice.



7 Check for the notification message.

- [OK]

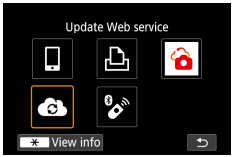


- [☁] now changes to [☁].



8 Access the page in the notification message and complete camera link settings.

- Follow the instructions to complete the settings on the camera link settings page.

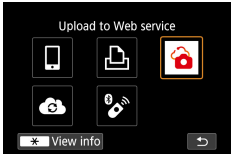


9 Choose [ ].

- image.canon is now added as a destination Web service.

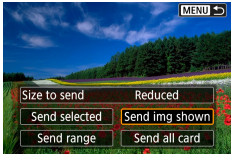
- Make sure initially that your computer or smartphone mail application is not configured to block email from relevant domains, which may prevent you from receiving the notification message.

Uploading Images to image.canon



1 **Press the (( )) button.**

2 **Choose [ ].**



3 **Send an image.**

- Choose sending options and upload the image.
- After the image is sent, [OK] is displayed. Press the (SET) button to return to the playback screen.

Streaming Images

Images can be live-streamed from the camera.
Check the YouTube streaming requirements in advance on the YouTube site.
Wireless Remote Control BR-E1 (sold separately) can be used exclusively in streaming. Before streaming, you will need to pair the camera with Wireless Remote Control BR-E1 (302).

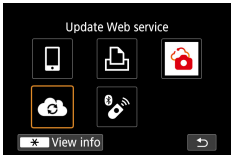
Set up [Live streaming] on the camera to enable streaming from the camera.

- Register the camera for image.canon and complete camera link settings as described in “Registering image.canon” (243).
- Complete the required streaming settings on the YouTube site.
- For instructions, visit the YouTube site.

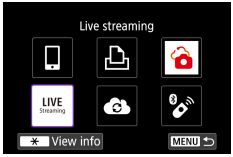


1 Enable YouTube streaming.

- Display the settings screen for connected Web services used with image.canon.
- Next to [YouTube], click or tap [Connect].
- Sign in to YouTube and allow image.canon access.



2 Choose [☁].



- An icon is added for [Live streaming].



3 Enter 🎥 mode.

- You can set the camera to movie recording mode and choose autoexposure or manual exposure movie recording. (To set: (SET) button → [Shooting mode])

Streaming

- YouTube is the only streaming service supported by this camera.
- Before you can use streaming services, you must complete image.canon registration.
- YouTube streaming is subject to change, suspension, or termination without prior notice.
- Canon is in no way responsible for third-party services such as YouTube streaming.

- No image is recorded to the card during streaming (but a card must be in the camera).
- Images are streamed at approx. 6 Mbps for either [FHD 29.97P] (NTSC) or [FHD 25.00P] (PAL).
- Images are streamed horizontally, regardless of the [Add rotate info] setting.
- The battery pack is not charged if you stream while using USB Power Adapter PD-E1 (sold separately), and power is only supplied to the camera.
- Audio may be noisy during streaming. Check for noisy audio in advance by using [PRVW] (📖251), for example. If noise from the external microphone is distracting, try placing the external microphone on the left side of the camera (on the external microphone IN terminal side) as far from the camera as possible.
- It is not possible to pair the camera with Wireless Remote Control BR-E1 (sold separately) after you have set up streaming.
- Wireless Remote Control BR-E1 cannot be used while connected to the camera via Wi-Fi unless you are streaming.
- Remote control from a smartphone is not possible during streaming.

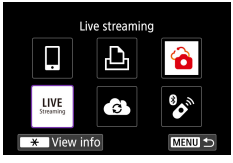
Live Streaming

You can also stream by selecting an event that you have set up in advance on the YouTube Live page (by entering the streaming time and title).

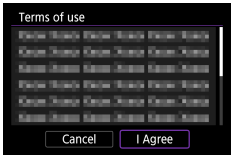


1 Complete event settings on the YouTube Live page.

- For instructions, visit the YouTube site.

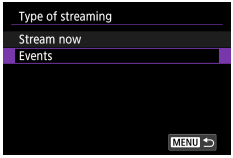


2 [Live streaming]

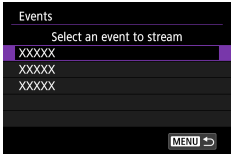


3 Check the terms of service.

- Read the agreement displayed and choose [I Agree].

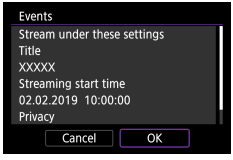


4 [Events]

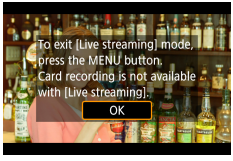


5 Choose an event.

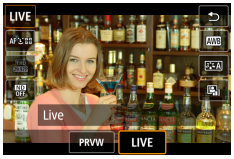
- Choose an event that you have entered in YouTube Live in advance.



6 Check the streaming details → [OK]



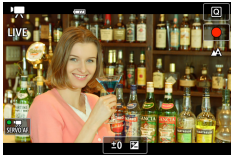
7 [OK]



8 Press the (SET) button.

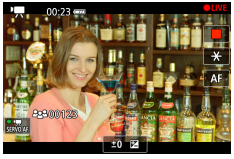
- Choose [PRVW] or [LIVE].
- [PRVW] (preview): Enables you to test streaming without releasing images publicly. Useful for checking images before streaming.

  [LIVE]: Enables you to start streaming immediately by pressing the movie shooting button.



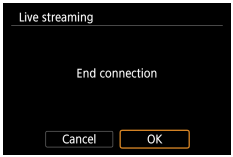
9 Start streaming.

- Configure recording features, just as in normal movie recording.
- When you are ready to start streaming, press the movie shooting button.
- Streaming begins after [Preparing preview] or [Preparing to stream] is displayed.
- [● PRVW] or [● LIVE] is displayed in the upper right during streaming.
- The time that has elapsed since you pressed the movie shooting button is shown in the upper left, with the number of viewers in the lower left.
- Check the YouTube Live page to see how the streamed image looks.



10 Stop streaming.

- Press the movie shooting button again to stop streaming.
- After checking the image with [PRVW], return to step 8 and choose [LIVE] to start streaming.



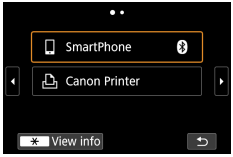
11 Exit live streaming mode.

- Press the MENU button to choose [OK].

- It will take a moment before streaming begins in step 9. Do not operate the camera while the message is displayed.
- Up to 20 events are displayed.
- The number of viewers is not shown during previews.
- In case of display problems (character corruption) on the camera for text you entered on the YouTube page, enter the text again on the YouTube page in ASCII format (single-byte letters or numbers).

Reconnecting via Wi-Fi

Reconnecting to devices or Web services via Wi-Fi is possible once the connection settings are registered.



1 **Press the (( )) button.**

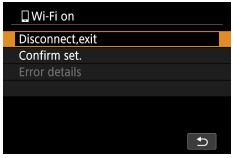
2 **From the past connections, choose a destination.**

- If your destination is not shown, press the ◀/▶ buttons to switch to other screens.
- For Web services, the connection is now complete.

3 **Prepare the other device.**

- Prepare the other device by following the instructions displayed.

