

Canon

PowerShot SD1400 IS **IXUS 130** DIGITAL ELPH **Camera User Guide**



ENGLISH

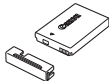
- Make sure you read this guide before using the camera.
- Store this guide safely so that you can use it in the future.

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.



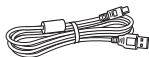
Camera



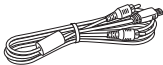
**Battery Pack NB-4L
(with Terminal Cover)**



**Battery Charger
CB-2LV/CB-2LVE**



**Interface Cable
IFC-400PCU**



**AV Cable
AVC-DC400**



Wrist Strap WS-DC7



Getting Started



**DIGITAL CAMERA
Solution Disk**



**Warranty
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.

- **Software Guide**

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

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

- The LCD monitor is made from reinforced glass, but it may break if subjected to severe impacts. Please read the Safety Precautions (p. 9) carefully. In case the glass breaks, exercise adequate caution so as not to injure yourself on any broken fragments.
- 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

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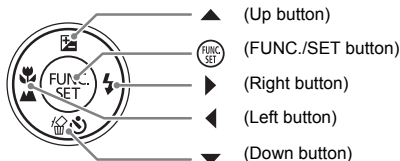
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Conventions Used in this Guide

- 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 and FUNC./SET button are represented by the following icons.



- : Troubleshooting tips.
- : Hints for getting more out of your camera.
- : Things you should be careful about.
- : 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 camera, please ensure that you read the safety precautions described below. Always ensure that the camera is operated 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.



Warning

Denotes the possibility of serious injury or death.



Caution

Denotes the possibility of injury.

Caution

Denotes the possibility of damage to the equipment.



Warning

Camera

- **Do not trigger the flash in close proximity to people's eyes.**

Exposure to the intense light produced by the flash could damage eyesight. In particular, remain at least 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.

Memory card: Dangerous if swallowed. If this occurs, contact a doctor immediately.

- **Do not attempt to disassemble or alter any part of the equipment unless expressly indicated to do so in this guide.**
- **To avoid the risk of injury, do not touch the interior of the camera if it has been dropped or otherwise damaged.**
- **Stop operating the camera immediately if it emits smoke, a strange smell, or otherwise behaves abnormally.**
- **Do not use organic solvents such as alcohol, benzene, or thinner to clean the equipment.**
- **Do not allow liquids or foreign objects to enter the camera.**

This could result in fire or electrical shock.

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

- **Use only recommended power sources.**

Using other power sources could result in fire or electrical shock.

Battery and Battery Charger

- Use only recommended batteries.
- Do not place the battery near or in direct flame.
- Do not let the battery come into contact with water (e.g. sea water) or other liquids.
- Do not attempt to disassemble, alter or apply heat to the battery.
- Avoid dropping or subjecting the battery to severe impacts.

This may cause explosions or leaks, resulting in fire, injury and damage to the surroundings. In the event that a battery leaks and the eyes, mouth, skin or clothing contacts these substances, immediately flush with water and seek medical assistance. If the battery charger becomes wet, unplug it from the outlet and consult your camera distributor or the closest Canon Customer Support Help Desk.

- Use only the specified battery charger to charge the battery.
- 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 charger terminals or plug.

This could result in fire or electrical shock.

Other Warnings

- 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.



Caution

- 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 damage the camera or lead to injury.

- Avoid using, placing or storing the camera 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 also cause deformation of the casing.

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

Caution

- **Do not aim the camera at bright light sources (the sun, etc.).**
Doing so may cause malfunctions or 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.
- **Unplug the battery charger from the power outlet after recharging 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.
- **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 battery, cover the terminals with tape or other insulators.**
Contacting other metal materials in waste containers may lead to fire or explosions.
- **Do not place the battery near pets.**
Pets biting the battery could cause leakage, overheating or explosion, resulting in fire or injuries.
- **Do not sit down with the camera in your pocket.**
Doing so may cause malfunctions or damage the LCD monitor.
- **When putting the camera in your bag, ensure that hard objects do not come into contact with the LCD monitor.**
- **Do not attach accessories to the strap.**
Doing so may cause malfunctions or damage the LCD monitor.





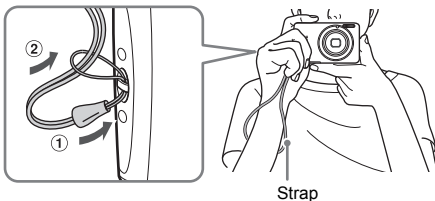
1

Getting Started

This chapter explains preparations before shooting, how to shoot in **AUTO** 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.

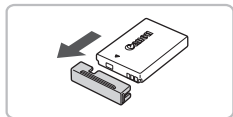
Attaching the Strap/Holding the Camera

- 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.

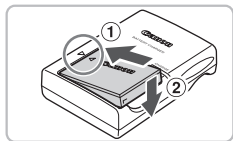


Charging the Battery

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

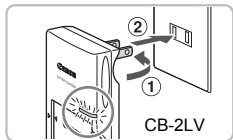


1 Remove the cover.



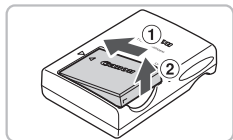
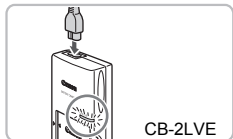
2 Insert the battery.

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



3 Charge the battery.

- **For CB-2LV:** Flip out the plug ① and plug the charger into a power outlet ②.
- **For CB-2LVE:** Plug the power cord into the charger, then plug the other end into a power outlet.
- ▶ The charge lamp lights red and charging starts.
- The charge lamp will light green when charging has finished. Charging takes approx. 1 hour and 30 minutes.



4 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	230
Playback Time (Hours)	6

- 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.
	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.



Attach the cover to a charged battery so that the ▲ mark is visible.

- **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

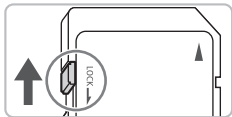
* This memory card complies with the SD standards. Some cards may not operate properly depending on the brand of card used.



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.

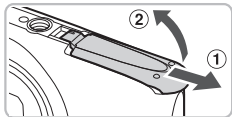
Inserting the Battery and Memory Card

Insert the included battery and a memory card (sold separately).



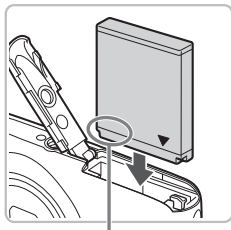
1 Check the card's write-protect tab.

- 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.



2 Open the cover.

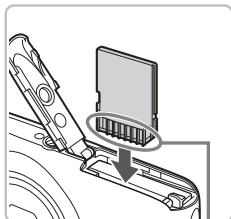
- Slide the cover ① and open it ②.



Terminals

3 Insert the battery.

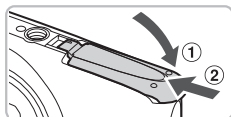
- Insert the battery as shown until it locks into place with a click.
- Be sure to insert the battery in the correct direction or it will not properly lock into place.



Terminals

4 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.



5 Close the cover.

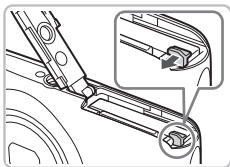
- Close the cover ①, and press downward as you slide it until it clicks into place ②.



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

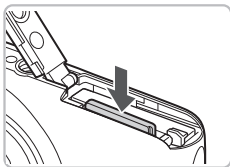
SD, SDHC and SDXC memory cards have a write-protect tab. If this tab is in the locked position, [Memory card locked] will appear on the screen and you will not be able to take or erase images.

Removing the Battery and Memory Card



Remove the battery.

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



Remove the memory card.

- Push the memory card in until you hear a click, then slowly release it.
- ▶ The memory card will pop up.

Approximate Number of Shots per Memory Card

Memory Card	4 GB	16 GB
Number of shots	1058	4334

- 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?

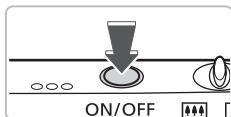
You can check the number of shots that can be taken when the camera is in a Shooting mode (p. 24).

Number of shots that
can be taken



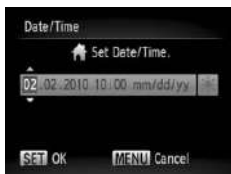
Setting the Date and Time

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.



1 Turn on the camera.

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



2 Set the date and time.

- Press the ◀▶ buttons to choose an option.
- Press the ▲▼ buttons to set a value.



3 Complete the setting.

- Press the  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

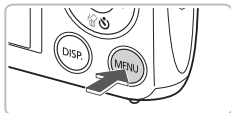
Set the correct date and time. If you have not set the date and time, the Date/Time screen will appear each time you turn on the camera.

Daylight saving time settings

If you choose  in Step 2 and press the ▲▼ buttons to 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.



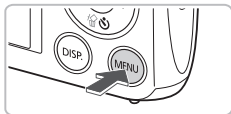
1 Display the menus.

- Press the **MENU** button.



2 Choose [Date/Time] in the **YT** tab.

- Press the **◀▶** buttons to choose the **YT** tab.
- Press the **▲▼** buttons to choose [Date/Time], then press the **FUNC. SET** button.



3 Change the date and time.

- Follow Steps 2 and 3 on p. 19 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. 19 to set the date and time.

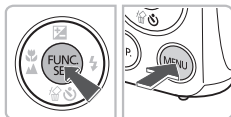
Setting the Display Language

You can change the language that displays on the screen.



1 Enter Playback mode.

- Press the button.



2 Display the settings screen.

- Press and hold the button, then immediately press the **MENU** button.
- ▶ The settings screen will appear.



3 Set the display language.

- Press the buttons to choose a language, then press the button.
- ▶ Once the display language has been set, the settings screen will close.



? What if the clock appears when the button is pressed?

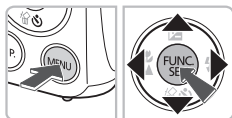
The clock will appear if too much time passes between pressing the button and the **MENU** button in Step 2. If the clock appears, press the button to remove the clock and repeat Step 2.



You can also change the display language by pressing the **MENU** button, choosing the 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.



1 Display the menu.

- Press the **MENU** button.

2 Choose [Format].

- Press the **◀▶** buttons to choose the **FUNC SET** tab.
- Press the **▲▼** buttons to choose [Format], then press the **FUNC SET** button.

3 Format the memory card.

- Press the **◀▶** buttons to choose [OK], then press the **FUNC SET** button.
- ▶ A confirmation screen will appear.
- Press the **▲▼** buttons to choose [OK], then press the **FUNC SET** button.
- ▶ The memory card will be formatted.
- ▶ When formatting ends, [Memory card formatting complete] will appear on the screen.
- Press the **FUNC SET** button.



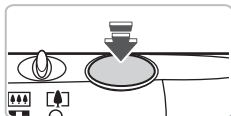
Formatting or erasing data on a memory card merely changes the file management information on the card and does not ensure its contents are completely erased. Be careful when transferring or disposing of a memory card. When disposing of a memory card, take precautions such as physically destroying the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

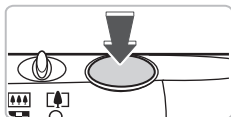
Pressing the Shutter Button

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



1 Press halfway (lightly to focus).

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



2 Press fully (all the way 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?

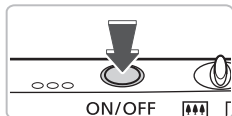
- Since the time required to shoot differs according to the scene you want to take, the length of the shutter sound may change.
- If the camera or subject moves while the shutter sound is playing, the recorded image may be blurry.



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.



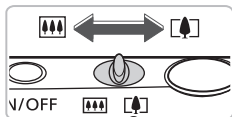
1 Turn on the camera.

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



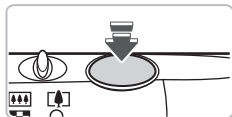
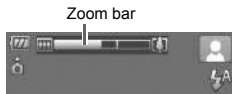
2 Choose **AUTO** mode.

- 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.



3 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 (the zoom bar will appear).

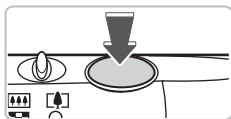


4 Focus.

- Press the shutter button halfway to focus.



AF Frame



5 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.

Scene Icons

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.

Background Subject	Bright		Including Blue Skies		Sunsets	Dark	
		Backlit		Backlit			When Using Tripod
People					—		 *
When Moving					—	—	—
Non-Human Subjects/ Landscapes	AUTO 		AUTO 			AUTO 	 *
Close Subjects					—		—
Icon Background Color	Gray		Light Blue		Orange	Dark Blue	

* Appears when the scene is dark and the camera is attached to a tripod.



Under certain conditions, the icon that appears may not match the actual scene. Especially when there is an orange or blue colored background (a wall for example),  or the “Including Blue Skies” icons may appear and it may not be possible to shoot with the appropriate color. If this happens, try shooting in **P** mode (p. 70).

**What if...**

- **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.

- **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  blinks 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 **DISP.** 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, choose the  tab, and then choose [Mute]. 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. Move the zoom lever toward  and hold it until the lens stops moving. The camera will be at its maximum wide angle setting and you can shoot within the effective flash range of approximately 30 cm – 4.0 m (12 in. – 13 ft.).

Move the zoom lever toward  and hold it until the lens stops moving. The camera will be at its maximum telephoto setting and you can shoot within the effective flash range of approximately 50 cm – 2.0 m (1.6 – 6.6 ft.).

