Canon

PowerShot SD940 IS DIGITAL DIGITAL ELPH IXUS 120 IS

Camera User Guide

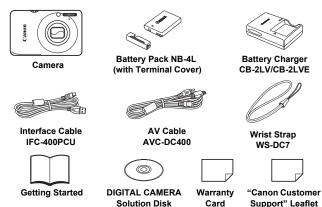


- Make sure you read this guide before using the camera.
- Store this guide safely so that you can use it in the future.

ENGLISH

Checking the Package Contents

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



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 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.

Memory Cards

The various types of memory cards that can be used in this camera are collectively referred to as memory cards in this guide.

What Do You Want to Do?

Shoot leaving it to the camera to make settings

Sh	oot
VII.	υυι

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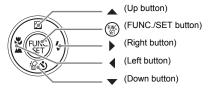
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Conventions Used in this Guide

- 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.
- \(\begin{aligned} \begin{aligned
- (1): Things you should be careful about.
- Supplemental information.
- (p. xx): Reference pages. "xx" stands for page number.
- This guide assumes all functions are at their default settings.

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.

A Warning

Camera

- Do not trigger the flash in close proximity to human eyes.
 Exposure to the intense light produced by the flash could damage eyesight. In particular, remain at least one meter (39 inches) away from infants when using the flash.
- Store this equipment out of the reach of children and infants.
 Strap: Putting the strap around a child's neck could result in asphyxiation.
 Memory card: Dangerous if accidentally swallowed. If this occurs, contact a doctor immediately.
- Do not attempt to disassemble or alter any part of the equipment that is not expressly described 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, benzine, 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, 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.
- Do not cut, damage, alter or place heavy items on the power cord.
- 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.
 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.

 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.

This could result in electrical shock or fire.

- 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.

 Do not allow dirt or metal objects (such as pins or keys) to contact the charger terminals or plug.

This could result in fire, electrical shock or other damage.

 The slideshow transition effects may cause discomfort when viewed for prolonged periods. Do not use the flash with dirt, dust or other items stuck to the surface, or if it is covered by 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
- 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 batteries, 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 in a chair 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.







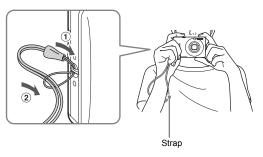


Getting Started

This chapter explains preparations before shooting, how to shoot in mode, and then how to view, erase and print 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

- Attach the included strap and place it around your wrist to avoid dropping the camera during use.
- 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.







Insert the battery.



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.



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	220
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
•	Good.
- 74	Slightly depleted, but sufficient.
(Blinking red)	Nearly depleted.
"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 **\(\Lambda \)** mark is visible.

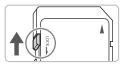
- How to store the battery for long periods.
 - Deplete and remove the battery from the camera. Attach the terminal cover and store the battery. Storing a battery for long periods of time (about a year) without depleting it may shorten its life span or affect its performance.
- The battery charger can also be used when abroad.

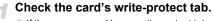
The charger can be used in regions that have 100 - 240 V (50/60 Hz) AC power. If the plug does not fit the outlet, use a commercially available plug adapter. Do not use electrical transformers for foreign travel as they will cause damage.

- 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.

Inserting the Battery and Memory Card

Insert the included battery and a memory card into the camera.



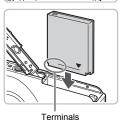


If the memory card has a write-protect tab, you will not be able to record images if the tab is in the locked position. Slide the tab up until you hear a click.



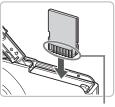
Open the cover.

Slide the cover ①, and open it ②.



Insert the 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.



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.

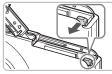
Terminals

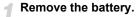


Close the cover.

Close the cover ①, and slide it ② until it locks into place with a click.

Removing the Battery and Memory Card





- 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	2 GB	8 GB
Number of shots	626	2505

- 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



Compatible Memory Cards

- SD memory cards
- SDHC memory cards 2
- MultiMediaCards
- MMCplus memory cards
- HC MMCplus memory cards

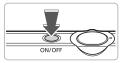


What is the write-protect tab?

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

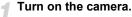
Setting the Date and Time

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.









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

Set the date and time.

- Press the \(\) buttons to choose an option.
- Press the A buttons to set a value.

Make the setting.

- Press the (st) 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

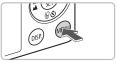
Set the correct date and time. If you have not set the date and time, the Date/ Time screen will appear each time you turn on the camera.

a 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.



Display the menus.

Press the MENU button.



Choose [Date/Time] in the ff tab.

- Press the ◆ buttons to choose the †† tab.
- Press the ▲▼ buttons to choose [Date/ Time], then press the (button.



Change the date and time.

- Follow Steps 2 and 3 on p. 19 to adjust the setting.
- To close the menus, press the MENU button.



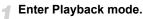
Date/Time battery

- 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. 40) 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 display language in the LCD monitor menus and messages.



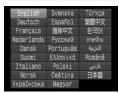


Press the button.



2	Display	the	settings	screen.
	,			

Press and hold the button ①, then immediately press the MENU button ②.



Set the display language.

- Press the ▲▼◀▶ buttons to choose a language, then press the (ﷺ) button.
- Once the display language has been set, the settings screen will close.





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



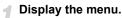
You can also change the display language by pressing the **MENU** button, choosing the **11** tab, and choosing the [Language] menu item.

Formatting Memory Cards

Before you use a new memory card or one that has been used 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.







Press the MENU button.



- Press the ◆▶ buttons to choose the **f†** tab.
- Press the ▲▼ buttons to choose [Format], then press the (button.



Format the memory card.

- Press the ♠ buttons to choose [OK], then press the (button.
- The memory card will be formatted.
- When formatting has finished, the menu screen will reappear.



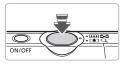
Formatting or erasing data on a memory card merely changes the file management information on the card and does not ensure its contents are completely erased. Be careful when transferring or disposing of a memory card. When disposing of a memory card, take precautions such as physically destroying the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

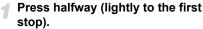
Pressing the Shutter Button

The shutter button has two stops. To take images that are in focus, be sure to first press the shutter button lightly (halfway) to focus, then take the shot.









- The camera automatically focuses and selects the necessary settings for shooting, such as the brightness.
- When the camera focuses, it will beep twice and the indicator will light green.

Press fully (to the second stop).

- 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.

Poes the length of the shutter sound change?

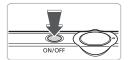
- Since the time required to shoot differs according to the scene you want to take, the length of the shutter sound may change.
- If the camera or subject moves while the shutter sound is playing, the recorded image may be blurry.



If you just press the shutter button fully without pausing halfway, the image may not be in focus.

Taking Pictures

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









Turn on the camera.

- Press the power button.
- ▶ The start-up sound will play, and the startup screen will appear.
- Pressing the power button again will turn the camera off.

Choose (MID) mode.

- Set the mode switch to AUTO.
- When you point the camera toward the subject, the camera will make a slight noise as it determines the scene.
- The camera focuses on the subject it judges to be the main subject, and the icon for the determined scene appears in the upper right of the screen.
- When faces are detected, a white frame appears on the face of the main subject, while gray frames appear on other detected faces.
- A white frame will follow a detected face that is moving and the gray frames will disappear.

Compose the shot.