Ending Wi-Fi Connections



1 Press the ((•)) button.

2 [Disconnect,exit] → [OK]

Clearing Information of Devices Paired via Bluetooth

Cancel pairing with a smartphone as follows.



1. **[Wi-Fi/Bluetooth connection] → [Connect to smartphone]**
2. **[Edit/delete device]**
3. **Choose the smartphone with registered information to clear.**
4. **[Delete connection information] → [OK]**

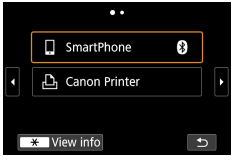


5. **Prepare the smartphone.**
   - In the Bluetooth system settings, clear the registered camera information.

Changing or Deleting Connection Settings

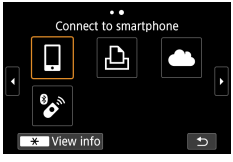
Connection settings saved on the camera can be changed or deleted. Before changing or deleting connection settings, end the Wi-Fi connection.

1 **Press the (( )) button.**



2 **Choose an item.**

- On the screen at left, you can switch to other screens by pressing the ◀/▶ buttons.



- On the screen at left, choose an item with connection settings to delete or change.



3 **Choose [Edit/delete device].**

- On the screen displayed, choose a device with connection settings to change, and then change the nickname or other information.
- You can change the Bluetooth connection by choosing a smartphone labeled with [ ] in gray. After the [Connect to smartphone] screen is displayed, choose [Pair via Bluetooth], and then press the (SET) button on the next screen.

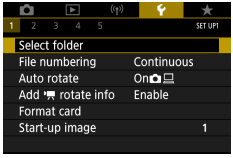
Function Settings

Make the camera easier to use by customizing or adjusting basic functions.

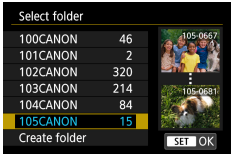
- These settings are configured on the and ★ menu tabs. Customize commonly used functions, for greater convenience.
- These instructions apply to the camera in **P** mode.

Selecting and Creating Folders

You can select or create folders where images are saved. New folders can be created by selecting [Create folder] on the folder selection screen.



1 [Select folder]



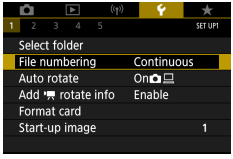
2 Configure the settings.

- Select folders: simply select a folder
- Create folders: [Create folder] → [OK]

- Folders are named as in 100CANON, with a three-digit folder number followed by five letters or numbers.
- Folders with numbers in the range 100 – 999 can be created.

Changing File Numbering

Your shots are automatically numbered in sequential order (0001 – 9999) and saved in folders that store up to 9,999 images each. You can change how the camera assigns file numbers.



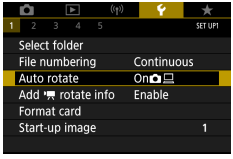
1 [File numbering] → [Numbering] or [Manual reset]

Continuous	Images are numbered consecutively (until the 9999th shot is taken/saved) even if you switch memory cards or folders.
Auto reset	Image numbering is reset to 0001 if you switch memory cards, or when a new folder is created.
Manual reset	Creates a new folder and starts numbering images from 0001.

- Regardless of the option selected in this setting, shots may be numbered consecutively after the last number of existing images on newly inserted memory cards. To start saving shots from 0001, use an empty (or formatted) memory card.

Configuring Auto Rotation of Vertical Images

You can change the auto rotation setting that straightens images shot in vertical orientation when they are displayed.

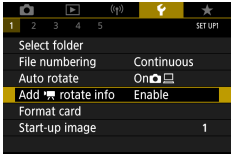


1 **[Auto rotate]**

On	Automatically rotate images during playback on both the camera and computers.
On	Automatically rotate images during playback on computers.
Off	Do not automatically rotate images.

Adding Orientation Information to Movies

For movies recorded with the camera held vertically, orientation information indicating which side is up can be added automatically to enable playback in the same orientation on smartphones or other devices.



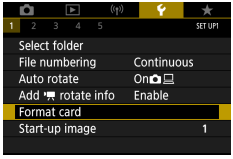
1 **[Add rotate info]**

Enable	Play movies on smartphones or other devices in the orientation in which they were recorded.
Disable	Play movies horizontally on smartphones or other devices, regardless of the recording orientation.

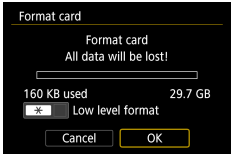
* These movies are played horizontally on the camera, regardless of the [Add rotate info] setting.

Formatting Memory Cards

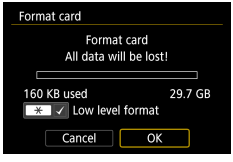
Before using a new memory card or a card formatted in another device, you should format the card with this camera.
Low-level formatting may be helpful if the camera is not working correctly, reading/writing of images on the memory card is slower, continuous shooting is slower, or movie recording suddenly stops.
Both regular and low-level formatting erase all data on a memory card, which cannot be recovered.



1 [Format card]



- Format: [OK]

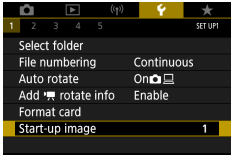


- Low-level format: ✳ button to select [✓] → [OK]

- Formatting or erasing data on a memory card only changes file management information on the card and does not erase the data completely. When disposing of or transferring ownership of memory cards, take steps to protect personal information if necessary, as by physically destroying cards.
- The total card capacity indicated on the formatting screen may be less than the advertised capacity.
- Low-level formatting takes longer than initial formatting, because data is erased from all storage regions of the memory card.
- You can cancel low-level formatting in progress by choosing [Cancel]. In this case, all data will be erased, but the memory card can be used normally.

Setting Start-up Screen Display

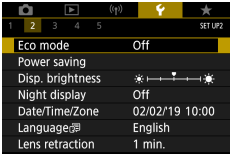
Specify display of the start-up screen shown when you turn the camera on.



1 **[Start-up image]**

Using Eco Mode

This function allows you to conserve battery power in shooting modes. When the camera is not in use, the screen darkens to save battery life.

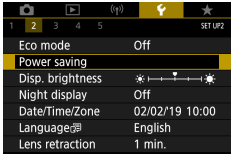


1 **[Eco mode]**

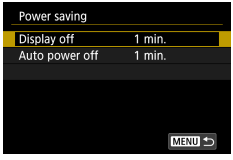
On	The screen darkens when the camera is not used for approximately two seconds; approximately ten seconds after darkening, the screen turns off. The camera turns off after approximately three minutes of inactivity. To activate the screen and prepare for shooting when the screen is off but the lens is still out, press the shutter button halfway.
Off	Do not use Eco mode.

Adjusting Power-Saving Features

Adjust the timing of automatic camera and screen deactivation (Auto power off and Display off, respectively) as needed.



1 [Power saving]

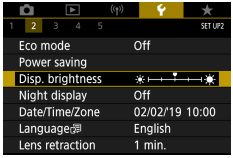


2 Configure the settings.

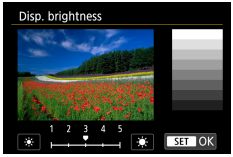
- To conserve battery power, you should normally choose [Power saving] → [Display off] and [Auto power off] → [1 min.] or less.
- The [Display off] setting is applied even if you set [Auto power off] to [Disable].