- **What if the camera beeps once when the shutter button is pressed halfway?**

Your subject may be too close. Move the zoom lever toward  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 3 cm (1.2 in.) or more away from the end of the lens.

Move the zoom lever toward  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 80 cm (2.6 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  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.



1 Enter Playback mode.

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



2 Choose an image.

- Pressing the  button will cycle through the images in the reverse order they were taken, from the newest image to the oldest.
- Pressing the  button will cycle through the images in the order they were taken, from oldest to newest.
- The images change more quickly if you keep the   buttons pressed.
- 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.



1 Enter Playback mode.

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



2 Choose an image to erase.

- Press the  buttons to display an image to erase.



3 Erase the image.

- Press the  button.
- ▶ [Erase?] appears.
- Press the  buttons to choose [Erase], then press the  button.
- ▶ The displayed image will be erased.
- To exit instead of erasing, press the  buttons 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 shutter button.

If you continue shooting for a long time, the camera may become warm. This is not a malfunction.

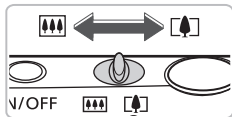


Shooting Time



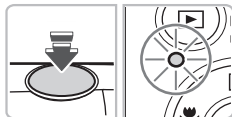
1 Enter mode.

- Set the mode switch to .



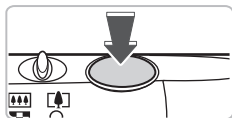
2 Compose the shot.

- 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.



3 Focus.

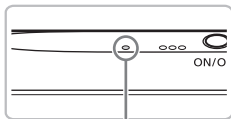
- Press the shutter button halfway to focus.
- ▶ When the camera focuses, it will beep twice and the indicator will light green.



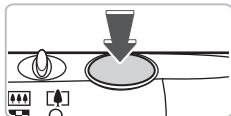
4 Shoot.

- Press the shutter button fully.

Elapsed Time



Microphone



- ▶ Recording will start, and [● Rec] and the elapsed time will appear on the screen.
- Once shooting begins, take your finger off the shutter button.
- If you change the composition of your shot during shooting, the focus will stay the same, but the brightness and tone will automatically adjust.
- Do not touch the microphone while shooting.
- Do not press any buttons other than the shutter button while shooting. The sound the buttons make will be recorded in the movie.

5 Stop shooting.

- Press the shutter button fully again.
- ▶ The camera will beep once 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 toward [📏] while shooting will zoom in on the subject. However, operation sounds will be recorded and the movie may appear coarse.

Estimated Shooting Times

Memory Card	4 GB	16 GB
Shooting Time	21 min. 23 sec.	1 hr. 27 min. 37 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 4 or higher memory cards are recommended.

Viewing Movies

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



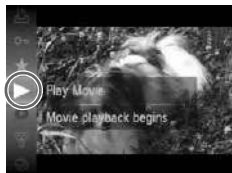
1 Enter Playback mode.

- Press the button.
- ▶ The last image you shot will appear.
- ▶ **SET** appears on movies.



2 Choose a movie.

- Press the buttons to choose a movie.



3 Play the movie.

- After pressing the button, press the buttons to choose , then press the button again.
- ▶ The movie will play.
- If you press the button again the movie will pause, and the control panel will appear. Press the buttons to choose (Play), then press the button to resume playback.
- Press the buttons to adjust the volume.
- ▶ After the movie finishes, **SET** appears.





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

- Install the included software (p. 35).
- 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 ZoomBrowser EX/ImageBrowser, install the software from the included CD-ROM, overwriting your current installation.

System Requirements

Windows

OS	Windows 7 Windows Vista (including Service Pack 1 and 2) Windows XP Service Pack 2, Service Pack 3
Computer model	The above OS should be pre-installed on computers with built-in USB ports.
CPU	Viewing images Pentium 1.3 GHz or higher Viewing movies Core2 Duo 1.66 GHz or higher
RAM	Windows 7 (64 bit): 2 GB or more Windows 7 (32 bit), Windows Vista: 1 GB or more Windows XP: Viewing images 512MB or more, Viewing movies 1 GB or more
Interface	USB
Free Hard Disk Space	ZoomBrowser EX: 200 MB or more* PhotoStitch: 40 MB or more
Display	1,024 x 768 pixels or higher

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

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	Viewing images PowerPC G4/G5 or Intel Processor Viewing movies Core Duo 1.66 GHz or higher
RAM	Mac OS X v10.4 – v10.5: Viewing images 512MB or more, Viewing movies 1GB or more Mac OS X v10.6: 1GB or more
Interface	USB
Free Hard Disk Space	ImageBrowser: 300 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.

1 Install the Software.

Windows



1 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.

2 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.

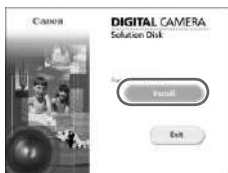


3 When the install finishes, click [Restart] or [Finish].

4 Remove the CD-ROM.

- Remove the CD-ROM when your desktop screen appears.

Macintosh



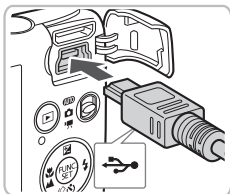
1 Place the CD in the computer's CD-ROM drive.

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

2 Begin installation.

- Double-click the  on the CD.

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



2 Connect the camera to the computer.

- Turn off the camera.
- Open the cover, and insert the small end of the plug firmly into the camera terminal in the direction shown.
- Insert the cable's larger plug into the computer. For connection details, refer to the user guide provided with the computer.

3 Turn on the camera.

- Press the  button to turn on the camera.

4 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.



- Click  on the task bar.
- In the screen that appears, click the  link to modify the program.
- Click [Downloads Images From Canon Camera using Canon CameraWindow], then click [OK].
- Double click .

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 further operations, refer to the *Software Guide*.

You can transfer images without installing the included software by simply connecting your camera to a computer. There are, however, the following limitations.



- After connecting to the camera, it may take a few minutes until you can transfer images.
- Movies will not transfer correctly.
- Images shot in the vertical position may be transferred in the horizontal position.
- 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.

Supplied with Camera



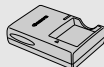
Wrist Strap
WS-DC7



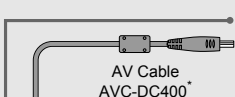
DIGITAL CAMERA
Solution Disk



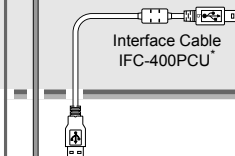
Battery Pack NB-4L*
(with Terminal Cover)



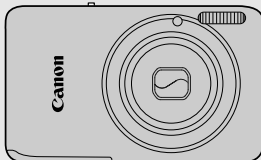
Battery Charger
CB-2LV/CB-2LVE*



AV Cable
AVC-DC400*



Interface Cable
IFC-400PCU*



*Also available for purchase separately.



Memory Card



Card Reader



Windows/Macintosh

Canon-Brand PictBridge Compliant Printers



Compact Photo Printers
(SELPHY series)



Inkjet Printers
(PIXMA series)

See the user guide supplied with the printer for more information on the printer and interface cables.



TV/Video



HDMI Cable HTC-100

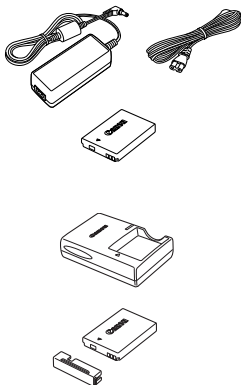


High-Definition TV

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



AC Adapter Kit ACK-DC60

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 battery inside the camera.

AC Adapter Kit ACK-DC10 can also be used.

Battery Charger CB-2LV/CB-2LVE

An adapter for charging Battery Pack NB-4L.

Battery Pack NB-4L

Rechargeable lithium-ion battery.

CAUTION

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



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.

Flash



High-Power Flash HF-DC1

This attachable supplementary flash can be used to capture photographic subjects that are too distant for the built-in flash to illuminate.

Other Accessories



Waterproof Case WP-DC37

Use this case to take underwater shots at depths of up to 40 meters (130 ft.), or to shoot in the rain, at the beach, or on the ski slopes.

HDMI Cable HTC-100

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

Printers



SELPHY series

PIXMA series

Canon-Brand PictBridge Compliant Printers

By connecting your camera to a Canon-brand 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.

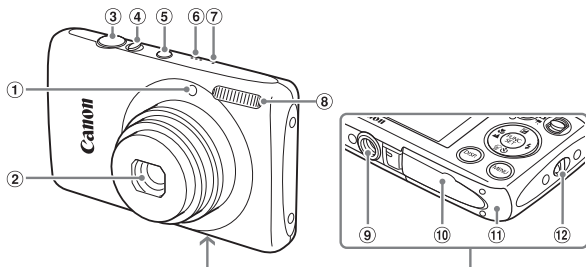
This product is designed to achieve excellent performance when used with genuine Canon accessories. Canon shall not be liable for any damage to this product and/or accidents such as fire, etc., caused by the malfunction of non-genuine Canon accessories (e.g., a leakage and/or explosion of a battery pack). 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.

2

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. 59 – 61, 67, 148)

② Lens

③ Shutter Button (p. 23)

④ Zoom Lever

Shooting: (Telephoto) / (Wide Angle) (p. 24)

Playback: (Magnify) / (Index) (pp. 108, 114)

⑤ Power Button (p. 19)

⑥ Speaker

⑦ Microphone (p. 31)

⑧ Flash (pp. 63, 71, 90)

⑨ Tripod Socket

⑩ DC Coupler Terminal Cover (p. 154)

⑪ Memory Card / Battery Cover (p. 16)

⑫ Strap Mount (p. 13)

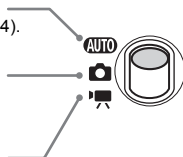
Mode Switch

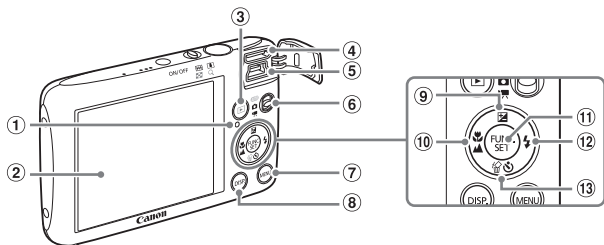
Use the mode switch to change a Shooting mode.

You can leave it to the camera to select settings for fully automatic shooting (p. 24).

You can shoot with the best settings for the scene (p. 54) or choose settings yourself to take various types of pictures (pp. 53, 69, 83).

For shooting movies (pp. 30, 99).





- ① Indicator (p. 45)
- ② Screen (LCD Monitor) (p. 44)
- ③ (Playback) Button (pp. 28, 107)
- ④ HDMI Terminal (p. 116)
- ⑤ A/V OUT (Audio/Video Output) (p. 115)
/ DIGITAL Terminal (pp. 36, 134)
- ⑥ Mode Switch (p. 42)
- ⑦ **MENU** Button (p. 47)
- ⑧ **DISP.** (Display) Button (p. 44)
- ⑨ (Exposure Compensation) (p. 71) /
▲ Button
- ⑩ (Macro) (p. 72) / ▲ (Infinity) (p. 72) /
▼ Button
- ⑪ **FUNC./SET** (Function/Set) Button
(p. 46)
- ⑫ (Flash) (pp. 63, 71, 90) / ► Button
- ⑬ (Self-Timer) (pp. 67, 80, 81) /
Single Image Erase (p. 29) /
▼ Button

Screen Display

Switching the Display

You can change the screen display using the **DISP.** button. Refer to p. 160 for details on information that appears on the screen.

Shooting



Information Display



No Information Display

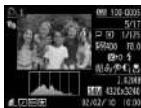
Playback



No Information Display



Simple Information Display



Detailed Information Display



Focus Check Display
(p. 113)



You can also switch the display by pressing the **DISP.** 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 to choose the  tab, then setting [Review Info] (p. 149).

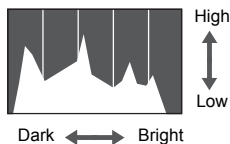
Screen Display in Dark Shooting Conditions

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. 44) 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. 146)
	Blinks	Recording/reading/transmitting image data
Orange	Lights	Shooting preparation complete (flash on)
	Blinks	Camera shake warning (p. 63)



When the indicator blinks green, data is being recorded to/read from the memory card or various information is being transmitted. Do not turn off the power, open the memory card slot/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 shooting functions can be set with the FUNC. menu. The menu items and options differ depending on the mode (pp. 162 – 165). You can also use the FUNC. menu in Playback mode.



1 Display the FUNC. menu.

- Press the  button.



Available Options
Menu Items

2 Choose a menu item.

- Press the  buttons to choose a menu item, then press the .
- Depending on the menu, the screen and menu items may switch.

3 Choose an option.

- Press the  buttons to choose an option.
- You can also choose settings by pressing the **DISP.** button on options that display .
- To return to the menu, press the .

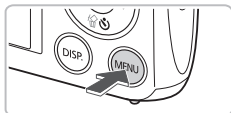


4 Complete the setting.

- Press the .

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 available menu items differ depending on the mode (pp. 162 – 165).



1 Display the menu.

- Press the **MENU** button.

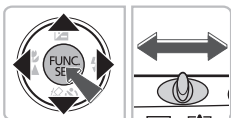


2 Choose a tab.

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

3 Choose a menu item.

- Press the ▲▼ buttons to choose a menu item.
- Some items require you to press the  button or ▶ button to display a submenu in which you change the setting.



