# Canon

# PowerShot SD4500 IS IXUS 1000 HS

# **Camera User Guide**

- Make sure you read this guide, including the "Safety Precautions" section, before using the camera.
- · Store this guide safely so that you can use it in the future.

**ENGLISH** 

## **Checking the Package Contents**

Check if the following items are included in your camera package. If anything is missing, contact the retailer from which you purchased the camera.



Camera



Battery Pack NB-9L (with Terminal Cover)



Battery Charger CB-2LB/CB-2LBE



Interface Cable IFC-400PCU



Stereo AV Cable AVC-DC400ST



Wrist Strap WS-DC7



Getting Started



DIGITAL CAMERA Solution Disk



Varranty Card



"Canon Customer Support" Leaflet

## **Using the PDF Manuals**

Also refer to the PDF manuals on the CD-ROM. After installation, shortcut icons appear on the desktop. If the software installation fails, you can find the manuals in the Readme folder on the CD-ROM.

- · Camera User Guide (This Guide)
  - Once you have mastered the basics, use the camera's many features to shoot more challenging photos.
- Personal Printing Guide

Read when you want to connect the camera to a printer (sold separately) and print.



Read when you want to use the included software.





- A memory card is not included.
- Adobe Reader is required to view the PDF manuals.

#### **Read This First**

#### **Test Shots and Disclaimer**

Take some initial test shots and play them back 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 results in the failure of an image to be recorded or to be recorded in a way that is machine readable.

#### **Warning Against Copyright Infringement**

The images recorded with this camera are intended for personal use. Do not record images that infringe upon copyright laws without the prior permission of the copyright holder. Please be advised that in certain cases the copying of images from performances, exhibitions, or commercial properties by means of a camera or other device may contravene copyright or other legal rights even if the image was shot for personal use.

#### **Warranty Limitations**

This camera's warranty is only effective in the country of sale. If there is a problem with the camera while abroad, please return it to the country of sale before proceeding with a warranty claim to a Canon Customer Support Help Desk. For Canon Customer Support contacts, please see the customer support list supplied with your camera.

#### LCD Monitor (Screen)

- The LCD monitor is produced with extremely high-precision manufacturing techniques. More than 99.99% of the pixels operate to specification, but occasionally non-performing pixels may appear as bright or dark dots. This is not a malfunction and has no effect on the recorded image.
- The LCD monitor may be covered with a thin plastic film for protection against scratches during shipment. If so, remove the film before using the camera.

#### Camera Body Temperature

Please take care when operating the camera for an extended period as the camera body may become warm. This is not a malfunction.

## What Do You Want to Do?

## Shoot

Shoot, leaving it to the camera to make settings ......25

## Take good people shots



#### Shoot various other scenes

 Night Scene
 Low Light
 Foliage
 Fireworks

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#### Shoot with special effects

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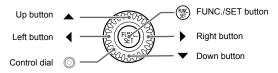
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#### **Conventions Used in This Guide**

- Icons are used in the text to represent the camera buttons and switches.
- Language that displays on the screen appears inside [] (square brackets).
- The directional buttons, control dial, and FUNC./SET button are represented by the following icons.



- : Things you should be careful about
- : Troubleshooting tips
- (i): Hints for getting more out of your camera
- Supplemental information
- (p. xx): Reference pages ("xx" stands for a page number)
- This guide assumes all functions are at their default settings.
- The various types of memory cards that can be used in this camera are collectively referred to as memory cards in this guide.

## **Safety Precautions**

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

## **Marning**

Denotes the possibility of serious injury or death.

Do not trigger the flash in close proximity to human eyes.

Exposure to the intense light produced by the flash could damage eyesight. In particular, remain at least one meter (39 inches) away from infants when using the flash.

- Store this equipment out of the reach of children and infants.
   Strap: Putting the strap around a child's neck could result in asphyxiation.
- Use only recommended power sources.
- Do not attempt to disassemble, alter or apply heat to the product.
- Avoid dropping or subjecting the product to severe impacts.
- To avoid the risk of injury, do not touch the interior of the product if it has been dropped or otherwise damaged.
- Stop using the product immediately if it emits smoke, a strange smell, or otherwise behaves abnormally.
- Do not use organic solvents such as alcohol, benzine, or thinner to clean the equipment.
- Do not let the product come into contact with water (e.g. sea water) or other liquids.
- Do not allow liquids or foreign objects to enter the camera.

This could result in electrical shock or fire.

If liquids or foreign objects come into contact with the camera interior, immediately turn the camera power off and remove the battery.

If the battery charger becomes wet, unplug it from the outlet and consult your camera distributor or the closest Canon Customer Support Help Desk.

 Do not play the supplied CD-ROM(s) in any CD player that does not support data CD-ROMs.

Playing the CD-ROM(s) in an audio CD player (music player) could damage the speakers. It is also possible to suffer hearing loss from listening with headphones to the loud sounds of a CD-ROM played on a music CD player.

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

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



#### Caution

Denotes the possibility of injury.

- Be careful not to bang the camera or subject it to strong impacts or shocks when hanging it by the strap.
- Be careful not to bump or push strongly on the lens.

This could lead to injury or damage the camera.

Be careful not to subject the screen to strong impacts.

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

When using the flash, be careful not to cover it with your fingers or clothing.
 This could result in burns or damage to the flash.

- Avoid using, placing or storing the product in the following places.
  - Places subject to strong sunlight.
  - Places subject to temperatures above 40 °C (104 °F).
  - Humid or dusty areas.

These could cause leakage, overheating or an explosion of the battery, resulting in electrical shock, fire, burns or other injuries.

High temperatures may cause deformation of the camera or battery charger casing.

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

#### Caution

Denotes the possibility of damage to the equipment.

- Do not aim the camera at bright light sources (the sun, etc.).
   Doing so may damage the image sensor.
- When using the camera on a beach or at a windy location, be careful not to allow dust or sand to enter the camera.

This may cause the camera to malfunction.

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

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

- Remove and store the battery when you are not using the camera.

  If the battery is left inside the camera, damage caused by leakage may occur.
- Before you discard the battery, cover the terminals with tape or other insulators. Contacting other metal materials may lead to fire or explosions.
- Unplug the battery charger from the power outlet after charging is complete, or when you are not using it.
- Do not place anything, such as cloth on top of the battery charger while it is charging.

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

Do not place the battery near pets.

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

Do not sit down with the camera in your pocket.

Doing so may cause malfunctions or damage the screen.

- When putting the camera in your bag, ensure that hard objects do not come into contact with the screen.
- Do not attach accessories to the strap.

Doing so may cause malfunctions or damage the screen.





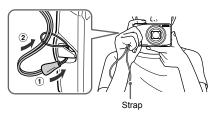


# **Getting Started**

This chapter explains preparations before shooting, how to shoot in mode, and then how to view and erase the images you take. The latter part of this chapter explains how to shoot and view movies and transfer images to a computer.

#### Attaching the Strap/Holding the Camera

- Be sure to attach the supplied strap to the camera and wrap it around your wrist when shooting to avoid dropping the camera.
- Keep your arms tight against your body while holding the camera firmly by the sides. Be sure that your fingers do not block the flash.



## **Charging the Battery**

Use the included charger to charge the battery. Be sure to charge the battery as it is not charged at the time of purchase.



## Remove the cover.



## Insert the battery.

• Align the ▲ marks on the battery and charger, then insert the battery by sliding it in (①) and down (②).



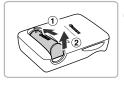
## Charge the battery.

- For CB-2LB: Flip out the plug (1) and plug the charger into a power outlet (2).
- For CB-2LBE: Plug the power cord into the charger, then plug the other end into a power outlet.
- The charge lamp lights orange and charging starts.
- ▶ The charge lamp will light green when charging has finished. Charging takes approx. 1 hour and 50 minutes.



## Remove the battery.

 Unplug the battery charger from the power outlet, then remove the battery by sliding it in (1) and up (2).





To protect the battery and prolong its life, do not charge it for longer than 24 hours continuously.

#### Approximate Number of Shots That Can Be Taken

Number of Shots	Approx. 150
Playback Time	Approx. 4 hrs. 30 min.

- The number of shots that can be taken is based on the Camera & Imaging Products Association (CIPA) measurement standard.
- Under some shooting conditions, the number of shots that can be taken may be less than mentioned above

#### **Battery Charge Indicator**

An icon or message will appear on the screen indicating the battery's charge state.

Display	Summary
•	Sufficient charge.
· 7/	Slightly depleted, but sufficient.
(Blinking red)	Nearly depleted. Charge the battery.
"Change the battery pack."	Depleted. Recharge the battery.



#### Using the battery and charger effectively

- Charge the battery on the day, or the day before, it will be used.
   Charged batteries continue to discharge naturally even if they are not used.
- How to store the battery for long periods:
   Deplete and remove the battery from the camera. Attach the terminal cover and store the battery. Storing a battery for long periods of time (about a year) without depleting it may shorten its life span or affect its performance.
- The battery charger can also be used when abroad. The charger can be used in regions that have 100 – 240 V (50/60 Hz) AC power. If the plug does not fit the outlet, use a commercially available plug adapter. Do not use electrical transformers for foreign travel as they will cause damage.
- The battery may develop a bulge.
   This is a normal characteristic of the battery and does not indicate a problem.
   However, if the battery bulges to the point where it will no longer fit into the camera, please contact a Canon Customer Support Help Desk.
- If the battery is quickly depleted even after charging, it has reached the end of its life span. Purchase a new battery.

## **Compatible Memory Cards (Sold Separately)**

- SD memory cards (2 GB and less)\*
- SDHC memory cards (more than 2 GB, up to and including 32 GB)\*
- SDXC memory cards (more than 32 GB)\*
- MultiMediaCards
- MMCplus memory cards
- HC MMCplus memory cards
- Eye-Fi Cards
- \* This memory card complies with the SD standards. Some cards may not operate properly depending on the brand of card used.



Depending on your computer's OS version, SDXC memory cards may not be recognized when using a commercially available card reader. Check to make sure that your OS supports this function beforehand.

### **About Eye-Fi Cards**

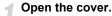
This product is not guaranteed to support Eye-Fi card functions (including wireless transfer). In case of an issue with an Eye-Fi card, please check with the card manufacturer.

Also note that an approval is required to use Eye-Fi cards in many countries or regions. Without approval, use of the card is not permitted. If it is unclear whether the card has been approved for use in the area, please check with the card manufacturer.

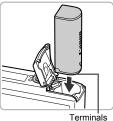
## **Inserting the Battery**

Insert the included battery.





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



Insert the battery.

- Insert the battery as shown until it locks into place with a click.
- Be sure to insert the battery in the correct direction or it will not properly lock into place.



Close the cover.

 Close the cover (①), and press downward as you slide it until it clicks into place (②).

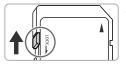
## **Removing the Battery**



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

## **Inserting the Memory Card**

Insert a memory card (sold separately).



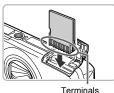
## Check the card's write-protect tab.

If the memory card has a write-protect tab, you will not be able to record images if the tab is in the locked position. Slide the tab up until you hear a click.



## Open the cover.

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



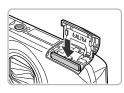
Insert the memory card.

- Insert the memory card as shown until it locks into place with a click.
- Be sure the memory card is oriented correctly. Inserting the memory card in the wrong direction could damage the camera.

#### Close the cover.

 Close the cover (①) and press downward as you slide it until it clicks into place (②).

## **Removing the Memory Card**



- Open the cover and push the memory card in until you hear a click, then slowly release it
- The memory card will pop up.



#### What if [Memory card locked] appears on the screen?

SD, SDHC and SDXC memory cards, and Eye-Fi cards have a write-protect tab. If this tab is in the locked position, [Memory card locked] will appear on the screen and you will not be able to take or erase images.

#### **Approximate Number of Shots per Memory Card**

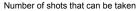
Memory Card	4 GB	16 GB
Number of Shots	1471	6026

- Values are based on the default settings.
- The number of shots that can be taken will vary depending on camera settings, the subject and the memory card used.



#### Can you check the number of shots that can be taken?

You can check the number of shots that can be taken when the camera is in a Shooting mode (p. 25).





## **Setting the Date and Time**

The Date/Time settings screen will appear the first time the camera is turned on. Since the dates and times recorded into your images are based on these settings, be sure to set them.



## Turn on the camera.

- Press the power button.
  - ▶ The Date/Time screen will appear.



#### Set the date and time.

- Press the ◆ buttons to choose an option.
- Press the ▲▼ buttons or turn the ② dial to set a value



## Complete the setting.

- Press the (str) button.
- Once the date and time have been set, the Date/Time screen will close.
- Pressing the power button will turn off the camera.



## Reappearing Date/Time screen

Set the correct date and time. If you have not set the date and time, the Date/Time screen will appear each time you turn on the camera.



#### Daylight saving time settings

If you choose ¾ in Step 2 and press the ▲▼ buttons or turn the ② dial and choose ﴾, you will set the time to daylight saving (1 hour ahead).

#### **Changing the Date and Time**

You can change the current date and time settings.



## Display the menus.

Press the MENU button.



## ○ Choose [Date/Time] in the ○ ↑

- Press the ◆ buttons to choose the \*\*†
  tab
- Press the ▲▼ buttons or turn the ② dial to choose [Date/Time], then press the ⊕ button.





### Change the date and time.

- Follow Steps 2 and 3 on p. 20 to adjust the setting.
- Pressing the MENU button will close the menu.



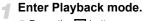
#### **Date/Time battery**

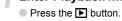
- The camera has a built-in date/time battery (backup battery) that allows the date/time settings to be retained for about three weeks after the battery pack has been removed.
- By inserting a charged battery or connecting an AC adapter kit (sold separately, p. 39) the date/time battery can be charged in about 4 hours even if the camera is not turned on.
- If the date/time battery is depleted, the [Date/Time] menu will appear when you turn the camera on. Follow the steps on p. 20 to set the date and time.

## **Setting the Display Language**

You can change the language that displays on the screen.









## Display the settings screen.

Press and hold the button, then immediately press the MENU button.



## Set the display language.

- Press the ▲▼◀▶ buttons or turn the ② dial to choose a language, then press the ⊕ button.
- ▶ Once the display language has been set, the settings screen will close.





The clock will appear if too much time passes between pressing the (\*\*) button and the MENU button in Step 2. If the clock appears, press the (\*\*) button to remove the clock and repeat Step 2.



You can also change the display language by pressing the  $\bf MENU$  button, choosing the  $\bf \Upsilon$  tab, and choosing the [Language] menu item.

## **Formatting Memory Cards**

Before you use a new memory card or one that has been formatted in other devices, you should format the card with this camera.

Formatting (initializing) a memory card erases all data on the memory card. As you cannot retrieve the erased data, exercise adequate caution before formatting the memory card.

Before formatting an Eye-Fi card (p. 155), be sure to install the software contained on the card to a computer.











#### Display the menu.

Press the MENU button.

#### Choose [Format].

- Press the ◀▶ buttons to choose the f† tab.
- Press the ▲▼ buttons or turn the ② dial to choose [Format], then press the ⑤ button.

## 3 Choose [OK].

Press the ♠ buttons or turn the ○ dial to choose [OK], then press the ⊕ button.

## Format the memory card.

- Press the ▲▼ buttons or turn the ② dial to choose [OK], then press the ∰ button.
- The memory card will be formatted.

#### Complete formatting.

- When formatting ends, [Memory card formatting complete] will appear on the screen
- Press the (str) button.



Formatting or erasing data on a memory card merely changes the file management information on the card and does not ensure its contents are completely erased. Be careful when transferring or disposing of a memory card. When disposing of a memory card, take precautions such as physically destroying the card to prevent personal information leaks.



The total capacity of the memory card displayed in the formatting screen may be less than indicated on the memory card.

## **Pressing the Shutter Button**

To take images that are in focus, be sure to first press the shutter button lightly (halfway) to focus, then press fully to shoot.





 Press lightly until the camera beeps twice and AF frames appear where the camera focused.



#### Press fully (Press fully to shoot).

- The camera plays the shutter sound and takes the shot.
- Since the shot is being taken while the shutter sound plays, be careful not to move the camera.



#### Does the length of the shutter sound change?

- Since the time required to shoot differs according to the scene you want to take, the length of the shutter sound may change.
- If the camera or subject moves while the shutter sound is playing, the recorded image may be blurry.



If you shoot without pressing the shutter button halfway, the image may not be in focus.

## **Taking Pictures (Smart Auto)**

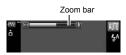
Since the camera can determine the subject and shooting conditions, you can let it automatically select the best settings for the scene and just shoot. The camera can also detect and focus on faces, setting the color and brightness to optimal levels.











#### Turn on the camera.

- Press the power button.
  - The start-up screen will appear.

### Choose (MID) mode.

- Set the mode switch to AUTO.
- When you point the camera toward the subject, the camera will make a slight noise as it determines the scene.
- The icon for the determined scene will appear in the upper right of the screen.
- The camera will focus on detected faces and display frames on them.
- Black bars will appear on the left and right sides of the screen. These areas cannot be recorded when shooting.

#### Compose the shot.

- Moving the zoom lever toward ♠ (telephoto) will zoom in on your subject, making it appear larger. Moving the lever toward ℍ (wide angle) will zoom out from your subject, making it appear smaller. (The zoom bar showing the zoom position appears on the screen.)
- If you move the zoom lever all the way toward (wide angle) or (1) (telephoto), you will zoom quickly. If you move it slightly, you will zoom slowly.

#### Taking Pictures (Smart Auto)





Press the shutter button halfway to focus.



When the camera focuses, it will beep twice and AF frames will appear where the camera focused.
Several AF frames will appear when the

Several AF frames will appear when the camera focuses on more than one point.

AF Frame



## Shoot.

- Press the shutter button fully.
- The camera will play the shutter sound and shoot. The flash will automatically fire in low light conditions.
- The image will appear on the screen for about two seconds.
- You can take a second picture even while an image is displayed by pressing the shutter button again.



#### What if an icon appears in the upper right of the screen?

The icon for the determined scene will appear in the upper right of the screen. For details on the icons that appear, see "Scene Icons" (p. 163).



#### What if...

- What if the color and brightness of the images do not turn out as expected?
   The scene icon (p. 163) that appears on the screen may not match the actual scene. If this happens, try shooting in P mode (p. 72).
- What if white and gray frames appear when you point the camera toward a subject?
  - When faces are detected, a white frame appears on the face of the main subject, while gray frames appear on other detected faces. The frames will follow the subjects within a certain range (p. 84).
  - If the main subject moves, however, the gray frames will disappear, leaving only the white frame.
- What if a blue frame appears when you press the shutter button halfway?
   A blue frame appears when a moving subject is detected; the focus and exposure will continuously adjust (Servo AF).
- What if the indicator blinks orange and flashes on the screen?
   Attach the camera to a tripod so that the camera does not move and blur the image.
- What if the camera does not play any sounds?

  Pressing the MENU button while turning on the camera power will turn off all sounds except for warning sounds. To turn the sounds on, press the MENU button to choose [Mute] in the 

  † tab, then press the 

  ▶ buttons to choose [Off].
- What if the image comes out dark even if the flash fired when shooting? The subject is too far away for the flash to reach. The effective flash range is approximately 30 cm 3.5 m (12 in. 12 ft.) at maximum wide angle ( $\boxed{\text{III}}$ ), and approximately 1.0 2.0 m (3.3 6.6 ft.) at maximum telephoto ( $\boxed{\text{II}}$ ).
- What if the camera beeps once when the shutter button is pressed halfway? Your subject may be too close. Move the zoom lever toward Ⅲ and hold it until the lens stops moving. The camera will be at its maximum wide angle setting and you will be able to focus on subjects that are about 1 cm (0.4 in.) or more away from the end of the lens. Move the zoom lever toward ៧ and hold it until the lens stops moving. The camera will be at its maximum telephoto setting and you will be able to focus on subjects that are about 1 m (3.3 ft.) or more away from the end of the lens
- What if the lamp lights when the shutter button is pressed halfway? To reduce red-eye and to assist in focusing, the lamp may light when shooting in dark areas.
- What if the \$\frac{1}{2}\$ icon blinks when you try to shoot?
   The flash is charging. You can shoot when recharging ends.