Adjusting Screen Brightness

Adjust screen brightness as follows.



1 [Disp. brightness]



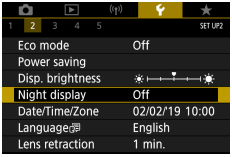
2 Configure the settings.

- buttons → (SET) button

- For maximum brightness (regardless of the [Disp. brightness] setting), press and hold the ▼ button for at least one second from the shooting screen or during single-image display. To restore the original brightness, press and hold the ▼ button again for at least one second or restart the camera.

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 [], [], [], and [].

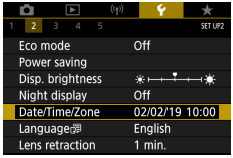


1 [Night display]

- To return [Night display] to [Off], hold down the ▼ button for at least one second on the shooting screen or during playback with single-image display.

Adjusting the Date, Time, and Time Zone

Adjust the date, time, and time zone.



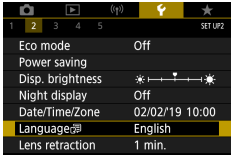
1 [Date/Time/Zone]

2 Configure the settings.

- Follow steps 2 – 3 in “Setting the Date, Time, Time Zone, and Language” (25) to adjust the settings.

Changing the Language

The current display language can be changed.



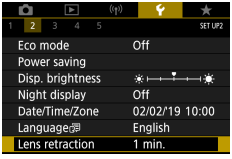
1 **[Language]**

2 **Configure the settings.**

- ▲/▼/◀/▶ buttons to choose a language → (SET) button

Lens Retraction Timing

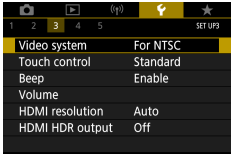
The lens is normally retracted for safety about one minute after you press the ▶ button in shooting modes. To have the lens retracted immediately after you press the ▶ button, set the retraction timing to [0 sec.].



1 **[Lens retraction]**

Setting the Video System

Set the video system of any television used for display. This setting determines the image quality (frame rate) available for movies.

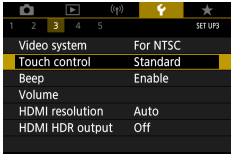


1 **[Video system]**

For NTSC	For areas using the NTSC TV system, such as North America, Japan, South Korea, and Mexico.
For PAL	For areas using the PAL TV system, such as Europe, Russia, China, and Australia.

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.



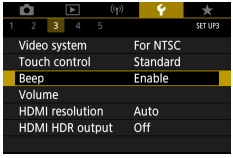
1 [Touch control]

- To increase panel sensitivity: [Sensitive]
- To deactivate the panel: [Disable]

- Increase the sensitivity of the touch-screen panel if gestures are not easily detected.
- Take the following precautions when using the touch-screen panel.
  - The screen is not pressure sensitive. Do not use sharp objects such as fingernails or ballpoint pens for touch operations.
  - Do not perform touch-screen operations when your fingers are wet.
  - If you perform touch-screen operations when the screen or your fingers are wet, the camera may not respond, or it may malfunction. In this case, turn the camera off and dry the screen with a cloth.
  - Do not apply screen protectors or adhesive film purchased separately. This may reduce the responsiveness of touch operations.
- The camera may be less responsive if you perform touch operations quickly when the setting is set to [Sensitive].

Adjusting Beeping

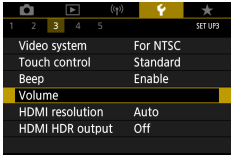
Specify whether the camera plays sounds when you press the shutter button halfway or use the self-timer.



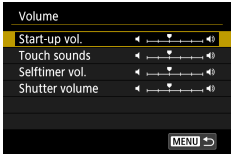
1 **[Beep]**

Adjusting the Volume

Adjust the volume of individual camera sounds.



1 [Volume]

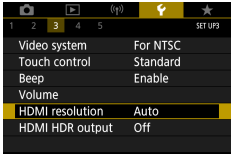


2 Configure the settings.

- (SET) button → ◀/▶ buttons

Setting the HDMI Output Resolution

Set the output resolution used for camera images when connected to a television or external recording device with an HDMI cable.

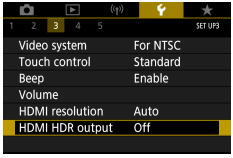


1 **[HDMI resolution]**

Auto	Images are automatically displayed at optimal resolution for connected televisions.
1080p	Output at 1080p resolution. Select if you prefer to avoid display or delay issues when switching resolution.

RAW Playback on an HDR TV

You can view RAW images in HDR by connecting the camera to an HDR TV.

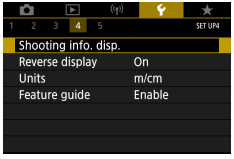


1 [HDMI HDR output]

- For image color display matching HDR TV characteristics, choose [HDMI HDR output] → [On].
- Make sure the HDR TV is set up for HDR input. For details on how to switch inputs on the TV, refer to the TV manual.
- HDR output is not available for images in sets (rolls) captured in RAW burst mode.
- Depending on the TV used, images may not look as expected.
- Some image effects and information may not be displayed on an HDR TV.

Customizing Shooting Information Display

You can customize the details and screens of information shown on the camera when you shoot. Grid and histogram display can also be configured.



1 [Shooting info. disp.] → [Screen info. settings]



2 Press the ▲/▼ buttons and select screens.

- For screens you prefer not to display, press the (SET) button to clear [✓].
- To edit the screen, press the ✳ button.



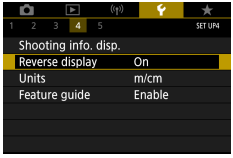
3 Edit the screen.

- Use the ▲/▼ buttons to navigate items.
- Use the (SET) button to add a [✓] next to items to display.
- Choose [OK] to apply your settings.

- You can set whether to display a red frame on the shooting screen during movie recording by configuring [Shooting info. disp.] → [Recording emphasis] in Movie mode.
- Settings for the aspect marker shown on the shooting screen can be configured in [Shooting info. disp.] → [Aspect marker] in Movie mode.
- Grid display can be configured via [Shooting info. disp.] → [Grid display].
- To switch from a brightness histogram to an RGB histogram or adjust the display size, choose [Shooting info. disp.] → [Histogram disp].

Setting Reverse Display

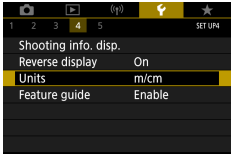
Specify whether to display a mirror image when shooting with the screen rotated around toward the front.



1 **[Reverse display]**

Metric / Non-Metric Display

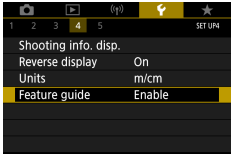
Change the unit of measurement shown in the zoom bar (📖98), the MF indicator (📖101), and elsewhere from m/cm to ft/in as needed.



1 **[Units]**

Configuring the Feature Guide

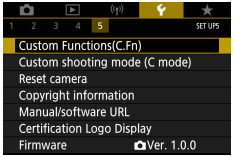
Specify whether to display feature guidance when items are selected on the Quick Control screen.