4 Choose an option.

- Press the ◀▶ buttons to choose an option.



5 Complete the setting.

- Press the **MENU** button.
- ▶ The normal screen will reappear.



Changing the Sound Settings

You can silence or adjust the volume of camera sounds.

Muting Sounds



1 Display the menu.

- Press the **MENU** button.

2 Choose [Mute].

- Press the ◀▶ buttons to choose the ȲȲ tab.
- Press the ▲▼ buttons to choose [Mute], then press the ◀▶ buttons to choose [On].
- Pressing the **MENU** button again will restore the normal screen.



Adjusting the Volume



1 Display the menu.

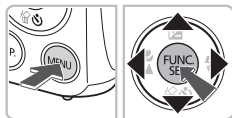
- Press the **MENU** button.

2 Choose [Volume].

- Press the ◀▶ buttons to choose the ȲȲ tab.
- Press the ▲▼ buttons to choose [Volume], then press the FUNC. SET button.

3 Change the volume.

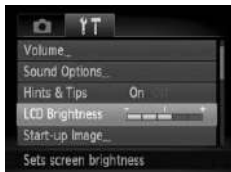
- Press the ▲▼ buttons to choose an item, then press the ◀▶ buttons to adjust the volume.
- Pressing the **MENU** button twice will restore the normal screen.



Changing the Screen Brightness

The screen brightness can be changed in two ways.

Using the Menu



1 Display the menu.

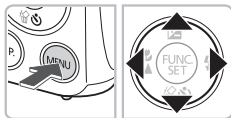
- Press the **MENU** button.

2 Choose [LCD Brightness].

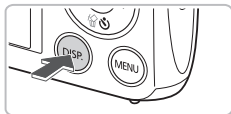
- Press the **◀▶** buttons to choose the **YT** tab.
- Press the **▲▼** buttons to choose [LCD Brightness].

3 Change the brightness.

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



Using the DISP. Button



- Press the **DISP.** button for more than one second.
- ▶ The screen increases to maximum brightness regardless of the setting in the **YT** tab.
- Pressing the **DISP.** 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 **YT** tab.
- When you have set the brightness to its highest setting in the **YT** tab, you cannot change the brightness with the **DISP.** button.

Returning the Camera to Default Settings

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

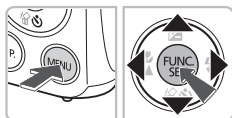


1 Display the menu.

- Press the **MENU** button.

2 Choose [Reset All].

- Press the **◀▶** buttons to choose the **Y** tab.
- Press the **▲▼** buttons to choose [Reset All], then press the **FUNC SET** button.



3 Reset the settings.

- Press the **◀▶** buttons to choose [OK], then press the **FUNC SET** button.
- ▶ The camera will reset to the default settings.

? Are there functions that cannot be reset?

- The [Date/Time] (p. 19) in the **Y** tab, [Language] (p. 21), [Video System] (p. 166), [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. 95) or Color Swap (p. 96).

Low Level Memory Card Formatting

Perform low level formatting when you think that the recording/reading speed of a memory card has dropped. Performing a low-level format on a memory card erases all data on the memory card. As you cannot retrieve the erased data, exercise adequate caution before performing a low-level format.



1 Display the menu.

- Press the **MENU** button.

2 Choose [Format].

- Press the **◀▶** buttons to choose the **↑↑** tab.
- Press the **▲▼** buttons to choose [Format], then press the **FUNC SET** button.

3 Perform the low level format.

- Press the **▲▼** buttons to choose [Low Level Format], then press the **◀▶** buttons to display **✓**.
- Press the **▲▼◀▶** buttons to choose [OK], then press the **FUNC SET** button.
 - ▶ A confirmation screen will appear.
- Press the **▲▼** buttons to choose [OK], then press the **FUNC SET** button.
 - ▶ The memory card will be formatted.
 - ▶ When low level formatting ends, [Memory card formatting complete] will appear.
- Press the **FUNC SET** button.

? About low level formatting

If the [Memory card error] message appears, or if the camera does not work correctly, performing a low level format may solve the problem. Copy the images from the memory card to a computer or other device before performing a low level format.



- Low level formatting may take longer than standard formatting, since all recorded data are 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.

Power Saving Function (Auto Power Down)

To save battery power, 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. 23) 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. 146).
- You can adjust the time before the screen turns off (p. 146).

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 to change the display color.
- Press the  button to cancel the clock display.



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

3

Shooting in Special Conditions and 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.



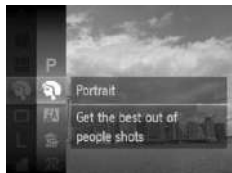
- When you choose a Shooting mode that matches a particular set of conditions, the camera will automatically select any necessary settings. All you need do is press the shutter button to take an optimized picture.
- This chapter assumes the mode switch is set to **AUTO** for “Turning the Flash Off” (p. 63) to “Using the Self-Timer” (p. 67). When shooting in a mode other than **AUTO**, check which functions are available in that mode (pp. 162 – 165).

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.



1 Set the mode switch to  (p. 42).



2 Choose the Shooting mode.

- After pressing the  button, press the  buttons to choose **P**, then press the  button again.
- Press the  buttons to choose the desired mode, then press the .



3 Shoot.



 **Take portraits (Portrait)**

- Produces a soft effect when photographing people.



 **Take snapshots at night (Night Snapshot)**

- Lets you take beautiful snapshots of city nightscapes or people against night backgrounds.
- If you hold the camera firmly, you can take pictures with reduced camera shake, even without a tripod.



Take shots of kids and pets (Kids&Pets)

- Lets you capture subjects that move around, such as children and pets, without missing photo opportunities.



Take indoor shots (Indoor)

- Lets you shoot indoors with natural colors.



Take shots in low light conditions (Low Light)

- Depending on the scene, the ISO speed will be set higher and the shutter speed faster than in **AUTO** mode so that you can shoot in dark places with reduced camera shake and subject blur.
- A recording pixel setting of **M** will appear, and the image will be fixed at 2144 x 1608 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.



Shoot underwater (Underwater)

- Lets you take natural-colored shots of aquatic life and underwater scenery when used with Waterproof Case WP-DC37 (sold separately).



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 [IS Mode] to [Off] (p. 150).



In , ,  or  mode, images may appear coarse because the ISO speed (p. 75) is increased to match the shooting conditions.



Modes for other scenes

In addition to the modes explained here, the following scene modes are also available.

-  Smart Shutter
 -  Smile (p. 59)
 -  Wink Self-Timer (p. 60)
 -  Face Self-Timer (p. 61)
-  Color Accent (p. 95)
-  Color Swap (p. 96)
-  Fish-eye Effect (p. 57)
-  Miniature Effect (p. 58)
-  Long Shutter (p. 94)
-  Stitch Assist (p. 98)

Adding Effects and Shooting

You can add various effects to images when shooting.

Shoot with the effects of a fish-eye lens (Fish-eye Effect)

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

1 Choose .

- Choose  in Steps 1 – 2 on p. 54.

2 Choose an effect.

- Press the **DISP.** button.
▶ [Effect Level] will appear on the screen.



- Press the   buttons to choose an effect level, then press the **DISP.** button.
▶ You can check the effect on the screen.



3 Shoot.



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.



1 Choose .

- Choose  in Steps 1 – 2 on p. 54.



2 Choose the area to keep in focus.

- Press the **DISP.** button.
- ▶ 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.
- Press the **DISP.** button.

3 Shoot.



- 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.

Detecting a Smile and Shooting

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



Choose ☺.

- Choose  in Steps 1 – 2 on p. 54, then press **DISP.** button.
- Press the ◀▶ buttons to choose ☺, then press the **DISP.** button.
- ▶ The camera will enter shooting preparation, and [Smile Detection on] will appear.
- Each 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

Press the **DISP.** button, then press ▲▼ buttons to choose the number of shots. Press the **DISP.** button to change the setting.



- 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 the subject and press the shutter button fully. The camera will shoot approximately two seconds after it detects a wink.

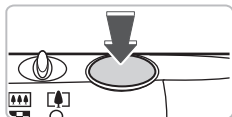


1 Choose .

- Choose  in Steps 1 – 2 on p. 54, then press the **DISP.** button.
- Press the **◀▶** buttons to choose , then press the **DISP.** button.

2 Compose the shot and press the shutter button halfway.

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



3 Press the shutter button fully.

- ▶ The camera will enter shooting stand-by, and [Wink to take picture] will appear on the screen.



4 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

For the screen in Step 1, press the **DISP.** button, then press the **▲▼** buttons to change the number of shots. Press the **DISP.** button to accept the setting.



- 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

To take a photo that includes the photographer, such as a group photo, compose the shot, and press the shutter button. The camera will shoot approximately two seconds after you enter the shot and it detects your face (p. 84).

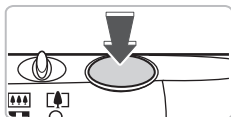


1 Choose .

- Choose  in Steps 1 – 2 on p. 54, then press the **DISP.** button.
- Press the **◀▶** buttons to choose , then press the **DISP.** button.

2 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.



3 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.



4 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 ▼ button.



Changing the number of shots

For the screen in Step 1, press the **DISP.** button, then press the ▲▼ buttons to change the number of shots. Press the **DISP.** button to accept the setting.



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

Turning the Flash Off

You can shoot with the flash turned off.



1 Press the ► button.



2 Choose .

- Press the ◀▶ buttons to choose , then press the FUNC SET button.
- ▶ Once set,  will appear on the screen.
- To turn the flash back on, follow the steps above to return the setting to .

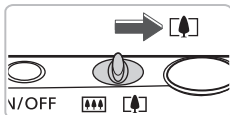


What if the indicator blinks orange and a flashing  appears?

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

Zooming in Closely on Subjects (Digital Zoom)

You can use the digital zoom to zoom up to a maximum equivalent of 16x 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. 73) and the zoom factor used.



1 Move the zoom lever toward [Tree Icon].

- 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.



2 Move it toward [Tree Icon] 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, choose the  tab, and choose [Digital Zoom] and the [Off] option.



The equivalent focal length when using the optical zoom is 28 – 112 mm, and the equivalent focal length when using the digital zoom is 112 – 448 mm (35mm film equivalent).

Digital Tele-Converter

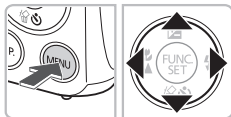
The focal length of the lens can be increased by an equivalent of 1.7x or 2.1x. This enables a faster shutter speed and less chance of camera shake than the zoom (including digital zoom) used by itself at the same zoom factor.

The images may appear coarse, however, depending on the combination of recording pixel (p. 73) and digital tele-converter settings used.



1 Choose [Digital Zoom].

- Press the **MENU** button.
- Press the **◀▶** buttons to choose the  tab.
- Press the **▲▼** buttons to choose [Digital Zoom].



2 Accept the setting.

- Press the **◀▶** buttons to choose the zoom factor.
- 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 [1.7x] at a recording pixel setting of **L** or **M1** will cause image deterioration (the zoom factor will appear in blue).
- Using [2.1x] at a recording pixel setting of **L**, **M1** or **M2** will cause image deterioration (the zoom factor will appear in blue).



- The respective equivalent focal lengths when using [1.7x] and [2.1x] are 47.6 – 190.4 mm and 58.8 – 235.2 mm (35mm film equivalent).
- The digital tele-converter cannot be used together with the digital zoom.

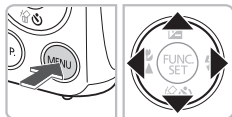
Inserting the Date and Time

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. 19).



1 Choose [Date Stamp].

- Press the **MENU** button.
- Press the ◀▶ buttons to choose the  tab.
- Press the ▲▼ buttons to choose [Date Stamp].



2 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.



3 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. 136) 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 activate approximately 10 seconds after the shutter button is pressed.

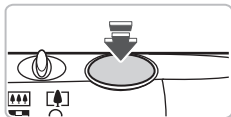


1 Press the ▼ button.



2 Choose 10.

- Press the ▲▼ buttons to choose 10, then press the FUNC SET button.
- ▶ Once set, 10 will appear on the screen.



3 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 Off in Step 2.



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



4

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 the mode switch is set 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. 162 – 165).

Shooting in Program AE

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



1 Set the mode switch to  (p. 42).

2 Choose **P**.

- Choose **P** in Step 2 on p. 54 and press the  button.

3 Adjust the settings according to your purposes (pp. 71 – 81).

4 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. 71)
- Choose a higher ISO speed (p. 75)

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.



1 Enter Exposure Compensation mode.

- Press the **▲** button.

2 Adjust the brightness.

- While watching the screen, press the **◀▶** buttons to adjust the brightness and press the **FUNC SET** button.
- ▶ The exposure compensation amount will appear on the screen.

Turning the Flash On

You can make the flash fire every time you shoot. At maximum wide angle, the flash range is approximately 30 cm – 4.0 m (12 in. – 13 ft.), and at maximum telephoto, it is 50 cm – 2.0 m (1.6 – 6.6 ft.)



Choose **⚡**.

- After pressing the **▶** button, press the **◀▶** buttons to choose **⚡**, then press the **FUNC SET** button.
- ▶ Once set, **⚡** will appear on the screen.