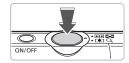
Moving the zoom lever toward will zoom in on your subject, making it appear larger. Moving the lever toward will zoom out from your subject, making it appear smaller.







AF Frames



Focus.

- Press the shutter button halfway to focus.
- When the camera focuses, it will beep twice and the indicator will light green (orange when the flash will fire).
- ▶ Green AF frames appear where the subject is in focus.
- Several AF frames will appear when the camera focuses on more than one point.
- When a moving face is detected, and you keep the shutter button pressed halfway, a blue AF frame appears and the focus and exposure are continuously adjusted.

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 indicator will blink green while the image is recorded to the memory card.
- The image will appear on the screen for about two seconds.
- You can take a second picture even while an image is displayed by pressing the shutter button again.



What if...

Attach the camera to a tripod so that the camera does not move and blur the image.

• 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]. Use the ◆▶ buttons to choose [Off].

Taking Pictures

- the image comes out dark even if the flash fired when shooting?

 The subject is too far away for the flash to reach. Shoot within the effective flash range of approximately 30 cm 4.0 m (12 in. 13 ft.) at maximum wide angle, and approximately 50 cm 2.0 m (1.6 6.6 ft.) at maximum telephoto.
- the camera beeps once when the shutter button is pressed halfway? Your subject is too close. When the camera is at maximum wide angle, move about 3 cm (1.2 in.) or more away from your subject and shoot. Move about 50 cm (1.6 ft.) or more away when the camera is at maximum telephoto.
- 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
- the \$ icon blinks when you try to take an image?
 The flash is charging. You can shoot when recharging ends.

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	Bri	ght		ng Blue ies	Sunsets		Dark
Su	ıbject		Backlit		Backlit			When Using Tripod
Pe	ople		07/		• Ty	-		€ 7.
	When Moving	PE	O∰/	P =	= 1	-	_	_
Pe	bjects Other Than ople/ ndscapes	AUTO	= 1,	AUTO	5/1	**	AUTO)
CI	ose Subjects	4	W.	*	WIN	-	*	_
	on Background blor	Gı	ay	Light	Blue	Orange	Dai	rk Blue

^{*} Appears when 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), wor the "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. 66).

Viewing Images

You can view your images on the screen.







Enter Playback mode.

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

Choose an image.

- Pressing the

 button will cycle through the images in reverse order.
- Pressing the button will cycle through the images in the order they were taken.
- The images change more quickly if you keep the ◀▶ buttons pressed.
- Pressing the shutter button halfway in Playback mode switches the camera to Shooting mode.
- The lens will retract after approximately 1 minute elapses.

Erasing Images

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



Enter Playback mode.

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



Choose an image to erase.

Press the ◀▶ buttons to display an image to erase.



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.



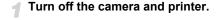


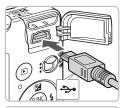
Printing Images

You can easily print the images you have taken if you connect the camera to a PictBridge compliant printer (sold separately).

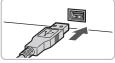
Items to Prepare

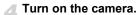
- Camera and PictBridge compliant printer (sold separately)
- Interface cable supplied with the camera (p. 2)





- 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.
 - Turn on the printer.





Press the button to turn on the camera.



- Choose an image to print.
 - Press the ◀▶ buttons to choose an image.



Printing Images





Print images.

- Press the ∰ button, then press the ▲▼ buttons to choose ♣ and press the ∰ button.
- ▶ 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. 39 for Canon-brand Pictbridge compliant printers.

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







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.



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

Shooting Movies

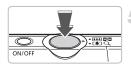


Elapsed Time





Microphone



Shoot.

- Press the shutter button fully.
- The camera will start shooting the movie, 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.
- You can zoom in and out with the zoom lever while shooting.
- Do not touch the microphone while shooting.
- Do not press any buttons other than the shutter button. Otherwise, the sound the buttons make will be recorded in the movie.

Stop shooting.

- Press the shutter button fully again.
- The camera will beep once and stop shooting the movie.
- The indicator will blink green, and the movie will record to the memory card.
- Shooting will automatically stop when the memory card fills.

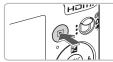
Estimated Shooting Times

Memory Card	2 GB	8 GB
Shooting Time	10 min. 53 sec.	43 min. 32 sec.

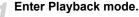
- Shooting times are based on default settings.
- Maximum clip length is approx. 10 minutes.
- Recording may stop even if the maximum clip length has not been reached on some memory cards. SD Speed Class 4 or higher memory cards are recommended.

Viewing Movies

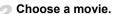
You can view your movies on the screen.





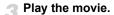


- Press the button.
- The last image you shot will appear.
- appears on movies.



- Press the ♠ buttons to choose a movie, then press the ▲ button.
- The movie control panel will appear on the screen





- Press the ◀▶ buttons to choose▶ (Play), then press the ∰ button.
- The movie will play.
- You can pause/resume the movie by pressing the (button again.
- Press the ▲▼ buttons to adjust the volume.







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. For enhanced playback you can also connect the camera to a TV.

Transferring Images to a Computer

You can use the included software to transfer your camera images to a computer. 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 Vista (including Service Pack 1, Service Pack 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	Viewing images	Windows Vista: 1 GB or more Windows XP: 512 MB 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. 500 MB) must be installed. Installation may take some time depending on your computer's capabilities.

Macintosh

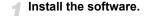
os	Mac OS X (v10.4 – v10.5)	
Computer model	The above OS should be pre-installed on computers with built-in USB ports.	
CPU	Viewing images	PowerPC G4/G5 or Intel Processor
	Viewing movies	Core Duo 1.66 GHz or higher
RAM	Viewing images	512 MB or more
	Viewing movies	1 GB or more
Interface	USB	
Free Hard Disk Space	ImageBrowser: 300 MB or more PhotoStitch: 50 MB or more	
Display	1,024 x 768 pixels or higher	

Items to Prepare

- Camera and computer
- DIGITAL CAMERA Solution Disk supplied with the camera (p. 2)
- Interface cable supplied with the camera (p. 2)

Preparations

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



Windows









- Place the DIGITAL CAMERA Solution Disk in the computer's CD-ROM drive.
- Begin installation.
 - Click [Easy Installation] and follow the onscreen instructions to proceed with the installation
 - If the [User Account Control] window appears, follow the onscreen instructions to proceed.
- When the install finishes, click [Restart] or [Finish].
- Remove the CD-ROM.
 - Remove the CD-ROM when your desktop screen appears.

Macintosh

- Place the CD-ROM in the computer's CD-ROM drive and double-click the picon.
- Click [Install], and follow the onscreen instructions to proceed with the installation.

Transferring Images to a Computer



Connect the camera to the computer.

- Turn off the camera.
- Follow Step 2 on p. 29 to connect the camera to a computer.
- Turn on the camera.
 - Press the button to turn on the camera.
- Open CameraWindow.



Windows

- Choose [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], [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).