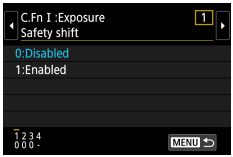
1 **[Feature guide]**

Configuring Custom Functions

Configure Custom Functions for advanced camera customization.



1 [Custom Functions(C.Fn)]



2 Choose an item.

- ◆◆ buttons → (SET) button

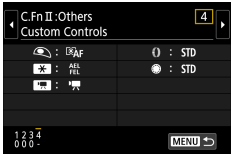
3 Configure the settings.

C.Fn I:Exposure Safety shift	Set to [1:Enable] for automatic adjustment of the shutter speed and aperture value to bring the exposure level closer to standard exposure if standard exposure would not be available otherwise under your specified shutter speed or aperture value in **Tv** or **Av** mode.
C.Fn II:Others Control ring rotation	Change the direction of ring rotation.
C.Fn II:Others Control dial rotation	Change the direction of dial rotation.
C.Fn II:Others Custom Controls	Customize functions of buttons, such as the shutter button.

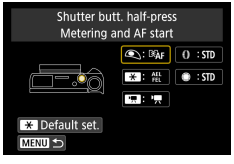
- When C.Fn-2 or C.Fn-3 is set to [1:Reverse direction], changing the direction of rotation only applies to shutter speed, aperture value, or Program Shift adjustment, as assigned to the ring or dial.
- To restore [Custom Functions(C.Fn)] defaults (except [Custom Controls] settings), choose [Reset camera] → [Other settings] → [Custom Function(C.Fn)] → [OK].

Customizing Buttons

Customize functions of buttons, such as the shutter button.
(AE lock) button, ring, and dial settings apply to /P/Tv/Av/M/C modes.
[Shutter butt. half-press] and [Movie shooting button] settings apply to P/Tv/Av/M/C modes.



1 [C.Fn II:Others Custom Controls]



2 Choose a button.



3 Choose a function.

- You can assign [Exposure compensation] functionality to the ring. To adjust exposure compensation with the dial, choose [] on the Custom Controls setting screen, choose [], return to the shooting screen, and set the exposure compensation dial to the [●] position.
- In **P** mode with the exposure compensation dial set to [●] and the ring and dial set to [STD], exposure compensation can be adjusted with the dial while the metering timer is running.
- Options you can set with the ring vary depending on the shooting mode (whether the camera is in **P**/**Tv**/**Av**/ mode, or **M**/ mode).
- To restore [Custom Controls] defaults, choose [Reset camera] → [Other settings] → [Custom Controls] → [OK].
- Some functions you configure may not apply (may be disabled) in Movie mode.

Options you can set when [STD] is assigned

Items	Settings	Shooting Modes		
		P	**Tv**	**Av**
ring	STD	Program shift	Shutter speed	Aperture value
dial	STD	—	—	—

* When the ring is not assigned to [STD] but the dial is, you can use the dial to set Program Shift in **P** mode, shutter speed in **Tv** mode, or aperture value in **Av** mode.
* When the dial is assigned to [STD] in **M**/ mode, you can use it to set shutter speed (or aperture value) when the ring is assigned to [**Av**] (or [**Tv**]).

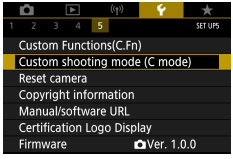
Custom Shooting Modes (C Mode)

Save commonly used shooting modes and your configured function settings for reuse. To access saved settings later, simply turn the mode dial to **C**. Even settings that are usually cleared when you switch shooting modes or turn the camera off can be retained this way.

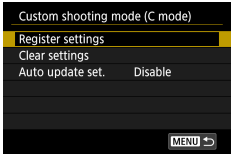
Settings That Can Be Saved

- Shooting modes (**P**/**Tv**/**Av**/**M**)
- Features set in **P**/**Tv**/**Av**/**M** modes (with some exceptions)
- Zoom positions
- Manual focus positions (101)

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



2 [Custom shooting mode (C mode)]

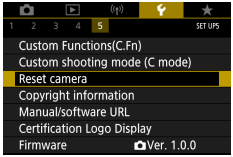


3 [Register settings]

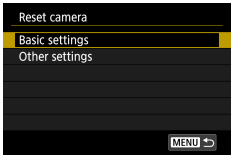
- To edit saved settings (other than shooting mode), choose C, change the settings, and then choose [Custom shooting mode (C mode)] → [Register settings] again. These setting details are not applied in other shooting modes.
- To reset saved settings to their defaults, choose [Custom shooting mode (C mode)] → [Clear settings].
- To automatically update your saved settings with any changes to settings that you make while shooting in C mode, set [Custom shooting mode (C mode)] → [Auto update set.] → [Enable].

Restoring Default Camera Settings

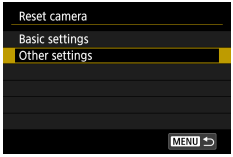
Restore default camera settings in P/Tv/Av/M/ modes.



1 [Reset camera]



- Clear basic settings: [Basic settings] → [OK]

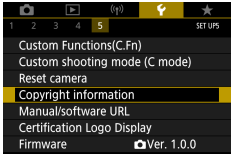


- Clear other settings: [Other settings] → choose an item → [OK]

- Basic settings such as [Language] and [Date/Time/Zone] are not restored to defaults.

Setting Copyright Information to Record in Images

Your specified author's name and copyright details can be recorded in your shots.



1 [Copyright information] → [Enter author's name] or [Enter copyright details]

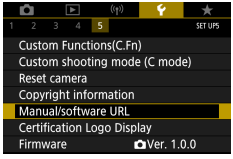


- Enter a name → MENU button → [OK]

- To check the information entered, choose [Copyright information] → [Display copyright info.].
- You can delete both the registered author's name and copyright details at the same time by choosing [Copyright information] → [Delete copyright information], but copyright information already recorded in images is not deleted.

Downloading Manuals/Software from a QR Code

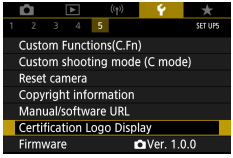
A QR code can be displayed on the camera screen to access a webpage for downloading instruction manuals and software.



1 **[Manual/software URL]**

Displaying Certification Logos

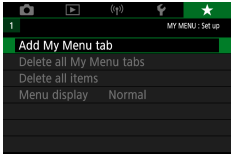
Some logos for certification requirements met by the camera can be viewed on the screen.



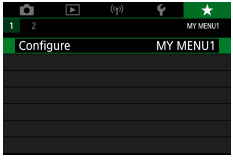
1 **[Certification Logo Display]**

Saving Commonly Used Shooting Menu Items (My Menu)

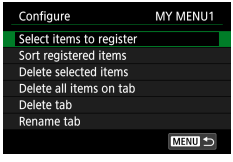
You can save up to six commonly used shooting menu items on the ★ tab. By customizing the ★ tab, you can access these items quickly from a single screen.



1 ★ [Add My Menu tab] → [OK]

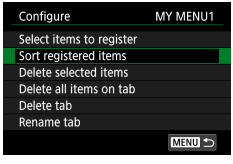


2 ★ [Configure]



3 [Select items to register]

- Choose an item → [OK]
- Your selected items are added to the My Menu tab.