Shooting Close-ups (Macro)

You can shoot an object at a close distance or even shoot extreme close-ups of it. The focus range (the distance range from your subject) is approximately 3 – 50 cm (1.2 in. – 1.6 ft.) from the end of the lens (when the zoom lever is moved toward  and held until the lens stops moving, which is the maximum wide angle setting of the lens).



Choose .

- After pressing the  button, press the  buttons to choose , then press the  button.
- ▶ Once set,  will appear on the screen.



The edges of the image may darken if the flash fires.



About the Zoom Bar

- When you move the zoom lever, the zoom bar appears on the screen. When shooting in Macro mode, the camera cannot focus in the range of the yellow bar.
- When zooming within the range of the yellow bar,  will be grayed out and shooting will be done in .

Shooting Far Away Subjects (Infinity)

When it is difficult to focus because your shot contains subjects that are both near and far, you can change the focus range (the distance range from your subject) to focus more reliably on the far away subjects only (3 m or more away from your camera).



Choose .

- After pressing the  button, press the  buttons to choose , then press the  button.
- ▶ Once set,  will appear on the screen.

Changing the Recording Pixel Setting (Image Size)

You can choose from six recording pixels (image size) settings.



1 Choose the recording pixel setting.

- After pressing the **FUNC SET** button, press the **▲▼** buttons to choose **L**, then press the **FUNC SET** button again.

2 Choose an option.

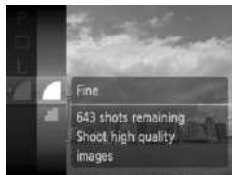
- Press the **▲▼** buttons to choose an option, then press the **FUNC SET** button.
- ▶ The setting you chose will appear on the screen.



If you choose **W**, you cannot use Digital Zoom (p. 64) or Digital Tele-Converter (p. 65).

Changing the Compression Ratio (Image Quality)

You can choose from the following two levels of compression ratio (image quality): **■** (Fine), **■** (Normal).



1 Choose the compression ratio setting.

- After pressing the **FUNC SET** button, press the **▲▼** buttons to choose **■**, then press the **FUNC SET** button again.

2 Choose an option.

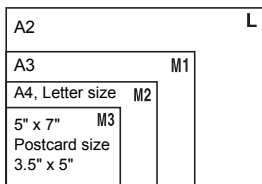
- Press the **▲▼** buttons to choose an option, then press the **FUNC SET** button.
- ▶ The setting you chose will appear on the screen.

Approximate Values for Recording Pixels and Compression Ratio

Recording Pixels	Compression Ratio	Single Image Data Size (Approx. KB)	Number of Recordable Images	
			4 GB	16 GB
L (Large) 14 M/4320 x 3240		3597	1058	4334
		1719	2194	8985
M1 (Medium 1) 9 M/3456 x 2592		2302	1652	6769
		1100	3352	13727
M2 (Medium 2) 5 M/2592 x 1944		1395	2681	10981
		695	5247	21486
M3 (Medium 3) 2 M/1600 x 1200		558	6352	26010
		278	12069	49420
S (Small) 0.3 M/640 x 480		150	20116	82367
		84	30174	123550
W (Widescreen) 4320 x 2432		2700	1403	5746
		1291	2873	11766

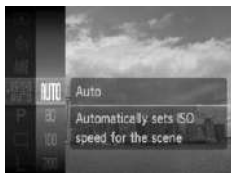
- The values in the table are measured according to Canon standards and may change depending on the subject, memory card and camera settings.

Approximate Values for Paper Size



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

Changing the ISO Speed



1 Choose the ISO speed.

- After pressing the  button, press the   buttons to choose .

2 Choose an option.

- Press the   buttons to choose an option, then press the .
- The setting you chose will appear on the screen.

	Automatically adjusts the ISO speed to the Shooting mode and shooting conditions.	
  	Low	Fine weather conditions, outdoor shooting.
 	↑ ↓	Cloudy, Twilight
	High	Nightsapes, 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 camera shake and letting the flash reach greater distances to the subject. The images, however, will appear coarse.



- When the camera is set to , you can press the shutter button halfway to display the automatically set ISO speed.
- If you set the camera to  (p. 55), ISO speeds will automatically be set higher than in  mode, depending on the scene.

Adjusting the White Balance

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



1 Choose the white balance function.

- After pressing the  button, press the  buttons to choose **AWB**, then press the  button again.

2 Choose an option.

- Press the  buttons to choose an option, then press the  button.
- ▶ The setting you chose will appear on the screen.

 AWB 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.

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 on p. 76, choose .
- Make sure the entire screen is filled with a plain, white colored subject, then press the **DISP.** button.
- ▶ The tint on the screen will change after recording the white balance data.



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

Continuous Shooting

You can shoot continuously at a maximum speed of approximately 0.7 images/second while the shutter button is pressed fully and held.



1 Choose a Drive mode.

- After pressing the  button, press the  buttons to choose , then press the  button again.
- Press the  buttons to choose , then press the  button.

2 Shoot.

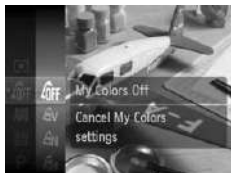
- ▶ As long as you hold the shutter button down, the camera will shoot successive images.

- Cannot be used with the self-timer (pp. 67, 80, 81) or  (pp. 59 – 61).
- Continuous shooting speed increases in  mode (p. 55)
- For continuous shooting, the focus and exposure are locked when the shutter button is pressed halfway.
- For a certain interval, images may not be recorded, and the shooting speed may slow down depending on the shooting conditions and the camera settings.
- 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.



1 Choose My Colors.

- After pressing the button, press the buttons to choose , then press the again.

2 Choose an option.

- Press the buttons to choose an option, then press the .
- The setting you chose will appear on the screen.

My Colors Off	—
Vivid	Emphasizes the contrast and color saturation for a vivid impression.
Neutral	Tones down the contrast and color saturation for neutral hues.
Sepia	Sepia tones.
B/W	Black and white.
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.
Lighter Skin Tone	Makes skin tones lighter.
Darker Skin Tone	Makes skin tones darker.
Vivid Blue	Emphasizes blue tints. Makes the sky, ocean and other blue subjects more vivid.
Vivid Green	Emphasizes green tints. Makes mountains, foliage and other green subjects more vivid.
Vivid Red	Emphasizes red tints. Makes red subjects more vivid.
Custom Color	You can adjust contrast, sharpness, and color saturation etc. to your preference (p. 77).



- The white balance cannot be set in the and modes (p. 76).
- In and 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. 76 to choose Cc , then press the **DISP.** button.
- Press the $\blacktriangle$ $\blacktriangledown$ buttons to choose an option, then press the $\blacktriangleleft$ $\blacktriangleright$ buttons to choose a value.
- The more to the right, the stronger/deeper/darker (skin tone) the effect gets, the more to the left, the weaker/lighter/fairer (skin tone) the effect gets.
- Press the **DISP.** button to accept the setting.

Shooting Using the Two Second Self-Timer

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



Choose 2 .

- After pressing the $\blacktriangledown$ button, press the $\blacktriangle$ $\blacktriangledown$ buttons to choose 2 , then press the **FUNC. SET** button.
- ▶ Once set, 2 will appear on the screen.
- Follow Step 3 on p. 67 to shoot.

Customizing the Self-Timer

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



1 Choose .

- Press the ▼ button, then press the ▲▼ buttons to choose , then press the MENU button.



2 Choose the settings.

- Press the ▲▼ buttons to choose [Delay] or [Shots].
- Press the ◀▶ buttons to choose a value, then press the  button.
- Follow Step 3 on p. 67 to shoot.



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

- Exposure and white balance settings are set with the first shot.
- 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).



- If the flash fires, the shooting interval may be longer.
- If you set a high number of shots, the shooting interval may be longer.
- If the memory card becomes full, shooting stops automatically.

Shooting Using a TV Monitor

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

- Connect the camera to a TV as described 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.



1 Focus.

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



2 Recompose.

- Keep the shutter button pressed halfway and recompose the scene.

3 Shoot.

- Press the shutter button fully.

5

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 the mode switch is set to  and the camera is in **P** mode.
- The sections “Shooting Long Exposures” (p. 94), “Changing the Color and Shooting” (p. 95) and “Shooting Stitch Assist Images” (p. 98) 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. 162 – 165).

Changing the AF Frame Mode

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



Choose [AF Frame].

- Press the **MENU** button, choose the  tab, and then choose the [AF Frame] menu item. Press the **◀▶** buttons to choose an option.

Face AiAF

- Detects people's faces and sets the focus, exposure (evaluative metering only) and white balance (**AWB** 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 on which the camera focuses. If a face is not detected when Servo AF (p. 87) is set to [On], the AF frame will appear in the center of the screen.
- 
 - If a face is not detected and only gray frames (no white frame) appear, up to 9 green frames will appear on the areas the camera focuses on when the shutter button is pressed halfway.
 - 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, choose the  tab, then choose the [AF Frame Size] menu item and [Small] option.
- The setting is configured to [Normal] when the Digital Zoom (p. 64) or Digital Tele-converter (p. 65) is used.



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.



1 Choose [AF-Point Zoom].

- Press the **MENU** button, choose the  tab, and then choose the [AF-Point Zoom] menu item. Press the   buttons to choose [On].



2 Check the focus.

- Press the shutter button halfway.
 - ▶ In [Face AiAF] (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 AiAF] 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. 64), Digital Tele-converter (p. 65), Servo AF (p. 87) 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.



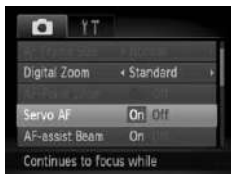
1 Lock the focus.

- 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.

2 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.



1 Choose [Servo AF].

- Press the **MENU** button and choose [Servo AF] from the tab, and press the **◀▶** buttons to choose [On].

2 Focus.

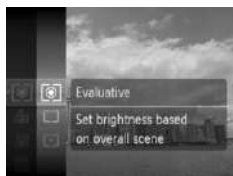
- The focus and exposure will be maintained where the blue AF frame appears while you press the shutter button halfway.



- The camera may not be able to focus in some conditions.
- 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.
- In low light conditions, AF frames may not turn blue even after pressing the shutter button halfway. In this case, focus and exposure are locked.
- The [AF-Point Zoom] option in the tab is not available in Servo AF mode.
- Not available when using Self-Timer (pp. 67, 80, 81).

Changing the Metering Mode

You can change the Metering mode (brightness measuring function) to match the shooting conditions.



1 Choose the Metering mode.

- After pressing the  button, press the  buttons to choose , then press the  button again.

2 Choose an option.

- Press the  buttons to choose an option, then press the  button.
- ▶ The setting will appear on the screen.

 Evaluative	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”



1 Lock the exposure.

- Point the camera toward the subject and press the **▲** 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 the AE will unlock.

2 Compose the scene and shoot.

Shooting with the FE Lock

Just as with the AE lock, you can lock the exposure for shooting with the flash. FE stands for “Flash Exposure”.



1 Choose **⚡** (p. 71).

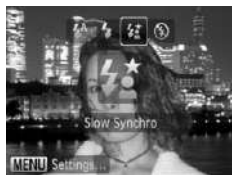
2 Lock the flash exposure.

- Point the camera toward the subject and press the **▲** button while pressing the shutter button halfway.
- ▶ The flash will fire and when **FEL** 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 the FE will unlock.

3 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.



1 Choose

- After pressing the button, press the buttons to choose then press the button again.
- ▶ Once set, will appear on the screen.

2 Shoot.

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



Attach the camera to a tripod to prevent the camera from moving and blurring the image. You should set the [IS Mode] to [Off] when shooting with a tripod (p. 150).

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, choose the  tab, and then choose the [i-Contrast] menu item. Press the **◀▶** buttons to choose [Auto].

- ▶ Once set,  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. 131).

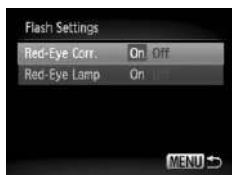
Red-Eye Correction

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



1 Choose [Flash Settings].

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



2 Adjust the setting.

- Press the buttons to choose [Red-Eye Corr.] and 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. 132).
- 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.



1 Choose [Blink Detection].

- Press the **MENU** button, choose the  tab, and then choose the [Blink Detection] menu item. Press the   buttons to choose [On].

2 Shoot.

- ▶ When a person with shut eyes is detected, a frame and  appear.



- In  or  mode, when the number of shots is set to two or more shots, this function is only available for the last image shot.
- Not available in  mode.

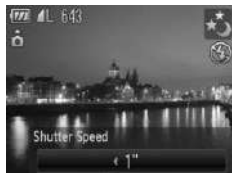
Shooting Long Exposures

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.



1 Choose .

- Follow Steps 1 – 2 on p. 54 to choose .



2 Choose the shutter speed.

- Press the  button.
- Press the   buttons to select the shutter speed, then press the  button.

3 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  and shoot.

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.



Recorded color

1 Choose A .

- Follow Steps 1 – 2 on p. 54 to choose A .

2 Press the DISP. button.

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

3 Specify the color.

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

4 Specify the range of colors.

- Press the $\blacktriangle$ / $\blacktriangledown$ buttons 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 DISP. button accepts the setting and restores the shooting screen.



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.



1 Choose **/s**.

- Follow Steps 1 – 2 on p. 54 to choose **/s**.



2 Press the **DISP.** button.

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



3 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.



4 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.