## **Viewing Images**

You can view the images you have taken on the screen.







## Enter Playback mode.

- Press the button.
- ▶ The last image you took will appear.

### Choose an image.

- Pressing ◀ or turning the dial counterclockwise will cycle through the images in the reverse order they were taken, from the newest image to the oldest.
- Pressing or turning the dial clockwise will cycle through images in the order they were taken, from oldest to newest.
- The images change more quickly if you keep the buttons pressed, but they will appear coarse.
- The lens will retract after approximately 1 minute elapses.
- Pressing the button again while the lens is retracted will turn off the power.

## Switching to Shooting mode

 Pressing the shutter button halfway while in Playback mode switches the camera to Shooting mode.

## **Erasing Images**

You can choose and erase images one at a time. Please note that erased images cannot be recovered. Exercise adequate caution before erasing an image.



## Enter Playback mode.

- Press the button.
  - The last image you took will appear.



## Choose an image to erase.

Press the ◀▶ buttons or turn the ○ dial to display an image to erase.



## Erase the image.

- After pressing the ∰ button, press ▲▼ buttons or turn the ۞ dial to choose m, then press the ∰ button again.
- ► [Erase?] appears on the screen.
- Press the ◀▶ buttons or turn the ② dial to choose [Erase], then press the ∰ button.
- The displayed image will be erased.
- To exit instead of erasing, press the ◀▶ buttons or turn the ② dial to choose [Cancel], then press the ∰ button.







## **Shooting Movies**

The camera can automatically select all settings so that you can shoot movies just by pressing the movie button. The audio will record in stereo. If you continue shooting for a long time, the camera may become warm. This

is not a malfunction.



Remaining Time



### Choose (M) mode.

Set the mode switch to AUTO.







### Compose the shot.

Moving the zoom lever toward will zoom in on your subject, making it appear larger. Moving the lever toward will zoom out from your subject, making it appear smaller.







#### Shoot.

- Press the movie button.
- The camera will beep once, recording will start, and [ Rec] and the elapsed time will appear on the screen.
- Once shooting begins, take your finger off the movie button
- If you change the composition of your shot during shooting, the focus, brightness and tone will automatically adjust.



Microphone



- Do not touch the microphone while shooting.
- Do not press any buttons other than the movie button while shooting. The sound the buttons make will be recorded in the movie.

### Stop shooting.

- Press the movie button again.
- The camera will beep twice and stop shooting the movie.
- The movie will record to the memory card.
- Shooting will automatically stop when the memory card fills.



#### Magnifying the subject while shooting

Pressing the zoom lever while shooting will zoom in on or out from the subject. However, operation sounds will be recorded.



When the mode switch is set to AUD, the icon for the determined scene will appear (p. 163). "When Moving" icons and "With Strong Facial Shadows" icons will not appear, however. Under certain conditions, the icon that appears may not match the actual scene.

- If you change the composition while shooting so the optimum white balance is not possible, press the Movie button to stop recording, then start recording again. (only when the movie quality is fixed at [m] (p. 101))
- Movies can be shot by pressing the movie button even when the mode switch is in positions other than (p. 97).
- When the mode switch is set to \, you can set each setting for shooting movies (p. 97).

#### **Estimated Shooting Times**

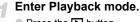
Memory Card	4 GB	16 GB
Shooting Time	14 min. 34 sec.	59 min. 40 sec.

- Shooting times are based on default settings.
- Maximum clip length is approx. 10 minutes.
- Recording may stop even if the maximum clip length has not been reached on some memory cards. SD Speed Class 6 or higher memory cards are recommended.

## **Viewing Movies**

You can view the movies you have shot on the screen.





- Press the button.
  - The last image you took will appear.
  - ▶ SETI appears on movies.

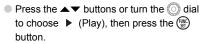


#### Choose a movie.

■ Press the ◆ buttons or turn the ⑥ dial to choose a movie, then press the (FUNC) button.



#### Play the movie.



- The movie will play.
- If you press the (SET) button, the movie will pause and the movie control panel will appear. Press the **\Delta** buttons or turn the (iii) dial to choose (Play), then press the (str) button to resume playback.
- Press the ▲▼ buttons to adjust the volume.
- ► After the movie finishes, ¬ appears.







## ?

#### What if you can't play back movies on a computer?

- Install the included software (p. 34).
- When watching a movie on a computer, frames may drop, it may not play smoothly, and the audio may stop suddenly depending on the computer's capabilities.
- If you use the supplied software to copy the movie back onto the memory card, you can play back the movie smoothly with the camera. For enhanced playback you can also connect the camera to a TV.

## **Transferring Images to a Computer for Viewing**

You can use the included software to transfer images you have shot with the camera to a computer for viewing. If you are already using software included with another Canon-brand compact digital camera, install the software from the included CD-ROM, overwriting your current installation.

#### **System Requirements**

#### Windows

OS	Windows 7 Windows Vista Service Pack 1 and 2 Windows XP Service Pack 3
Computer model	The above OS should be pre-installed on computers with built-in USB ports.
CPU	Pentium 1.3 GHz or higher (still images), Core2 Duo 2.6 GHz or higher (movies)
RAM	Windows 7 (64 bit): 2 GB or more Windows 7 (32 bit), Windows Vista (64 bit, 32 bit): 1 GB or more (still images), 2 GB or more (movies) Windows XP: 512 MB or more (still images), 2 GB or more (movies)
Interface	USB
Free Hard Disk Space	ZoomBrowser EX: 200 MB or more CameraWindow: 150 MB or more* PhotoStitch: 40 MB or more
Display	1,024 x 768 pixels or higher

<sup>\*</sup> For Windows XP, Microsoft .NET Framework 3.0 or later (max. 500 MB) must be installed. Installation may take some time depending on your computer's capabilities.

#### Transferring Images to a Computer for Viewing

#### Macintosh

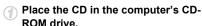
OS	Mac OS X (v10.4 – v10.6)
Computer model	The above OS should be pre-installed on computers with built-in USB ports.
CPU	PowerPC G4/G5 or Intel Processor (still images), Core 2 Duo 2.6 GHz or higher (movies)
RAM	Mac OS X v10.4 – v10.5: 512 MB or more (still images), 2 GB or more (movies) Mac OS X v10.6: 1 GB or more (still images), 2 GB or more (movies)
Interface	USB
Free Hard Disk Space	ImageBrowser: 250 MB or more CameraWindow: 150 MB or more PhotoStitch: 50 MB or more
Display	1,024 x 768 pixels or higher

#### **Preparations**

Windows Vista and Mac OS X (v10.5) are used for these explanations.



# Install the Software.



Place the supplied CD-ROM (DIGITAL CAMERA Solution Disk) (p. 2) into the computer's CD-ROM drive.



#### Begin installation.

- Click [Easy Installation] and follow the on-screen instructions to proceed with the installation.
- If the [User Account Control] window appears, follow the on-screen instructions to proceed.

#### Transferring Images to a Computer for Viewing



When the installation finishes, click [Restart] or [Finish].

#### Remove the CD-ROM.

 Remove the CD-ROM when your desktop screen appears.

#### Macintosh

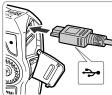
# Place the CD in the computer's CD-ROM drive.

 Place the supplied CD-ROM (DIGITAL CAMERA Solution Disk) (p. 2) into the computer's CD-ROM drive.



#### Begin installation.

- Double-click the on the CD.
- Click [Install], and follow the on-screen instructions to proceed with the installation



# Connect the camera to the computer.

- Turn off the camera
- Open the cover and insert the small plug of the included interface cable (p. 2) firmly into the camera terminal in the direction shown.



 Insert the interface cable's larger plug into the computer. For connection details, refer to the user guide provided with the computer.

#### Transferring Images to a Computer for Viewing





#### Turn on the camera.

Press the button to turn on the camera.

Open CameraWindow.

#### Windows

- Click [Downloads Images From Canon Camera using Canon CameraWindow].
- CameraWindow will appear.
- If CameraWindow does not appear, click the [Start] menu and choose [All Programs], followed by [Canon Utilities], [CameraWindow] and [CameraWindow].

#### Macintosh

- CameraWindow will appear when you establish a connection between the camera and computer.
- If CameraWindow does not appear, click the CameraWindow icon on the Dock (the bar which appears at the bottom of the desktop).



For Windows 7, use the following steps to display CameraWindow.

- ① Click 🔊 on the task bar.
- ② In the screen that appears, click the Wink to modify the program.
- ③ Choose [Downloads Images From Canon Camera using Canon CameraWindow] and click [OK].
- 4 Double click 3.

#### **Transfer and View Images**



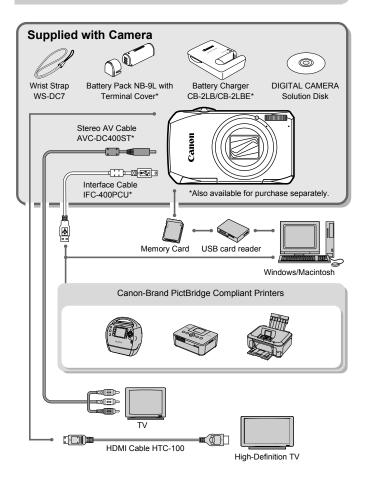
- Click [Import Images from Camera], and then click [Import Untransferred Images].
- All images not previously transferred will transfer to the computer. Transferred images will be sorted by date and saved in separate folders in the Pictures folder.
- When [Image import complete.] appears, click [OK], then click [X] to close CameraWindow.
- Turn off the camera and unplug the cable.
- For details on how to view images using a computer, refer to the Software Guide.



You can transfer images even without using the image transfer function in the included software by simply connecting your camera to a computer. There are, however, the following limitations.

- It may take a few minutes from when you connect the camera to the computer until you can transfer images.
- Images shot in the vertical orientation may be transferred in the horizontal orientation.
- Protection settings for images may be lost when transferred to a computer.
- There may be problems transferring images or image information correctly depending on the version of the operating system in use, the file size, or the software in use.
- Some functions in the included software may not be available, such as editing movies, and transferring images to the camera.

### **Accessories**



# **Separately Sold Accessories**

The following camera accessories are sold separately. Some accessories are not sold in some regions, or may no longer be available.

#### **Power Supplies**







#### Battery Charger CB-2LB/CB-2LBE

 An adapter for charging Battery Pack NB-9L.

#### **Battery Pack NB-9L**

Rechargeable lithium-ion battery.

#### AC Adapter Kit ACK-DC70

This kit lets you power the camera using household power. Recommended for powering the camera for an extended period of time or when connecting to a computer or printer. Cannot be used to charge the camera battery.



#### **Using Accessories Abroad**

The battery charger and the AC adapter kit can be used in regions that have 100 – 240 V (50/60 Hz) AC power.

If the plug does not fit the outlet, use a commercially available plug adapter. Do not use electrical transformers for foreign travel as they will cause damage.

#### CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO LOCAL REGULATION.

#### Flash



#### **High-Power Flash HF-DC1**

 This externally mounted flash can be used to capture photographic subjects that are too distant for the built-in flash to illuminate

#### Other Accessories



#### **HDMI Cable HTC-100**

 Use this cable to connect the camera to the HDMI™ terminal on a high-definition TV set

#### **Printers**



# Canon-Brand PictBridge Compliant Printers

By connecting your camera to a Canonbrand PictBridge compliant printer, you can print your images without having to use a computer.

For more information, visit your nearest Canon retailer.

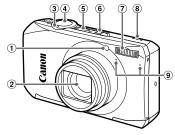
#### Use of genuine Canon accessories is recommended.

This product is designed to achieve excellent performance when used with genuine Canon accessories. Canon shall not be liable for any damage to this product and/or accidents such as fire, etc., caused by the malfunction of non-genuine Canon accessories (e.g., a leakage and/or explosion of a battery pack). Please note that this warranty does not apply to repairs arising out of the malfunction of non-genuine Canon accessories, although you may request such repairs on a chargeable basis.

# **Learning More**

This chapter explains the parts of the camera and what appears on the screen, as well as the basic operating instructions.

# Components Guide

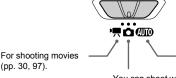


- ① Lamp (pp. 60, 66, 80, 81, 147)
- 2 Lens
- ③ Zoom Lever Shooting: ☐ (Telephoto) / ☐ (Wide Angle) (pp. 25, 30, 57) Playback: Q (Magnify) / ☐ (Index) (pp. 108, 113)
- 4 Shutter Button (p. 24)
- ⑤ Power Button (p. 20)

- 6 Mode Switch
- 7 Flash (pp. 56, 73)
- 8 Speaker
- 9 Microphone (p. 31)
- 10 Battery Cover (p. 17)
- 1 DC Coupler Terminal Cover (p. 154)
- 12 Tripod Socket
- 13 Memory Card Slot Cover (p. 18)
- (9. 13) Strap Mount (p. 13)

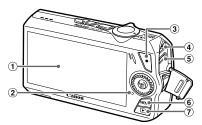
#### Mode Switch

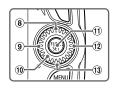
Use the mode switch to change the Shooting mode.



You can leave it to the camera to select settings for fully automatic shooting (p. 25).

You can shoot with the best settings for the scene (p. 61) or choose settings yourself to take various types of pictures (pp. 55, 71, 83).





- ① Screen (LCD Monitor) (pp. 44, 162, 164)
- 2 Indicator (p. 45)
- 3 Movie Button (pp. 30, 97)
- ④ A/V OUT (Audio/Video Output) / DIGITAL Terminal (pp. 35, 115, 134)
- 5 HDMI Terminal (p. 116)
- 6 MENU Button (p. 47)

- ⑦ ► (Playback) Button (pp. 28, 32, 107)
   ⑧ ❖ (Self-Timer) (p. 60) / ▲ Button
- 10 Control Dial (p. 43)
- ① FUNC./SET (Function/Set) Button (p. 46)
- ① **\$** (Flash) (pp. 56, 73) / ▶ Button
- <sup>13</sup> DISP. (Display) (p. 44) / ▼ Button

#### **Control Dial**





Turning the control dial allows you to perform operations such as choosing items or switching images. Except for a few operations, the same operations are possible with the ATT buttons.

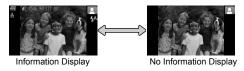
If you touch the control dial in a Shooting mode, the function assigned to the position you touch will appear on the screen. When you switch to Playback mode, the function assigned to the dial in Playback mode will appear for a few seconds.

# **Screen Display**

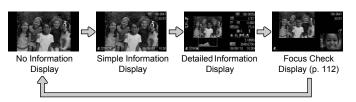
#### **Switching the Display**

You can change the screen display using the ▼ button. Refer to p. 162 for details on information that appears on the screen.

#### **Shooting**



#### **Playback**





You can also switch the display by pressing the ▼ button while the image displays right after shooting. However, Simple Information Display is not available. You can change the display that appears first by pressing the MENU button, then choosing [Review info] in the tab (p. 149).

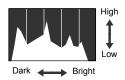
#### **Screen Display in Dark Shooting Conditions**

The display automatically brightens when shooting in dark conditions, allowing you to check the composition (Night Display function). However, the brightness of the image on the screen, and the brightness of the actual image recorded may be different. Screen noise may appear and the movement of the subject may appear somewhat jagged on the screen. This has no effect on the recorded image.

#### **Overexposure Warning during Playback**

In "Detailed Information Display" (p. 44), overexposed areas of the image flash on the screen

#### Histogram during Playback



The graph that appears in "Detailed Information Display" (p. 164) is called the histogram. The histogram shows the distribution of brightness in an image horizontally, and the amount of brightness vertically. When the graph approaches the right side, the image is bright, but when it approaches the left side, the image is dark, and in this way you can judge the exposure.

#### Indicator

The indicator on the back of the camera (p. 43) will light or blink depending on the camera's status.

Colors	Status	Operation Status
Green	Lights	Shooting preparation complete/Display off (p. 145)
	Blinks	Recording/reading/transmitting image data
Orange	Lights	Shooting preparation complete (flash on)
	Blinks	Camera shake warning (pp. 27, 56)



When the indicator blinks green, data is being recorded/read or various information is being transmitted. Do not turn off the power, open the memory card slot cover/battery cover, shake or jolt the camera. These actions may corrupt the image data or cause the camera or memory card to malfunction.

# **FUNC. Menu - Basic Operations**

Commonly used functions can be set with the FUNC. menu. The menu items and options differ depending on the Shooting mode and Playback mode (pp. 166 – 169).





Available Options
Menu Items



# Display the FUNC. menu.

Press the (SET) button.

#### Choose a menu item.

- Press the ▲▼ buttons or turn the ② dial to choose a menu item, then press the (\*\*) or ▶ button.
- Choosing some menu items changes the screen to display further menu options.

### Choose an option.

- Press the ▲▼ buttons or turn the ② dial to choose an option.
- You can also choose settings by pressing the MENU button on options that display
   MRNU.
- To return to the menu item, press the \underset
  button.



#### Complete the setting.

- Press the (st) button.
  - The shooting screen will reappear and the setting you chose will display on the screen

# **MENU - Basic Operations**

Various functions can be set from the menus. The menu items are organized under tabs, such as for shooting (♠) and playback (♠). The options differ depending on the Shooting mode and the Playback mode (pp. 168 – 171).



# Display the menu.

Press the MENU button.



#### Choose a tab.

Press the ◀▶ buttons, or move the zoom lever left or right to choose a tab.



#### Choose an item.

- Press the ▲▼ buttons or turn the ② dial to choose an item.
- Some items require you to press the (m) or
   button to display a submenu in which you change the setting.



### Choose an option.

Press the buttons to choose an option.



# Complete the setting.

 Press the MENU button to restore the normal screen.

# **Changing the Sound Settings**

You can silence or adjust the volume of camera sounds.

#### **Muting Sounds**





# Display the menu.

Press the MENU button.

# Choose [Mute].

- Press the ◆ buttons to choose the \*† tab.
- Press the ▲▼ buttons or turn the ② dial to choose [Mute], then press the ◀▶ buttons to choose [On].
- Press the MENU button to restore the normal screen.



You can also mute camera sounds by holding down the ▼ button and turning on the power.

### **Adjusting the Volume**





# Display the menu.

Press the MENU button.

# Choose [Volume].

- Press the ◆ buttons to choose the \*† tab.
- Press the ▲▼ buttons or turn the ② dial to choose [Volume], then press the ⊕ button.

# Change the volume.

- Press the ▲▼ buttons or turn the ◎ dial to choose an item, then press the ◆▶ buttons to adjust the volume.
- Press the MENU button twice to restore the normal screen.

# **Changing the Screen Brightness**

The screen brightness can be changed in two ways.

#### **Using the Menu**





# Display the menu.

Press the MENU button.

# Choose [LCD Brightness].

- Press the ◆ buttons to choose the †† tab
- Press the ▲▼ buttons or turn the ② dial to choose [LCD Brightness].

### Change the brightness.

- Press the ◀▶ buttons to change the brightness.
- Press the MENU button twice to restore the normal screen.

### Using the ▼ Button



- Press the ▼ button for more than one second.
- The screen increases to maximum brightness regardless of the setting in the 

  ft tab.
- Pressing the ▼ button again for more than one second will return the screen to the original brightness.



- The next time you turn on the camera, the screen will be at the brightness setting chosen in the **f†** tab.
- When you have set the brightness to its highest setting in the 
   †† tab, you cannot change the brightness with the ▼ button.

# **Returning the Camera to Default Settings**

When you have mistakenly changed a setting, you can reset the camera to the default settings.







### Display the menu.

- Press the MENU button.
- Choose [Reset All].
  - Press the ◆ buttons to choose the †† tab.
  - Press the ▲▼ buttons or turn the ⑥ dial to choose [Reset All], then press the ⊕ button.

# Reset the settings.

- Press the ◀▶ buttons or turn the ◎ dial to choose [OK], then press the ∰ button.
- The camera will reset to the default settings.