Transfer Images



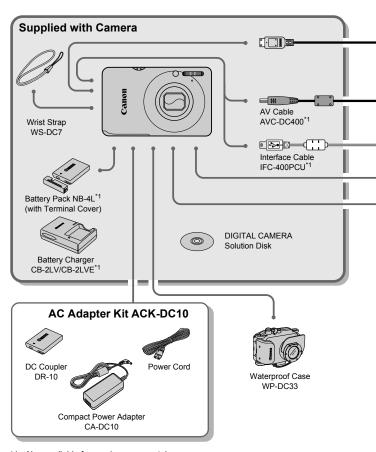
- Click [Import Images from Camera], and then click [Import Untransferred Images].
- All images not previously transferred will transfer to the computer. Transferred images will be sorted by date and saved in separate folders in the Pictures folder.
- After the transfer finishes, click [x] to close CameraWindow, then 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:

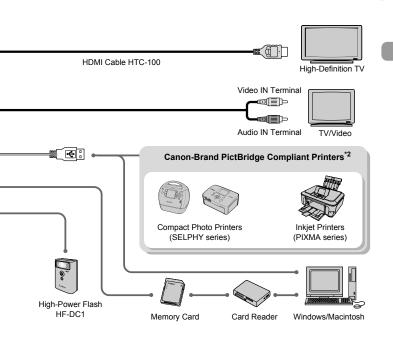
- After connecting to the camera, it may take a few minutes until you can transfer images.
- The camera information may not display correctly.
- · Movies may not transfer correctly.
- Images shot vertically may be transferred in the horizontal orientation.
- Protection settings for images may be lost when transferred to a computer.
- There may be problems transferring images or image information correctly depending on the version of the operating system in use, the file size, or the software in use.

Accessories



*1 Also available for purchase separately.

^{*2} See the user guide supplied with the printer for more information on the printer and interface cables.



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.

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-DC10

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. Cannot be used to charge the battery inside the camera.

Battery Charger CB-2LV/CB-2LVE

An adapter for charging Battery Pack NB-4L.

Battery Pack NB-4L

Rechargeable lithium-ion battery.

Other Accessories

HDMI Cable HTC-100

Use this cable to connect the camera to the $\mathsf{HDMI}^{\intercal}$ terminal on a high-definition TV set.

Waterproof Case WP-DC33

Installing the camera into this waterproof case lets you take underwater shots at depths down to 40 meters (130 feet), or take worry-free pictures in the rain, at the beach, or on the ski slopes.

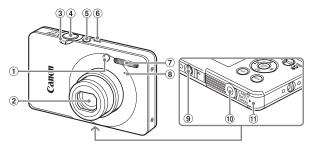
High-Power Flash HF-DC1

This attachable supplementary flash can illuminate subjects that are too distant for the light from the built-in flash to reach.

Learning More

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

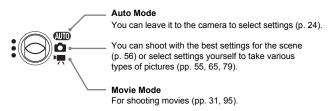
Components Guide

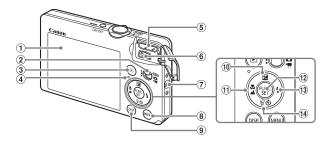


- ① Lamp (Self-Timer Lamp (p. 64) / AF Assist Beam (p. 136) / Red-Eye Reduction Lamp (p. 136))
- 2 Lens
- ③ Zoom Lever Shooting: [♣] (Telephoto) / ♣♣ (Wide Angle) (p. 24) Playback: Q (Magnify) (p. 110)/ ♣♣ (Index) (p. 104)
- 4 Shutter Button (p. 23)
- ⑤ Power Button
- 6 Speaker
- 7 Flash (pp. 59, 67)
- ® Microphone (p. 32)
- 9 Tripod Socket
- ① DC Coupler Terminal Cover (p. 142)① Memory Card / Battery Cover (p. 16)

Mode Switch

Use the mode switch to change the Shooting mode.





- 1 Screen (LCD Monitor) (p. 44)
- 2 Mode Switch
- ③ (Playback) Button (pp. 27, 103)
- 4 Indicator (p. 46)
- (5) HDMI Terminal (p. 112)
- ⑥ A/V OUT (Audio/Video Output) DIGITAL Terminal
- Trap Mount (p. 13)
- ® MENU Button (p. 48)

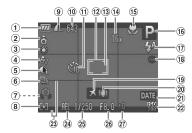
- DISP. (Display) Button (pp. 44, 45)
- (1) (Exposure) (p. 66) / ▲ Button
- (2) FUNC./SET (Function/Set) Button (p. 47)
- (13 **\$** (Flash) (pp. 59, 67) / ▶ Button
- ⁽¹⁾
 ^(A) (Single Image Erase) (p. 28) /
 - **③** (Self-Timer) (pp. 63, 64) / ▼ Button

▶ Button

When the lens is extended, you can switch between the Shooting and Playback modes. When the lens is retracted, you can use this button to turn the camera on and off in Playback mode.

Information Displayed on the Screen

Shooting (Information Display)



- Battery Charge Indicator (p. 15)
- ② Camera Orientation*
- 3 White Balance (p. 72) 4 My Colors (p. 74)
- (5) i-Contrast (p. 87)
- 6 Drive Mode (p. 73)
- (7) Camera Shake Warning
- (p. 138) ® Metering Modes (p. 84)
- Ompression (Image) Quality) (p. 69) Recording Pixels (p. 69)

- 10 Still Images: Recordable shots (p. 18) Movies: Remaining Time/
 - Elapsed Time (p. 32)
- 12 AF Frame (p. 25)
- Spot AE Point Frame (p. 84)
- ① Digital Zoom Magnification (p. 60), Digital Tele-
- Converter (p. 61) 15 Macro (p. 67), Infinity (p. 68),
- AF Lock (p. 82) 16 Shooting Mode

- 17 Flash Mode (pp. 59, 67)
- ® Red-Eye Correction (p. 88)
- (9) Time Zone (p. 135) ① Self-Timer (pp. 63, 64, 76) ② Image Stabilizer (p. 138)
 - 21 Date Taken/Recorded (p. 62)
 - 22 ISO Speed (p. 71)
 - 23 Disp. Overlay (p. 138)
 - 24 AE Lock (pp. 85, 98), FE Lock (p. 85)
 - 25 Shutter Speed
 - 26 Aperture Value
 - 27 Exposure Compensation (p. 66)

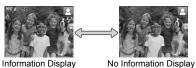
🛕 : Standard, 🗯 🧯 : Held vertically

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.

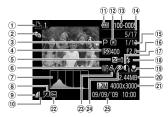
Switching the Display

You can change the display using the DISP, button.



Information Display

Playback (Detailed Information Display)



- 1 Print List (p. 126)
- 2 My Category (p. 118)
- 3 Shooting Mode
- 4 ISO Speed (p. 71)
- 5 Exposure Compensation (p. 66), Exposure Shift (p. 98)
- 6 White Balance (p. 72)
- 7 Histogram (p. 46)
- 8 Image Editing
- (pp. 121 125) Compression (Image) Quality) (p. 69),
 - M(V (Movies) (p. 97)

- 10 Recording Pixels (p. 69) (1) Battery Charge Indicator
 - (p. 15) 12 Metering Modes (p. 84)
 - 13 Folder Number File Number (p. 132)
 - ① Displayed image number / Total number of 22 Protect (p. 113) images
 - 15 Shutter Speed
 - (6) Aperture Value, Image Quality (Movies) (p. 97)
 - ① i-Contrast (p. 124)
 - (8) Flash (p. 67)

- 19 Macro (p. 67), Infinity (p. 68)
- 20 File Size (pp. 69, 97)
- 21 Still Images: Recording Pixels (p. 69) Movies: Movie Length (p. 97)
- 23 My Colors (p. 74) 24 Red-Eye Correction
 - (p. 125)
- 25 Shooting Date and Time (p. 62)

Switching the Display

You can change the display using the DISP, button.