5 Specify the range of colors to be swapped.

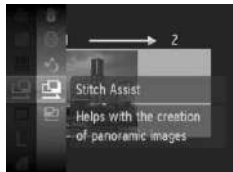
- Press the ▲▼ buttons to change the range of colors to be retained.
- Choose a negative value to limit the range of colors. Choose a positive value to extend the range of colors to similar colors.
- Pressing the **DISP.** button accepts the setting and restores the shooting screen.



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

Shooting 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.



1 Choose or .

- Follow Steps 1 – 2 on p. 54 to choose  or .

2 Take the first shot.

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



3 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.

4 Finish shooting.

- Press the  button.



5 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).

6

Using Various Functions for Shooting Movies

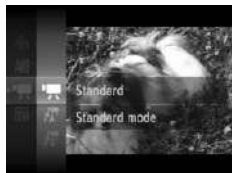
This chapter provides more advanced information than the “Shooting Movies” and “Viewing Movies” sections of Chapter 1.



- This chapter assumes that the mode switch is set to .
- Press the  button to enter Playback mode before playing back or editing movies.

Changing the Movie Mode

You can choose between three Movie modes.



1 Set the mode switch to .

2 Choose a Movie mode.

- After pressing the  button, press the   buttons to choose , then press the  button again.
- Press the   buttons to choose a mode, then press the .

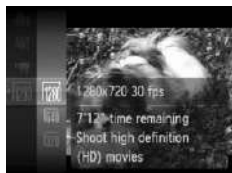
 Standard	Normal mode.
 Color Accent	These Shooting modes let you change all colors except the chosen color to black and white, or exchange the chosen color for another color, when shooting. See “Changing the Color and Shooting” (p. 95) for details.
 Color Swap	



Under some conditions, colors may not turn out as expected in  and  modes.

Changing the Image Quality

You can choose between three image quality settings.



1 Choose the image quality setting.

- After pressing the **FUNC SET** button, press the **▲▼** buttons to choose **1280**, then press the **FUNC SET** button again.

2 Choose an option.

- Press the **▲▼** buttons to choose an option, and press the **FUNC SET** button.
 - ▶ The setting will appear on the screen.

Image Quality Table

Image Quality (Recording Pixels/Frame Rate)	Content
1280 1280 x 720 pixels, 30 frames/sec.	For shooting high-definition movies.
640 640 x 480 pixels, 30 frames/sec.	For shooting standard quality movies.
320 320 x 240 pixels, 30 frames/sec.	Since the number of recording pixels is smaller, the image quality will appear coarse when compared with 640 , but you can record three times the length.

Estimated Shooting Time

Image Quality	Shooting Time	
	4 GB	16 GB
1280	21 min. 23 sec.	1 hr. 27 min. 37 sec.
640	46 min. 46 sec.	3 hrs. 11 min. 32 sec.
320	2 hrs. 23 min. 41 sec.	9 hrs. 48 min. 19 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 **1280**, and approximately 1 hour when shooting in **640** or **320**.
- Recording may stop even if the maximum clip length has not been reached on some memory cards. SD Speed Class 4 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.



1 Focus.

- Press the shutter button halfway to focus.



2 Lock the exposure.

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

3 Change the exposure.

- While watching the screen, press the $\blacktriangleleft$ buttons to adjust the brightness.

4 Shoot.

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  or .

- **Zooming in Closely on Subjects (Digital Zoom) (p. 64)**

You can use the digital zoom while shooting, but the optical zoom cannot be used.

If you want to shoot at the maximum zoom factor, you should adjust the optical zoom to the maximum before shooting.

The sound of the zoom will be recorded.

- **Using the Self-Timer (p. 67)***
- **Shooting Close-ups (Macro) (p. 72)***
- **Shooting Far Away Subjects (Infinity) (p. 72)***
- **Adjusting the White Balance (p. 76)**
- **Changing the Tone of an Image (My Colors) (p. 79)**
- **Shooting Using the Two Second Self-Timer (p. 80)***
- **Shooting Using a TV Monitor (p. 82)***
- **Shooting with the AF Lock (p. 86)**
- **Turning off the AF Assist Beam (p. 148)***
- **Displaying the Overlay (p. 150)***
[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. 111)
- Changing Image Transitions (p. 114)
- Viewing Images on a TV (p. 115)
- Viewing Images on a High-Definition TV (p. 116)
- Protecting Images (p. 118)
- Erasing All Images (p. 121)
- Organizing Images by Category (My Category) (p. 123)
- Rotating Images (p. 127)

Summary of Movie Control Panel in “Viewing Movies” (p. 32)

	Exit
	Playback
	Slow Motion Playback (you can use the ◀▶ buttons to adjust the speed. Sound will not play back.)
	Display the first frame
	Previous frame (Rewind if you hold down the  button.)
	Next frame (Fast forward if you hold down the  button.)
	Display the last frame
	Edit (p. 105)
	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 in one-second increments.



Movie Editing Panel



Movie Editing Bar

1 Choose .

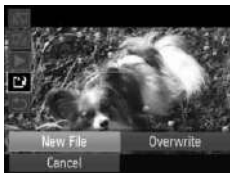
- In Step 3 on p. 32, choose  from the displayed movie control panel, then press the  button.
- ▶ The movie editing panel and the movie editing bar will appear.

2 Set the editing range.

- Press the   buttons and choose  or .
- Press the   buttons to move .  will display at each one-second interval. 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  to a point other than a  point, only the portion from the nearest  to the left will be trimmed when  is chosen. Only the portion from the nearest  to the right will be trimmed when  is chosen.
- ▶ The section indicated with  will be the section of the movie that remains after editing.

3 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 ↶. After pressing the  button, press the ◀▶ buttons to choose [OK], and press the  button again.



4 Save the edited movie.

- Press the ▲▼ buttons to choose [↶], then press the  button.
- Press the ▲▼◀▶ buttons 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 the separately sold AC adapter kit (p. 154).



7

Using Various Playback and Editing Functions

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

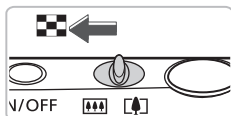
- Press the  button to enter Playback mode before operating the camera.
- It may not be possible to play back or edit images that have been edited on a computer, had their file name changed, or have been taken on a different camera.
- The edit function (pp. 128 – 132) cannot be used if the memory card does not have free space available.



Quickly Searching Images

Searching Images Using Index Display

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



1 Move the zoom lever toward .

- ▶ Images will display in an index.
- Move the zoom lever toward  to increase the number of images. The number of images increases each time you move the lever.
- Move the zoom lever toward  to reduce the number of images. The number of images will reduce each time you move the lever.



2 Choose an image.

- 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 from a large number of images

By repeatedly moving the zoom lever toward , you can display an index of up to 100 images. If you move the zoom lever toward  again, an orange frame appears around all of the images and you can quickly search by pressing the   buttons to switch between sets of 100 images.

Searching Images by Scrolling

Pressing the ◀▶ buttons for more than one second will display images in a line letting you quickly search them. You can also jump by the shooting date (Scroll Display).



Choose an image.

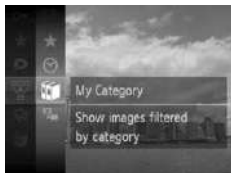
- If you set single image playback and press the ◀▶ buttons for more than one second, the screen shown on the left will appear.
- Pressing the  button restores single image playback.
- If you press the ▲▼ buttons during scroll display, you can search images by the shooting date.



To turn off this effect, press the **MENU** button, then choose [Scroll Display] in the  tab and 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. 118) or delete (p. 121) all filtered images at once.



1 Choose .

- Press the  button to choose , in the FUNC. menu, then press the  button again.

2 Choose a filter.

- Press the ▲▼ buttons to choose a filter, then press the  button.



3 View the filtered images.

- Press the ▲▼ buttons 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, 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. 125)
📅 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 contain any images cannot be chosen.



Filtered Playback

You can filter images during a slideshow (p. 111) so that only certain images will play back. You can also use the following functions in filtered playback for processing all the filtered images at once.

- “Protecting Images” (p. 118), “Erasing All Images” (p. 121), “Choosing Images for Printing (DPOF)” (p. 138)

Viewing Slideshows

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



1 Choose .

- Press the  button to choose , in the FUNC. menu, then press the  button again.

2 Choose a transition effect.

- Press the   buttons to choose an effect and press the .
- ▶ The slideshow will start a few seconds after [Loading image...] displays.
- In filtered playback (p. 109), only images matching a filter play back.
- You can pause/restart a slideshow by pressing the .
- Press the **MENU** button to stop the slideshow.



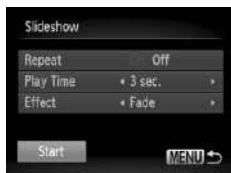
- If you press the   buttons during playback, the image will switch. If you keep the   buttons pressed, you can fast-forward through images.
- The power saving function does not work during slideshows (p. 52).

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.

1 Choose [Slideshow].

- Press the **MENU** button to choose [Slideshow] in the  tab, then press the  button.



2 Make the setting.

- Press the   buttons 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.



1 Press the DISP. button, and switch to the focus check display (p. 44).

- ▶ 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.



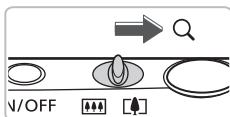
2 Switch frames.

- 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.

3 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 .

- The display will zoom in on the image and **SET**  will appear. If you continue to hold the zoom lever, it will continue to 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.
- When **SET**  appears on the screen, press the **FUNC SET**  button to switch to **SET** . Press the   buttons to switch between images in the zoomed state. Press the **FUNC SET**  button again to return to **SET** .

Changing Image Transitions

You can choose from three transition effects when switching between images in Single Image Playback.



Choose [Transition].

- Press the **MENU** button and choose the  tab, then choose [Transition] and press the   buttons to choose a transition effect.

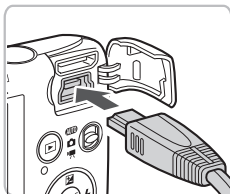
Viewing Images on a TV

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

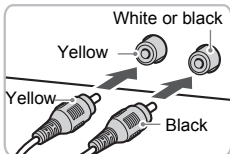
1 Turn off the camera and TV.

2 Connect the camera to the TV.

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



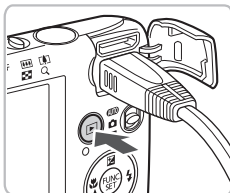
- Insert the cable plug fully into the video input terminals as shown in the illustration.



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

4 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 properly display on the TV?

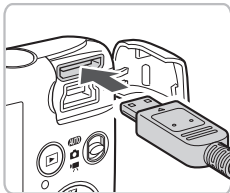
Images will not display correctly if the camera's video output setting (NTSC/PAL) does not match the TV system. Press the **MENU** button, choose the  tab and [Video System] to switch to the correct video system.

Viewing Images on a High-Definition TV

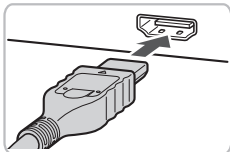
Use the separately sold HDMI Cable HTC-100 to connect the camera to a high-definition TV for an enhanced viewing experience.

1 Turn off the camera and TV.

2 Connect the camera to the TV.



- Open the cover and fully insert the cable plug into the camera's HDMI terminal.
- Fully insert the cable plug into the TV's HDMI terminal.
- Follow Steps 3 and 4 on p. 115 to display the images.



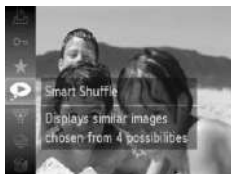
The supplied AV and interface cables and the separately sold HDMI Cable HTC-100 cannot be plugged into the camera simultaneously. This could cause the camera to malfunction.



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

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.



1 Choose .

- Press the  button to choose , in the FUNC. menu, then press the  button again.
- ▶ Four images will appear as candidates.



2 Choose the 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 candidates will appear.
- Pressing the  button will display the middle image at full size. Press the  button again to restore the original display.
- Press the **MENU** button to return to single image playback.



- Only still images shot with this camera will play back in Smart Shuffle.
- Smart Shuffle is 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 other than candidates selected by the camera.
 - During filtered playback.

Protecting Images

You can protect important images so that they cannot be accidentally erased with the camera (pp. 29, 121).



1 Choose .

- Press the  button to choose , in the FUNC. menu, then press the  button again.
- ▶ Once protected,  will appear.
- To unlock an image, choose  in the FUNC. menu again, and press the  button.



If you format the memory card (pp. 22, 51), protected images will also be erased.



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

Using the Menu



1 Choose [Protect].

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

2 Choose a selection method.

- Press the   buttons to choose a selection method, and press the  button.
- Pressing the **MENU** button will restore the menu screen.

Choosing Images Individually



1 Choose [Select].

- Follow Step 2 on p. 118 to choose [Select] and press the **FUNC SET** button.
- Press the **◀▶** buttons to choose the image and press the **FUNC SET** button.
- ▶ Once set, **On** will appear on the screen.
- Pressing the **FUNC SET** button again deselects the image, and **On** will disappear.
- To choose multiple images, repeat the above operation.



2 Press the MENU button.

3 Protect.

- Press the **◀▶** buttons to choose [OK], then press the **FUNC SET** button.

Select Range



1 Choose [Select Range].

- Follow Step 2 on p. 118 to choose [Select Range] and press the **FUNC SET** button.

2 Choose the starting image.

- Press the **FUNC SET** button.