# ?

### Are there functions that cannot be reset?

- The [Date/Time] (p. 21) in the **f†** tab, [Language] (p. 22), [Video System] (p. 115), [Time Zone] (p. 146), and the image registered in [Start-up Image] (p. 143).
- The saved data for custom white balance (p. 77).
- Colors that were chosen in Color Accent (p. 92) or Color Swap (p. 93).
- Shooting modes set with the mode switch set to 
   or 
   r (pp. 61, 98).

# **Power Saving Function (Auto Power Down)**

To save battery power, the screen turns off, and the camera shuts down automatically when it is not operated for a certain time.

#### **Power Saving during Shooting**

The screen will turn off approximately 1 minute after the camera is last operated. After about 2 more minutes, the lens will retract and the power will turn off. When the screen has turned off but the lens has not yet retracted, pressing the shutter button halfway (p. 24) turns on the screen and shooting can continue.

#### **Power Saving during Playback**

The power will turn off approximately 5 minutes after the camera is last operated.



- You can turn off the power saving function (p. 145).
- You can adjust the time before the screen turns off (p. 145).

#### **Clock Functions**

You can check the current time.



- Press and hold the ( button.
- ▶ The current time appears.
- If you hold the camera vertically while using the clock function, it will switch to vertical display. Press the ◀▶ buttons or turn the ② dial to change the display color.
- Press the button again to cancel the clock display.



When the camera power is off, press and hold the (m) button, then press the power button to display the clock.

# **Low Level Memory Card Formatting**

Perform low level formatting when [Memory card error] appears, the camera does not operate properly, or you think that the recording/reading speed of a memory card has dropped. As you cannot retrieve the erased data, exercise adequate caution before formatting the memory card.









### Display the menu.

Press the MENU button.

# Choose [Format].

- Press the ◀▶ buttons to choose the f† tab.
- Press the ▲▼ buttons or turn the ② dial to choose [Format], then press the ⑤ button.

### Choose [Low Level Format].

- Press the ▲▼ buttons or turn the ② dial to choose [Low Level Format], then press the ◀▶ buttons to display ✔.
- Press the ▲▼◀▶ buttons or turn the dial to choose [OK], then press the ★ button.

# Start the low level format.

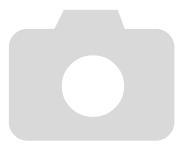
- Press the ▲▼ buttons or turn the ② dial to choose [OK], then press the ⊕ button.
- Low level formatting starts.
- ▶ When low level formatting ends, [Memory card formatting complete] will appear.

# Complete the low level format.

Press the (SET) button.



- Low level formatting may take longer than standard formatting (p. 23), since all recorded data is erased.
- You can stop a low level format of a memory card by choosing [Stop].
   When stopping low level formatting, the data will be erased but the memory card can be used without problem.



# Shooting with Commonly Used Functions

This chapter explains how to shoot in different conditions, as well as how to use common functions, such as the self-timer, and turn off the flash.



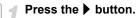


- This chapter assumes the camera is set to AUTO mode for "Turning the Flash Off" (p. 56) to "Using the Self-Timer" (p. 60). When shooting in a mode other than AUTO, check which functions are available in that mode (pp. 166 167).
- "Shooting in Various Conditions" (p. 61) to "Take Shots That Look Like a Miniature Model (Miniature Effect)" (p. 70) assumes that the corresponding mode has been chosen.

# **Turning the Flash Off**

You can shoot with the flash turned off.









- Press the ◀▶ buttons or turn the ۞ dial to choose ⑤, then press the ∰ button.
  - Once set, will appear on the screen.
  - To turn the flash back on, follow the Steps above to return the setting to \$\frac{1}{2}^A\$.





When you press the shutter button halfway in low light conditions where camera shake is likely, the indicator will blink orange and a flashing  $\mathbb{Q}$  will appear on the screen. Attach the camera to a tripod to prevent it from moving.

# Zooming in More Closely on Subjects (Digital Zoom)

You can use the digital zoom to zoom up to approximately 40x and capture subjects that are too far away for the optical zoom to enlarge. The images may appear coarse, however, depending on the recording pixel setting (p. 74) and the zoom factor used.



# Move the zoom lever toward [.].

- Hold the lever until zooming stops.
  - The zoom will stop when the largest possible zoom factor without image deterioration has been reached, and the zoom factor will appear when you release the zoom lever.

Zoom Factor



# Move it toward again.

► The digital zoom will zoom in even further on the subject.



#### What if the zoom factor appears in blue?

Images shot at zoom factors that appear in blue will be coarse.



#### Turning off the digital zoom

To turn off the digital zoom, press the MENU button to choose [Digital Zoom] in the  $\bigcirc$  tab, then choose [Off].



The focal length when using the optical zoom and digital zoom together is 36-1440 mm, and 36-360 mm when using the optical zoom alone (all focal lengths are 35mm film equivalent).

#### **Digital Tele-Converter**

The focal length of the lens can be increased by approx. 1.4x or approx. 2.3x. This enables a faster shutter speed and less chance of camera shake than the zoom (including digital zoom) used by itself at the same zoom factor. The images may appear coarse, however, depending on the combination of recording pixel (p. 74) and digital tele-converter settings used.





# Choose [Digital Zoom].

- Press the MENU button.
  - Press the ◀▶ buttons to choose the tab
- Press the ▲▼ buttons or turn the ② dial to choose [Digital Zoom].

### Accept the setting.

- Press the buttons to choose a magnification.
- Pressing the MENU button will restore the shooting screen.
- The view will be enlarged and the zoom factor will appear on the screen.
- To return to standard digital zoom, choose [Digital Zoom] and the [Standard] option.



#### What if the zoom factor appears in blue?

Using this function at a recording pixel setting of  $\ L$  or  $\ M1$  will cause image deterioration (the zoom factor will appear in blue).



- The respective focal lengths when using [1.4x] and [2.3x] are 50.4 504 mm and 82.8 828 mm (35mm film equivalent).
- The digital tele-converter cannot be used together with the digital zoom.

# **Inserting the Date and Time**

You can insert the shooting date and time in the lower right corner of an image. Once inserted, however, they cannot be deleted. Be sure to check beforehand that the date and time are correctly set (p. 20).







- Press the MENU button.
- Press the ◆▶ buttons to choose the ☐
  tab
- Press the ▲▼ buttons or turn the ② dial to choose [Date Stamp].

# Accept the setting.

- Press the buttons to choose [Date] or [Date & Time].
- Pressing the MENU button will restore the shooting screen.
- Once set, [DATE] will appear on the screen.





#### Shoot.

- ► The shooting date or time will be recorded in the image's lower right corner.
- To restore to the original setting, choose [Off] in Step 2.



You can insert and print the shooting date in images which do not have an embedded date and time as follows. However, if you do this for images with an embedded date and time, the date and time may be printed twice.

- · Use the DPOF print settings (p. 137) to print.
- Use the included software to print.
   Refer to the Software Guide for details.
- Print using printer functions.

  Refer to the Personal Printing Guide for details.

# **Using the Self-Timer**

The self-timer can be used to shoot a group photo that includes the photographer. The camera will shoot approximately 10 seconds after the shutter button is pressed.









- Press the ▲▼ buttons or turn the ③ dial to choose ⅙, then press the ∰ button.
- ▶ Once set, ऒ will appear on the screen.



#### Shoot.

- Press the shutter button halfway to focus on the subject, then press it fully.
- When the self-timer starts, the lamp blinks and the self-timer sound plays.
- Two seconds before the shutter releases, the lamp and sound speed up (the lamp remains lit when the flash will fire).
- To cancel shooting with the timer after countdown has started, press the button.
- To restore the original setting, choose in Step 2.





You can change the delay time and number of shots (p. 81).

# **Shooting in Various Conditions**

The camera will select the necessary settings for the conditions in which you wish to shoot when you choose the matching mode.









- After pressing the ∰ button, press the
   ▲▼ buttons or turn the ② dial to choose
   P, then press the ∰ button again.
- Press the ▲▼ buttons or turn the ② dial to choose a Shooting mode, then press the ∰ button.
- EL CONTROL DE LA CONTROL DE LA

# Shoot.



#### Take portraits (Portrait)

 Produces a soft effect when photographing people.



# Take shots of kids and pets (Kids&Pets)

- Lets you capture subjects that move around, such as children and pets, without missing photo opportunities.
- At maximum wide angle setting you will be able to focus on subjects that are about 1 m (3.3 ft.) or more away from the end of the lens, and at maximum telephoto setting you will be able to focus on subjects that are about 3 m (9.8 ft.) or more away from the end of the lens





- Lets you take beautiful snapshots of city nightscenes by combining several continuous shots to reduce camera shake and noise
- When using a tripod, you should shoot in
   AUTO mode (p. 25).
- A recording pixel setting of L will display, and the image will be fixed at 3648 x 2736 pixels.



# Take shots in low light conditions (Low Light)

- Lets you shoot in dark places with reduced camera shake and subject blur.
- A recording pixel setting of M will display, and the image will be fixed at 1824 x 1368 pixels.



# Take shots of people at the beach (Beach)

 Lets you take shots of brightly lit people on sandy beaches where the reflected sunlight is strong.



#### **¼** Take shots of foliage (Foliage)

 Lets you shoot trees and leaves, such as new growth, autumn leaves or blossoms, in vivid colors.



# \* Take shots of people in snow (Snow)

 Lets you take bright, natural-colored shots of people against snowy backgrounds.



#### Take shots of fireworks (Fireworks)

 Lets you take shots of fireworks in vivid colors.



- In mode, attach the camera to a tripod to prevent the camera from moving and blurring the image. Additionally, you should set the [IS Mode] to [Off] when shooting with a tripod (p. 150).
- In emode, hold the camera firmly while shooting as multiple images are captured in succession.



- In **3** or **1** mode, images may appear coarse because the ISO speed (b. 76) is increased to match the shooting conditions.
- If camera shake is too strong while shooting in immode, the camera may not be able to combine images or you may not obtain the expected result depending on shooting conditions.

#### **Adding Effects and Shooting**



# Shoot images with vivid colors (Super Vivid)

 Lets you take shots with vivid, intense colors.



# Take posterized shots (Poster Effect)

 Lets you take shots that look like an old poster or illustration.



Since you may not achieve the expected results with images shot in 😩 and , try taking some test shots first.



# Detecting a Smile and Shooting

The camera will shoot, even without pressing the shutter button, when it detects a smile





#### Choose 33.

- Follow Steps 1 − 2 on p. 61 to choose then press the MENU button for more than one second.
- Press the ◆ buttons or turn the dial to choose  $\mathcal{L}$ , then press the MENU button.
- The camera will enter shooting stand-by. and [Smile Detection on] will appear on the screen.

### Point the camera at a person.

- Fach time the camera detects a smile it will. shoot after the lamp lights.
- Pressing the button will pause smile detection. Press the 
  button again to resume smile detection.



### What if a smile is not detected?

Smiles are easier to detect if the subject faces the camera, and opens their mouth enough to show some teeth when smiling.



#### Changing the number of shots

After choosing <sup>3</sup> in Step 1, press the ▲▼ buttons.



- You should switch to another mode when you finish shooting, or the camera will continue taking shots each time the camera detects a smile.
- You can also shoot by pressing the shutter button.

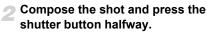
# **Using the Wink Self-Timer**

Point the camera at a person and press the shutter button fully. The camera will shoot approximately two seconds after it detects a wink.





- Follow Steps 1 2 on p. 61 to choose 
   <sup>™</sup>
   then press the MENU button for more than one second.
- Press the ◀▶ buttons or turn the ◎ dial to choose ☺️, then press the MENU button.



 Confirm that a green frame appears around the face of the person who will wink.



### Press the shutter button fully.

- ▶ The camera will enter shooting stand-by, and [Wink to take picture] will appear on the screen
  - The lamp will blink and the self-timer sound will play.



#### Face the camera and wink.

- ➤ The shutter will release approximately 2 seconds after a wink is detected from the person with a frame around the person's face
- To cancel the countdown, press the button.



#### What if a wink is not detected?

- · Wink a bit slowly.
- A wink may not be detected if eyes are covered by hair or a hat, or when wearing glasses.



#### Changing the number of shots

After choosing ♦ in Step 1, press the ▲ buttons.



- · Shutting both eyes will also be detected as a wink.
- If a wink is not detected, the shutter will release approximately 15 seconds later.
- If there are no people in the shot when the shutter button is pressed fully, the camera will shoot after a person enters the shot and winks.

# **Using the Face Self-Timer**

The shutter will release approximately two seconds after the camera detects a new face (p. 84). You can use this when the photographer wants to be in the image, such as a group photo.





- Press the ◀▶ buttons or turn the ◎ dial to choose ॐ, then press the MENU button.

# Compose the shot and press the shutter button halfway.

 Make sure a green frame appears on the face focused on and white frames appear on other faces.



### Press the shutter button fully.

- The camera will enter shooting stand-by, and [Look straight at camera to start count down] will appear on the screen.
- The lamp will blink and the self-timer sound will play.



# Join the subjects and look at the camera.

- When the camera detects a new face, the lamp and sound will speed up (the lamp remains lit when the flash will fire), and two seconds later the shutter will release
- To cancel shooting with the timer after countdown has started, press the A button

# **(a)**

#### Changing the number of shots

After choosing ♦ in Step 1, press the ▲▼ buttons.



Even if your face is not detected after joining the subjects, the shutter will release approximately 15 seconds later.

# High-Speed Continuous Shooting (High-speed Burst)



#### **◀** Choose <sup>□</sup>

● Follow Steps 1 – 2 on p. 61 to choose 🖳



As long as you hold the shutter button down, the camera will shoot successive images.



- · Focus, exposure and white balance settings are set with the first shot.
- Depending on the shooting conditions, camera settings and the zoom position, the shooting speed may slow down.
- · As the number of images increases, the shooting speed may slow down.

# Capturing the Best Facial Expressions (Best Image Selection)

The camera takes five continuous shots, then detects various aspects of the shot such as facial expressions, and saves only one picture detected as the best.

The recording pixel setting will be fixed at **M** (1824 x 1368 pixels).



#### Choose 🗳.

#### Shoot.

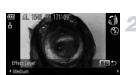
When the shutter button is pressed fully, the camera takes five continuous shots, and saves one picture only.



- The focus, brightness and white balance will be set with the first shot.
- Depending on the shooting condition, you may not obtain the expected result.

# Shoot with the Effects of a Fish-Eye Lens (Fish-eve Effect)

Lets you shoot with the distorting effect of a fish-eye lens.



# Choose 3.

Follow Steps 1 − 2 on p. 61 to choose



#### Choose an effect level.

- Press the MENU button for more than one second.
- [Effect Level] will appear on the screen.
- Press the ◆ buttons or turn the ⑥ dial to choose an effect level, then press the MENU button.
- You can check the effect on the screen.





Since you may not achieve the expected results depending on the shooting conditions, try taking some test shots first.

# Take Shots That Look Like a Miniature Model (Miniature Effect)

Blurs chosen portions in the top and bottom of an image to produce the effect of a miniature model.



#### Choose 🕹.



# Choose the area to keep in focus.

- Press the MENU button for more than one second.
- A white frame (the area that will not be blurred) appears on the screen.
- Move the zoom lever to change the frame size, and press the ▲▼ buttons to change the frame position, then press the MENU button



# Shoot.



- For the screen in Step 2, pressing the ◆ buttons will allow you to change the frame vertical orientation and also change the area to focus in. Pressing the ▲▼ buttons will return the frame to horizontal orientation.
- · Holding the camera vertically will change the orientation of the frame.
- Since you may not achieve the expected results depending on the shooting conditions, try taking some test shots first.

# **Choosing Settings Yourself**

In this chapter you will learn how to use the various functions in **P** mode to progressively advance your shooting skills.



- This chapter assumes that you have set the mode switch to and the camera is in P mode.
- P stands for Program AE.
- Before attempting to shoot using a function explained in this chapter in modes other than P mode, check if the function is available in those modes (pp. 166 – 169).

# **Shooting in Program AE**

You can choose the settings for various functions to suit your preferences. AE stands for Auto Exposure.

The focusing range is approximately 5 cm (20 in.) – infinity at maximum wide angle ((HII)), and approximately 1 m (3.3 ft.) – infinity at maximum telephoto ( $([\Phi])$ ).



#### Enter P mode.

- Follow Steps 1 2 on p. 61 to choose P.
- Adjust the settings according to your purposes (pp. 73 81).
- Shoot.



#### What if the shutter speed and aperture value appear in orange?

If a correct exposure cannot be obtained when pressing the shutter button halfway, the shutter speed and aperture value are shown in orange. Try the following settings to obtain the correct exposure.

- Turn on the flash (p. 73)
- Choose a higher ISO speed (p. 76)

# **Adjusting the Brightness (Exposure Compensation)**

You can adjust the standard exposure set by the camera in 1/3-stop increments in the range of -2 to +2.



### Enter Exposure Compensation mode.

- After pressing the ∰ button, press the
   ▲▼ buttons or turn the ② dial to choose
   ±0, then press the ∰ button again.
- Adjust the brightness.
  - While watching the screen, press the ▲▼ buttons or turn the ② dial to adjust the brightness, then press the ∰ button.
  - The exposure compensation amount will appear on the screen.

### **Turning the Flash On**

You can make the flash fire every time you shoot. The effective flash range is approximately 30 cm - 3.5 m (12 in. - 12 ft.) at maximum wide angle (|| || || ||), and approximately 1.0 - 2.0 m (3.3 - 6.6 ft.) at maximum telephoto (|| || || ||).



### Choose \$.

- After pressing the ▶ button, press the ◀▶ buttons or turn the ② dial to choose ఈ, then press the ∰ button.
- Once set, \$ will appear on the screen.

## Changing the Focusing Range (Macro/Infinity)

When it is difficult to focus because your shot contains subjects that are both near and far, you can change the focusing range to focus more reliably.

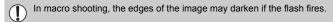


### Choose a focusing range.

- After pressing the ◀ button, press the ◀buttons or turn the ◎ dial to choose an option, then press the ∰ button.
- The icon for the set mode will appear.

	Focusing Range	Description
*	Approx. 1 – 50 cm* (0.4 in. – 1.6 ft.)	Only focuses on close subjects.
•	Approx. 3 m (9.8 ft.) – infinity	Only focuses on far-away subjects.

<sup>\*</sup> When at the maximum wide angle ( ) setting of the lens.





### How can I take better close-ups?

Try attaching the camera to a tripod and shooting in  $\mathfrak{S}$  to prevent the camera from moving and blurring the image (p. 80).



For macro shooting, 3 will turn gray in the area that displays in the yellow bar underneath the zoom bar, and the camera will not focus.

### Changing the Recording Pixel Setting (Image Size)

You can choose from five recording pixel (image size) settings.



### Choose the recording pixel setting.

- After pressing the ∰ button, press the
   ▲▼ buttons or turn the ② dial to choose
   L , then press the ∰ button again.
- Choose an option.
  - Press the ▲▼ buttons or turn the dial to choose an option, then press the button.
  - The setting will appear on the screen.



- If you choose M, you cannot use Digital Zoom (p. 57) or Digital Tele-Converter (p. 58).
- If you press the movie button when the camera is set to M, the aspect ratio of the display will change and recording will begin (when set to [640] or [320] (p. 101)).

## Changing the Compression Ratio (Image Quality)

You can choose from the following two compression ratios (image quality):

(Fine), (Normal).



### Choose the compression ratio setting.

- After pressing the ⊕ button, press the
   ▲ buttons or turn the ۞ dial to choose
  - , then press the (st) button again.

### Choose an option.

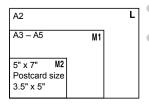
- Press the ▲▼ buttons or turn the () dial to choose an option, then press the () button.
- The setting will appear on the screen.