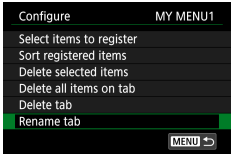


Rearranging the items

- [Sort registered items] → choose an item to move → ▲/▼ buttons to move → (SET) button

- You can add up to [★5] My Menu tabs.
- Choosing [Configure] → [Delete all items on tab] → [OK] on your added My Menu tab will delete all items added to the tab.

Renaming My Menu Tabs

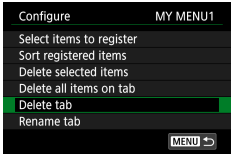


1 **[Rename tab]**

2 **Change the tab name.**

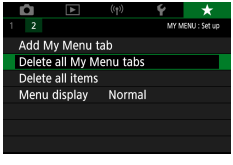
- Enter a tab name → MENU button → [OK]

Deleting a My Menu Tab



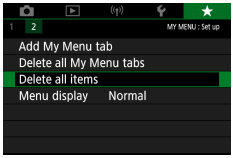
1 **[Delete tab]**

Deleting All My Menu Tabs



1 **★ [Delete all My Menu tabs]**

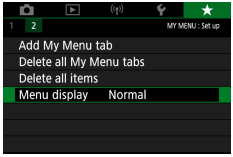
Deleting All Added Items



1 ★ **[Delete all items]**

Customizing My Menu Display

Specify which screen is displayed when the MENU button is pressed in shooting modes.



1 ★ **[Menu display]**

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

Accessories

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

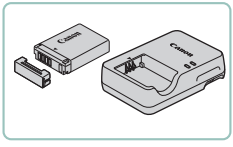
Use of genuine Canon accessories is recommended.

This product is designed to achieve excellent performance when used with genuine Canon accessories.
Canon shall not be liable for any damage to this product and/or accidents such as fire, etc., caused by the malfunction of non-genuine Canon accessories (e.g., a leakage and/or explosion of a battery pack). Please note that any repairs your Canon product may require as a result of such malfunction are not covered under warranty and will incur a fee.

Optional Accessories

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

Power Supplies

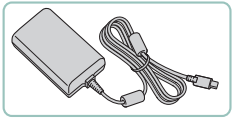


Battery Pack NB-13L

- Rechargeable lithium-ion battery

Battery Charger CB-2LH Series

- Charger for Battery Pack NB-13L



USB Power Adapter PD-E1

- Adapter for using the camera with household power

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

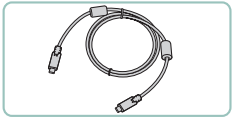
Flash



High-Power Flash HF-DC2

- External flash for illuminating subjects that are out of range of the built-in flash.

Others



Interface Cable IFC-100U

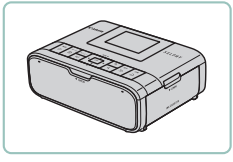
- For connecting the camera to a computer



Wireless Remote Control BR-E1

- Bluetooth enabled wireless remote control

Printers



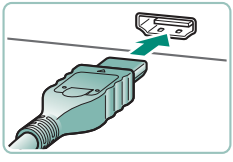
Canon PictBridge-Compatible Printers

- Even without using a computer, you can print images by connecting the camera directly to a printer.

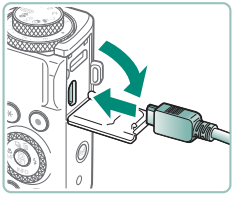
Playback on a TV

You can view your shots on a TV by connecting the camera to an HDTV with a commercially available HDMI cable (not exceeding 2.5 m / 8.2 ft., with a Type D terminal on the camera end). You can also shoot while previewing shots on the larger screen of the TV.
For details on connection or how to switch inputs, refer to the TV manual.

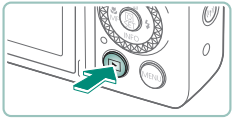
1 **Make sure the camera and TV are off.**



2 **Connect the camera to the TV.**



3 **Turn the TV on and switch TV input to the connected terminal.**



4 **Switch to playback.**

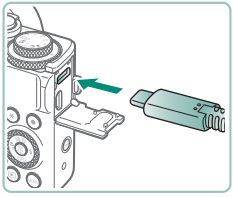
- Images from the camera are now displayed on the TV. (Nothing is displayed on the camera screen.)

- Some information may not be displayed when viewing images on a TV.
- During HDMI output, display of the next image may take some time if you switch between 4K and HD movies, or movies of different frame rates.

Using a USB Power Adapter to Charge/Power the Camera

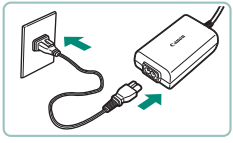
With USB Power Adapter PD-E1 (sold separately), you can use the camera while charging the battery without removing it.

1 **Make sure the camera is off.**



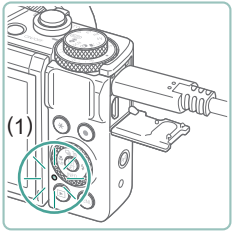
2 **Connect the USB power adapter.**

- Insert the adapter plug as shown.



3 **Connect the power cord.**

- Connect the power cord to the USB power adapter and plug the other end into a power outlet.

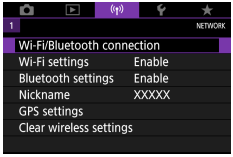


- The charging lamp (1) turns orange, and charging begins.
- Turn the camera on to use it while charging the battery (except when shooting or standing by to shoot).
- The lamp turns off when charging finishes.

- Icon meanings are as follows.
  : charging/powering the camera, : powering the camera only, FULL: fully charged
- To protect the battery pack and keep it in optimal condition, do not charge it continuously for more than 24 hours.
- If the charging lamp fails to light up or a problem occurs during charging (shown by the indicator on the back of the camera blinking in orange), unplug the power cord, reattach the battery, and wait a few minutes before plugging it in again. If the problem persists, contact a Customer Support Help Desk.
- The charging time required and the amount charged vary depending on ambient temperature and remaining capacity.
- For safety reasons, recharging in low temperatures will take longer.

Shooting Remotely

Wireless Remote Control BR-E1 (sold separately) can be used to shoot. Also refer to the wireless remote control instruction manual for additional information.

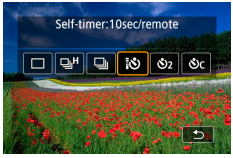


1 Pair the devices.

- [Wi-Fi/Bluetooth connection] → [] (Connect to Wireless Remote) → [Add a device to connect to]

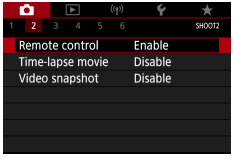
2 Hold down both the W and T buttons on the BR-E1 for at least three seconds.

- The devices are now paired.



3 Set up the camera for remote shooting.

- Stills: ▲ button → []



- For movie recording, make sure [Remote control] is set to [Enable].

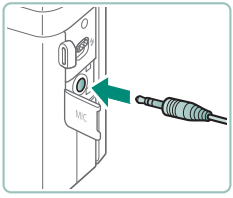
4 Shoot.

- For movie recording, set the remote control's release timing/movie shooting switch to and press the release button.

- Auto power off is triggered in about two minutes, even if you have set it for one minute or less.
- To clear pairing information, choose [Wi-Fi/Bluetooth connection] → [] → [Delete connection information] → [OK].