You can also switch the display by pressing the DISP, button while the image displays shortly after shooting. However, Simple Information will not display. You can set the display that appears first. Press the MENU button to choose the tab. Then set [Review Info].

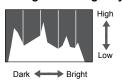
Display in Dark Conditions during Shooting

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. 45), overexposed areas of the image flash on the screen.

Histogram during Playback



The graph that appears in "Detailed Information Display" (p. 45) is called the histogram. The histogram shows the distribution and amount of brightness of an image. 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 under the following conditions.

Colors	Status	Operation Status	
Green	Lights	Shooting preparation complete (p. 25)/Display Off (p. 134)	
	Blinks	Recording/reading/transmitting image data (p. 25)	
Orange	Lights	Shooting preparation complete (flash on) (p. 25)	
	Blinks	Camera shake warning (p. 59)	



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

You can set commonly used functions using the FUNC. menu. The menu items and options differ depending on the mode (p. 148). You can also use the FUNC. menu in Playback mode.





Selectable Options
Menu Items





Display the FUNC. menu.

Press the (st) button.

Choose a menu item.

- Press the ▲▼ buttons to choose a menu item, then press the (button.
- Depending on the menu, the screen may switch. Choose a menu item and make the setting.

Choose an option.

- Press the ▲▼ buttons to choose an option.
- To return to the menu, press the ◀ button.

Make the setting.

Press the (st) button.

MENU - Basic Operations

Various functions can be set from the menus. The menu items are organized under tabs, such as for shooting (\bigcirc) and playback (\bigcirc). The available menu items differ depending on the mode (pp. 150 – 153).











Display the menu.

Press the MENU button.

Choose a tab.

Press the ◀▶ buttons, or move the zoom lever (p. 42) left or right to choose a tab.

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.

Choose an option.

■ Press the ◀▶ buttons to choose an option.

Make 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







- Display the menu.
 - Press the MENU button.
 - Choose [Mute].
 - Press the ◀▶ buttons to choose the
 † tab.
 - Press the ▲▼ buttons to choose [Mute], then use the ◀▶ buttons to choose [On].

Adjusting the Volume







- Display the menu.
 - Press the MENU button.
- Choose [Volume].
 - Press the ◀▶ buttons to choose the
 † tab.
 - Press the ▲▼ buttons to choose [Volume], then press the (button.
- Change the volume.
 - Press the ▲▼ buttons to choose an item, then use the ◀▶ buttons to adjust the volume.

Changing the Screen Brightness

The screen brightness can be changed in two ways.

With the Menu







Display the menu.

Press the MENU button.

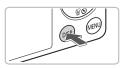
Choose [LCD Brightness].

- Press the buttons to choose the tab.
- Press the ▲▼ buttons to choose [LCD Brightness],

Change the brightness.

- Press the ◀▶ buttons to change the brightness.
- Press the MENU button again to complete the setting.

With the DISP, Button



- Press the DISP, button for more than one second.
- The screen increases to maximum brightness regardless of the setting in the ft 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 \(\begin{align*} \frac{1}{2} \end{align*} \)
- When you have set the brightness to its highest setting in the
 †† 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.







Display the menu.

- Press the MENU button.
- Choose [Reset All].
 - Press the ◀▶ buttons to choose the
 ††
 tab.
 - Press the ▲▼ buttons to choose [Reset All], then press the (button.



Reset the settings.

- Press the ♠ buttons to choose [OK], then press the (button.
- ➤ The camera will reset to the default settings.

Are there functions that cannot be reset?

- The [Date/Time] (p. 19) in the
 †† tab, [Language] (p. 21), [Video System]
 (p. 111), [Time Zone] (p. 135), the image registered as [Start-up Image] (p. 139).
- The saved data for custom white balance (p. 72).
- Colors that were chosen in Color Accent (p. 91) or Color Swap (p. 92).

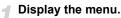
Low Level Memory Card Formatting

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









- Press the MENU button.
- Choose [Format].
 - Press the ◀▶ buttons to choose the
 ††
 - Press the ▲▼ buttons to choose [Format], then press the (button.



Perform the low level format.

- Press the ▲▼ buttons to choose [Low Level Format], then use the ◀▶ buttons to display ✓.
- Press the ▲▼◀▶ buttons to choose [OK], then press the (IF) button.
- Low level formatting starts.



About low level formatting

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



- Low level formatting may take longer than standard formatting (p. 22), 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 monitor 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 monitor has turned off but the lens has not yet retracted, pressing the shutter button halfway (p. 23) turns on the monitor 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. 134).
- You can adjust the time before the monitor turns off (p. 134).

Clock Functions

You can check the current time.



- Press and hold the button.
- A screen like that on the left appears showing the current time.
- 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 (\mathbb{F}) button, then press the power button to display the clock.

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 flash and self-timer.





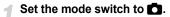
- When you choose a Shooting mode that matches a particular set of conditions, the camera will automatically select any necessary settings.
 All you need do is press the shutter button to take an optimized picture.
- This chapter assumes the mode is set to (IIII) for "Turning the Flash Off" (p. 59) to "Using the Face Self-Timer" (p. 64).

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.







2 Choose the desired shooting mode.

- After pressing the ⊕ button, press the
 ▲ buttons to choose P, then press the
 ⊕ button.
- Press the ▲▼ buttons to choose the desired mode, then press the (ﷺ) button.
- Shoot.



Take portraits (Portrait)

 Produces a soft effect when photographing people.



Take snapshots at night (Night Snapshot)

- Lets you take beautiful snapshots of people against city nightscapes or 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.



Shoot sunsets (Sunset)

 Lets you take shots of sunsets in vivid colors.



 Lets you take shots of fireworks in vivid colors.



Take shots of people at the beach (Beach)

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



Shoot underwater (Underwater)

 Lets you shoot underwater with Waterproof Case WP-DC33 (sold separately).



Take shots of aquatic life in an aquarium (Aquarium)

 Lets you take natural-colored shots of aquatic life in indoor aquariums.



¼ Take shots of foliage (Foliage)

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



*Take shots of people in snow (Snow)

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



Shoot using high ISO speed (ISO 3200)

- Lets you set the ISO speed to 3200, and lets you shoot without camera shake or subject blurring even in low light conditions.
- Recording pixels are set to M3 (1600 x 1200 pixels, p. 69).



- In M, S, X, √k or M mode, images may appear coarse because the ISO speed (p. 71) is increased to match the shooting conditions.
- In mode, attach the camera to a tripod to prevent the camera from moving and blurring the image. Additionally, you are recommended to set [IS Mode] to [Off] (p. 138).
- In mode, images may appear coarse.

Turning the Flash Off

You can shoot with the flash turned off.









- Press the buttons to choose htten press the button.
- ▶ **③** will appear on the screen.
- Follow the steps above to return the setting to \(\bigsep^A \).



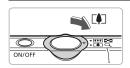


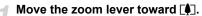
What if the indicator blinks orange and a flashing **Q** appears?

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 More Closely on Subjects (Digital Zoom)

You can use the digital zoom to zoom up to a maximum of 16x and capture subjects that are too far away for the optical zoom (p. 24) to enlarge. The images may appear coarse, however, depending on the recording pixel setting (p. 69) and the zoom factor used.





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



Move it toward [♠] again.