### Approximate Values for Recording Pixels and Compression Ratio

Recording Pixels	Compression Ratio	Single Image Data	Number of Shots per Memory Card	
	Ratio	Size (Approx. KB)	4 GB	16 GB
L (Large)	4	2565	1471	6026
10M/3648x2736	4	1226	3017	12354
<b>M1</b> (Medium 1)	4	1620	2320	9503
6M/2816x2112	4	780	4641	19007
M2 (Medium 2)	4	558	6352	26010
2M/1600x1200	4	278	12069	49420
S (Small)	4	150	20116	82367
0.3M/640x480	4	84	30174	123550
W (Widescreen)	4	1920	1978	8101
3648x2048	4	918	4022	16473

The values in the table are measured according to Canon standards and may change depending on the subject, memory card and camera settings.

### **Approximate Values for Paper Size**



- S Suitable for sending images as e-mail attachments.
- Tor printing on wide size paper.

### Changing the ISO Speed



### Choose the ISO speed.

- After pressing the ∰ button, press the
   ▲▼ buttons or turn the ② dial to choose
   ∰, then press the ∰ button again.
- Choose an option.
  - Press the ▲▼ buttons or turn the ② dial to choose an option, then press the ⊕ button
  - The setting will appear on the screen.

ISO AUTO	Automatically adjusts the ISO speed to the Shooting mode and shooting conditions.		
125 200	Low	Low Fine weather conditions, outdoor shooting.	
ISO ISO 400 800	1	Cloudy, twilight	
ISO ISO 1600 3200	High Nightscapes, dark interiors		

### Changing the ISO speed

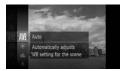
- Lowering the ISO speed results in sharper images, but there may be an increased chance of image blurring in certain shooting conditions.
- Raising the ISO speed results in a faster shutter speed, reducing image blurring and letting the flash reach greater distances to the subject. The images, however, will appear coarse.



When the camera is set to  $\frac{150}{1000}$ , you can press the shutter button halfway to display the automatically set ISO speed.

### **Adjusting the White Balance**

The white balance (WB) function sets the optimal white balance for natural looking colors to match the shooting conditions.





- After pressing the ∰ button, press the
   ▲▼ buttons or turn the ◎ dial to choose
   ₩, then press the ∰ button again.
- Choose an option.
  - Press the ▲▼ buttons or turn the dial to choose an option, then press the ⊕ button.
  - The setting will appear on the screen.

Auto	Automatically sets the optimal white balance for the shooting conditions.
Day Light	Fine weather conditions, outdoor shooting
Cloudy	Cloudy, shady, twilight conditions
Tungsten	Tungsten, bulb-type (3-wavelength) fluorescent lighting
Fluorescent	Warm-white fluorescent, cool-white fluorescent, warm-white-type (3-wavelength) fluorescent lighting
Fluorescent H	Daylight fluorescent, daylight-type (3-wavelength) fluorescent lighting
Custom	Manually sets a custom white balance.
	Day Light Cloudy Tungsten Fluorescent Fluorescent H

### **Custom White Balance**

You can adjust the white balance to the light source at the shooting location. Make sure that you set the white balance under the light source of the actual scene you will shoot.



- In Step 2 above, choose
- Make sure the entire screen is filled with a plain, white colored subject, then press the MFNU button
- The tint on the screen will change when a white balance data is set



If you change camera settings after recording white balance data, the tone may not turn out properly.

### **Continuous Shooting**

As long as you hold the shutter button down, the camera will shoot continuously.



### Choose a Drive mode.

- After pressing the button, press the
   ▲▼ buttons or turn the dial to choose
   , then press the button again.
- Choose an option.
  - Press the ▲▼ buttons or turn the ② dial to choose ☐ or ☐, then press the ⊕ button.
- Shoot.
  - As long as you hold the shutter button down, the camera will shoot successive images.

Mode	Maximum Speed (Approx. images/ sec.)	Description
☐ Continuous	3.7	The camera shoots continuously with the focus and exposure set when the shutter button is pressed halfway.
Continuous Shooting AF	0.8	The camera shoots continuously and focuses. The [AF Frame] is set to [Center].
Continuous Shooting LV*	0.9	In 🎇 mode, the focus is locked on the first shot.

\* When in ∰ (p. 63) or AF lock modes (p. 86), <sup>™</sup> will change to <sup>™</sup>.



- · Cannot be used with the self-timer (pp. 60, 80, 81).
- Continuous shooting speed increases in the mode (p. 62).
- Depending on the shooting conditions, the camera settings and the zoom position, the camera may stop shooting momentarily, or the shooting speed may slow down.
- As the number of images increases, the shooting speed may slow down.
- · If the flash fires, the shooting speed may slow down.

### **Changing the Tone of an Image (My Colors)**

You can change the tone of an image to sepia or black and white when shooting.



### Choose My Colors.

After pressing the ⊕ button, press the
 ▲▼ buttons or turn the ⊙ dial to choose
 ♦ then press the ⊕ button again.

### Choose an option.

- Press the ▲▼ buttons or turn the ③ dial to choose an option, then press the ∰ button.
- The setting will appear on the screen.

My Colors Off	_
<b>∆</b> V Vivid	Emphasizes the contrast and color saturation for a vivid impression.
<i>A</i> <sub>N</sub> Neutral	Tones down the contrast and color saturation for neutral hues.
<i>E</i> se Sepia	Sepia tones.
₽ <sub>W</sub> B/W	Black and white.
₿p Positive Film	Combines the effects of Vivid Red, Vivid Green and Vivid Blue to produce intense natural appearing colors like those obtained with positive film.
△L Lighter Skin Tone	Makes skin tones lighter.
₽D Darker Skin Tone	Makes skin tones darker.
<i>A</i> <sub>B</sub> Vivid Blue	Emphasizes blue tints. Makes the sky, ocean and other blue subjects more vivid.
∄ <sub>G</sub> Vivid Green	Emphasizes green tints. Makes mountains, foliage and other green subjects more vivid.
∄ <sub>R</sub> Vivid Red	Emphasizes red tints. Makes red subjects more vivid.
₿ <sub>C</sub> Custom Color	You can adjust contrast, sharpness, and color saturation etc. to your preference (p. 80).



- The white balance cannot be set in the & and w modes (p. 77).
- In  $A_L$  and  $A_D$  modes, colors other than people's skin color may change. You may not obtain the expected results with some skin colors.

### **Custom Color**

The contrast, sharpness, color saturation, red, green, blue, and skin tones in an image can be chosen and set at 5 different levels.



- Follow Step 2 on p. 79 to choose <sup>A</sup>C, then press the MENU button.
- Press the ▲▼ buttons to choose an option, then press the ◀▶ buttons or turn the ◎ dial to choose a value.
- The more to the right, the stronger/darker (skin tone) the effect gets, the more to the left, the weaker/lighter (skin tone) the effect gets.
- Press the MENU button to complete the setting.

### **Using the Self-Timer to Prevent Camera Shake**

The camera will shoot approximately two seconds after the shutter button is pressed, preventing any camera shake that occurs when pressing the shutter button.



### Choose 🖒.

- After pressing the button, press the
  - ▲▼ buttons or turn the ② dial to choose ②, then press the ∰ button.
- Follow Step 3 on p. 60 to shoot.

### **Customizing the Self-Timer**

You can set the time delay (0 - 30 seconds) and the number of shots (1 - 10 shots).





### **The Choose €**∂.

- After pressing the ▲ button, press the ▲▼ buttons or turn the ② dial to choose ℃, then press the MENU button immediately.
- Choose the settings.
  - Press the ▲▼ buttons to choose [Delay] or [Shots].
  - Press the ◀▶ buttons or turn the ◎ dial to choose a value, then press the ∰ button.
  - Follow Step 3 on p. 60 to shoot.

### (3)

### What if the number of shots is set to two or more shots?

- Exposure and white balance settings are set with the first shot.
- If the flash fires or you set a high number of shots, the shooting interval may take longer than usual.
- If the memory card becomes full, shooting stops automatically.



When you set the time delay for more than 2 seconds, the self-timer lamp and sound speed up 2 seconds before the shutter releases (when the flash will fire, the lamp lights).

### **Shooting Using a TV Monitor**

You can use a TV to display the camera screen content while shooting.

- To connect the camera to a TV, follow the Steps in "Viewing Images on a TV" (p. 115).
- Shooting procedures are the same as when using the camera screen.



TV display is not available when using HDMI Cable HTC-100 (sold separately) to connect the camera to a high-definition TV.

### **Changing the Composition with the Focus Lock**

While you keep the shutter button pressed halfway, the focus and exposure are locked. You can now recompose and shoot. This is called Focus Lock.





#### Focus.

- Center the subject you want in focus, and press the shutter button halfway.
- Confirm that the AF Frame on the subject is green.





### Recompose.

 Keep the shutter button pressed halfway and move the camera to recompose the scene



Press the shutter button fully.

# Getting More Out of Your Camera

This chapter serves as the advanced version of Chapter 4 and explains how to take pictures using various functions.



- This chapter assumes that you have set the mode switch to and set the camera to P mode.
- The sections "Changing the Color and Shooting" (p. 92), "Shooting Long Exposures" (p. 95) and "Shooting Stitch Assist Images" (p. 96) assume you have set the mode switch to and chosen the corresponding mode.
- Before attempting to shoot using a function explained in this chapter in modes other than P mode, check if the function is available in those modes (pp. 166 – 169).

### **Changing the AF Frame Mode**

You can change the AF (Auto Focus) frame mode to match the scene you want to shoot.



### Choose [AF Frame].

- After pressing the MENU button, choose [AF Frame] in the tab, then press the
  - **♦** buttons to choose an option.

### **Face Detect**

- Detects people's faces and sets the focus, exposure (evaluative metering only) and white balance ( NB only).
- When the camera is pointed at subjects, a white frame appears on the face the camera judges to be the main subject, and gray frames (max. 2) will appear on other faces.
- A frame will follow a moving subject within a certain range.
- When the shutter button is pressed halfway, up to 9 green frames will appear on faces that the camera focuses on.



- If a face is not detected and only gray frames (no white frame) appear, an AF Frame will appear in the center of the screen when you press the shutter button halfway.
- The AF frame will appear in the center of the screen if you press the shutter button halfway when Servo AF (p. 86) is set to [On] and a face is not detected.
- · Examples of faces that cannot be detected:
  - Subjects that are far away or extremely close.
  - · Subjects that are dark or light.
  - Faces turned to the side or at a diagonal, or faces with a portion hidden.
- · The camera may mistakenly identify non-human subjects as a face.
- If the camera cannot focus when you press the shutter button halfway, the AF frame will not appear.

#### Center

The AF frame is locked to the center. This is effective for focusing on a specific point.



### You can reduce the AF frame size

- Press the MENU button to choose [AF Frame Size] in the tab, then choose [Small].
- The AF frame is set to [Normal] when using Digital Zoom (p. 57) or Digital Teleconverter (p. 58).



If the camera cannot focus when you press the shutter button halfway, the AF frame will turn yellow and 
will appear.

### **Magnifying the Focal Point**

If you press the shutter button halfway, the AF frame will magnify and you can check the focus.





### Choose [AF-Point Zoom].

- Press the MENU button to choose [AF-Point Zoom] in the tab, then press the
   buttons to choose [On].
- Check the focus.
  - Press the shutter button halfway.
    - In [Face Detect] (p. 84), the face detected as the main subject will appear magnified.
    - In [Center] (p. 84), the contents of the center AF frame will appear magnified.



### What if the display does not magnify?

The display will not appear magnified in [Face Detect] if a face cannot be detected or is too big in relation to the screen. In [Center], it will not appear magnified if the camera cannot focus.



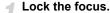
The magnified display will not appear when using Digital Zoom (p. 57), Digital Tele-converter (p. 58), Servo AF (p. 86) or when connected to a TV (p. 82).

### **Shooting with the AF Lock**

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







- Keep the shutter button pressed halfway and press the ◀ button.
- ► The focus locks and AFL appears on the screen.
- If you release your finger from the shutter button and press the ◀ button again, AFL will disappear and the focus will unlock.
- Compose the scene and shoot.

### **Shooting with Servo AF**

While the shutter button is pressed halfway, the focus and exposure will continue to adjust, allowing you to take pictures of moving subjects without missing a shot.



### ¶ Choose [Servo AF].

 Press the MENU button to choose [Servo AF] in the tab, then press the buttons to choose [On].



The focus and exposure will be maintained where the blue AF frame appears while you press the shutter button halfway.



- The camera may not be able to focus in some conditions.
- In low light conditions, AF frames may not turn blue even after pressing the shutter button halfway. In this case, you can set the focus and exposure with the AF frame setting.
- If a correct exposure cannot be obtained, the shutter speed and aperture value appear in orange. Release your finger from the shutter button, then press it again halfway.
- You cannot shoot with the AF lock in this mode.
- The [AF-Point Zoom] option in the tab is not available in Servo AF mode.
- Not available when using Self-Timer (pp.60, 80, 81).

### **Changing the Metering Method**

You can change the metering method (brightness measuring function) to match the shooting conditions.



### Choose the metering method.

- After pressing the ( button, press the buttons or turn the ( dial to choose
  - buttons or turn the glain to choosethen press the glain button again.

### Choose an option.

- Press the ▲▼ buttons or turn the ② dial to choose an option, then press the ⑤ button.
- The setting will appear on the screen.

Second Example 1 Second Example 1	Suitable for standard shooting conditions, including back lit shots. Automatically adjusts the exposure to match the shooting conditions.
Center Weighted Avg.	Averages the light metered from the entire frame, but gives greater weight to the center.
[•] Spot	Only meters within the [ ] (Spot AE Point frame) that appears at the center of the screen.

### Shooting with the AE Lock

You can lock the exposure and shoot, or set the focus and exposure separately to shoot. AE stands for "Auto Exposure".



### Choose (\$) (p. 56).





### Lock the exposure.

- Point the camera toward the subject and press the **A** button while pressing the shutter button halfway.
- ► When AEL appears, the exposure will be locked
- If you release your finger from the shutter button and press the 
  button again, AEL will disappear and AE will unlock.
- Compose the scene and shoot.

### Shooting with the FE Lock

Just as with the AE lock (p. 88), you can lock the exposure for shooting with the flash, FE stands for "Flash Exposure".



### Choose \$ (p. 73).





### Lock the flash exposure.

- Point the camera toward the subject and press the 
  button while pressing the shutter button halfway.
- The flash will fire and when FFI appears. the flash output will be retained.
- If you release your finger from the shutter button and press the 
  button again, FEL will disappear and FE will unlock.
- Compose the scene and shoot.

### **Shooting with Slow Synchro**

You can make the main subject, such as people, appear bright by having the camera provide the appropriate illumination with the flash. At the same time, you can use a slow shutter speed to brighten the background that the light from the flash cannot reach.

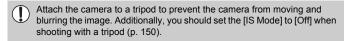


### 

- After pressing the ▶ button, press the ◀▶ buttons or turn the ◎ dial to choose ⅙, then press the ∰ button.
- ▶ Once set, 🗱 will appear on the screen.

### Shoot.

 Even if the flash fires, ensure that the subject does not move until the shutter sound ends.



### Correcting the Brightness and Shooting (i-Contrast)

The camera can detect areas in the scene, such as faces or backgrounds, that are too bright or dark and automatically adjust them to the optimum brightness when shooting. Also, when the overall image is lacking in contrast, the camera will automatically correct the image for a sharper impression when shooting.



### Choose [i-Contrast].

- Press the MENU button and choose [i-Contrast] in the tab, then press the buttons to choose [Auto].
- ▶ Once set, C<sub>i</sub> will appear on the screen.



Under some conditions, the image may appear coarse or may not be corrected properly.



You can correct recorded images (p. 130).

### **Red-Eye Correction**

You can automatically correct red-eye that occurs in images taken with the flash.





### Choose [Flash Settings].

Press the MENU button to choose [Flash Settings] in the tab, then press the wbutton.

### Adjust the setting.

- Press the ▲▼ buttons or turn the ② dial to choose [Red-Eye Corr.], then press the
   ◆ buttons to choose [On].
- Once set, will appear on the screen.



Red-eye correction may be applied to areas other than red eyes. For example, when red make-up has been used around eyes.



- You can correct recorded images (p. 130).
- You can also display the screen in Step 2 by pressing the button, then the MENU button.

### **Checking for Shut Eyes**

When the camera detects the possibility that people have their eyes shut,  $\[ \]$  appears.



### Choose [Blink Detection].

- Press the MENU button, then choose [Blink Detection] in the tab. Press the
  - **♦** buttons to choose [On].





- In or commode, when the number of shots is set to two or more, this
  function is only available for the last image shot.
- Not available in □, <sup>4</sup>, or <sup>1</sup> mode.

### **Changing the Color and Shooting**

You can change the look of an image when shooting. However, depending on shooting conditions the image may become coarse, or the colors may not come out as expected.

### **Color Accent**

You can choose to retain a single color and change the rest to black and white in a composition.



### Choose ₽A.

Follow Steps 1 − 2 on p. 61 to choose f<sub>A</sub>.

### Press the MENU button for more than one second.

- The unchanged image and the Color Accent image will alternately display.
- The color for default settings is green.

### Specify the color.

- Position the center frame so it is filled with the color you want and press the ◀ button.
- The specified color will be recorded.

### Specify the range of colors.

- Press the ▲▼ buttons or turn the ⑥ dial to change the range of colors to be retained.
- Choose a negative value to limit the range of colors. Choose a positive value to extend the range of colors to similar colors.
- Pressing the MENU button accepts the setting and restores the shooting screen.



Recorded color



Using the flash may cause unexpected results in this mode.

### **Color Swap**

You can swap one color in an image for another when recording it. You can only swap one color.





Follow Steps 1 – 2 on p. 61 to choose √s.



### Press the MENU button for more than one second.

- ► The unchanged image and the Color Swap image will alternately display.
- The default setting is to change green to gray.



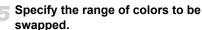
### Specify the color to be swapped.

- Position the center frame so it is filled with the color you want and press the ◀ button.
- The specified color will be recorded.



### Specify the target color.

- Position the center frame so it is filled with the color you want and press the ▶ button.
- ▶ The specified color will be recorded.



- Press the ▲▼ buttons or turn the ③ dial to adjust the range of colors to be changed.
- Choose a negative value to limit the range of colors. Choose a positive value to extend the range of colors to similar colors.
- Pressing the MENU button accepts the setting and restores the shooting screen.



- Using the flash may cause unexpected results in this mode.
- Under some conditions, the image may appear coarse.

### **Shooting Long Exposures**

You can set the shutter speed to a range between 1 and 15 seconds to shoot long exposures. However, you should attach the camera to a tripod to prevent the camera from moving and blurring the image.





### Choose ⊀.

Choose ★ in Steps 1 – 2 on p. 61.



### Choose the shutter speed.

- After pressing the (str) button, press the ▲▼ buttons or turn the ( ) dial to choose 1", then press the (st) button again.
- Press the ▲▼ buttons or turn the ( dial to choose the shutter speed, then press the ( button.

### Confirm the exposure.

When you press the shutter button halfway, the exposure for the chosen shutter speed will appear on the screen.



- The brightness of the image may differ from the brightness of the screen in Step 3 when the shutter button was pressed halfway.
- When shutter speeds of 1.3 seconds or slower are used, images are processed to eliminate noise after being taken. A certain amount of processing time may be needed before you can take the next shot.
- · You should set the [IS Mode] to [Off] when shooting with a tripod (p. 150).



If the flash fires, the image may be overexposed. If this happens, set the flash to (2) and shoot.

### **Shooting Stitch Assist Images**

Large subjects can be split into several shots that can later be merged together using the included software on a computer to create a panoramic image.



### Choose 🖳 or 🖳

Follow Steps 1 – 2 on p. 61 to choose  $\square$  or  $\square$ .



### Take the first shot.

The exposure and white balance will be set with the first shot.



### Take subsequent shots.

- Overlap part of the first shot when taking the second shot.
- Minor discrepancies in the overlapping portions will be corrected when the images are merged.
- Up to 26 shots can be recorded with the same procedures.



### Finish shooting.

Press the (SET) button.