Using an External Microphone

To record with an external microphone (32), connect a commercially available external microphone with a mini plug (3.5 mm diameter) to the external microphone IN terminal. Note that the built-in microphone is not used for recording when an external microphone is connected.



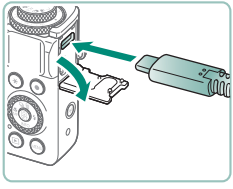
1 Connect the external microphone.

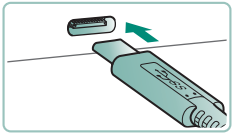
- Insert the external microphone plug as shown.

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

Saving Images to a Computer

You can save images you have captured to a computer by connecting the camera to the computer with Interface Cable IFC-100U (sold separately; camera end: Type-C). For details on computer connections, refer to the computer user manual.





1 **Make sure the camera is off.**

2 **Connect the camera to the computer.**

3 **Turn the camera on.**

4 **Save the images to the computer.**

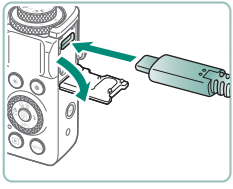
- To open images, use preinstalled or commonly available software.

- You can also use a card reader to transfer images.

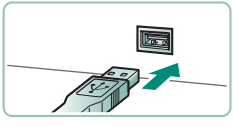
Printing Images

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

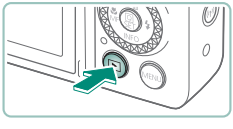
1 **Make sure the camera and printer are off.**



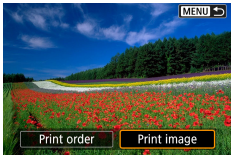
2 **Connect the camera to the printer.**



3 **Turn the printer on.**

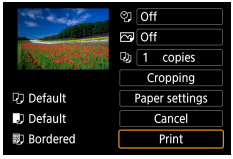


4 **Switch to playback and choose an image.**



5 Access the printing screen.

- (SET) button → [Print image]



6 [Print]

Appendix

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. Strong electromagnetic fields 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 Customer Support Help Desk.
- 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.

Troubleshooting

If you think there is a problem with the camera, first check the following. If the issue persists, contact a Customer Support Help Desk.

Power

Nothing happens when the power button is pressed.

- 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 useful life. Purchase a new battery pack.

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 Customer Support Help Desk.

Shooting

Cannot shoot.

- During playback, press the shutter button halfway.

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.

Movie recording or playback suddenly stops.

- For [4K 29.97P], [4K 23.98P], or [4K 25.00P], use a UHS-I memory card with a UHS Speed Class 3 or higher.
- For High Frame Rate movies, use a UHS-I memory card with a UHS Speed Class 3 or higher.
- For playback of 4K time-lapse movies (1), Full HD time-lapse movies (2), or Hybrid Auto movies (3), use a memory card with a read speed of approx. (1) 300 Mbps or (2)/(3) 90 Mbps or faster. Using a slow memory card may cause movie playback in progress to stop.

[] is displayed and the camera turns off automatically.

- After extended shooting, or shooting in hot weather, [] is displayed to indicate that the camera will soon turn off automatically. In this case, turn off the camera and allow it to cool down.

Continuous shooting is much slower.

- Under high temperatures, continuous shooting may be much slower. In this case, turn off the camera and allow it to cool down.

[] is displayed.

- [] may be displayed after repeated movie recording under the following settings, or if you keep the camera standing by for movie recording over extended periods.
  - 4K movie recording
  - High frame rate movie recording
  - Movie recording while connected via Wi-Fi

  The camera turns off automatically in approx. 3 min. if you continue recording while [] is displayed. The camera may also turn off automatically while standing by for movie recording when [] is displayed. When [] is displayed, turn off the camera and allow it to cool down.

- The date/time/zone must be set to enable normal camera temperature control. Once the date/time/zone are set, temperature warnings can be displayed correctly.
- If [Overheated! Shutting down.] is displayed, turn off the camera and wait at least 5 min. Note that the camera should be off for 20 min. or more if you will record a 4K movie up to 9 min. 59 sec. or a high frame rate movie up to 7 min. 29 sec. (Actual movie recording times may be shorter, depending on the recording environment and conditions of use.)

Image quality is poor.

- Image quality may decline if you shoot while the camera's internal temperature is high.

Shots are out of focus.

- Confirm that unneeded functions such as macro are deactivated.
- Try shooting with AF lock.

No AF points are displayed and the camera does not focus when the shutter button is pressed halfway.

- To have AF points displayed and the camera focus correctly, try composing the shot with higher-contrast subject areas centered before pressing the shutter button halfway (or pressing it halfway repeatedly).

Subjects in shots look too dark.

- Adjust brightness by using exposure compensation.
- Use AE lock or spot metering.

Subjects look too bright, highlights are washed-out.

- Adjust brightness by using exposure compensation.
- Use AE lock or spot metering.
- Reduce the lighting on subjects.

Shots look too dark despite the flash firing.

- Adjust brightness by using flash exposure compensation or changing the flash output level.
- Increase the ISO speed.

Subjects in flash shots look too bright, highlights are washed-out.

- Adjust brightness by using flash exposure compensation or changing the flash output level.

Recording Movies

Subjects look distorted.

- Subjects that pass in front of the camera quickly may look distorted.

Wi-Fi

Cannot access the Wi-Fi menu by pressing the (( )) button.

- The Wi-Fi menu cannot be accessed while the camera is connected to a printer or computer via a cable. Disconnect the cable.

Cannot connect to the access point.

- Confirm that the access point channel is set to a channel supported by the camera. Note that instead of auto channel assignment, it is advisable to specify a supported channel manually. For details on supported channels, check the Canon website.

Images take a long time to send. / The wireless connection is disrupted.

- Do not use the camera near sources of Wi-Fi signal interference such as microwave ovens or other equipment operating on the 2.4 GHz band.
- Bring the camera closer to the other device you are trying to connect to (such as the access point), and make sure there are no objects between the devices.

Cannot pair with a smartphone via Bluetooth.

- Pairing with a smartphone via Bluetooth is not possible if you are using Wireless Remote Control BR-E1.

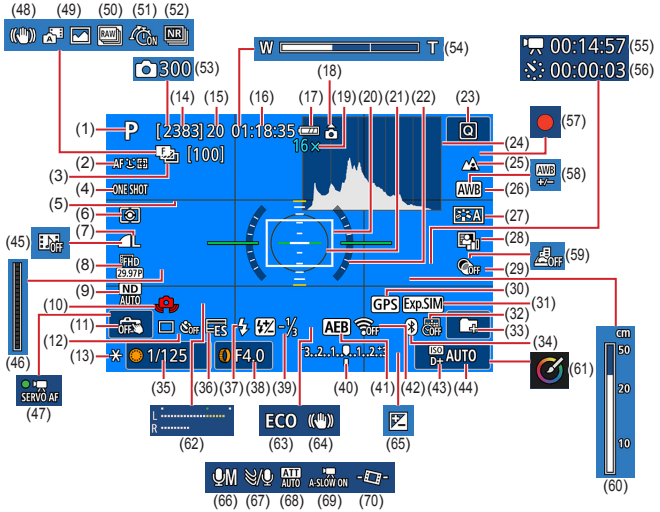
Error Codes

Error codes (Errxx) and recommended responses are displayed.