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

Zoom Factors at which Images Deteriorate

Recording Pixels	Optical Zoom (28 – 112 mm)*	Digital Zoom (112 – 448 mm)*
L	4.0x →	
M1	4.9x	→
M2		6.2x →
М3		10x →
S		16x →

: No image deterioration (zoom factor appears white)

: Image deterioration (zoom factor appears blue)

→ : Maximum zoom factor without deterioration (Safety Zoom)

^{*} Focal length (35mm equivalent)



Turning off the digital zoom

To turn off the digital zoom, press the **MENU** button, choose the **1** tab, and choose [Digital Zoom] and the [Off] option.

Digital Tele-Converter

The focal length of the lens can be increased by an equivalent of 1.5x or 2.0x. 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. 69) and digital tele-converter settings used.







Choose [Digital Zoom].

- Press the MENU button.
- Press the ◆▶ buttons to choose the tab, and press the ▲▼ buttons to choose [Digital Zoom].

Accept the setting.

- Press the ◀▶ buttons to choose [1.5x] or [2.0x].
- 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.

Combinations that Cause Image Deterioration

- Using [2.0x] at a recording pixel setting of L, M1 or M2 will cause image deterioration (the zoom factor will display in blue).



- The respective focal lengths when using [1.5x] and [2.0x] are 42.0 168 mm and 56.0 – 224 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).









Choose [Date Stamp].

- Press the MENU button.
- Press the ◆▶ buttons to choose tab, and press the ▲▼ buttons to choose [Date Stamp].

Accept the setting.

- Press the ◀▶ buttons to choose [Date] or [Date & Time].
- Press the MENU button again to accept the setting.
- ► [DATE] will appear on the screen.

Shoot.

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



Inserting and printing the date and time in images without an embedded date and time

- Use the DPOF print settings (p. 128) to print.
- Use the included software to print.
 Refer to the Software Guide for details.
- Connect the camera to a printer to print.
 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 camera operator. The camera will activate approximately 10 seconds after the shutter button is pressed.





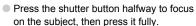




- Press the ▲▼ buttons to choose (10), then press the (11) button.
- ▶ Once set, ऄ will appear.







- 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 self-timer after countdown has started, press the ▼ button
- button.

 To restore the original setting, choose to





You can change the delay time and number of shots (p. 76).

in Step 2.

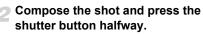
Using the Face Self-Timer

Once you compose the shot, such as for a group photo, press the shutter button, and enter the composition, the camera will take three shots in a row two seconds after it detects your face (p. 80).





Follow Step 2 on p. 63 and choose <?</p>



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



Press the shutter button fully.

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



Join the subjects and look at the camera.

- ▶ When the camera detects a new face, the lamp and sound will speed up (the lamp remains lit when the flash will fire), and two seconds later the shutter will release.
- The second and third shots will continue in succession.
- To restore the original setting, choose in Step 2 on p. 63.



What if a face is not detected?

Even if your face is not detected after joining the subjects, the shutter will release approximately 30 seconds later.



Changing the number of shots

For the screen in Step 1, press the **MENU** button, then press the \P buttons to change the number of shots. Press the \P button to accept the setting.

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.
- "Zooming In on Close Subjects (Digital Macro)" (p. 68) assumes the mode switch had been set to and the mode chosen.
- 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. 148 – 151).

Shooting in Program AE

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



- Set the mode switch to (p. 42).
- Choose P.
 - Choose **P** in Step 2 on p. 56 and press the (button.
 - Adjust the settings according to your purposes (pp. 67 76).
- Shoot.



What if the shutter speed and aperture value are displayed in orange?

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

- Turn on the flash (p. 67)
- Choose a higher ISO speed (p. 71)

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.



- Choose the exposure compensation.
 - Press the ▲ button.
- Adjust the brightness.
 - While watching the screen, press ◀▶ buttons to adjust the brightness and press the ▲ button.

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 ∰ button.
- Once set, \$\forall \text{ will appear.}

Shooting Close-ups (Macro)

You can shoot an object at a close distance or even shoot extreme closeups of it. The shooting range is approximately 3 - 50 cm (1.2 in. - 1.6 ft.) from the end of the lens (when the zoom lever is pushed to maximum \mathbb{H}).



Choose

- After pressing the ◀ button, press the ◀buttons to choose ☒, then press the ∰ button.
- Once set, will appear.



How can I take better close-ups?

- You are recommended to attach the camera to a tripod and shoot in

 , to prevent the camera from moving and blurring the image (p. 75).
- You can reduce the AF frame size when you want to focus on a specific portion of the subject (p. 80).



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

Shooting Far Away Subjects (Infinity)

You can shoot landscapes and far away subjects. The focusing range is 3 m (9.8 ft.) and greater from the camera.



Choose .

- After pressing the ◀ button, press the ◀buttons to choose ▲, then press the ∰ button.
- ▶ Once set, ▲ will appear.

Zooming In on Close Subjects (Digital Macro)

You can zoom in on close subjects. The possible shooting range is approximately 3-10 cm (1.2-3.9 in.) from the end of the lens. However, you can zoom in even closer on the subject using the digital zoom. The digital zoom may cause images to appear coarse at some recording pixel settings (p. 69).



Set the mode switch to (p. 42).

Choose 📆.

- Choose **\(\phi\)** in Step 2 on p. 56 and press the (\(\pm\)\) button.
- The optical zoom will lock at the maximum wide angle.

Use the zoom lever to compose the shot.

The camera will zoom in and the zoom factor will appear.

Zoom Factors at which Images Deteriorate

- No image deterioration (zoom factor appears white)
- Image deterioration (zoom factor appears blue)



You are recommended to attach the camera to a tripod and shoot in \mathfrak{Q} , to prevent the camera from moving and blurring the image (p. 75).

Changing the Recording Pixels

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



Choose the recording pixels.

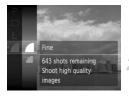
- Press the button and choose L, then press the button again.
- Change the recording pixels.
 - Press the ▲▼ buttons to choose an option, then press the button.
 - ▶ The setting you chose will display on the screen.



If you choose **M**, you cannot use Digital Zoom (p. 60) or Digital Tele-Converter (p. 61).

Changing the Compression Ratio (Image Quality)

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



Choose the image quality.

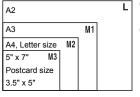
- Press the (button and choose , then press the (button again.
- Change the compression ratio.
 - Press the ▲▼ buttons to choose an option, then press the (button.
 - The setting you chose will display on the screen.

Approximate Values for Recording Pixels and Compression Ratio

Recording Pixels	Compression Ratio	Single Image Data Size (Approx. KB)	Number of Recordable Images	
	Ratio		2 GB	8 GB
L (Large)		3084	626	2505
12 M/4000 x 3000	4	1474	1280	5116
M1 (Medium 1)		2060	930	3721
8 M/3264 x 2448	4	980	1920	7675
M2 (Medium 2)	4	1395	1365	5457
5 M/2592 x 1944	4	695	2672	10679
M3 (Medium 3)		558	3235	12927
2 M/1600 x 1200	4	278	6146	24562
S (Small)	4	150	10245	40937
0.3 M/640 x 480	4	84	15368	61406
W (Widescreen)	4	2311	830	3318
4000 x 2248	4	1105	1707	6822

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

Approximate Values for Paper Size



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

Changing the ISO Speed



Choose the ISO speed.

Press the button and choose not then press the button again.

Choose an option.

- Press the ▲▼ buttons to choose an option, then press the (button.
- The setting you chose will display on the screen.