### Merge the images on a computer.

 For details on how to merge the images, refer to the Software Guide.



This function is not available when a TV is used as the monitor (p. 82).

### Using Various Functions for Shooting Movies

This chapter serves as a more advanced version of the "Shooting Movies" and "Viewing Movies" sections in Chapter 1, and explains how to use various functions for shooting and viewing movies.



- This chapter assumes that the mode switch is set to \mathbb{\mathbb{m}}.
- The latter half of the chapter explaining movie playback and editing assumes that the button has been pressed to enter Playback mode.

### Shooting Movies in Modes Other than '-

- When the mode switch is set to (AUTO), the camera can automatically select all settings so that you can shoot movies (p. 30).
- You can shoot movies by pressing the movie button, however, certain settings made in the FUNC, and Shooting menus will automatically change to match settings for shooting movies.
- When you finish shooting a movie, the settings will return to those before the movie was shot.

### Shooting Movies in 'M Mode



### Enter 🖳 mode.

- Set the mode switch to \( \frac{1}{27} \).
- Adjust the settings according to your purposes (pp. 98 – 103).
- Shoot.
  - Press the movie button.
  - To stop shooting the movie, press the movie button again.

### **Changing the Movie Mode**

You can choose between five Movie modes.



#### Choose a Movie mode.

- Press the ▲▼ buttons or turn the dial to choose a mode, then press the ⊕ button.

- Standard	Normal mode.
Super Slow Motion	Captures fleeting moments at high-speed for playback in slow motion (p. 99).
Miniature Effect	You can shoot movies that look like a miniature model (p. 99).
Color Accent	These Shooting modes let you change all colors except the chosen color to black and white, or exchange the chosen color
🎏 Color Swap	for another color, when shooting. See "Changing the Color and Shooting" (p. 92) for details. Choose the color you wish to leave in or change before shooting the movie.



Under some conditions, colors may not turn out as expected in  $\ensuremath{\mathbb{Z}}$  and  $\ensuremath{\mathbb{Z}}$  modes.



- Pressing the movie button in mode will record a movie in mode.

### **Shooting Super Slow Motion Movies**

You can shoot fast moving subjects and play them back in slow motion. The maximum clip length you can record is approximately 30 seconds long, which will take approximately 4 minutes to play back in slow motion.



### Choose 🐙.

Follow the steps for "Changing the Movie Mode" on p. 98 to choose  $\cline{\mathbb{Z}}$ .



#### Shoot.

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



### **Viewing Super Slow Motion Movies**

- The movie will play back in slow motion when you following Steps 1 3 on p. 32.
- You can use the included software to change the playback speed of movies shot in . Refer to the Software Guide for details.



- Even if you press the zoom lever, the zoom will not operate while shooting.
- The focus, exposure and white balance will be set when the movie button is pressed

### Shoot Movies That Look Like a Miniature **Model (Miniature Effect)**

You can shoot movies that look like moving miniature models. You create the miniature model effect by choosing the upper and lower portions of the scene that will be blurred and the playback speed, which makes people and objects in the scene move quickly during playback. Audio will not be recorded.



### Choose 2.

Follow the steps for "Changing the Movie 

#### Shoot Movies That Look Like a Miniature Model (Miniature Effect)





A white frame (the area that will not be blurred) appears on the screen.

### Choose the area to keep in focus.

- Press the MENU button for more than one second.
- Move the zoom lever to change the frame size, and press the ▲▼ buttons to change the frame position.

### 🧣 Choose a playback speed.

- Press the (SET) button.
- Press the buttons or turn the dial to choose a playback speed.
- Pressing the MENU button restores the settings screen.



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

### Playback Speeds and Estimated Playback Times (for 1 Min. Clips)

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



- For the screen in Step 2, pressing the ◆ buttons will allow you to change the frame vertical orientation and also change the area to focus in. Pressing the ▲▼ buttons will return the frame to horizontal orientation.
- · Holding the camera vertically will change the orientation of the frame.
- Since you may not achieve the expected results depending on the shooting conditions, try taking some test shots first.

### **Changing the Movie Quality**

You can choose between four movie quality settings.



### Choose the movie quality setting.

- After pressing the → button, press the
   → buttons or turn the dial to choose
   m , then press the → button again.
- Choose an option.
  - Press the ▲▼ buttons or turn the dial to choose an option, then press the (♠) button.
  - The option you set will appear on the screen.

### **Movie Quality Table**

Movie Quality (Recording Pixels/Frame Rate)	Content
1920 x 1080 pixels, 24 frames/sec.	For shooting full high-definition movies.
1280 x 720 pixels, 30 frames/sec.	For shooting high-definition movies.
640 x 480 pixels, 30 frames/sec.	For shooting standard quality movies.
320 x 240 pixels, 30 frames/sec.	Since the number of recording pixels is smaller than in [4], the movie quality will appear coarse, but you can record approximately three times the length.

### **Estimated Shooting Time**

Movie Quality	Shooting Time		
Wovie Quality	4 GB	16 GB	
1 <u>92</u> 0	14 min. 34 sec.	59 min. 40 sec.	
1280	20 min. 43 sec.	1 hr. 24 min. 54 sec.	
640	43 min. 43 sec.	2 hrs. 59 min. 3 sec.	
320	1 hr. 58 min. 19 sec.	8 hrs. 4 min. 30 sec.	

- · Based on Canon's testing standards.
- Recording will automatically stop when the clip file size reaches 4 GB, or when the recording time reaches approximately 10 minutes when shooting in minutes when shooting
- Recording may stop even if the maximum clip length has not been reached on some memory cards. SD Speed Class 6 or higher memory cards are recommended.

### **AE Lock/Exposure Shift**

You can lock the exposure or change it in 1/3 steps within a range of ±2 before shooting.



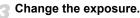
#### Focus.

Press the shutter button halfway to focus.



### Lock the exposure.

- After releasing the shutter button, press the button to lock the exposure. The exposure shift bar appears.
- Press the button again to release the lock.



While watching the screen, turn the (3) dial to adjust the exposure.



### Shoot.

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

### **Other Shooting Functions**

The following functions can be used in the same way as for still images. Functions marked with a \* can be used in the same way as for still images when in  $\sqrt[R]{n}$ ,  $\sqrt[R]{n}$  or  $\sqrt[R]{n}$ .

- Zooming in More Closely On Subjects
  - The optical and digital zooms (p. 57) are available in .
  - Only the optical zoom is available in R and R.
  - Neither the optical nor digital zooms are available while shooting in Be sure to set the optical zoom before shooting.
  - The sound of the zoom will be recorded.
- Using the Self-Timer (p.60)\*
- Adjusting the White Balance (p.77)
- Changing the Tone of an Image (My Colors) (p.79)
- Using the Self-Timer to Prevent Camera Shake (p.80)\*
- Customizing the Self-Timer (p.81)
   The number of shots cannot be changed.
- Shooting Using a TV Monitor (p.82)\*
- Shooting with the AF Lock (p.86)
- Turning Off the AF Assist Beam (p.147)\*
- Displaying the Overlay (p.149)\*
   [3:2 Guide] is not available.
- Changing the IS-Mode Settings (p.150)\*
   You can switch between [Continuous] and [Off].

### **Playback Functions**

The following functions can be used in the same way as for still images.

- Erasing Images (p.29)
- Quickly Searching Images (p.108)
- Viewing Images in Filtered Playback (p.109)
- Viewing Slideshows (p.110)
- Changing Image Transitions (p.114)
- Viewing Images on a TV (p.115)
- Viewing Images on a High-Definition TV (p.116)
- Protecting Images (p.117)
- Erasing Images (p.120)
- Tagging Images as Favorites (p.122)
- Organizing Images by Category (My Category) (p.123)
- Rotating Images (p.126)

### Summary of Movie Control Panel in "Viewing Movies" (p. 32)

₽	Exit
•	Playback
<b> </b>	Slow motion playback (you can use the ◀▶ buttons or the ◎ dial to adjust the speed. Sound will not play back.)
K	Display the first frame
- ■	Previous frame (Rewind if you hold down the ( button.)
	Next frame (Fast forward if you hold down the (m) button.)
<b>&gt;&gt;</b>	Display the last frame
%	Edit (p. 105)
Ф	Appears when connected to a PictBridge compliant printer (p. 134).  Refer to the <i>Personal Printing Guide</i> for details.

### **Editing**

You can trim the beginnings and ends of recorded movies.



Movie Editing Panel



Movie Editing Bar

### **◀** Choose %.

- Follow Steps 1 3 on p. 32 to choose ⅙, then press the ∰ button.
- ➤ The movie editing panel and the movie editing bar will appear.

### Set the editing range.

- Press the ▲▼ buttons and choose %♥ or
   ♥♥.
- Press the ◀▶ buttons or turn the ⑥ dial to move ■. ※ will display at a point where you can edit the movie. If you choose ※ you can trim the beginning of the movie from ※ . If you choose √% , you can trim the end of the movie from ※ .
- ▶ Even if you move **U** to a point other than a **&**, only the portion from the nearest **&** to the left will be trimmed when **\mathbb{T}** is chosen. Only the portion from the nearest **&** to the right will be trimmed when **T**% is chosen.
- The section indicated with 

  will be the section of the movie that remains after editing.

### Check the edited movie.

- Press the ▲▼ buttons to choose ► (Play), then press the ∰ button. The edited movie will play.
- To edit the movie again, repeat Step 2.
- To cancel editing, press the ▲▼ buttons, and choose ⑤ . After pressing the ⑤ button, press the ♠ buttons or turn the ⑥ dial to choose [OK], then press the ⑥ button again.





### Save the edited movie.

- Press the ▲▼ buttons to choose , then press the button.
- Press the ▲▼◀▶ buttons, or turn the dial to choose [New File], then press the button.
- The movie will be saved as a new file.



- When [Overwrite] is chosen in Step 4, the unedited movie is overwritten with the edited movie, erasing the original.
- When there is not enough space left on the memory card, only [Overwrite] can be chosen.
- If the battery is depleted partway through editing, the edited movie clips may not be saved.
- When editing movies, you should use a fully charged battery, or an AC adapter kit (sold separately) (p. 39).

# Using Various Playback and Editing Functions

This chapter explains various ways to play back and edit images.

Press the D button to enter Playback mode before operating the camera.



- It may not be possible to play back or edit images that have been edited on a computer, had their file name changed, or have been taken on a different camera.
- The edit function (pp. 127 131) cannot be used if the memory card does not have free space available.

### **Quickly Searching Images**

### **Searching Images Using Index Display**

Displaying multiple images at the same time lets you quickly find the image you want.





### Move the zoom lever toward ...

- Images will display in an index.
  - The number of images increases each time you move the lever toward
  - The number of images decreases each time you move the lever toward Q.



### Choose an image.

- Turn the dial to switch images.
- Press the ▲▼◆ buttons to choose an image.
- An orange frame appears on the chosen image.
- Press the button to display the chosen image by itself.

### **Searching Images Using the Control Dial**

Turning the control dial will display images in a line letting you quickly search them. You can also jump by the shooting date (Scroll Display).



### Choose an image.

- If you set the camera to single image playback and turn the dial quickly, the images will display as shown on the left. Turn the dial to choose an image.
- Pressing the button restores single image playback.
- If you press the ▲▼ buttons during Scroll Display, you can search images by the shooting date.



To turn off this effect, press the MENU button to choose [Scroll Display] in the  $\blacksquare$  tab, then choose [Off].

#### **Viewing Images in Filtered Playback**

When there are many images on the memory card, you can filter and display them by a specified filter. You can also protect (p. 117) or delete (p. 120) all images at once while filtered.





After pressing the ∰ button, press the
 ▲▼ buttons or turn the ۞ dial to choose
 ∰, then press the ∰ button again.

#### Choose a filter.

Press the ▲▼ buttons or turn the ② dial to choose a filter, then press the ∰ button.

#### View the filtered images.

- Press the ▲▼ buttons or turn the ⑥ dial to choose a filter for playback, then press the ∰ button (except for ★).
- Filtered playback starts and a yellow frame appears.
- If you press the buttons or turn the dial, only the chosen target images will display.
- If you choose in Step 2, filtered playback will be canceled.

#### Search filters

★ Favorites	Displays images tagged as favorites (p. 122)
Shot Date	Displays the images shot on a specified date
My Category	Displays the images of a specified category (p. 123)
🔒 File Type	Displays only still images or movies



#### What if you can't choose a filter?

Filters that do not have any corresponding images cannot be chosen.



#### Filtered playback

In filtered playback (Step 3), you can view filtered images with "Quickly Searching Images" (p. 108), "Viewing Slideshows" (p. 110), and "Magnifying Images" (p. 113). You can process all filtered images at once while performing operations in "Protecting Images" (p. 117), "Erasing Images" (p. 120), or "Printing from the Print List (DPOF)" (p. 137), by choosing all of the filtered images.

However, if you change the category (p. 123), or edit an image and save it as a new image (p. 127), a message will appear, and filtered playback will cancel.

#### **Viewing Slideshows**

You can automatically play back images recorded to a memory card. Each image displays for approximately 3 seconds.



#### Choose 🗣.

After pressing the ∰ button, press the
 ▲▼ buttons or turn the ۞ dial to choose
 ♦, then press the ∰ button again.

#### Choose a transition effect.

- Press the ▲▼ buttons or turn the ② dial to choose an effect, then press the ⊕ button.
  - The slideshow will start a few seconds after [Loading image...] appears.
  - In filtered playback (p. 109), only images matching a filter play back.
  - You can pause/restart a slideshow by pressing the () button again.
  - Press the MENU button to stop the slideshow.



- If you press the ◆▶ buttons or turn the ⑥ dial during playback, the image will switch. If you keep the ◆▶ buttons pressed, you can fastforward through images.
- The power saving function (p. 51) does not work during slideshows.

#### **Changing Settings**

You can set a slideshow to repeat, or change transition effects and the time that slideshow images are displayed. You can choose from six transition effects when switching between images.



MENU

#### Choose [Slideshow].

Press the MENU button to choose [Slideshow] from the ▶ tab, then press the ★ button.

#### Make the setting.

- Press the ▲▼ buttons or turn the ⑥ dial to choose an item, then press the ◀▶ buttons to adjust the setting.
- If you choose [Start] and press the button, the slideshow starts with your settings.
- Pressing the MENU button will restore the menu screen.

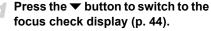


You cannot change [Play Time] if [Bubble] is chosen in [Effect].

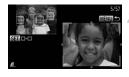
#### **Checking the Focus**

You can magnify the area of a recorded image that was inside the AF Frame, or the area of a face that was detected, to check the focus.





- A white frame will appear where the AF frame or face was when the focus was set.
- A gray frame will appear on a face detected during playback.
- ► The area within the orange frame appears magnified.



#### Switch frames.

- Move the zoom lever toward Q once.
- The screen shown to the left will appear.
- Press the button to move to a different frame when multiple frames appear.

# Change the magnification level or location.

- Use the zoom lever to change the display size, and the ▲▼◀▶ buttons to change the display position while checking the focus
- Pressing the MENU button resets the display to Step 1.

#### **Magnifying Images**





Approximate Location of Displayed Area

#### Move the zoom lever toward $\mathbb{Q}$ .

- The display will zoom in on the image. If you continue to hold the zoom lever, it will zoom in up to a maximum factor of 10x.
- If you press the ▲▼◀▶ buttons, you can move the location of the displayed area.
- Move the zoom lever toward to zoom out, or continue to hold it to return to single image playback.
- If you turn the dial, you can switch images while zoomed.



You can return to single image playback immediately by pressing the **MENU** button while the image is magnified.

#### **Displaying Various Images (Smart Shuffle)**

The camera will choose four images based on the displayed image. If you choose one of those images, the camera will choose four more images letting you enjoy the playing back of images in an unexpected order. This will work best if you take many shots of various scenes.



#### ■ Choose ■.

- After pressing the ⊕ button, press the
   ▲▼ buttons or turn the dial to choose
   , then press the ⊕ button again.
- Four images will appear as possibilities.

#### **Changing Image Transitions**



#### Choose an image.

- Press the ▲▼◀▶ buttons to choose the image you want to view next.
- The chosen image will be displayed in the middle, and the next four possibilities will appear.
- Pressing the button will display the middle image at full size. Press the button again to restore the original display. You can also use the zoom lever in the same way.
- Pressing the MENU button restores single image playback.



- Only still images shot with this camera will play back in Smart Shuffle.
- s not available in the following situations:
  - If there are less than 50 images taken with this camera on the memory card.
  - If you play back images not supported by Smart Shuffle.
  - During filtered playback.

#### **Changing Image Transitions**

You can choose from three transition effects when switching between images in single image playback.



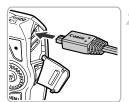
#### Choose [Transition].

Press the MENU button to choose [Transition] in the ▶ tab, then press the

**♦** buttons to choose a transition effect.

#### Viewing Images on a TV

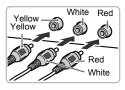
Using the supplied stereo AV cable (p. 2), you can connect the camera to a TV to view images you have shot.





#### Connect the camera to the TV.

 Open the camera's terminal cover and fully insert the cable plug into the camera's terminal.



 Insert the cable plug fully into the video input terminals as shown in the illustration.

# Turn on the TV and switch it to the input the cable is connected to.



#### Turn on the camera.

- Press the button to turn on the camera.
  - ► The image will appear on the TV (nothing will appear on the screen of the camera).
  - After you finish, turn off the camera and TV, and unplug the cable.



#### What if the images don't display correctly on the TV?

Images will not display correctly if the camera's video output setting (NTSC/PAL) does not match the TV system. Press the MENU button, choose the  $\ref{t}$  tab and [Video System] to switch to the correct video system.

#### **Viewing Images on a High-Definition TV**

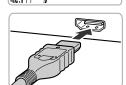
Use the separately sold HDMI Cable HTC-100 to connect the camera to a high-definition TV for an enhanced viewing experience.



#### Turn off the camera and TV.



 Open the camera's terminal cover and fully insert the cable plug into the camera's terminal.



 Fully insert the cable plug into the TV's HDMI terminal.

#### Display images.

Follow Steps 3 and 4 on p. 115 to display the images.



The supplied stereo A/V and interface cables and the separately sold HDMI Cable HTC-100 cannot be plugged into the camera at the same time. Doing so could cause the camera to malfunction.



Operation sounds will not play when connected to a high-definition TV.

#### **Protecting Images**

You can protect important images so that they cannot be accidentally erased with the camera (pp. 29, 120).



#### Protect the image.

- After pressing the button, press the
   ▲▼ buttons or turn the dial to choose
   then press the button again.
- [Protected] will appear on the screen.
- To unlock an image, follow the Step above to choose again, then press the button.



If you format the memory card (pp. 23, 52), protected images will also be erased.



Protected images cannot be erased with the camera's erase function. To erase an image, cancel protection settings first.

#### **Using the Menu**





#### ◀ Choose [Protect].

 Press the MENU button to choose [Protect] in the tab, then press the button.

#### Choose a selection method.

- Press the ▲▼ buttons or turn the ② dial to choose a selection method, then press the (m) button.
- Pressing the MENU button will restore the menu screen.

#### **Choosing Images Individually**

#### Choose [Select].

Follow Step 2 above to choose [Select], then press the () button.

#### **Protecting Images**



#### Choose images.

- Press the ◀▶ buttons or turn the ⑥ dial to choose an image, then press the ∰ button.
- ▶ 🔄 will appear on the screen.
- To choose additional images, repeat the above procedure.



#### Protect the image.

- If you press the MENU button, a confirmation screen will appear.
- Press the ◀▶ buttons or turn the ◎ dial to choose [OK], then press the ∰ button.

operation

If you switch shooting modes or turn off the power before performing the operations in Step 3, images will not be protected.

#### Select Range

#### Choose [Select Range].

Follow Step 2 on p. 117 to choose [Select Range], then press the button.



#### Choose a starting image.

Press the (st) button.

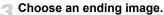


Press the ◀▶ buttons or turn the ⑥ dial to choose an image, then press the ∰ button.