- Press the ◀▶ buttons to choose an image, and press the  button.



3 Choose the ending image.

- Press the ▶ button to choose [Last image] and press the  button.
- Press the ◀▶ buttons to choose an image, and press the  button.
- You cannot choose images before the first image.



4 Protect images.

- Press the ▼ button to choose [Protect] and press the  button.

Choose All Images



1 Choose [All Images].

- Follow Step 2 on p. 118 to choose [All Images] and press the  button.

2 Protect images.

- Press the ▲▼ buttons to choose [Protect] and 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 All Images

You can erase all images at once. Since erased images cannot be recovered, exercise adequate caution before erasing. Protected images (p. 118) cannot be erased.



1 Choose [Erase].

- Press the **MENU** button to choose [Erase] in the tab, then press the button.



2 Choose a selection method.

- Press the buttons to choose a selection method, and press the button.
- Pressing the **MENU** button will restore the menu screen.

Choosing Images Individually



1 Choose [Select].

- Follow Step 2 above to choose [Select] and press the button.
- Press the buttons to choose an image, and press the button.
- ▶ Once set, will appear on the screen.
- Pressing the button again deselects the image, and will disappear.
- To choose multiple images, repeat the above operation.



2 Press the MENU button.

3 Erase.

- Press the ◀▶ buttons to choose [OK] and press the  button.

Select Range

1 Choose [Select Range].

- Follow Step 2 on p. 121 to choose [Select Range] and press the  button.
- Follow Steps 2 and 3 on p. 119 – 120 to choose images.



2 Erase.

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

Choose All Images



1 Choose [All Images].

- Follow Step 2 on p. 121 to choose [All Images] and press the  button.

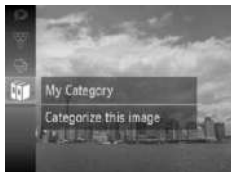
2 Erase.

- Press the ◀▶ buttons to choose [OK] and press the  button.

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. 111), “Protecting Images” (p. 118), “Erasing All Images” (p. 121), “Choosing Images for Printing (DPOF)” (p. 138)



1 Choose .

- Press the  button to choose  in the FUNC. menu, then press the  button again.



2 Choose a category.

- Press the   buttons to choose a category, then press the .
- Once set,  will appear on the screen.



3 Make the setting.

- Pressing the **MENU** button will display [Accept changes?].
- Press the   buttons to choose [OK], then press the .



If you switch Shooting modes or turn off the power before performing the operations in Step 3, the images will not be assigned to a category.

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



-  : Images with detected faces, or images shot in ,  or .
-  : Images detected as ,  or  in **AUTO** mode, or images shot in .
-  : Images shot in , ,  or .

Using the Menu

1 Choose [My Category].

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



2 Choose a selection method.

- Press the   buttons to choose a selection method and press the .
- Pressing the **MENU** button will restore the menu screen.

Choosing Images Individually



1 Choose [Select].

- Follow Step 2 above to choose [Select] and press the .
- Press the   buttons to choose images.
- Press the   buttons, choose a category and press the .
- ▶ Once set,  will appear on the screen.
- Pressing the  button again deselects the category and  disappears.
- To choose multiple images, repeat the above operation.

2 Press the MENU button.

3 Make the setting.

- Press the   buttons to choose [OK], then press the .



Select Range



1 Choose [Select Range].

- Follow Step 2 on p. 124 to choose [Select Range] and press the  button.
- Follow Steps 2 and 3 on p. 119 – 120 to choose images.
- Press the  button, choose the item and press the  buttons to choose a category.

2 Complete the settings.

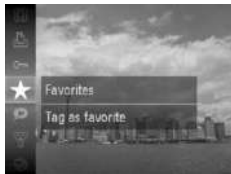
- Press the  button to choose [Select] and press the  button.



If you choose [Deselect] in Step 2, you can deselect all of the images in the [Select Range] category.

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).



Choose ★.

- Press the  button to choose ★ in the FUNC. menu, then press the  button again.
- ▶ Once set,  will appear on the screen.
- To untag the image, choose ★ in the FUNC. menu again, then press the  button.



If you use Windows 7 or Windows Vista and transfer tagged images to the computer, they will be given a star rating of 3 (★ ★ ★ ☆ ☆) (except for Movie).

Using the Menu



1 Choose [Favorites].

- Press the **MENU** button to choose [Favorites] in the tab, then press the button.



2 Choose images.

- Press the buttons to choose an image and press the button.
- ▶ Once set, will appear on the screen.
- Pressing the button again deselects the image, and disappears.
- To choose multiple images, repeat the above operation.

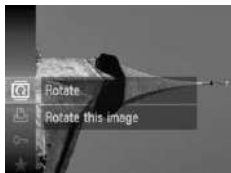


3 Make the setting.

- Pressing the **MENU** button will display [Accept changes?].
- Press the buttons to choose [OK], then press the button.

Rotating Images

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



1 Choose .

- Press the  button to choose  in the FUNC. menu, then press the  button again.



2 Rotate the image.

- Press the  buttons to rotate the image 90° in the chosen direction.
- Press the  button to make the setting.

Using the Menu



1 Choose [Rotate].

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



2 Rotate the image.

- Press the  buttons to choose an image.
- ▶ The image will rotate 90° with each press of the  button.
- Pressing the **MENU** button will restore the menu screen.



Movies with a resolution of  cannot be rotated.

Resizing Images

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



1 Choose [Resize].

- Press the **MENU** button to choose [Resize] in the tab, then press the button.

2 Choose an image.

- Press the buttons to choose the image and press the button.

3 Choose an image size.

- Press the buttons to choose an option, then press the button.
 - ▶ The [Save new image?] screen will appear.



4 Save the new image.

- Press the buttons to choose [OK] and press the button.
 - ▶ The image will be saved as a new file.



5 Display the new image.

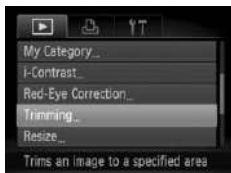
- When you press the **MENU** button, the [Display new image?] screen will appear.
- Press the buttons to choose [Yes], and press the button.
 - ▶ The saved image will be displayed.



- You cannot resize an image to a larger size.
- Images with a recording pixel setting of (p. 74), or a set as **XS** 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



1 Choose [Trimming].

- Press the **MENU** button to choose [Trimming] in the tab, then press the button.

2 Choose an image.

- Press the buttons to choose the image and press the .

3 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 **DISP.** 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 pressing the .
- Press the **MENU** button.

4 Save as a new image and display.

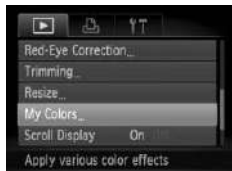
- Follow Steps 4 and 5 on p. 128.



- Images recorded at a pixel setting of **W** or **S** (p. 74), or images resized as **XS** (p. 128) cannot be edited.
- The width and height ratio of an image that can be changed is fixed at 4:3 (for a vertical image 3:4).
- 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.



1 Choose [My Colors].

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

2 Choose an image.

- Press the buttons to choose the image and press the button.

3 Choose a menu option.

- Press the buttons to choose an option.
- ▶ The image will be displayed with the chosen effect.



4 Save as a new image and display.

- Follow Steps 4 and 5 on p. 128.



- If you repeatedly change the color of an image, the quality will gradually deteriorate and you may not achieve the expected color.
- The tone 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 4 levels of correction: [Auto], [Low], [Medium] or [High]. Corrected images will be saved as a new file.



1 Choose [i-Contrast].

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

2 Choose an image.

- Press the buttons to choose the image and press the .



3 Choose a menu item.

- Press the buttons to choose an option, then press the .

4 Save as a new image and display.

- Follow Steps 4 and 5 on p. 128.

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.



- Under some conditions, the image may appear coarse or the correction setting may not be suitable.
- Repeatedly adjusting the same image may cause the quality to deteriorate.

Correcting the Red-Eye Effect

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



1 Choose [Red-Eye Correction].

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

2 Choose an image.

- Press the buttons to choose an image.

3 Correct the image.

- Press the 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. 114).



4 Save as a new image and display.

- Press the buttons to choose [New File], and press the button.
 - ▶ The image will be saved as a new file.
- Follow Step 5 on p. 128.



- Some images may not be properly corrected.
- 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.

8

Printing

This chapter explains how to choose images for printing, and print using a PictBridge compliant printer (sold separately, p. 40). Please also refer to the *Personal Printing Guide*.

Canon-Brand PictBridge Compliant Printers



SELPHY series



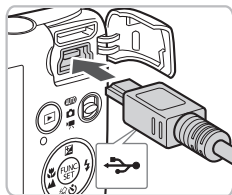
PIXMA series

Printing Images

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

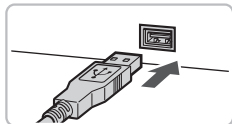


1 Turn off the camera and printer.

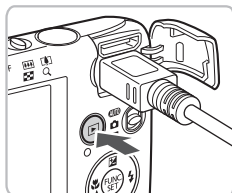


2 Connect the camera to the printer.

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



3 Turn on the printer.



4 Turn on the camera.

- Press the  button to turn on the camera.



5 Choose an image to print.

- Press the   buttons to choose an image.



6 Print images.

- Press the  button to choose  in the FUNC. menu, then press the  button again.
- ▶ The Print Settings screen will appear.
- Press the ▲▼ buttons to choose [Print] and press the  button.
- ▶ Printing will start.
- If you want to print additional images, repeat Steps 5 and 6 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 is not available with the CP710/CP510/CP500/CP400/CP330/CP300/CP220/CP200 printers.

Printing from the Print List (DPOF)

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

You can print from a print list simply by connecting your camera and printer. These selection methods comply with the DPOF (Digital Print Order Format) standards.

Easily Add Images to the Print List

1 Choose an image.

- Press the ◀▶ buttons to choose the image.

2 Choose (videos will be excluded).

- After pressing the  button, press the ▲▼ buttons to choose , then press the  button again.

3 Print list.

- Press the ▲▼ buttons to choose the number of prints, then press the ◀▶ buttons to choose [Add] and press the  button.
- To cancel adding images, choose the added images and press the  button. Choose  from the FUNC. menu, then press the  button, and press the ◀▶ buttons to choose [Remove] then press the  button again.



Print Added Images

The following examples use the Canon SELPHY series printers.

Number of copies to print



1 Connect the camera to the printer.

- Follow Steps 1 – 4 on p. 134.

2 Print.

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

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 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.



1 Choose [Print Settings].

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

2 Adjust the settings.

- Press the buttons 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 output.
- may 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.



- 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 **⏏** tab (p. 20).

Choosing the Number of Copies



1 Choose [Select Images & Qty.].

- Press the **MENU** button to choose [Select Images & Qty.] in the **⏏** tab, then press the **FUNC SET** button.

2 Choose an image.

- Press the **◀▶** buttons to choose an image, then press the **FUNC SET** button.
- ▶ You will be able to set the number of print copies.
- If you choose [Index], **✓** appears on the screen. Pressing the **FUNC SET** button again will deselect the image and **✓** will disappear.



3 Set the number of prints.

- Press the **▲▼** buttons 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 print copies for index prints. You can only choose which images to print.
- Pressing the **MENU** button accepts the settings and restores the menu screen.

Choose Range



1 Choose [Select Range].

- In Step 1 on p. 139, choose [Select Range] and then press the **FUNC SET** button.
- Choose images according to Steps 2 and 3 on p. 119 – 120.

2 Make print settings.

- Press the **▲▼** buttons, choose [Order] and press the **FUNC SET** button.

Set All Images to Print Once



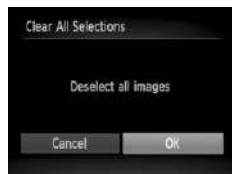
1 Choose [Select All Images].

- In Step 1 on p. 139, choose [Select All Images] and then press the **FUNC SET** button.

2 Make print settings.

- Press the **◀▶** buttons to choose [OK] and press the **FUNC SET** button.

Clearing All Selections



1 Choose [Clear All Selections].

- In Step 1 on p. 139, choose [Clear All Selections] and then press the **FUNC SET** button.

2 All selections will be cleared.

- Press the **◀▶** buttons to choose [OK], then press the **FUNC SET** button.

9

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 **FUNC SET** button.
- Press the **▲▼** buttons to choose an option.
- Press the **◀▶** buttons to choose an option.

1	Preset sounds. (cannot be modified)
2	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 image that appears on the screen when you turn on the camera.

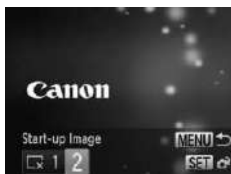


- Choose [Start-up Image], then press the  button.
- Press the   buttons to choose an option.

 x	No start-up image.
1	Preset images. (cannot be modified)
2	Preset images. You can set recorded images, and use the included software to change the images.

Setting a Recorded Image as the Start-up Screen Image

When you press the  button and set the camera to Playback mode, you can register sounds and images.



- Choose [Start-up Image], then press the  button.
- Press the   buttons to choose [2], then press the  button.



- Press the   buttons to choose an image, then press the  button.
- Press the   buttons to choose [OK], then press the  button to complete registration.



Using the included software to register sounds and the start-up screen image

You can register sounds and start-up screen images that come with the included software to the camera. Refer to the *Software Guide* for details.



Any previously registered start-up image will be overwritten when registering a new start-up image.