ISO AUTO	Automatically adjusts the ISO speed to the Shooting mode and shooting conditions.	
150 ISO ISO 80 100 200	Low	Fine weather conditions, outdoor shooting.
150 150 400 800		Cloudy, Twilight
[SO 1600	High	Nightscapes, Dark interiors

(a)

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.



- With ISO 3200 you can set an even faster speed (p. 58).

Adjusting the White Balance

The white balance (WB) function sets the optimal white balance for natural looking colors.





Press the ⊕ button and choose ₩, then press the ⊕ button again.

Choose an option.

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

AWB	Auto	Automatically sets the optimal white balance for the shooting conditions.
	Day Light	Fine weather conditions, outdoor shooting
2	Cloudy	Cloudy, shady, twilight conditions
- .	Tungsten	Tungsten, bulb-type (3-wavelength) fluorescent lighting
111	Fluorescent	Warm-white fluorescent, cool-white fluorescent, warm-white-type (3-wavelength) fluorescent lighting
₩/H	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.



- Make sure the entire screen is filled with a white colored subject, then press the DISP. button.
- The tint on the screen will change when a white balance data is set.



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

Continuous Shooting

You can shoot continuously at a fixed interval (0.8 shots/sec.).



Choose a Drive mode.

- Press the (button and choose , then press the (button again.
- Press the ▲▼ buttons to choose 및, then press the ⊕ button.

Shoot.

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



- Cannot be used with the self-timer (pp. 63, 64, 75, 76).
- For continuous shooting, the focus and exposure are locked when the shutter button is pressed halfway.
- As the number of images increases, the shooting intervals may take longer.
- If the flash fires, shooting intervals may take longer.

Changing the Tone of an Image (My Colors)

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



Choose My Colors.

Press the button and choose for, then press the button again.

Choose an option.

- Press the ▲▼ buttons to choose an option, then press the (button.
- ► The setting you choose will display on the screen.

40FF	My Colors Off	_
Av	Vivid	Emphasizes the contrast and color saturation for a vivid impression.
AN	Neutral	Tones down the contrast and color saturation for neutral hues.
€\$e	Sepia	Sepia tones.
€BW	B/W	Black and white.
Вp	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.
\boldsymbol{a}_{L}	Lighter Skin Tone	Makes skin tones lighter.
A _D	Darker Skin Tone	Makes skin tones darker.
₽B	Vivid Blue	Emphasizes blue tints. Makes the sky, ocean and other blue subjects more vivid.
₿G	Vivid Green	Emphasizes green tints. Makes mountains, foliage and other green subjects more vivid.
A_{R}	Vivid Red	Emphasizes red tints. Makes red subjects more vivid.
A _C	Custom Color	You can adjust contrast, sharpness, and color saturation etc. to your preference (p. 75).



- In the A_L and A_D mode, colors other than people's skin color may change. You may not obtain the expected results with some skin colors.

Ac Custom Color

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



- Follow Step 2 on p. 74 to choose A_C, then press the DISP, button.
- Press the ▲▼ buttons to choose an option, then use the ◀▶ buttons to choose a value.
- The more to the right, the stronger/deeper the effect gets, the more to the left, the weaker/lighter the effect gets.
- Press the DISP, button to accept the setting.

Shooting Using the Two Second Self-Timer

You can set the self-timer to a delay of approximately two seconds.



Choose 😚.

- After pressing the ▼ button, press the
 ▲▼ buttons to choose ☼, then press the
 ∰ button.
- ▶ Once set, ♦ will appear on the screen.
- Follow Step 3 on p. 63 to shoot.

Customizing the Self-Timer

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





¶ Choose ੴ.

- Press the ▼ button, then use the ▲▼ buttons to choose ☼, then press the MENU button.
- 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. 63 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. 111).
- Shooting procedures are the same as when using the camera's monitor.



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

Changing the Composition with the Focus Lock

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





Focus.

- Center the subject you want in focus, and press the shutter button halfway.
- Confirm that a green AF frame appears around the subject.

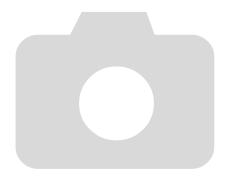




 Keep the shutter button pressed halfway and recompose the scene.

Shoot.

Press the shutter button fully.



Getting More Out of Your Camera

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



- This chapter assumes that the mode switch is set to and the camera is in P mode.
- "Shooting Long Exposures" (p. 90), "Changing the Color and Shooting" (p. 91) and "Shooting Stitch Assist Images" (p. 94) assume you have set the mode switch to and selected 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. 148 – 151).

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. Use the ◀▶ buttons to choose an option.

Face AiAF

- Detects people's faces and sets the focus, exposure (evaluative metering only) and white balance (WB 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. 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 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. 60) or Digital Tele-converter (p. 61) is used.



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

Magnifying the Focal Point

You can push the shutter button halfway to magnify the AF frame and check the focus



Choose [AF-Point Zoom].

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



Check the focus.

- Press the shutter button halfway.
- In [Face AiAF], the face selected as the main subject will appear magnified.
- In [Center], 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. 60) or Digital Tele-Converter (p. 61), Servo AF (p. 83), or when connected to a TV (p. 77).

Shooting with the AF Lock

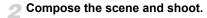
The focus can be locked. After locking the focus, the focal distance will not change even when you release your finger from the shutter button.







- Keep the shutter button pressed halfway and press the ◀ button.
- ► The focus locks and AFL is displayed 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.



Shooting with Servo AF

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





Choose [Servo AF].

Press the MENU button and choose [Servo AF] on the tab, and use the buttons to choose [On].



Focus.

- Focus and exposure will be maintained where the blue AF frame appears while you press the shutter button halfway.
- If a face is not detected when AF Frame is set to [Face AiAF], the AF frame will be set to [Center].



- The camera may not be able to focus and exposure in some conditions.
- If a correct exposure cannot be obtained, the shutter speed and aperture value are shown in orange. Take your finger off the shutter button, then press it again halfway.
- You cannot shoot with the AF lock in this mode.
- You cannot set the Servo AF mode if you have set the [AF-Point Zoom] option in the tab to [On].
- Not available in Self-Timer (pp. 63, 64, 75, 76).

Changing the Metering Mode

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





Press the (button and choose), then press the (button again.

Choose an option.

- Press the ▲▼ buttons to choose an option, then press the button.
- The setting will display on the screen.

S Evaluative	lit shots. Automatically adjusts the exposure to match the 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

When you wish to take several shots with the same exposure, you can set the exposure and focus separately using the AE lock. AE stands for "Auto Exposure".





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 set.
- If you release your finger from the shutter button and press the button again, AEL will disappear and the AE will unlock.
- Compose the scene and shoot.

Shooting with the FE Lock

Just as with the AE lock (p. 85), you can lock the exposure for shooting with the flash. FE stands for "Flash Exposure".



Choose 🕏 (p. 67).





Lock the 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.
- 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.





- Press the ▶ button, then use the ◀▶ buttons to choose ‡

 , then press the ⊕ button again.
- ▶ Once set, ★ will appear on the screen.

Shoot.

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



Attach the camera to a tripod to prevent the camera from moving and blurring the image. It is recommended to set the [IS Mode] to [Off] when shooting with a tripod (p. 138).

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. Use the ◀▶ buttons to choose [Auto].
- ▶ Ci 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. 124).