- Press the ▶ button to choose [Last image], then press the ( button.
- Press the ◀▶ buttons or turn the dial to choose an image, then press the ∰ button.
- You cannot choose images before the first image.

#### Protect images.

Press the ▼ button to choose [Protect], then press the ∰ button.

#### 🖒 Choose images with the 🔘 dial

You can also choose the first or last image by turning the dial when the upper screen in Steps 2 and 3 is displayed.

#### **Choose All Images**

#### ◀ Choose [All Images].

Follow Step 2 on p. 117 to choose [All Images], then press the ( button.



#### Protect images.

Press the ▲▼ buttons or turn the ② dial to choose [Protect], then press the ∰ button.



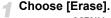
You can unlock groups of protected images if you choose [Unlock] in Step 4, while in [Select Range] or Step 2 while in [All Images].

#### **Erasing Images**

You can choose images and then erase them in groups. Since erased images cannot be recovered, exercise adequate caution before erasing. Protected images (p. 117) cannot be erased.

#### Choose a selection method





Press the MENU button to choose [Erase] in the **\( \)** tab, then press the (SET) button.



#### Choose a selection method.

- Press the ▲▼ buttons or turn the ( dial) to choose a selection method, then press the ( button.
- Pressing the MENU button will restore the menu screen

#### **Choosing Images Individually**



#### Choose [Select].

Follow Step 2 above to choose [Select] and press the (st) button.



#### Choose an image.

- If you follow Step 2 on p. 118 to choose images,  $\checkmark$  will appear on the screen.
- Pressing the (sign) button again deselects the image and  $\checkmark$  will disappear.
- To choose additional images, repeat the above procedure.



#### Erase.

- If you press the MENU button, a confirmation screen will appear.
- Press the ◆ buttons or turn the ⑥ dial to choose [OK], then press the ( button.

#### Select Range

#### ◀ Choose [Select Range].

Follow Step 2 on p. 120 to choose [Select Range], then press the () button.

#### Choose images.

 Follow Steps 2 and 3 on p. 118 to choose images.

#### Erase.

Press the ▼ button to choose [Erase], then press the ( button.

#### **Choose All Images**

#### Choose [All Images].

Follow Step 2 on p. 120 to choose [All Images], then press the button.

#### Erase.

Press the ♠ buttons or turn the ○ dial to choose [OK], then press the ♠ button.



#### **Tagging Images as Favorites**

When you tag images as favorites, you can easily categorize just those images. You can also filter out just those images for viewing, protecting or erasing (p. 109).



#### Make the setting.

- After pressing the (st) button, press the
  - ▲▼ buttons or turn the ① dial to choose ★, then press the ( button again.
- ► [Tagged as favorites] will appear on the screen.
- To untag the image, follow the above Step to choose ★ again, then press the m

#### **Using the Menu**





#### Choose [Favorites].

Press the MENU button to choose [Favorites] in the ▶ tab, then press the ⊕ button.

#### Choose an image.

- Press the ◀▶ buttons or turn the ② dial to choose an image, then press the ⊕ button.
- ▶ ★ will appear on the screen.
- Pressing the ⊕ button again untags the image and ★ disappears.
- To choose additional images, repeat the above procedure.



#### Make the setting.

- If you press the MENU button, a confirmation screen will appear.
- Press the ◀▶ buttons or turn the ◎ dial to choose [OK], then press the ∰ button.



If you switch Shooting modes or turn off the power before making the setting in Step 3, images will not be tagged as favorites.



If you use Windows 7 or Windows Vista and transfer tagged images to the computer, they will be given a star rating of 3 (  $\star$   $\star$   $\star$   $\dot{\sim}$   $\dot{\sim}$ ) (except for movies).

# Organizing Images by Category (My Category)

You can organize images into categories. You can display the images in a category in Filtered Playback (p. 109) and process all images at once by using the functions below.

 Viewing Slideshows (p. 110), Protecting Images (p. 117), Erasing All Images (p. 120), Choosing Images for Printing (DPOF) (p. 137)



Images are automatically categorized by shooting condition as they are shot.

🤏: Images with detected faces, or images shot in 🦣 or 🥞 mode.

Images detected as 
 ™, 
 or 
 in 
 in 
 mode, or images shot in 
 mode.

: Images shot in , for mode.





#### Choose .

After pressing the ∰ button, press the
 ▲▼ buttons or turn the ◎ dial to choose
 ∰, then press the ∰ button again.

#### Choose a category.

- Press the ▲▼ buttons to choose a category, then press the () button.
- will appear on the screen.
- Pressing the button again deselects the image and will disappear.

#### Organizing Images by Category (My Category)



#### Make the setting.

- If you press the MENU button, a confirmation screen will appear.
- Press the ◀▶ buttons or turn the ◎ dial to choose [OK], then press the ∰ button.



If you switch Shooting modes or turn off the power before making the setting in Step 3, images will not be tagged as My Category.

#### **Using the Menu**





#### Choose [My Category].

Press the MENU button to choose [My Category] in the ▶ tab, then press the ⊕ button.

#### Choose a selection method.

- Press the ▲▼ buttons or turn the ② dial to choose a selection method, then press the ∰ button.
- Pressing the MENU button will restore the menu screen.

#### **Choosing Images Individually**





#### Choose [Select].

 Follow Step 2 above to choose [Select], then press the button.

#### Choose an image.

Press the ♠ buttons or turn the ○ dial to choose an image.

#### Choose a category.

Press the ▲▼ buttons, or turn the ② dial to choose a category, then press the ® button.

#### Organizing Images by Category (My Category)

- will appear on the screen.
- Pressing the (st) button again deselects the image and will disappear.
- To choose additional images, repeat the above procedure.



#### Make the setting.

- If you press the MENU button, a confirmation screen will appear.
- Press the ◀▶ buttons or turn the ② dial to choose [OK], then press the ∰ button.



If you switch Shooting modes or turn off the power before making the setting in Step 4, images will not be tagged as My Category.

#### Select Range

#### Choose [Select Range].

Follow Step 2 on p. 124 to choose [Select Range], then press the ( button.

#### Choose images.

 Follow Steps 2 and 3 on p. 118 to choose images.

#### Choose a category.

Press the ▼ button to choose an item, then press the ◀ buttons or turn the ⊚ dial to choose a category.

#### Choose the setting.

Press the ▼ button to choose [Select], then press the ( button.



Select Range

If you choose [Deselect] in Step 4, you can deselect all of the images in the [Select Range] category.

#### **Rotating Images**

You can change the orientation of an image and save it.







- After pressing the (SET) button, press the ▲▼ buttons or turn the ( ) dial to choose (a), then press the (sir) button again.
- Rotate the image.
  - Press the buttons to rotate the image 90° in the chosen direction.
    - Press the (s) button to make the setting.

#### Using the Menu





#### Choose [Rotate].

- Press the MENU button to choose [Rotate] in the **b** tab, then press the (st) button.

#### Rotate the image.

- Press the buttons or turn the dial to choose an image.
- The image will rotate 90° with each press of the (st) button.
- Pressing the MENU button will restore the menu screen



Movies with a resolution of or cannot be rotated.

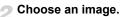
#### **Resizing Images**

You can resize images to a lower pixel setting and save the resized image as a separate file.

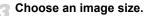


#### Choose [Resize].

Press the MENU button to choose [Resize] in the ▶ tab, then press the ⊕ button.



Press the ◀▶ buttons or turn the ② dial to choose an image, then press the ⑥ button.



- Press the ◀▶ buttons or turn the ② dial to choose an option, then press the ∰ button.
- ► The [Save new image?] screen will appear.

#### Save the new image.

- Press the ◀▶ buttons or turn the ◎ dial to choose [OK] and press the (★) button.
  - The image will be saved as a new file.



### 5 Display the new image.

- When you press the MENU button, the [Display new image?] screen will appear.
- Press the ◀▶ buttons or turn the ③ dial to choose [Yes], then press the ∰ button.
- The saved image will be displayed.





- You cannot resize an image to a larger size.
- Images recorded at a pixel setting of (p. 74), or saved as X\$ in Step 3 cannot be edited.

#### **Trimming**

You can cut out a portion of a recorded image and save it as a new image file.



#### Trimming Area



Trimming Area Display

Recorded pixels after trimming



#### Choose [Trimming].

Press the MENU button to choose [Trimming] in the ▶ tab, then press the ⊕ button.

#### Choose an image.

Press the ◀▶ buttons or turn the ② dial to choose an image, then press the ⑤
button.

#### Adjust the trimming area.

- A frame will appear around the portion of the image to be trimmed.
- The original image will display in the upper left and the trimmed image will display in the lower right.
- If you move the zoom lever to the left or right, you can change the frame size.
- If you press the ▲▼◀▶ buttons, you can move the frame.
- If you press the button, you can change the frame orientation.
- In an image with detected faces, gray frames appear around the faces located in the upper left image. The frames can be used for trimming. You can switch between frames by turning the dial.
- Press the MENU button.

#### Save as a new image and display.

Follow Steps 4 and 5 on p. 127.



- Images recorded at a pixel setting of S or W (p. 75), or images resized to XS (p. 127) cannot be edited.
- The width and height ratio of an image that can be trimmed is fixed at 4:3.
- The number of recorded pixels in a trimmed image will be smaller than before trimming.

#### **Adding Effects with the My Colors Function**

You can change the color of an image and save it as a separate image. Refer to p. 79 for details on each menu item.



#### ◀ Choose [My Colors].

Press the MENU button to choose [My Colors] in the ► tab, then press the ⊕ button.

#### Choose an image.

Press the ◀▶ buttons or turn the ② dial to choose an image, then press the ∰ button.



#### Choose a menu option.

Press the ◀▶ buttons or turn the ② dial to choose an option, then press the ∰ button.

#### Save as a new image and display.

Follow Steps 4 and 5 on p. 127.



If you repeatedly change the color of the same image, the quality will gradually deteriorate and you may not achieve the expected color.

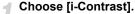


The color of images changed with this function may vary from those recorded with the My Colors function (p. 79).

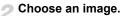
#### **Correcting the Brightness (i-Contrast)**

The camera can detect areas in an image, such as faces or backgrounds, that are too dark and automatically adjust them to the optimum brightness. Also, when the overall image is lacking in contrast, the camera will automatically correct the image for a sharper impression. You can choose from four levels of correction, and save the image as a new file.





 Press the MENU button to choose [i-Contrast] in the tab, then press the button.



Press the ◀▶ buttons or turn the ◎ dial to choose an image, then press the ∰ button.



#### Choose a menu item.

Press the ◀▶ buttons or turn the ◎ dial to choose an option, then press the ∰ button.

#### Save as a new image and display.

Follow Steps 4 and 5 on p. 127.



- Under some conditions, the image may appear coarse or not be corrected properly.
- · Repeatedly adjusting the same image may cause it to become coarse.



What if the image wasn't corrected by the [Auto] option as well as you would like?

Choose [Low], [Medium] or [High] and adjust the image.

#### **Correcting the Red-Eye Effect**

You can automatically correct red eyes in images and save them as new files.



#### Choose [Red-Eye Correction].

Press the MENU button to choose [Red-Eye Correction] in the tab, then press the button.

#### Choose an image.

Press the ◀▶ buttons or turn the ۞ dial to choose an image.

#### Correct the image.

- Press the (st) button.
- Red-eye detected by the camera will be corrected and a frame will appear around the corrected portion.
- You can magnify or reduce the size of the image using the procedures in "Magnifying Images" (p. 113).



#### Save as a new image and display.

- Press the ▲▼◀▶ buttons or turn the dial to choose [New File], then press the ⊕ button.
- The image will be saved as a new file.
- Follow Step 5 on p. 127.



- Some images may not be corrected properly.
- When [Overwrite] in Step 4 is chosen, the uncorrected image is overwritten with the corrected data, erasing the original image.
- Protected images cannot be overwritten.



## **Printing**

This chapter explains how to choose images for printing, and print using a Canon-brand PictBridge compliant printer (sold separately) (p. 40).

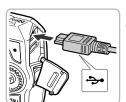
Please also refer to the Personal Printing Guide.

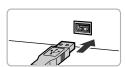
#### Canon-Brand PictBridge Compliant Printers



#### **Printing Images**

You can easily print the pictures you take by connecting the camera to a PictBridge compliant printer (sold separately) using the supplied interface cable (p. 2).







#### Turn off the camera and printer.

- Connect the camera to the printer.
  - Open the cover and insert the small plug of the included interface cable (p. 2) firmly into the camera terminal in the direction shown.
    - Insert the interface cable's larger plug into the printer. For connection details, refer to the user guide provided with the printer.

- Turn on the printer.
- Turn on the camera.
  - Press the button to turn on the camera.
  - Choose an image to print.
  - Press the ◀▶ buttons or turn the ۞ dial to choose an image.





After pressing the ⊕ button, press the
 ▲▼ buttons or turn the ○ dial to choose
 凸, then press the ⊕ button again.





#### Print images.

- Press the ▲▼ buttons or turn the ② dial to choose [Print], then press the ∰ button.
- Printing will start.
- If you want to print additional images, repeat Steps 5 to 7 after printing has completed.
- After printing has completed, turn off the camera and printer, and unplug the interface cable.





- Refer to the Personal Printing Guide for details on printing.
- Refer to p. 40 for Canon-brand Pictbridge compliant printers.
- Index printing (p. 137) is not available on certain Canon-brand PictBridge compliant printers (sold separately).

#### **Printing from the Print List (DPOF)**

You can add images to the print list (DPOF) directly after shooting or during playback in the FUNC, menu.

These selection methods comply with the DPOF (Digital Print Order Format) standards.





#### Choose an image.

Press the ◀▶ buttons or turn the ۞ dial to choose an image.

#### 

- After pressing the (∰) button, press the
   ▲▼ buttons or turn the (⊙) dial to choose
   凸, then press the (∰) button again.
- Add images to the print list.
  - Press the ▲▼ buttons to choose the number of prints, then press the ◀▶ buttons or turn the ② dial to choose [Add] and press the ∰ button.
  - To cancel adding images, repeat Steps 1 and 2, and press the ◀▶ buttons or turn the ② dial to choose [Remove], then press the ∰ button.



You cannot add images when the camera is connected to the printer.

#### **Choosing Images for Printing (DPOF)**

You can choose up to 998 images on a memory card for printing and specify settings such as the number of copies so that they can be printed together (p. 140) or processed at a photo developer service. These selection methods comply with the DPOF (Digital Print Order Format) standards.

#### **Print Settings**

You can set the print type, date and file number. These settings apply to all images chosen for printing.



#### Choose [Print Settings].

Press the MENU button to choose [Print Settings] in the 
☐ tab, then press the 
☐ button.

#### Adjust the settings.

- Press the ▲▼ buttons or turn the ② dial to choose a menu item, then press the ◀▶ buttons to choose an option.
- Pressing the MENU button accepts the settings and restores the menu screen.

Print Type	Standard	Prints one image per page.
	Index	Prints several reduced size images per page.
	Both	Prints both standard and index formats.
Date	On	Prints the shooting date.
	Off	_
File No.	On	Prints the file number.
	Off	_
Clear DPOF data	On	Removes all print settings after printing.
	Off	_



- Some printers or photo developer services may not be able to reflect all of the settings in the prints.
- Imay appear when using a memory card with print settings set by a different camera. These settings will be overwritten with those set by your camera.
- If [Date] is set to [On], some printers may print the date twice.

#### Choosing Images for Printing (DPOF)



- With [Index] chosen, the [Date] and [File No.] options cannot be set to [On] at the same time.
- The date will be printed in the style set in the [Date/Time] function in the  $\ref{t}$  tab (p. 20).
- Movies cannot be added to a print list.

#### **Choosing the Number of Copies**



#### Choose [Select Images & Qty.].

Press the MENU button to choose [Select Images & Qty.] in the 
 tab, then press the button.

#### Choose an image.

- Press the ◀▶ buttons or turn the ② dial to choose an image, then press the ∰ button.
- You will be able to set the number of print copies.
- If you choose images in [Index], ✓ appears on the screen. Pressing the (\*\*) button again will deselect the image and ✓ will disappear.



#### Set the number of prints.

- Press the ▲▼ buttons or turn the ② dial to set the number of prints (maximum 99).
- Repeat Steps 2 and 3 to choose other images and the number of prints for each.
- You cannot set the number of copies for index prints. You can only choose which images to print (as shown in Step 2).
- Pressing the MENU button accepts the settings and restores the menu screen.

#### **Select Range**



- In Step 1 on p. 138, choose [Select Range], then press the () button.
- Follow Steps 2 and 3 on p. 118 to choose images.



#### Make print settings.

Press the ▲▼ buttons to choose [Order], then press the ( button.

#### **Set All Images to Print Once**



In Step 1 on p. 138, choose [Select All Images], then press the button.

# Select All Images Set 1 print per image Cancel OK

#### Make print settings.

Press the ◀▶ buttons or turn the ⑤ dial to choose [OK], then press the ∰ button.

#### **Clearing All Selections**

#### Choose [Clear All Selections].

 In Step 1 on p. 138, choose [Clear All Selections], then press the button.



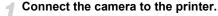
#### All selections will be cleared.

Press the ◀▶ buttons or turn the ② dial to choose [OK], then press the ∰ button.

#### **Print Added Images**

You can print images added to the print list by connecting the camera to a PictBridge compliant printer (pp. 136 – 139).

Number of copies to print



Follow Steps 1 to 4 on p. 134.



#### Print.

- Press the ▲▼ buttons to choose [Print now], then press the ( button.
- Printing will start.
- If you stop the printer during printing and start again, it will start from the next print.

# **Customizing Camera Settings**

You can customize various settings to suit your shooting preferences. The first part of this chapter explains convenient and commonly used functions.

The latter part explains how to change shooting and playback settings to suit your purposes.

#### **Changing Camera Settings**

You can customize convenient and commonly used functions from the **§†** tab (p. 47).

#### **Changing Sounds**

You can change each of the camera's operation sounds.



- Choose [Sound Options], then press the button.
- Press the ▲▼ buttons or turn the dial to choose an option.
- Press the buttons to choose an option.
  - Preset sounds (cannot be modified)

    Preset sounds

    You can use the included software to change the sounds (p. 2).

#### **Turning Off Hints & Tips**

When you choose an item in the **FUNC**, menu (p. 46) or MENU (p. 47), a description of the function (hints and tips) is displayed. You can turn off this function



 Choose [Hints & Tips], then press the buttons to choose [Off].

#### **Changing the Start-up Screen**

You can change the start-up screen that appears when you turn on the camera.



- Choose [Start-up Image], then press the
   button.
- Press the ◀▶ buttons or turn the ۞ dial to choose an option.
  - No start-up image
  - 1 Preset images (cannot be modified)
    - Preset images
  - You can set recorded images, and use the included software to change the images.

# Registering Recorded Images as the Start-up Screen

When you press the **D** button and set the camera to Playback mode, you can register an image.





- Choose [Start-up Image], then press the
- Press the ◀▶ buttons or turn the ◎ dial to choose [2], then press the ∰ button.
- Press the ◀▶ buttons or turn the ② dial to choose an image, then press the ∰ button.
- Press the ◀▶ buttons or turn the ⑥ dial to choose [OK], then press the ∰ button to complete registration.
- Any previously registered start-up image will be overwritten when registering a new start-up image.



## Register the start-up image or sounds with the included software

The dedicated operation sounds and start-up images on the included software can be registered to the camera. Refer to the Software Guide for details.

#### **Changing the File Number Assignment**

Images you shoot are automatically assigned file numbers in the order they were taken, from 0001 – 9999, and saved to folders of up to 2,000 images. You can change the file number assignment.



Choose [File Numbering], then press the
 buttons to choose an option.

Continuous	memory card, the file numbers are assigned consecutively until an image with the number 9999 is taken/saved.
Auto Reset	If you replace the memory card with a new one, or a new folder is created, file numbering begins with 0001 again.

Even if you shoot using a new



- If you use a memory card already containing images, the newly assigned file numbers may continue the existing numbering for both [Continuous] and [Auto Reset]. If you want to start over with file number 0001, format the memory card before use (p. 23).
- Refer to the Software Guide for information regarding folder structure or image types.