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

Even if you shoot using a new 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.



- If you use a memory card already containing images, the newly assigned file numbers may continue the existing numbering for both the [Continuous] and [Auto Reset] settings. If you want to start over with file number 0001, format the memory card before use (pp. 22, 51).
- Refer to the *Software Guide* for information regarding folder structure or image types.

Creating Folders by Shooting Date

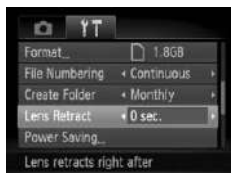
Images are saved into folders created each month, however, you can also create folders by shooting date.



- Choose [Create Folder] and 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. 52) to [Off]. Setting it to [On] is recommended to save battery power.



- Choose [Power Saving], then press the  button.
- Press the ▲▼ buttons to choose [Auto Power Down], then use 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

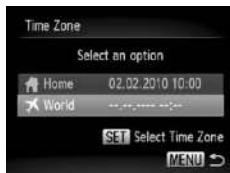
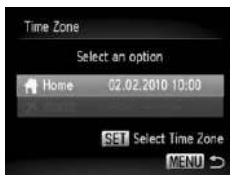
You can adjust the time the screen takes to shut off automatically (p. 52). This also works when [Auto Power Down] is set to [Off].



- Choose [Power Saving], then press the  button.
- Press the ▲▼ buttons to choose [Display Off], then use 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.



1 Set the home time zone.

- Choose [Time Zone] and press the button.
- When setting this for the first time, check the information that displays on the screen at the left, and press the button.
- Press the buttons to choose the home time zone, then press the button. To set daylight saving time (adds 1 hour), press the buttons to choose .

2 Set the world time zone.

- Press the buttons to choose [World], then press the .
- Press the buttons to choose the destination time zone, then press the .
- You can also set the daylight saving time as in Step 1.

3 Choose the world time zone.

- Press the buttons to choose [World], then press the **MENU** button.
- ▶ will appear in the [Time Zone] or shooting screen (p. 160).



If you change the date or time in the setting (p. 19), 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. 162 – 165).

Turning off the AF Assist Beam

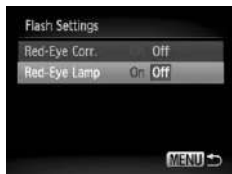
The lamp will automatically light to assist focusing in low light conditions when you press the shutter button halfway. You can turn off the lamp.



- 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.



- Choose [Flash Settings], then press the  button.
- Press the   buttons 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 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	No image displays

Changing the Way the Image Displays Right After Shooting

You can change the way the image displays after shooting.



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

Off	Displays the image only.
Detailed	Displays detailed information (p. 44).
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. 113).

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.



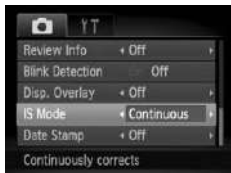
- Choose [Disp. Overlay], then press the **◀▶** buttons to choose an option.

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



- In **W** mode, 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 result directly on the display, which makes it easier to check the composition or focus.
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.

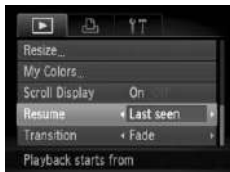


- If camera shake is too strong, attach the camera to a tripod. You should set the IS Mode to [Off] when the camera is attached to a tripod.
- When using [Panning], hold the camera horizontally to shoot. Image stabilization does not work when the camera is held vertically.

Changing Playback Function Settings

You can adjust the settings in the  tab by pressing the  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.



10

Useful Information

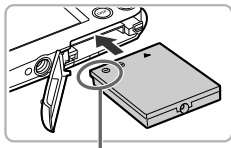
This chapter introduces how to use the AC adapter kit (sold separately), troubleshooting tips, and contains lists of functions and items that appear on the screen. The index also appears at the end.

Using Household Power

If you use AC Adapter Kit ACK-DC60 (sold separately), you can use the camera without worrying about how much charge is left in the battery.

////////////////////////////////////

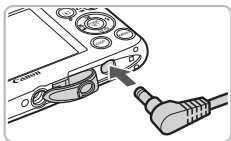
1 Turn off the camera.



Terminals

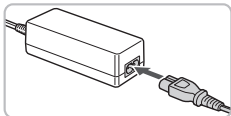
2 Insert the coupler.

- Open the cover (p. 16) and insert the coupler as shown until it locks into place with a click.
- Close the cover (p. 17).



3 Plug the cord into the coupler.

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



4 Connect the power cord.

- Connect the power cord to the compact power adapter, then plug the other end into a power outlet.
- You can 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.



AC Adapter Kit ACK-DC10 can also be used.

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 not depleted (p. 15).
- Confirm that the battery is properly inserted (p. 17).
- Confirm that the memory card/battery cover is securely closed (p. 17).
- 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 (p. 17).

TV output

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

Shooting

Cannot shoot.

- When in Playback mode (p. 28), press the shutter button halfway (p. 23).

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 lighting, the screen may flicker.
- When shooting bright light sources, a bar of light (purplish red) may appear on the screen.

⚡ 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 was pressed halfway (pp. 27, 63)

- Set the [IS mode] to [Continuous] (p. 150).
- Set the flash to ⚡ (p. 71).
- Increase the ISO speed (p. 75).
- Attach the camera to a tripod.

Image is blurred.

- Press the shutter button halfway to focus on the subject, then press fully to shoot (p. 23).
- Shoot the subject within the focusing distance (p. 169).
- Set the [AF-assist Beam] to [On] (p. 148).
- 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 frame will appear and the camera will focus.

Subject is too dark.

- Set the flash to  (p. 71).
- Adjust the brightness with exposure compensation (p. 71).
- Adjust the image with i-Contrast (pp. 91, 131)
- Use the AE lock, or spot metering to shoot (pp. 89, 88).

Subject is too bright (overexposed).

- Set the flash to  (p. 63).
- Adjust the brightness with exposure compensation (p. 71).
- Use the AE lock, or spot metering to shoot (pp. 89, 88).
- Reduce the light illuminating the subject.

Image is dark even though the flash fired (p. 27).

- Increase the ISO speed (p. 75).
- Shoot within an appropriate distance for flash photography (p. 71).

Image taken using the flash is too bright (overexposed).

- Shoot within an appropriate distance for flash photography (p. 71).
- Set the flash to  (p. 63).

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. 75).
- Depending on the Shooting mode, when shooting in a high ISO speed the image may appear rough or grainy (p. 75).

Eyes appear red (p. 92).

- Set the [Red-Eye Lamp] to [On] (p. 148). When shooting with the flash, the lamp (on the front of the camera) (p. 42) lights, 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. 51)

When you can't make settings for shooting functions or FUNC. menu.

- The items in which settings can be made differ depending on the shooting mode (pp. 162 – 165).

What if I cannot use the mode switch or buttons?

- When you turn on the camera, if you press the power button while holding down other buttons, you may not be able to use the mode switch or some buttons due to a special mode for the Waterproof Case (sold separately).

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. 31, 101).

❗ 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. 51).
- Change the image quality setting (p. 101).
- Use a memory card capable of recording at high speeds (p. 101).

Zoom does not operate.

- You can use the digital zoom while recording, but not the optical zoom (p. 103).

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 been formatted on this camera (pp. 22, 51).
- If you copy a movie to a memory card that reads slowly, playback may interrupt momentarily.
- Depending on its capabilities, when playing movies, the computer may drop frames 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 the computer via cable by reducing the transfer speed.

- Press and hold down the **MENU** button, then press and hold the  and  buttons simultaneously. Choose [B] when it appears on the screen, then press the  button.

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. 17).

Memory card locked

- The SD memory card, SDHC memory card or SDXC memory card's write protect tab is set to "LOCK". Unlock the write protect tab (p. 17).

Cannot record!

- You attempted to shoot an image without the a memory card, or with a memory card installed incorrectly. Install the memory card in the correct direction to shoot (p. 17).

Memory card error (p. 51)

- If the same message appears even when a formatted memory card is installed in the correct direction, contact your Canon Customer Support Help Desk (p. 17).

Insufficient space on card

- There is not enough free space on the memory card to shoot (pp. 24, 53, 69, 83) or edit images (pp. 128 – 132). Erase the images (pp. 29, 107) to open space for new images, or insert an empty memory card (p. 18).

Change the battery pack. (p. 17)

No Image.

- There are no images recorded on the memory card that can be displayed.

Protected! (p. 118)

Unidentified Image/Incompatible JPEG/Image too large./Cannot play back/AVI

- 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 rotate/Cannot modify image/Cannot register this image!/Cannot modify/Cannot assign to category

- Incompatible images cannot be magnified (p. 114), Tagging Images as Favorites (p. 125), rotated (p. 127), edited (pp. 128 – 132), registered to the start-up screen (p. 143), categorized (p. 123), or added to a print list (pp. 134, 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, rotated, edited, registered to the start-up screen, categorized, or added to a print list.
- Movies cannot be magnified (p. 114), edited (pp. 128 – 132), added to a print list (pp. 136, 138), or registered to the start-up screen (p. 143).

Invalid selection range

- When choosing the selection range (pp. 119, 122, 125), 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. 139).
- Print settings could not be saved correctly. Reduce the number of selected images and try again (p. 139).
- You chose 501 or more images in Protect (p. 118), Erase (p. 121), My Category (p. 123) and Favorites (p. 125).

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 **Y↑** menu, change [File Numbering] to [Auto Reset] (p. 144) or format the memory card (pp. 22, 51).

Lens Error

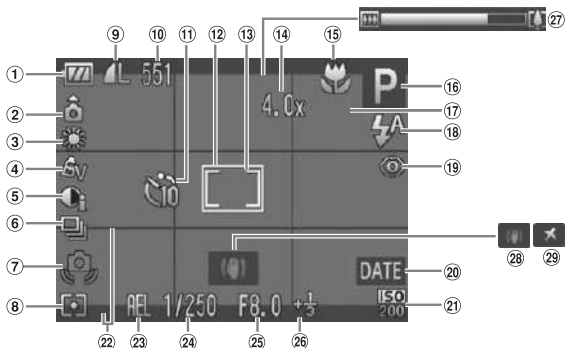
- This error can occur if you hold the lens while it is in motion or when using it in a location with excessive dust or sand in the air.
- If this error message continues to appear, contact a Canon Customer Support Help Desk as there may be a problem with the lens.

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 your Canon Customer Support Help Desk as there may be a problem with the camera.

Information Displayed on the Screen

Shooting (Information Display)

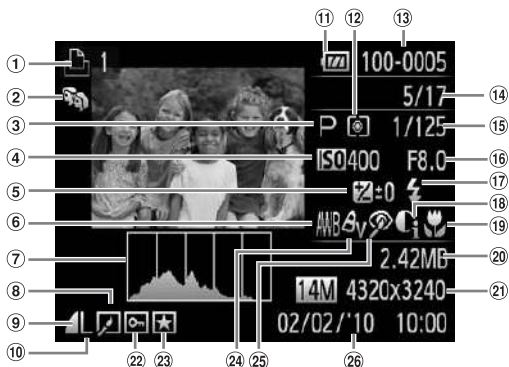


- ① Battery Charge Indicator (p. 15)
- ② Camera Orientation* (p. 15)
- ③ White Balance (p. 76)
- ④ My Colors (p. 79)
- ⑤ i-Contrast (p. 91)
- ⑥ Drive Mode (p. 78)
- ⑦ Camera Shake Warning (p. 155)
- ⑧ Metering Modes (p. 88)
- ⑨ Compression (Image Quality) (pp. 73, 101)
- ⑩ Still Images: Recordable Shots (pp. 18, 74)
- ⑪ Movies: Remaining Time/Elapsed Time (pp. 31, 101)
- ⑫ Self-Timer (pp. 67, 80, 81)
- ⑬ AF Frame (pp. 25, 84)
- ⑭ Spot AE Point Frame (p. 88)
- ⑮ Digital Zoom Magnification (p. 64) / Digital Tele-converter (p. 65)
- ⑯ Focus Range (p. 72), AF Lock (p. 86)
- ⑰ Shooting Mode (p. 42)
- ⑱ Blink Detection (p. 93)
- ⑲ Flash Mode (pp. 63, 71, 90)
- ⑳ Red-Eye Correction (p. 92)
- ㉑ Date Stamp (p. 66)
- ㉒ ISO Speed (p. 75)
- ㉓ Disp. Overlay (p. 150)
- ㉔ AE Lock (p. 89), FE Lock (p. 89)/ Exposure Shift (p. 102)
- ㉕ Shutter Speed
- ㉖ Aperture Value
- ㉗ Exposure Compensation (p. 71)
- ㉘ Zoom Bar (p. 24)
- ㉙ Image Stabilizer (p. 150)
- ㉚ Time Zone (p. 146)

* : 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.