Red-Eye Correction

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





Press the MENU button, choose [Flash Settings] from the tab and press the
button.



Adjust the setting.

- Press the ▲▼ buttons to choose [Red-Eye Corr.] and press the ◀▶ buttons to choose [On].
 - will appear on the screen.



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



- You can correct recorded images (p. 125).
- If you press the button as shown on the screen in Step 2 and then press the MENU button, the Flash Settings screen will appear.

Checking for Shut Eyes

When the camera detects the possibility that people have their eyes shut, $\boxed{\mathbb{Z}}$ appears.



Choose [Blink Detection].

Press the MENU button, choose the tab, and then choose the [Blink Detection] menu item. Use the ◀▶ buttons to choose [On].

Shoot.

When a person with shut eyes is detected, a frame and

appear for a few seconds.



- In ? and ? modes, this function is only available for the last image shot.
- Not available in □₁.

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.

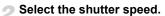




Select ★.

Choose ★ in Steps 1 – 2 on p. 56 and press the (sir) button.





- Press the A button.
- Press the buttons to select shutter speed, then press the (SET) button.

Confirm the exposure.

When you press the shutter button halfway, the exposure for the selected shutter speed will appear.



- . 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.
- It is recommended to set the [IS Mode] to [Off] when shooting with a tripod (p. 138).



If the flash fires, the image may be overexposed. If this happens, set the flash to (3) and shoot.

Changing the Color and Shooting

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

IA Color Accent

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





Recorded color

Choose ∄A.

Follow Steps 1 – 2 on p. 56 to choose [₹]A.

Press the DISP, button.

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

Specify the color.

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

Specify the range of colors.

- Press the ▲▼ buttons 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.

S Color Swap

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





Follow Steps 1 – 2 on p. 56 to choose √s.



Press the DISP button.

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



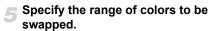
Specify the color to be swapped.

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



Specify the target color.

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



- Press the ▲▼ buttons to adjust the range of colors affected.
- 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.



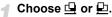
- Using the flash may cause unexpected results in this mode.
- Under some conditions, the image may appear coarse.

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.







 Follow Steps 1 – 2 on p. 56 to choose ⊈ or ⊉.

Take the first shot.

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

😨 Take subsequent shots.

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

Finish shooting.

Press the (SET) button.

Merge the images on a computer.

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



This function is not available when a TV is used as the monitor (p. 77).

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 \mathbb{\mathbb{m}}.

Changing the Movie Mode

You can choose between three Movie modes.



Set the mode switch to \mathbb{\bar{\mathbb{\pi}}}.

- Choose a Movie mode.
 - Press the ⊕ button, then use the ▲▼ buttons to choose ➡, then press the ⊕ button again.
 - Press the ▲▼ buttons to choose a Shooting mode, then press the (button.

► 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
况 Color Swap	color, when shooting. See "Changing the Color and Shooting" (p. 91) for details.



Under some conditions, colors may not turn out as expected in the $\begin{tabular}{l} \end{tabular}$ and $\begin{tabular}{l} \end{tabular}$ mode.

Changing the Image Quality

You can choose between three image quality settings.



Choose the image quality.

Press the ∰ button, then use the ▲▼ buttons to choose ᠓, then press the ∰ button again.

Choose an option.

- Press the ▲▼ buttons to choose an option, and press the (button.
- The setting will display on the screen.

Image Quality Table

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

Estimated Shooting Time

Image Quality	Shooting Time		
(Frame Rate)	2 GB	8 GB	
1280	10 min. 53 sec.	43 min. 32 sec.	
640	23 min. 49 sec.	1 hr. 35 min. 11 sec.	
320	1 hr. 13 min. 10 sec.	4 hrs. 52 min. 24 sec.	

Based on Canon's testing standards.

⁻ Maximum clip length is approximately 10 minutes in \boxed{m} , 1 hour in \boxed{m} and \boxed{m} . Recording also stops when the file size reaches 4 GB.

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 set the exposure or change it in 1/3 steps within a range of ±2.



Focus.

Press the shutter button halfway to focus.

Lock the exposure.

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

Change the exposure.

While watching the screen, press the buttons to adjust the brightness.



Other Shooting Functions

The following functions can be used in the same way as for still images. For R and R modes, the functions with an * attached can be used in the same way as for still images.

Zooming in More Closely on Subjects (Digital Zoom) (p. 60)
 You can use the digital zoom, 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. 63)*
- Shooting Close-ups (Macro) (p. 67)*
- Shooting Far Away Subjects (Infinity) (p. 68)*
- Adjusting the White Balance (p. 72)
- Changing the Tone of an Image (My Colors) (p. 74)
- Shooting Using the Two Second Self-Timer (p. 75)*
- Shooting Using a TV Monitor (p. 77)*
- Shooting with the AF Lock (p. 82)
- Turning off the AF Assist Beam (p. 136)*
- Displaying the Overlay (p. 138)*
 [3:2 Guide] is not available.
- Changing the IS-Mode Settings (p. 138)*
 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. 28)
- Quickly Searching Images (p. 104)
- Viewing Images in Filtered Playback (p. 106)
- Viewing Slideshows (p. 107)
- Changing Image Transitions (p. 110)
- Viewing Images on a TV (p. 111)
- Protecting Images (p. 113)
- Erasing All Images (p. 115)
- Organizing Images by Category (My Category) (p. 118)
- Rotating Images (p. 120)

← Exit

Summary for "Viewing Movies" (p. 33)

ت			
•	Playback		
 	Slow Motion Playback (you can use the ♦ buttons to adjust the speed. Sound will not play back.)		
K	Display the first frame		
4	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. 101)		
Ф	Appears when connected to a PictBridge compliant printer (p. 29). 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 Bar

- Follow Steps 1 3 on p. 33, choose **%** and press the (button.
- ► The movie editing panel and the movie editing bar will appear.

Set the editing range.

- Press the ▲▼ buttons and choose ¾♥ or
- Press the ♠ buttons to move ♠. ¾ will display at each one-second interval. If you choose ⅙, you can trim the beginning of the movie from ⅙. If you choose ⅙, you can trim the end of the movie from ⅙.
- ▶ Even if you move **↓** to a point other than a **ઝ** point, only the portion from the nearest **ઝ** to the left will be trimmed when **ઝ** is chosen. Only the portion from the nearest **ઝ** to the right will be trimmed when **y** is chosen.
- The light blue section indicated with will be the section of the movie that remains after editing.

Check the edited movie.

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



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 movie.
- 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. 40).

Using Playback and Other Functions

The first part of this chapter explains various ways to play back and edit images. The latter part explains how to specify images for printing.

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

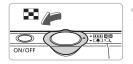


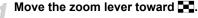
- It may not be possible to play back or edit images that have been edited on a computer, had their file name changed, or have been taken on a different camera.
- The edit function (pp. 121 125) cannot be used if the memory card does not have free space available.

Quickly Searching Images

🔀 Searching Images Using Index Display

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





- 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 Q to reduce the number of images. The number of images will reduce each time you move the lever.



Choose an image.

- Press the ATT buttons to choose an image.
- An orange frame appears on the chosen image.
- Press the button to display the chosen image by itself.

<u>@</u>

Searching in a large number of images

By repeatedly moving the zoom lever toward \P , you can display an index of up to 100 images. If you move the zoom lever toward \P again, a orange frame appears around all of the images and you can quickly search by pressing the \P 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 (Scroll Display) letting you quickly search them.