- Error codes are displayed if camera problems occur. If the problem persists, write down the error code (Errxx) and contact a Customer Support Help Desk.
- Error numbers for wireless communication errors (Errxx) are shown in the upper right of the [Wi-Fi/Bluetooth connection] screen. Press the button to view error details on information display screens.

On-Screen Information

When Shooting



(1) Shooting mode, Scene icon

(2) AF method

(3) Focus bracketing/Number of shots

(4) AF operation

(5) Grid lines

(6) Metering mode

(7) Image quality

(8) Movie recording quality

(9) ND filter

(10) Camera shake warning

(11) Touch Shutter

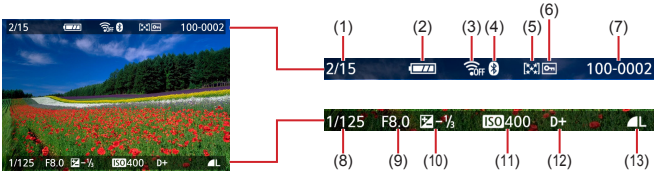
(12) Drive mode/Self-timer

(13) AE lock

(14) Recordable shots/Recordable RAW rolls

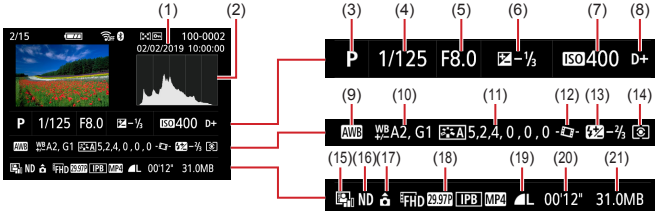
(15) Maximum continuous shots/ Maximum continuous RAW rolls (fixed at 1)
(16) Movie recording time available
(17) Battery level
(18) Movie orientation indicator
(19) Zoom magnification, Digital tele-converter
(20) AF point
(21) Spot AE point frame
(22) Electronic level
(23) Quick Control
(24) Histogram
(25) Focus range
(26) White balance
(27) Picture Style
(28) Auto Lighting Optimizer
(29) Creative filters
(30) Bluetooth smartphone connection, GPS acquisition status
(31) Exposure simulation
(32) Date stamp
(33) Create folder
(34) Bluetooth connection status
(35) Shutter speed
(36) Electronic shutter
(37) Flash mode/FE lock
(38) Aperture value
(39) Flash exposure compensation/Flash output level
(40) Exposure level indicator
(41) AEB
(42) Wi-Fi signal strength
(43) Highlight tone priority
(44) ISO speed
(45) Video snapshot
(46) RAW Indicator
(47) Movie Servo AF
(48) Intelligent IS
(49) Hybrid Auto mode/Digest type
(50) RAW burst mode
(51) RAW Pre-shooting
(52) Multi Shot Noise Reduction
(53) Number of shots
(54) Zoom bar
(55) Time required
(56) Interval
(57) Self-portrait movie
(58) White balance correction
(59) Miniature effect movie
(60) MF indicator
(61) Creative Assist
(62) Audio recording level meter
(63) Eco mode
(64) Image stabilization
(65) Exposure compensation
(66) Audio recording mode
(67) Wind filter
(68) Attenuator
(69) Auto slow shutter
(70) Auto level

During Playback



(1) Current image/Total images
(2) Battery level
(3) Wi-Fi signal strength
(4) Bluetooth connection status
(5) Rating
(6) Protection
(7) Folder number - File number
(8) Shutter speed
(9) Aperture value
(10) Exposure compensation level
(11) ISO speed
(12) Highlight tone priority
(13) Image quality*

*Images captured with a creative filter, RAW image processing, resizing, Creative Assist, cropping, or red-eye correction applied are labeled with [ ]. Cropped images are labeled with [ ].



(1) Shooting date/time

(2) Histogram

(3) Shooting mode/RAW burst mode

(4) Shutter speed

(5) Aperture value

(6) Exposure compensation level

(7) ISO speed

(8) Highlight tone priority

(9) White balance

(10) White balance correction

(11) Picture Style setting details

(12) Auto level

(13) Flash exposure compensation/Multi Shot Noise Reduction

(14) Metering mode

(15) Auto Lighting Optimizer

(16) ND filter

(17) Movie rotation info

(18) Movie recording size

(19) Image quality*

(20) Movie recording time/RAW burst mode

(21) File size

*Images captured with a creative filter, RAW image processing, resizing, Creative Assist, cropping, or red-eye correction applied are labeled with [ ]. Cropped images are labeled with [ ].

Precautions for Wireless Features

- Before goods or technologies in the camera regulated by the Foreign Exchange and Foreign Trade Act are exported (which includes bringing them outside Japan or showing them to non-residents in Japan), export or service transaction permission may be required from the Japanese government.
- Because this product includes American encryption items, it falls under U.S. Export Administration Regulations, and cannot be exported to or brought into a country under U.S. trade embargo.
- Be sure to make notes of the Wi-Fi settings you use. The wireless settings saved to this product may change or be erased due to incorrect operation of the product, the effects of radio waves or static electricity, or accident or malfunction. Please note that Canon accepts no responsibility for direct or indirect damages or loss of earnings resulting from a degradation or disappearance of content.
- When transferring ownership, disposing of the product, or sending it for repair, restore the default wireless settings by erasing any settings you have entered.
- Canon will not make compensation for damages resulting from loss or theft of the product.
  Canon accepts no responsibility for damages or loss resulting from unauthorized access or use of target devices registered on this product due to loss or theft of the product.
- Be sure to use the product as directed in this guide.
  Be sure to use the wireless function of this product within the guidelines noted in this guide. Canon accepts no responsibility for damages or loss if the function and product are used in ways other than as described in this guide.

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.

Third-Party Software

- AES-128 Library
  Copyright (c) 1998-2008, Brian Gladman, Worcester, UK. All rights reserved.

  LICENSE TERMS
  The redistribution and use of this software (with or without changes) is allowed without the payment of fees or royalties provided that:
  1. source code distributions include the above copyright notice, this list of conditions and the following disclaimer;
  2. binary distributions include the above copyright notice, this list of conditions and the following disclaimer in their documentation;
  3. the name of the copyright holder is not used to endorse products built using this software without specific written permission.

  DISCLAIMER
  This software is provided 'as is' with no explicit or implied warranties in respect of its properties, including, but not limited to, correctness and/or fitness for purpose.

- CMSIS Core header files
  Copyright (C) 2009-2015 ARM Limited.
  All rights reserved.

  Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:
  - Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
  - Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
  - Neither the name of ARM nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

  THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL COPYRIGHT HOLDERS AND CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

- KSDK Peripheral Drivers, Flash / NVM, KSDK H/W Abstraction Layer (HAL)
  (c) Copyright 2010-2015 Freescale Semiconductor, Inc.
  ALL RIGHTS RESERVED.

  Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:
  * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
  * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
  * Neither the name of the <organization> nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

  THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL <COPYRIGHT HOLDER> BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Personal Information and Security Precautions

If personal information and/or Wi-Fi security settings, such as passwords, etc., are saved on the camera, please be aware that such information and settings may still remain in the camera.
When transferring the camera to another person, disposing of it, or sending it for repair, be sure to take the following measures to prevent the leakage of such information and settings.

- Erase registered Wi-Fi security information by choosing (( )) [Clear wireless settings].

Trademarks and Licensing

- Microsoft and Windows are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.
- Macintosh and Mac OS are trademarks of Apple Inc., registered in the U.S. and other countries.
- App Store, iPhone, and iPad are trademarks of Apple Inc.
- The SDXC logo is a trademark of SD-3C, LLC.
- HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.
- Wi-Fi®, Wi-Fi Alliance®, WPA™, WPA2™ and Wi-Fi Protected Setup™ are trademarks or registered trademarks of the Wi-Fi Alliance.
- The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Canon Inc. is under license. Other trademarks and trade names are those of their respective owners.
- All other trademarks are the property of their respective owners.
- This device incorporates exFAT technology licensed from Microsoft.
- This product is licensed under AT&T patents for the MPEG-4 standard and may be used for encoding MPEG-4 compliant video and/or decoding MPEG-4 compliant video that was encoded only (1) for a personal and non-commercial purpose or (2) by a video provider licensed under the AT&T patents to provide MPEG-4 compliant video. No license is granted or implied for any other use for MPEG-4 standard.

- THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL USE OF A CONSUMER OR OTHER USES IN WHICH IT DOES NOT RECEIVE REMUNERATION TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE **HTTP://WWW.MPEGLA.COM**

Disclaimer

- Unauthorized reproduction of this guide is prohibited.
- All measurements based on Canon testing standards.
- Information subject to change without notice, as are product specifications and appearance.
- Illustrations and screenshots in this guide may differ slightly from the actual equipment.
- The above items notwithstanding, Canon cannot be held liable for any loss arising from the use of this product.

Index

Numbers

1-point AF 153

Roman

A

Accessories 296
AEB shooting 123
AE lock 99
AF-assist beam 156
AF lock 104
AF method 153
AF points 45, 154
AF-point zoom 101
Aspect ratio 108
Attenuator 168
Auto level 163
Auto Lighting Optimizer 130
Auto mode (shooting mode) 56
Av (shooting mode) 94

B

Background defocus (shooting mode) 83
Battery charger 296
Battery pack
  Charging 21, 300
  Eco mode 265
  Power saving 266
Beep 274
Bluetooth 223, 255
Bulb exposure 97

C

Camera
  Resetting 288
Camera Connect 223
Changing or deleting connection information 256
Charging 21, 300
Color temperature 138
Color (white balance) 138
Compression 106
Continuous AF 155
Continuous shooting 117
Creative Assist (playback) 208
Creative Assist (shooting) 60
Creative filters (shooting mode) 82
Cropping 213
C (shooting mode) 286
Custom Functions 283
Custom white balance 140

D

Date/time/zone
  Changing 269
  Settings 25
Digital tele-converter 164
Digital zoom 98
Display language
  Changing 270
  Settings 25
DPOF 202

E

Eco mode 265
Editing
  Cropping 213
  Red-eye correction 210
  Resizing images 215
Electronic shutter 151
Erasing 199
Error messages 313
Exposure
  AE lock 99
  Compensation 122
  FE lock 111
External microphone 303

F

Face+Tracking 153
FE lock 111
File numbering 259
Fireworks (shooting mode) 66
Fish-eye effect (shooting mode) 84
Flash
  Flash exposure compensation 113
  Flash off 110
  Flash timing 115
  Mode 110
  Slow synchro 110
Flash exposure compensation 113
Flash off 110
Focus bracketing 157
Focusing
  AF lock 104
  AF points 153
  MF peaking 103
  Servo AF 152
Focus range
  Macro 100
  Manual focus 101
Food (shooting mode) 65

G

Geotagging images 233
Grainy B/W (shooting mode) 83
Grid lines 278

H

Handheld night scene (shooting mode) 65
HDMI cable 298
HDR art bold (shooting mode) 85
HDR art embossed (shooting mode) 85
HDR art standard (shooting mode) 85
HDR art vivid (shooting mode) 85
HDR Backlight Control (shooting mode) 66
HDR movie 91
High Frame Rate 166
High ISO speed noise reduction 148
Highlight tone priority 131
Hybrid Auto (shooting mode) 62

I

Icons 314, 316
image.canon 243
Image quality 106
Images
  Display period 109
  Erasing 199
  Protecting 194
Image stabilization 161
Index display 186
ISO speed 125, 128

J

Jump display 219

L

Lamp 156
Live streaming 247
Long exposure 97

M

Macro (focus range) 100
Magnified display 184
Manual focus (focus range) 101
Memory cards 22
Menu
  Basic operations 39
  Table 42
  Touch operation 50
Metering method 133
MF (Manual focusing) 101
MF peaking 103
Miniature effect movie (shooting mode) 171
Miniature effect (shooting mode) 84, 87
Movie manual exposure (shooting mode) 90
Movies
  Create album 211
  Editing 187
  Recording size 165
  Servo AF 169
M (shooting mode) 95
Multi shot noise reduction 148
My Menu 292

N

ND filter 132

P

Panning (shooting mode) 70
Panoramic shot (shooting mode) 68
Photobook set-up 204
PictBridge 235, 297, 305
Picture Style 142, 144, 147
Pixel count (image size) 106
Portrait (shooting mode) 64
Power 296
Power saving 266
Printing 202, 235, 305
Program AE 92
Protect images 194
Protecting 194
P (shooting mode) 92

Q

Quick Control screen 41
  Basic operations 37
  Touch operation 49

R

Rating 216
RAW 106
RAW burst mode 119
RAW image processing 206, 209
Red-eye correction 210
Resetting 288
Resizing images 215
Rotating 197, 198

S

Saturation 144
Saving images to a computer 304
Screen
  Display language 25, 270
  Icons 314
Searching 218

Self portrait movie 177
Self portrait (shooting mode) 64, 67
Self-timer 118, 178
Sending images 243
Sending images to a smartphone 225, 232
Sending images to Web services 243
Servo AF 152
Shooting
  Shooting information 314
Slideshow 217
Smooth skin (shooting mode) 64
Soft focus (shooting mode) 83
Software
  Sending images to a computer automatically 239
Spot AF 153
Star nightscape (shooting mode) 74
Star portrait (shooting mode) 71
Star time-lapse movie (shooting mode) 78
Star trails (shooting mode) 76
Strap 20

T

Terminal 298, 304, 305
Time-lapse movie (shooting mode) 175
Tone priority 131
Touch Shutter 150
Toy camera effect (shooting mode) 84
Troubleshooting 309
TV display 298
Tv (shooting mode) 93

V

Video blog recording mode 89
Video snapshot 173, 211
Video system 272
Viewing 31, 182
  Digest movies 185
  Image search 218
  Index display 186
  Jump display 219
  Magnified display 184
  Single-image display 182
  Slideshow 217
  Touch operation 52
  TV display 298

W

Water painting effect (shooting mode) 84
White balance (color) 138
Wi-Fi features 222
Wind filter 168
Wireless features 222, 318

Z

Zoom 29, 56, 98, 105