Playback (Detailed Information Display)



- | | | |
|---|---|--|
| ① Print List (p. 136) | ⑩ Recording Pixels (p. 73) | ⑲ Focus Range (p. 72) |
| ② My Category (p. 123) | ⑪ Battery Charge Indicator (p. 15) | ⑳ File Size (p. 74) |
| ③ Shooting Mode (p. 42) | ⑫ Metering Modes (p. 88) | ㉑ Still Images: Recording Pixels (p. 74) |
| ④ ISO Speed (p. 75) | ⑬ Folder Number – File Number (p. 144) | ㉒ Movies: Movie Length (p. 101) |
| ⑤ Exposure Compensation (p. 71), Exposure Shift Amount (p. 102) | ⑭ Displayed image number / Total number of images | ㉓ Protect (p. 118) |
| ⑥ White Balance (p. 76) | ⑮ Shutter Speed | ㉔ Favorites (p. 125) |
| ⑦ Histogram (p. 45) | ⑯ Aperture Value, Image Quality (Movies) (p. 101) | ㉕ My Colors (pp. 79, 123) |
| ⑧ Image Editing (pp. 128 – 132) | ⑰ Flash (pp. 71, 90) | ㉖ Red-Eye Correction (pp. 92, 132) |
| ⑨ Compression (Image Quality) (p. 73), MOV (Movies) (p. 101) | ⑱ i-Contrast (pp. 91, 131) | ㉗ Shooting Date and Time (p. 19) |

Functions Available in Each Shooting Mode

Shooting modes						
Function		AUTO	P			
Exposure Compensation (p. 71)		—	○	○	○	○
AE Lock (pp. 89, 102)/FE Lock (p. 89)		—	○	—	—	—
Focus Range (p. 72)		—	○	—	—	—
		○	○	○	○	○
		—	○	—	—	—
AF Lock (p. 86)		—	○	—	—	—
Flash (pp. 63, 71, 90)	 ^A	○	○	○	○	○
		—	○	○	○	○
	 *	*3	○	—	*4	—
		○	○	○	○	○
Self-Timer (pp. 67, 80, 81)	 OFF	○	○	○	○	○
	 10  2	○	○	○	○	○
	 *2	○	○	○	○	○
TV Display (p. 82)		○	○	○	○	○

Func. Menu						
Light Metering (p. 88)		○	○	○	○	○
	[] 	—	○	—	—	—
My Colors (p. 79)	 OFF	○	○	○	○	○
	         *5	—	○	—	—	—
White Balance (p. 76)	AWB	○	○	○	○	○
	      	—	○	—	—	—
ISO Speed (p. 75)	ISO AUTO	○	○	○	○	○
	ISO 80 ISO 100 ISO 200 ISO 400 ISO 800 ISO 1600	—	○	—	—	—
Drive Mode (p. 78)		○	○	○	○	○
		—	○	○	○	○
Recording Pixels (pp. 73, 101)	L M1 M2 M3 S 	○	○	○	○	○
	1280 1640 1320	—	—	—	—	—
Compression Ratio (Image Quality) (p. 73)	 	○	○	○	○	○

*1 FE Lock not available, Exposure Shift available.

*2 Possible settings: 0 - 30 seconds in [Delay], and 1 - 10 shots in [Shots].

*3 Slow Synchro set automatically.

*4  when flash is [On].

*5 White Balance not selectable in  .

○	○	○	○	○	—	○	○	○	○	○	○	○	○	—	○	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*1	—
—	—	—	—	—	○	—	—	—	○	—	—	—	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
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Func. Menu																	
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—	—	—	—	○	—	—	—	—	—	—	—	—	○	*6	○	—	—
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—	—	—	—	—	—	—	—	—	—	—	—	—	○	—	—	—	—
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○	○	○	○	*7	○	○	○	○	○	○	○	○	○	*8	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	○	○	○
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	—	—

○ Selectable, or set automatically. — Not selectable

*6 White Balance data not recordable.

*7 Fixed to **M**.

*8 **W** is not selectable.

Menus

Shooting Menu

Function			Shooting modes							
			AUTO	P						
AF Frame (p. 84)	Face AiAF		○	○	○	○	○	○	○	○
	Center		—	○	○	○	○	○	○	○
AF Frame Size (p. 85)	Normal/Small		—	○	—	—	—	—	—	—
Digital Zoom (p. 64)	Standard		○	○	○	○	○	○	○	○
	Off		○	○	○	○	○	○	○	○
	Digital Tele-converter (1.7x/2.1x)		○	○	○	○	○	○	○	○
AF-Point Zoom (p. 85)	On/Off		○	○	○	○	○	○	○	○
Servo AF (p. 87)	On/Off		*2	○	○	○	○	○	○	○
AF-assist Beam (p. 148)	On/Off		○	○	○	○	○	○	○	○
Flash Settings (pp. 92, 148)	Red-Eye Corr.	On/Off	○	○	○	○	○	○	○	○
	Red-Eye Lamp	On/Off	○	○	○	○	○	○	○	○
i-Contrast (p. 91)	Auto/Off		*3	○	—	—	—	—	—	—
Review (p. 149)	Off/2 – 10 sec./Hold		○	○	○	○	○	○	○	○
Review Info (p. 149)	Off/Detailed/Focus Check		○	○	○	○	○	○	○	○
Blink Detection (p. 93)	On/Off		○	○	○	○	○	○	○	○
Disp. Overlay (p. 150)	Off/Grid Lines		○	○	○	○	○	○	○	○
	3:2 Guide/Both		○	○	○	○	○	○	○	○
IS Mode (p. 150)	Continuous/Off		*4	○	○	○	○	○	○	○
	Shoot Only/Panning		—	○	○	○	○	○	○	○
Date Stamp (p. 66)	Off/Date/Date & Time		○	○	○	○	○	○	○	○

*1 AiAF only.

*2 [On] when movement is detected.

*3 Always [Auto].

*4 Always [Continuous].

○	○	○	○	○	○	—	—	○	○	○	○	—	○	—	*1	*1
○	—	—	—	—	○	○	—	○	○	○	○	○	○	○	—	—
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○	*4	○	○	○	○	○	○	○	○	○	○	—	○	○	○	○
○	○	○	○	○	—	—	—	○	○	○	○	—	○	—	—	—
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—	—	—	—	*3	—	—	—	—	—	—	—	—	—	—	—	—
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○	○	○	○	—	○	○	○	○	○	○	○	○	○	—	—	—

○ Selectable, or set automatically. — Not selectable

Set up Menu

Item	Options/Summary	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 start-up image.	p. 143
Format	Formats memory card, erasing all data	pp. 22, 51
File Numbering	Continuous*/Auto Reset	p. 144
Create Folder	Monthly*/Daily	p. 145
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. 52, 146
Time Zone	Home*/World	p. 146
Date/Time	Date and time settings	p. 19
Video System	NTSC/PAL	p. 115
Language	Choose display language.	p. 21
Reset All	Returns camera to default settings.	p. 50

* Default setting

Playback Menu

Item	Options/Summary	Ref. Page
Slideshow	Plays back images automatically.	p. 111
Erase	Erases images.	p. 121
Protect	Protects images.	p. 118
Rotate	Rotates images.	p. 127
Favorites	Tags or untags images as favorites.	p. 125
My Category	Categorizes images.	p. 123
i-Contrast	Corrects dark portions and contrast in still images.	p. 131
Red-Eye Correction	Corrects red eyes in still images.	p. 132
Trimming	Trims portions of still images.	p. 129
Resize	Resizes and saves still images.	p. 128
My Colors	Adjusts colors in still images.	p. 123
Scroll Display	On*/Off	p. 109
Resume	Last seen*/Last shot	p. 151
Transition	Fade*/Slide 1/Slide 2/Off	p. 114

* Default setting

Print Menu

Item	Options/Summary	Ref. Page
Print	Displays printing screen.	p. 134
Select Images & Qty.	Chooses individual images for printing.	p. 139
Select Range	Chooses starting and ending images for printing.	p. 140
Select All Images	Chooses all images for printing.	p. 140
Clear All Selections	Cancels all settings for printing.	p. 140
Print Settings	Sets the printing style.	p. 138

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 have fallen onto, or dirt is 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, stop using the camera immediately. Continued use may damage the camera. Remove the battery and memory card, and wait until the moisture has completely evaporated before resuming use.

Specifications

Camera Effective Pixels	Approx. 14.1 million
Image Sensor	1/2.3-inch type CCD (Total number of pixels: Approx. 14.5 million)
Lens	5.0 (W) – 20.0 (T) mm 35mm film equivalent: 28 (W) – 112 (T) mm f/2.8 (W) – f/5.9 (T)
Zoom Magnification	Approx. 4.0 (Up to approx. 16x in combination with the digital zoom)
LCD Monitor	2.7 TFT LCD color monitor Approx. 230,000 dots, Picture coverage approx. 100%
AF Frame Mode	Face AiAF/Center
Servo AF	On/Off
Focusing Range (from end of lens)	Auto: 3 cm (1.2 in.) – infinity (W)/80 cm (2.6 ft.) – infinity (T) Normal: 5 cm (2.0 in.) – infinity (W)/80 cm (2.6 ft.) – infinity (T) Macro: 3 – 50 cm (1.2 in. – 1.6 ft.) (W) Infinity: 3 m (9.8 ft.) – infinity Kids&Pets: 1 m (3.3 ft.) – infinity
Shutter	Mechanical shutter and electronic shutter used together
Shutter Speed	1 – 1/1500 sec. 15 – 1/1500 sec. (Total shutter speed range)
Image Stabilization	Lens-shift type
Metering System	Evaluative, Center-weighted average or Spot
Exposure Compensation	±2 stops in 1/3-stop increments
ISO speed	Auto, ISO 80/100/200/400/800/1600
(Standard Output Sensitivity, Recommended Exposure Index)	
White Balance	Auto, Day Light, Cloudy, Tungsten, Fluorescent, Fluorescent H, Custom
Built-in Flash	Auto, On, Slow Synchro, Off * Red-eye correction/Red-eye reduction/FE lock settings available
Built-in Flash Range	30 cm – 4.0 m (12 in. – 13 ft.) (W)/ 50 cm – 2.0 m (1.6 – 6.6 ft.) (T)
Shooting Modes	Auto, Program AE, Portrait, Night Snapshot, Kids&Pets, Indoor, Smart Shutter (Smile, Wink Self-Timer, Face Selftimer), Low Light, Color Accent, Color Swap, Fish-eye Effect, Miniature Effect, Beach, Underwater, Foliage, Snow, Fireworks, Long Shutter, Stitch Assist, Movie Movie Modes: Standard, Color Accent, Color Swap
Continuous Shooting	Normal: Approx. 0.7 images/sec. Low Light: Approx. 2.6 images/sec.
Self-timer	Approx. 10-sec./Approx. 2-sec. delay, Custom Timer
i-Contrast	Auto/Off
Recording Media	SD memory card, SDHC memory card, SDXC memory card, MultiMediaCard, MMCplus memory card, HC MMCplus memory card

Specifications

File Format	Design rule for Camera File system and DPOF compliant (version 1.1)
Data Type	Still images: Exif 2.2 (JPEG) Movies: MOV (Image data: H.264, Audio data: Linear PCM) (Monaural)
Number of Recording Pixels (Still images)	Large: 4320 x 3240 pixels Medium 1: 3456 x 2592 pixels Medium 2: 2592 x 1944 pixels Medium 3: 1600 x 1200 pixels Small: 640 x 480 pixels Widescreen: 4320 x 2432 pixels
(Movies)	1280 x 720 pixels (30 frames/sec.*) 640 x 480 pixels (30 frames/sec.*) 320 x 240 pixels (30 frames/sec.*) * Actual frame rate is 29.97 frames/sec.
Compression (Still images)	Fine, Normal
Number of Possible Shots (CIPA compliant)	Approx. 230 images
Playback Function	Single Image, Movie, Magnified Focus, Index, Magnified, Filtered Playback, Slideshow, Scroll Display, Smart Shuffle
Editing Function	Erase, Protect, My Category, Favorites, Resize, My Colors, i-Contrast, Trimming, Rotate, Red-Eye Correction
Direct Print Type	PictBridge capable
Interface	Digital input/output: Hi-Speed USB (mini-B compatible)* HDMI (HDMI mini connector) Analog audio output: Monaural* Analog video output: NTSC/PAL selectable* * Dedicated connector (female) with unified type of digital, audio and video.
Communication Settings	MTP, PTP
Power	Battery Pack NB-4L (rechargeable lithium-ion battery) AC Adapter Kit ACK-DC60 (sold separately)
Operating Temperatures	0 – 40 °C (32 – 104 °F)
Operating Humidity	10 – 90%
Dimensions (CIPA compliant)	92.2 x 56.1 x 17.8 mm (3.63 x 2.21 x 0.70 in.)
Weight (CIPA compliant)	Approx. 133 g (4.69 oz.) (Including the battery and memory card) Approx. 114 g (4.02 oz.) (Camera body only)

Battery Pack NB-4L

Type	Rechargeable lithium-ion battery
Voltage	3.7 V DC
Capacity	760 mAh
Charging cycles	Approx. 300 times
Operating temperature	0 – 40 °C (32 – 104 °F)
Dimensions	35.4 × 40.3 × 5.9 mm (1.39 × 1.59 × 0.23 in.)
Weight	Approx. 17 g (0.60 oz.)

Battery Charger CB-2LV/CB-2LVE

Rated input	100 – 240 V AC (50/60 Hz), 0.1 A (100 V) – 0.06 A (240 V)
Rated output	4.2 V DC, 0.65 A
Charge time	Approx. 1 hour 30 min.
Operating temperature	0 – 40 °C (32 – 104 °F)
Dimensions	53.0 × 86.0 × 19.5 mm (2.09 × 3.39 × 0.77 in.)
Weight	Approx. 60 g (2.12 oz.) (CB-2LV) Approx. 55 g (1.94 oz.) (CB-2LVE, 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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