#### **Creating Folders by Shooting Date**

Images are saved into folders created each month, however, you can also create folders by shooting date.



- Choose [Create Folder], then press the
  - ♦ buttons to choose [Daily].
- Images will be saved into folders created on each shooting date.

## **Changing the Lens Retract Time**

For safety reasons, the lens retracts about 1 minute after pressing the button when in a Shooting mode (p. 28). If you want the lens to retract immediately when you press the button, set the retract time to [0 sec.].



Choose [Lens Retract], then press the◆▶ buttons to choose [0 sec.].

## **Turning Off the Power Saving Function**

You can set the power saving function (p. 51) to [Off]. Setting it to [On] is recommended to save battery power.



- Choose [Power Saving], then press the button.
- Press the ▲▼ buttons or turn the ② dial to choose [Auto Power Down], then press the
   ◆ buttons to choose [Off].
- If you set the power saving function to [Off], be sure to turn the camera off after use.

## **Setting the Screen Shut-Off Time**

You can adjust the time the screen takes to shut off automatically (p. 51). This also works when [Auto Power Down] is set to [Off].



- Choose [Power Saving], then press the who button.
- Press the ▲▼ buttons or turn the ② dial to choose [Display Off], then press the ◀▶ buttons to choose a time.
- In order to save battery power, you should choose less than [1 min.].

## **Using the World Clock**

When traveling abroad, you can record images with local dates and times simply by switching the time zone setting. If you pre-register the destination time zones, you can enjoy the convenience of not having to switch the Date/Time settings.









## Set the home time zone.

- Choose [Time Zone], then press the button.
- When setting this for the first time, check the information that displays on the screen at the left, then press the (\*\*) button.
- Press the ◀▶ buttons or turn the ۞ dial to choose the home time zone.
- To set daylight saving time (adds 1 hour), press the ▲▼ buttons to choose ※.
- Press the ( button.

#### Set the world time zone.

- Press the ▲▼ buttons or turn the ② dial to choose [⊀ World], then press the ⊕ button.
- Press the buttons or turn the dial to choose the destination time zone.
- You can also set the daylight saving time as in Step 1.
- Press the button.

## Choose the world time zone.

- Press the ▲▼ buttons or turn the ② dial to choose 록, then press the MENU button.
- ➤ ★ will appear on the shooting screen (p. 162).



If you change the date or time in the X setting (p. 20), your [ Home] time and date will automatically change.

## **Changing Shooting Function Settings**

If you set the mode switch to , and the mode to P, you can change the settings in the tab (p. 47).



Before attempting to shoot using a function explained in this chapter in modes other than **P** mode, check if the function is available in those modes (pp. 166 – 169).

## **Switching the Focus Setting**

The camera focuses on whatever it is aimed at even when the shutter button is not pressed. However, you can set it so that the camera only focuses when the shutter button is pressed halfway.



- Choose [Continuous AF], then press the◆▶ buttons to choose [Off].
  - On Since the camera focuses continuously until you press the shutter button halfway, it allows you to shoot without missing photo opportunities.
  - The camera does not focus

    Continuously, thereby conserving
    battery power.

### **Turning Off the AF Assist Beam**

The lamp will automatically light to assist focusing in low light conditions when you press the shutter button halfway. You can turn off the lamp.



- Choose [AF-assist Beam], then press the
  - ♦ buttons to choose [Off].

## **Turning Off the Red-Eye Reduction Function**

The red-eye reduction lamp lights in order to reduce the red-eye effect that occurs when shooting in dark conditions with the flash. You can turn off this function.



- Press the ▲▼ buttons or turn the ◎ dial to choose [Red-Eye Lamp], then press the ◆ buttons to choose [Off].

# Changing the Image Display Time Right After Shooting

You can change the length of time the images display right after shooting.



 Choose [Review], then press the buttons to choose an option.

2 – 10 sec.	Displays images for the set time.
Hold	The image displays until you press the shutter button halfway.
Off	Images will not display.

# Changing the Way the Image Displays Right After Shooting

You can change the way the image displays right after shooting.



 Choose [Review Info], then press the buttons to choose an option.

Off	Displays the image only.
Detailed	Displays detailed information (p. 164).
Focus Check	The area inside the AF frame is magnified, allowing you to check the focus. The procedure is the same as in "Checking the Focus" (p. 112).

## **Displaying the Overlay**

You can display gridlines for vertical and horizontal guidance, or a 3:2 guide to confirm the printable area for postcard size prints.



Choose [Disp. Overlay], then press the ◀▶ buttons to choose an option.

Grid Lines	A grid overlays the screen.
3:2 Guide	Gray bars appear on the top and bottom of the screen. This area will not print when printing on paper with a 3:2 aspect ratio.
Both	Both grid lines, and the 3:2 guide appear.



- In W, you cannot set [3:2 Guide] or [Both].
- · Grid lines will not be recorded on the image.
- The gray areas displayed with [3:2 Guide] are the areas that will not be printed. The actual image recorded will include the portion in the gray areas.

## **Changing the IS-Mode Settings**



 Choose [IS Mode], then press the buttons to choose an option.

Continuous	Image stabilization is always on. You can confirm the effects directly on the display, which makes it easier to check the composition or focus. When shooting movies, the camera also reduces strong camera shake, for example when walking (Dynamic mode).
Shoot Only*	Image stabilization is only active at the moment of shooting.
Panning*	Image stabilization only counters up and down motion. This option is recommended for shooting

objects moving horizontally.

\* Setting changes to [Continuous] when shooting movies.



- If camera shake is too strong, attach the camera to a tripod. You should also set the IS Mode to [Off] when the camera is attached to a tripod.
- When using [Panning], hold the camera horizontally to shoot. Image stabilization does not work when the camera is held vertically.



When shooting movies, if you press the zoom lever toward  $\overline{\blacksquare}$  and zoom out, the effect increases.

## **Changing Playback Function Settings**

You can adjust the settings in the **\bigsiz** tab by pressing the **\bigsiz** button (p. 47).

# Choosing the Image that First Displays in Playback



 Choose [Resume], then press the buttons to choose an option.

Last seen	Resumes with the image last viewed.
Last shot	Resumes with the most recently shot image.



## **Useful Information**

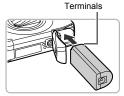
This chapter introduces how to use the AC adapter kit and Eye-Fi card (both sold separately), troubleshooting tips, and contains lists of functions and items that appear on the screen.

## **Using Household Power**

If you use AC Adapter Kit ACK-DC70 (sold separately), you can use the camera without worrying about how much charge is left in the battery.



#### Turn off the camera.



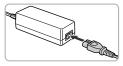
## Insert the coupler.

- Follow Step 1 on p. 17 to open the cover, then insert the coupler as shown until it locks into place with a click.
- Follow Step 3 on p. 17 to close the cover.



## Plug the cord into the coupler.

 Open the cover and fully insert the plug into the coupler.



## Connect the power cord.

- Connect the power cord to the compact power adapter, then plug the other end into a power outlet.
- Turn the camera on to use it.
- After you finish, turn off the camera and unplug the power cord from the power outlet.



Do not unplug the plug or power cord with the camera turned on. This could erase images you have taken or damage the camera.

## **Using an Eye-Fi Card**

Before using an Eye-Fi card, be sure to check whether Eye-Fi card use is authorized in the country or territory of use (p. 16).

When you put a prepared Eye-Fi card into the camera, you can automatically transfer your images wirelessly to a computer, or upload them to a web service

Image transfer is a function of the Eye-Fi card. For details on how to setup and use the card, and concerning problems transferring images, please refer to the Eye-Fi card user guide, or contact the manufacturer.



Please keep the following things in mind when using an Eye-Fi card.

- Even if you set [Eye-Fi trans.] to [Disable] (p. 156), the Eye-Fi card may transmit radio waves. Be sure to remove the Eye-Fi card from the camera before entering areas that prevent unauthorized transmission of radio waves, such as hospitals and airplanes.
- If you have trouble transferring images, check the card or computer settings. For details, refer to the user guide supplied with the card.
- Depending on the connection status of the wireless network, it may take time to transfer images, or image transfer may be interrupted.
- Due to its transfer function, the Eye-Fi card may become hot.
- · Battery consumption will be quicker than in normal use.
- Camera operations will be slower than in normal use. This may be resolved by setting [Eye-Fi trans.] to [Disable].

If you put an Eye-Fi card into the camera, the connection status can be checked in the shooting screen (Information Display) and playback screen (Simple Information Display).

(Gray)	Not connected
(Flashing white)	Connecting
(White)	Transfer standby
⊗ (Animated)	Transferring
<b>*************************************</b>	Interrupted
<b>7</b>	Error retrieving Eye-Fi card info (Turn the camera off and on again. If this continues to appear, there may be a problem with the card.)

will appear on transferred images.



The power saving function does not work while transferring images (p. 51).

## **Checking Connection Information**

You can check the Eye-Fi card's access point SSID, or connection status.



## Choose [Connection info].

- Press the MENU button, then choose [Eye-Fi Settings] from the 
  †† tab, and press the 
  †† tab, and
- Press the ▲▼ buttons or turn the ⑥ dial to choose [Connection info], then press the ∰ button.
- ► The Connection info screen will appear.

## **Disabling Eye-Fi Transfer**

You can set the card to disable Eye-Fi transfer.



## Choose [Disable] in [Eye-Fi trans.].

- Press the MENU button to choose [Eye-Fi Settings] from the ft tab, then press the button.
- Press the ▲▼ buttons or turn the ② dial to choose [Eye-Fi trans.], then press the
   ◆ buttons to choose [Disable].



## What if [Eye-Fi Settings] does not appear?

[Eye-Fi Settings] will only appear when an Eye-Fi card is inserted in the camera.



If the Eye-Fi card has a write-protect tab, you will not be able to check the card's connection status, or set [Eye-Fi trans.] to [Disable] when the tab is in the locked position.

## **Troubleshooting**

If you think there is a problem with the camera, first check the following. If the items below do not solve your problem, contact a Canon Customer Support Help Desk as listed on the included customer support list.

#### **Power**

You pressed the power button, but nothing happened.

- Confirm that the battery is the correct type, and is not depleted (p. 15).
- Confirm that the battery is properly inserted (p. 17).
- Confirm that the memory card/battery cover is securely closed (pp. 17, 18).
- If the battery terminals are dirty, battery performance will decrease. Clean the terminals with a cotton swab and re-insert the battery several times.

#### Battery is consumed quickly.

 Battery performance decreases at low temperatures. Warm the battery, for example, by placing it in your pocket with the terminal cover on.

#### Lens will not retract.

 Do not open the memory card/battery cover while the power is on. After closing the memory card/battery cover, turn the power on then back off (pp. 17, 18).

### TV output

Image is distorted or not showing on TV (p. 115).

#### **Shooting**

#### Cannot shoot.

When in Playback mode (p. 22), press the shutter button halfway (p. 24).

The screen is off (p. 157).

Screen does not display properly in dark places (p. 45).

#### Screen does not display properly while shooting.

Please note, the following will not be recorded in still images, but will be recorded in movies.

- When the camera is subjected to powerful light sources, the display may darken.
- When shooting under fluorescent or LED lighting, the screen may flicker or horizontal lines may appear across the screen.
- When shooting bright light sources, a bar of light (purplish red) may appear on the screen.

# A flashing ‡ appears on the screen and the shot cannot be taken even though the shutter button was pressed fully (p. 27).

#### appears when the shutter button is pressed halfway (p. 56).

- Set the [IS mode] to [Continuous] (p. 150).
- Set the flash to \$ (p. 73).
- Increase the ISO speed (p. 76).
- Attach the camera to a tripod. Additionally, you should set the [IS Mode] to [Off] when shooting with a tripod (p. 150).

#### Troubleshooting

#### Image is blurred.

- Press the shutter button halfway to focus on the subject, then press fully to shoot (p. 24).
- Shoot the subject within the focusing distance (p. 172).
- Set the [AF-assist Beam] to [On] (p. 147).
- Confirm that functions which you do not intend to use (macro, etc.) are not set.
- Shoot using the focus lock or AF lock (pp. 82, 86).

# Even when you press the shutter button halfway, the AF frame does not appear, and the camera does not focus.

 If you center on the light and dark contrasting area of the subject and push the shutter button halfway, or repeatedly push the shutter button halfway, the AF frame will appear and the camera will focus.

#### Subject is too dark.

- Set the flash to \$ (p. 73).
- Correct the brightness with exposure compensation (p. 72).
- Adjust the image with i-Contrast (pp. 90, 130).
- Use AE Lock, or spot metering to shoot (pp. 87, 88).

#### Subject is too bright (overexposed).

- Set the flash to (9) (p. 56).
- Correct the brightness with exposure compensation (p. 72).
- Use AE Lock, or spot metering to shoot (pp. 87, 88).
- Reduce the light illuminating the subject.

#### Image is dark even though the flash fired (p. 27).

- Shoot within an appropriate distance for flash photography (p. 73).
- Increase the ISO speed (p. 76).

#### Image taken using the flash is too bright (overexposed).

- Shoot within an appropriate distance for flash photography (p. 73).
- Set the flash to (p. 56).

#### White dots appear on the image when shooting with the flash.

Light from the flash has reflected off dust particles or other objects in the air.

#### Image appears rough or grainy.

- Shoot with the ISO speed on a lower setting (p. 76).
- Depending on the Shooting mode, when shooting in a high ISO speed the image may appear rough or grainy (pp. 62, 63).

#### Eyes appear red (p. 90).

Set the [Red-Eye Lamp] to [On] (p. 148). When shooting with the flash, the lamp (on the front of the camera) lights (p. 42), and for approximately 1 second while the camera is reducing red-eye, it is not possible to shoot. It is more effective if the subject is looking directly at the lamp. Even better results can be obtained by increasing the lighting in indoor settings or approaching closer to the subject.

# Recording images to the memory card takes a long time, or continuous shooting slows down.

Perform a low-level format of the memory card in the camera (p. 52).

#### Cannot make settings for shooting functions or FUNC, menu.

 The items in which settings can be made differ depending on the shooting mode. Refer to "Functions Available in Each Shooting Mode" and "Shooting Menu" (pp. 166 – 169).

#### **Shooting movies**

#### Correct shooting time does not display, or stops.

 Format the memory card in the camera, or use a memory card capable of recording at high speeds. Even when the shooting time does not display properly, the recorded video will be the length that it was actually shot (pp. 23, 31).

#### appeared on the screen and shooting ended automatically.

The camera's internal memory was insufficient. Try one of the following:

- Perform a low-level format of the memory card in the camera (p. 52).
- Change the movie quality setting (p. 101).
- Use a memory card capable of recording at high speeds (p. 101).

#### Subject appears distorted.

 The subject may appear distorted if it passes quickly in front of the camera while shooting. This is not a malfunction.

### **Playback**

#### Cannot play back images or movies.

If the file name or folder structure is changed on a computer, you may not be able to
play back images or movies. Refer to the Software Guide for information regarding
folder structure or file names.

#### Playback stops, or audio cuts out.

- Use a memory card that has had a low-level format performed on it with this camera (p. 52).
- If you copy a movie to a memory card that reads slowly, playback may interrupt momentarily.
- Depending on its capabilities, when playing movies on a computer, frames may drop or the audio may cut out.

#### Computer

### Cannot transfer images to a computer.

It may be possible to solve the problem when the camera is connected to a computer via cable by reducing the transfer speed.

#### Eye-Fi Card

Cannot transfer images (p. 155).

## **List of Messages That Appear on the Screen**

If error messages appear on the screen, try one of the following solutions.

#### No memory card

 The memory card is not installed in the correct direction. Install the memory card in the correct direction (p. 18).

#### Memory card locked

 The SD memory card, SDHC memory card, SDXC memory card or Eye-Fi card's write protect tab is set to "LOCK". Unlock the write protect tab (pp. 18, 19).

#### Cannot record!

 You attempted to shoot an image without a memory card. Install the memory card in the correct direction to shoot (p. 18).

#### Memory card error (p. 52)

 If the same message appears even when a formatted memory card is installed in the correct direction, contact a Canon Customer Support Help Desk (p. 18).

#### Insufficient space on card

There is not enough free space on the memory card to shoot (pp. 25, 30, 55, 71, 98) or edit images (pp. 127 – 131). Erase the images (pp. 29, 120) to open space for new images, or insert an empty memory card (p. 18).

#### Change the battery pack. (p. 15)

#### No Image.

There are no images recorded on the memory card that can be displayed.

#### Protected! (p. 117)

# Unidentified Image/Incompatible JPEG/Image too large./Cannot play back AVI/ RAW

- Unsupported images, or images with corrupted data cannot be displayed.
- Images manipulated on a computer, that have had their file name changed, or have been taken with a different camera may not display.

# Cannot magnify!/Cannot play back this content in Smart Shuffle/Cannot rotate/Cannot modify image/Cannot register this image!/Cannot modify/Cannot assign to category/Unselectable image.

- Incompatible images cannot be magnified (p. 113), played back in Smart Shuffle (p. 113), tagged as favorites (p. 122), rotated (p. 126), edited (pp. 127 – 131), registered to the start-up screen (p. 143), categorized (p. 123), or added to a print list (p. 136).
- Images manipulated on a computer, that have had their file name changed, or have been taken with a different camera may not be magnified, played back in Smart Shuffle, tagged as favorites, rotated, edited, registered to the start-up screen, categorized, or added to a print list.
- Movies cannot be magnified (p. 113), played back in Smart Shuffle (p. 113), edited (pp. 127 – 131), added to a print list (pp. 136, 137), or registered to the start-up screen (p. 143).

#### Invalid selection range

 When choosing the selection range (pp. 118, 121, 125, 139), you tried to choose a starting image that was after the last image or you tried to choose an ending image that was before the starting image.

#### **Exceeded selection limit**

- You chose more than 998 images in print settings. Choose less than 998 images (p. 138).
- Print settings could not be saved correctly. Reduce the number of selected images and try again (p. 138).
- You chose 501 or more images in Protect (p. 117), Erase (p. 120), Favorites (p. 122),
   My Category (p. 123) and Print Settings (pp. 136, 138).

#### Communication error

 Images could not be transferred to the computer or printed due to the large amount of images (approx. 1000) stored on the memory card. Use a commercially available USB card reader to transfer the images. Insert the memory card into the printer's card slot to print.

#### Naming error!

• The folder or image could not be created because there is an image with the same file name as the folder or image that the camera is attempting to create, or the highest possible file number has already been reached. In the ff menu, change [File Numbering] to [Auto Reset] (p. 144) or format the memory card (p. 23).

#### Lens Error

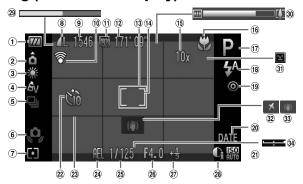
- This error can occur if you hold the lens while it is in motion or when using it in a location with excessive dust or sand in the air.
- If this error message continues to appear, contact a Canon Customer Support Help Desk as there may be a problem with the lens.

#### A camera error was detected (Error number)

- If an error code appears directly after taking a picture, the shot may not have been recorded. Check the image in Playback mode.
- If this error code reappears, note the Error number (Exx) and contact a Canon Customer Support Help Desk as there may be a problem with the camera.

## **Information Displayed on the Screen**

## **Shooting (Information Display)**



- Battery Charge Indicator (p. 15)
- ② Camera Orientation\*
- 3 White Balance (p. 77)
- 4 My Colors (p. 79)
- ⑤ Drive Mode (p. 78)
- ⑥ Camera shake warning (p. 27)
- 7 Metering Method (p. 87)
- (Sompression) (p. 74) / Recording Pixels (p. 74)
- 9 Still Images: Recordable Shots (pp. 15, 75)
- 10 Eye-Fi Connection Status (p. 155)
- 11 Movie Quality (p. 101)

- Movies: Remaining Time (pp. 31, 101)
- (13) AF Frame (p. 84)
- (p. 87) Spot AE Point Frame
- (i) Digital Zoom Magnification (p. 57) / Digital Tele-converter (p. 58)
- (f) Focusing Range (p. 73), AF Lock (p. 86)
- (p. 66), (p. 166),
- Scene Icon (p. 163)

  18 Flash Mode
- (pp. 56, 73, 89)
- (9) Red-Eye Correction (p. 131)
- 20 Date Stamp (p. 59)

- 2) ISO Speed (p. 76) 2) Self-Timer
  - (pp. 60, 80, 81, 66)
- 23 Disp. Overlay (p. 149)
- ② AE Lock (p. 88), FE Lock (p. 88)
- 25 Shutter Speed
- 26 Aperture Value
- ② Exposure Compensation Amount (p. 72)
- 28 i-Contrast (p. 90)
- Super Slow Motion Movie Elapsed Time (p. 99)
- 30 Zoom Bar (p. 25)
- 3) Blink Detection (p. 91)
- 32 Time Zone (p. 146)
- 33 Image Stabilizer (p. 150)
- 34 Exposure Shift Bar

#### \* 🏚 : Standard, 🗘 🧯 : Held vertically

When shooting, the camera detects if it is held vertically or horizontally, and adjusts settings accordingly for the best shot. It also detects orientation during playback, so you can hold the camera in either orientation and it will automatically rotate images for correct viewing.

This function may not operate correctly when the camera is pointed straight up or down.

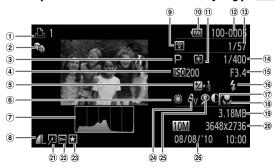
#### **Scene Icons**

In AUTO mode, the camera displays an icon for the scene it has determined and then automatically focuses and selects the optimum settings for subject brightness and color.

Subject			People		Non-		
Ba	ckground		When Moving	With Strong Facial Shadows	Human Subjects/ Landsca pes	Close Subjects	Icon Background Color
E	Bright		Q=	R	AUTO	<b>Y</b>	Gray
	Backlit	<b>9</b> (1)	OF!	_	3/1	<b>Y</b>	Gruy
	luding ue Skies		<b>P</b> =	2	AUTO	<b>(</b> *)	Light Blue
	Backlit		0 = 1	_	7/1	WE,	Light blue
S	unsets		_		<b>51</b>	_	Orange
Sp	ootlights		A				
Da	rk	F	7	2	AUTO	~	Dark Blue
	When Using Tripod	<b>5</b> .	-	_	<b>D</b> .	_	

<sup>\*</sup> Appears when the scene is dark and the camera is attached to a tripod.

## **Playback (Detailed Information Display)**



- ① Print List (pp. 136, 137)
- 2 My Category (p. 123)
- 3 Shooting mode (p. 166)4 ISO Speed (p. 76),
  - Playback Speed (Movies) (p. 99)
- ⑤ Exposure Compensation (p. 72), Exposure Shift Amount (p. 102)
- 6 White Balance (p. 77)
- 7 Histogram (p. 45)
- ® Compression (Image Quality) (p. 74) / Recording Pixels (p. 74), MOV (Movies)

- 9 Eye-Fi Transfer Complete (p. 155)
- Battery Charge Indicator (p. 15)
- Metering Method (p. 87)
   Folder Number File
- 12 Folder Number File Number (p. 144)
- ① Displayed image number/ Total number of images
- Shutter Speed, Movie Quality, Frame Rate (Movies) (p. 101)
- 15 Aperture Value
- 16 Flash (p. 73)
- 17 i-Contrast (pp. 90, 130)

- 18 Focusing Range (p. 73)
- (9) File Size (pp. 75, 101)
- ② Still Images: Recording Pixels (p. 74) Movies: Movie Length
- (p. 101)
  ② Image Editing
- (pp. 127 131)

  ② Protect (p. 117)
- ② Favorites (p. 117)
- 24 My Colors (pp. 79, 129)
- Red-Eye Correction (pp. 90, 131)
- Shooting Date and Time (p. 20)

## **Handling Precautions**

- This camera is a high-precision electronic device. Do not drop it or subject it to strong impacts.
- Never place the camera close to magnets, motors or other devices that generate strong electromagnetic fields. Exposure to strong magnetic fields may cause malfunctions or corrupt image data.
- If water droplets or dirt become stuck on the camera or screen, wipe with a dry soft cloth or eyeglass wiper. Do not rub or apply force.
- Never use cleaners containing organic solvents to wipe the camera or screen.
- Use a commercially available blower brush to remove dust from the lens.
   For stubborn dirt contact a Canon Customer Support Help Desk as listed on the customer support leaflet supplied with your camera.
- When you move the camera rapidly from cold to hot temperatures, condensation may form on the internal or external surfaces of the camera.
   To avoid condensation, put the camera in an airtight, resealable plastic bag and let it adjust to temperature changes slowly before removing it from the bag.
- If condensation has formed on the camera, stop using it immediately, as continued use may damage the camera. Remove the battery and memory card, and wait until the moisture has completely evaporated before resuming use.

## **Functions Available in Each Shooting Mode**

	Shooting modes				ď	•		
Function		AUTO	Р	ą	2			
Tunction	13.3.3					ĴĽ	63	6.7
Self-Timer (pp. 60, 66, 80, 81)	Cir Cir Cir	0	0	0	0	_	_	_
	69	0	0	0	0	_	_	_
AE Lock/Exposure Shift (p. 102)		_	_	_	_	_	_	_
AE Lock/FE Lock (p. 88)		-	0	_	_	_	_	-
	<b>\$</b> <sup>A</sup>	0	0	0	0	0	0	0
Flb ( 50 70 00)	<b>‡</b>	_	0	0	0	0	0	0
Flash (pp. 56, 73, 89)	4≛	*2	0	_	_	_	_	-
	<b>③</b>	0	0	0	0	0	0	0
	*	<b>—</b>	0	_	_	_	_	-
Focusing Range (p. 73)	A	0	0	0	0	0	0	0
	<b>A</b>	-	0	-	-	<b>—</b>	_	—
AF Lock (p. 86)		I —	0	_	_	_	_	_
	Func. Menu							
Metering Method (p. 87)	0	0	0	0	0	0	0	0
Metering Method (p. 87)	$\Box$	_	0	_	_	_	_	_
	€ GFF	0	0	0	0	0	0	0
My Colors (p. 79)	Av An Ase Asw Ap AL AD AB AG AR AC	-	0	-	-	_	_	-
Mhite Delenes (n. 77)	AWB	0	0	0	0	0	0	0
White Balance (p. 77)	☀▲悬淵愚	I -	0	-	-	-	_	-
ISO Speed (p. 76)	RUTO	0	0	0	0	0	0	0
130 Speeu (p. 70)	ලෝ ලෝ ලෝ ලෝ ලෝ ලෝ		_					

*1 The number of shots	cannot b	e specifie	d, and the time delay cannot be	e set to	0 sec	conds.	

 $\Box$ 

ISO ISO ISO ISO ISO ISO ISO

L M1 M2 S W

1920 1280 1640 1320

0

0 0 0 0 0 0 0

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0

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0 0 0 0 0 0 0

Exposure Compensation (p. 72)

Drive Mode (p. 78)

Recording Pixels (p. 74)

Compression Ratio (p. 74)

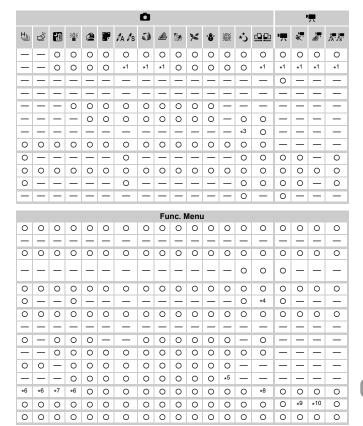
Movie Quality (p. 101)

<sup>\*2</sup> Not selectable but switches to 🗯 depending on the circumstances.

<sup>\*3</sup> Not selectable but switches to \$2 when the flash fires.

<sup>\*4</sup> White Balance data not recordable.

<sup>\*5 🖳</sup> 



<sup>\*6</sup> Recording pixels are fixed to M .

<sup>\*7</sup> Fixed to .

<sup>\*8</sup> Recording pixel setting III not selectable.

<sup>\*9</sup> Fixed to 300 .

<sup>\*10</sup> mm or m is not available.

## Menus

## **Shooting Menu**

Shooting Modes						ď	ל		
			<b>AUTO</b>	Р	a	2		ø	
Function							ĴĽ	63	<b>(3)</b>
AF Frame (p. 84)	Face Detect		*1	0	0	0	0	0	0
74 1 Tallie (p. 04)	Center		_	0	0	0	_	_	_
AF Frame Size (p. 85)	Normal/Small		_	0	_	_	_	_	_
	Standard		0	0	0	0	0	0	0
Digital Zoom (p. 57)	Off		0	0	0	0	0	0	0
	Digital Tele-conve	erter (1.4x/2.3x)	0	0	0	0	0	0	0
AF-Point Zoom (p. 85)	On/Off		0	0	0	_	0	0	0
Servo AF (p. 86)	On/Off	On/Off			0	<b>*</b> 4	_	_	_
Continuous AF (p. 147)	On/Off		*4	0	0	_	*4	<b>*</b> 4	*4
AF-assist Beam (p. 147)	On/Off		0	0	0	0	*4	0	0
Flash Settings	Red-Eye Corr.	On/Off	0	0	0	0	0	0	0
(pp. 90, 148)	Red-Eye Lamp	On/Off	0	0	0	0	0	0	0
i-Contrast (p. 90)	Auto/Off		*5	0	_	_	_	_	_
Review (p. 148)	Off/2 - 10 sec./Ho	old	0	0	0	0	0	0	0
Review Info (p. 149)	Off/Detailed/Focu	s Check	0	0	0	0	0	0	0
Blink Detection (p. 91)	On/Off		0	0	0	0	0	0	0
Diag Overdey (s. 440)	Grid Lines		0	0	0	0	0	0	0
Disp Overlay (p. 149)	3:2 Guide		0	0	0	0	0	0	0
IC Made (n. 150)	Continuous/Off		<b>*</b> 6	0	0	0	0	0	0
IS Mode (p. 150)	Shoot Only/Panni	ng	_	0	0	0	0	0	0
Date Stamp (p. 59)	Off/Date/Date & T	ime	0	0	0	0	0	0	0

<sup>\*1 9</sup> points when a face is not detected.

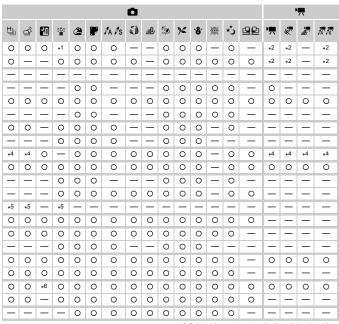
<sup>\*2</sup> Only available for shooting still images.

<sup>\*3 [</sup>On] when movement is detected.

<sup>\*4</sup> Fixed to [On].

<sup>\*5</sup> Fixed to [Auto].

<sup>\*6</sup> Fixed to [Continuous].



O Selectable, or set automatically. - Not selectable

## **f†** Set up Menu

Item	Content	Ref. Page
Mute	On/Off*	p. 48
Volume	Set all operation sounds (5 levels).	p. 48
Sound Options	Set the sounds for each camera operation.	p. 142
Hints & Tips	On*/Off	p. 142
LCD Brightness	Set within a range of ±2.	p. 49
Start-up Image	Add an image as a start-up image.	p. 143
Format	Formats memory card, erasing all data	pp. 23, 52
File Numbering	Continuous*/Auto Reset	p. 144
Create Folder	Monthly*/Daily	p. 144
Lens Retract	1 min.*/0 sec.	p. 145
Power Saving	Auto Power Down: On*/Off Display Off: 10, 20 or 30 sec./1*, 2 or 3 min.	pp. 51, 145
Time Zone	Home*/World	p. 146
Date/Time	Date and time settings	p. 21
Video System	NTSC* / PAL	p. 115
Eye-Fi Settings	Eye-Fi connection settings (only appears when Eye-Fi card is inserted)	p. 155
Language	Choose display language.	p. 22
Reset All	Returns camera to default settings.	p. 50

<sup>\*</sup> Default setting

## 🕒 Print Menu 🛚

Item	Content	Ref. Page
Print	Displays printing screen (When connected to a printer).	_
Select Images & Qty.	Chooses individual images for printing.	p. 138
Select Range	Chooses starting and ending images for printing.	p. 139
Select All Images	Chooses all images for printing.	p. 139
Clear All Selections	Cancels all settings for printing.	p. 139
Print Settings	Sets the printing style.	p. 137

## **▶** Playback Menu

Item	Content	Ref. Page
Slideshow	Plays back images automatically.	p. 110
Erase	Erases images (Select, Select Range, All Images)	p. 120
Protect	Protects images (Select, Select Range, All Images)	p. 117
Rotate	Rotates images.	p. 126
Favorites	Tags or untags images as favorites.	p. 122
My Category	Categorizes images (Select, Select Range)	p. 123
i-Contrast	Corrects dark portions and contrast in still images.	p. 130
Red-Eye Correction	Corrects red eyes in still images.	p. 131
Trimming	Trims portions of still images.	p. 128
Resize	Resizes and saves still images.	p. 127
My Colors	Adjusts colors in still images.	p. 129
Scroll Display	On*/Off	p. 108
Resume	Last seen*/Last shot	p. 151
Transition	Fade*/Scroll/Slide/Off	p. 114

<sup>\*</sup> Default setting

## Playback Mode FUNC. Menu

Item	Content	Ref. Page
Rotate	Rotates displayed image.	p. 126
Print List	Selects or clears settings for printing displayed image. (Print appears when the camera is connected to the printer)	p. 136
Protect	Protects/unlocks displayed image.	p. 117
Favorites	Tags/untags displayed image as favorites.	p. 122
Erase	Erases displayed image.	p. 120
Play Movie	Starts Play Movie.	p. 32
Smart Shuffle	Starts Smart Shuffle.	p. 113
Filtered Playback	Filters/cancels filter for displayed image.	p. 109
Slideshow	Plays back images automatically.	p. 110
My Category	Categorizes images.	p. 123

## **Specifications**

Image Sensor	
Camera Effective Pixels Lens	Approx. 10 million pixels
Focal Length	10x zoom: 6.3 (W) $-$ 63.0 (T) mm (35mm film equivalent: 36 (W) $-$ 360 (T) mm)
Focusing Range	1 cm (0.4 in.) – infinity (W), 1 m (3.3 ft.) – infinity (T) • Macro: 1 – 50 cm (0.4 in. – 1.6 ft.) (W)
Image Stabilizer (IS) System Imaging Processor LCD Monitor	
Size	**
Aspect Ratio	16:9
Function	Brightness adjustment (5 levels), Quick-bright LCD
•	Autofocus: Single (Continuous in Auto mode), Continuous Servo AF (Servo AE)
AF Frame	Evaluative, Center-weighted average, Spot
/Exposure Shift (Movies)	
ISO Speed	Auto, ISO 125/200/400/800/1600/3200
(Standard Output Sensitivity, Recommended Exposure Index)	
White Balance	Auto, Day Light, Cloudy, Tungsten, Fluorescent, Fluorescent H, Custom
Shutter Speeds	1 – 1/4000 sec. 15 – 1/4000 sec. (Total shutter speed range)
Aperture	
	Blade (x2) f/3.4 - f/7.1 (W), f/5.6 - f/9.0 (T)
Flash	
	Auto, on, Slow Synchro, off 30 cm – 3.5 m (W), 1.0 – 2.0 m (T)
rango	(12 in. – 12 ft. (W), (3.3 – 6.6 ft. (T))
Shooting Mode	Auto, P, Portrait, Kids&Pets, Smart Shutter*1, High-speed Burst, Best Image Selection, Handheld Night Scene, Low Light, Super Vivid, Poster Effect, Color Accent, Color Swap, Fish-eye Effect, Miniature Effect, Beach, Foliage, Snow, Fireworks, Long Shutter, Stitch Assist, Movie*2*3
	*1 Smile, Wink Self-timer, Face Self-timer *2 Smart Auto available

\*3 Standard, Super Slow Motion, Miniature Effect, Color

Accent, Color Swap

Digital Zoom	Still images/Movies: Approx. 4x (up to approx. 40x in combination with the optical zoom) Safety Zoom, Digital Tele-converter
Continuous Shooting	
Modes	Normal, AF, LV
Speed (Normal)	Approx. 3.7 shots/sec. (In P mode) Approx. 8.8 shots/sec. (In High-speed Burst mode)
Number of Possible Shots	
(CIPA compliant)	Approx. 150 shots
Recording Media	SD memory card, SDHC memory card, SDXC memory card, MultiMediaCard, MMC <i>plus</i> card, HC MMC <i>plus</i> card
File Format	Design rule for Camera File system, DPOF (Version 1.1) compliant
Data Type	
Still Images	
	MOV (Image data: H.264, Audio data: Linear PCM (stereo))
Recording Pixels	
Still images	Large: 3648 x 2736, Medium 1: 2816 x 2112, Medium 2: 1600 x 1200, Small: 640 x 480, Widescreen: 3648 x 2048
	<ul> <li>Fixed to 1824 x 1368 when in High-speed Burst, Best Image Selection, and Low Light</li> </ul>
Movies	Smart Auto, Standard, Color Accent, Color Swap: 1920 x 1080 (24 fps*1), 1280 x 720 (30 fps*2), 640 x 480 (30 fps*2), 320 x 240 (30 fps*2)
	Super Slow Motion: 320 x 240 (240 fps*3 when shooting, 30 fps*2 during playback)
	Miniature Effect: 1280 x 720 (Shooting: 6 fps/3 fps/1.5 fps,
	Playback: 30 fps <sup>+2</sup> ), 640 x 480 (Shooting: 6 fps/3 fps/1.5 fps, Playback: 30 fps <sup>+2</sup> )
	*1 Actual frame rate is 23.976 fps.
	*2 Actual frame rate is 29.97 fps.
	*3 Actual frame rate is 239.76 fps.
Interface	
	HDMI output
	Analog audio output (stereo) Analog video output (NTSC/PAL)
Direct Print Standard	, , ,
Power	· ·
r owei	AC Adapter Kit ACK-DC70
Dimensions (CIPA compliant)	101.3 x 58.5 x 22.3 mm (3.99 x 2.30 x 0.88 in.)
` ' '	Approx. 190 g (6.70 oz.) (Including the battery and memory
	card)
	Approx. 167 g (5.89 oz.) (camera body only)

#### **Battery Pack NB-9L**

 Type
 Rechargeable lithium-ion battery

 Nominal Voltage
 3.5 V DC

 Nominal Capacity
 870 mAh

 Battery Life (Charge Cycles)
 Approx. 300 times

 Operating Temperatures
 0 – 40 °C (32 – 104 °F)

 Dimensions
 14.6 x 43.1 x 15.3 mm (0.57 x 1.70 x 0.60 in.)

Weight ...... Approx. 21 g (0.74 oz.)

## Battery Charger CB-2LB/CB-2LBE

Regions	CB-2LB: Japan/Americas CB-2LBE: Europe/Asia/Oceania
Rated Input	100 V – 240 V (50/60 Hz) 8.5 VA (100 V) – 12 VA (240 V) 0.085 A (100 V) – 0.05 A (240 V)
Rated Output	4.2 V, 0.7 A
Charging Time	Approx. 1 hour and 50 min. (when using NB-9L)
Charge Indicator	Charging: Orange, Fully charged: Green Two indicator system
Operating Temperatures	0 – 40 °C (32 – 104 °F)
Dimensions	82.0 x 59.0 x 24.5 mm (Protrusion: 26.4 mm) (3.23 x 2.32 x 0.96 in. (Protrusion:1.04 in.))
Weight	CB-2LB: Approx. 73 g (2.57 oz.) CB-2LBE: Approx. 67 g (2.36 oz.) (excluding power cord)

- · All data is based on tests by Canon.
- Camera specifications or appearance are subject to change without notice.

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## **MEMO**

## **MEMO**

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