Choose an image.

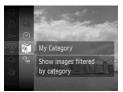
- If you press the ▲▼ buttons, you can search images by the shooting date.
- Pressing the (m) button restores single image playback.



To turn off this effect, press the MENU button, then choose [Scroll Display] in the \textbf{\infty} 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. 113) or delete (p. 115) all images at once while filtered.





¶ Choose ♥

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

Choose a filter.

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

View the filtered images.

- Press the ▲▼ buttons to choose a filter for playback, then press the (button.
- Filtered playback starts and a yellow frame appears.
- If you press the ◀▶ buttons, only the chosen target images will display.
- If you choose [All Images] in Step 2, filtered playback will be canceled.

Search by ⊘, i and •

Shot Date	Displays the images shot on a specified date
My Category	Displays the images of a specified category
💂 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. 107) 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. 113), "Erasing All Images" (p. 115), "Printing from the Print List (DPOF)" (p. 126)

Viewing Slideshows

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







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

Choose a transition effect.

- Press the ▲▼ buttons to choose an effect and press the (button.
- ► The slideshow will start a few seconds after [Loading image...] displays.
- In filtered playback (p. 106), only images matching a filter play back.
- You can pause/restart a slideshow by pressing the (button again.
- Press the MENU button to stop the slideshow.



- If you press the ◆▶ buttons 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. 53).

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.



Choose [Slideshow].

 Press the MENU button, choose [Slideshow] from the tab and press the
 button.



- Press the ▲▼ buttons to choose an item, and 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.





Press the DISP, button, and switch to the focus check display (p. 45).

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

Switch frames.

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

Change the magnification level or location.

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

Magnifying Images



Approximate Location of Displayed Area

Move the zoom lever toward \mathbb{Q} .

- The display will zoom in on the image and sing will appear. If you continue to hold the zoom lever, it will continue to zoom in up to a 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 return to Single Image Playback.
- When ♣ appears on the screen, press the ♠ button to switch to ♣ button to switch between images at the same level of magnification. Press the ♠ button again to return to ♣ 5

Changing Image Transitions

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



Choose [Transition].

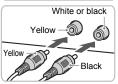
Viewing Images on a TV

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

Items to Prepare

- Camera and TV
- AV cable supplied with the camera (p. 2)







Turn off the camera and TV.

Connect the camera to the TV.

- Open the camera's terminal cover and fully insert the plug of the cable into the camera's terminal.
- Insert the cable plug fully into the video input terminals as shown in the illustration.
- Turn on the TV and switch it to the input to which the cable is connected.

Turn on the camera.

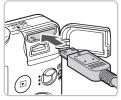
- Press the button to turn on the camera.
- ► The image will appear on the TV (nothing will appear on the monitor of the camera).
- After you finish viewing, turn off the camera and TV, and unplug the AV cable.

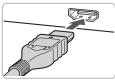
What if the images don't properly display on the TV?

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 Υ^{\uparrow} tab and [Video System] to switch to the correct video system.

Viewing Images on a High-Definition TV

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





Turn off the camera and TV.

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 4 on p. 111 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.

Protecting Images

You can protect important images so that they cannot be erased by the camera (pp. 28, 115).





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



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



- Protected images cannot be erased with the camera's erase function. To erase an image, cancel protection first.
- You can also protect images using the following method. Press the
 MENU button, choose the tab, then choose [Protect]. Press the
 button to choose [Select] and press the button again, then press the
 buttons to choose an image and press the button.

Select Range



Choose [Protect].

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

Choose [Select Range].

- Press the ▲▼ buttons to choose [Select Range] and press the (button.)
- Pressing the MENU button will restore the menu screen.

Protecting Images









Choose the starting image.

- Press the (st) button.
 - Press the ◀▶ buttons to choose the image and press the (button.

Choose the ending image.

- Press the ▶ button, 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.

Protect images.

Press the ▼ button, choose [Protect] and press the ⊕ button.

Choose All Images



Choose [All Images].

Follow Step 2 on p. 113 to choose [All Images] and press the (button.

Protect images.

■ Press the ▲▼ buttons to choose [Protect] and press the (st) button.



You can unlock groups of protected images if you choose [Unlock] in Step 5 while in [Select Range], or Step 2 while in [All Images].

Erasing All Images

You can choose images and erase them in groups. Since erased images cannot be recovered, exercise adequate caution before erasing. Protected images (p. 113) cannot be erased.

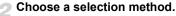




Choose [Erase].

■ Press the MENU button, choose the ID tab and [Erase], and press the (st) button.





Press the AT buttons to choose a selection method, and press the (SET) button.

Choosing Images Individually





Choose [Select].

● Follow Step 2 on p. 115 to choose [Select] and press the (button.

Choose images.

- Press the ◀▶ buttons to choose the image and press the (button.
- Once set, \checkmark will appear on the screen.
- Pressing the ⊕ button once more will cancel the selection, and ✓ will disappear.
- To choose multiple images, repeat the above operation.

Press the MENU button.

Erase.

Press the ♠ buttons to choose [OK] and press the (button.

Select Range





◀ Choose [Select Range].

- Follow Step 2 on p. 115 to choose [Select Range] and press the button.
 - Follow Steps 3 and 4 on p. 114 to choose images.

Erase.

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

Choose All Images



Choose [All Images].

Follow Step 2 on p. 115 to choose [All Images] and press the (button.

Erase.

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

Organizing Images by Category (My Category)

You can organize images in categories. You can display the images in a category in Filtered Playback (p. 106) and process all images at once by using the functions below.

 "Viewing Slideshows" (p. 107), "Protecting Images" (p. 113), "Erasing All Images" (p. 115), "Choosing Images for Printing (DPOF)" (p. 128)





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



Make the setting.

- Press the ▲▼ buttons to choose a category, then press the (button.
- Once set, ✓ will appear on the screen.



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

🐃 : Images with detected faces, or images shot in 🦣, 🔣, 🧩 modes.

: Images detected as or in auto mode, or images shot in or or .

Using the Menu



Choose [My Category].

Press the MENU button, choose the tab and [My Category], and press the button.



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



Choose [Select].

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

Select Range



Choose [Select Range].

- Follow Step 2 above to choose [Select Range] and press the () button.
- Follow Steps 3 and 4 on p. 114 to choose images.
- Press the ▼ button, choose the item and press the ◀ buttons to choose a type.

Choose the setting.

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.

Rotating Images

You can change the orientation of an image and save it. Movies with a resolution of macannot be rotated.





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



Rotate the image.

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

Using the Menu



■ Choose [Rotate].

● Press the MENU button, choose the ▶ tab and [Rotate], and press the (button.



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.

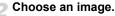
Resizing Images

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





Press the MENU button and choose the
 tab, then choose [Resize] and press the m button.



Press the ◀▶ buttons to choose the image and press the (button.



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



Save the new image.

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



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 display.



- You cannot resize an image to a larger size.
- You cannot resize images taken with the \mathbf{W} and \mathbf{XS} settings.

Trimming

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



Trimming Area



Trimming Area Display

Recorded pixels after trimming



Choose [Trimming].

Press the MENU button, choose the tab and [Trimming], then press the button.

Choose an image.

Press the ♠ buttons to choose the image and press the (button.

Adjust the trimming area.

- A frame will appear around the portion of the image to be trimmed.
- The original image will display in the upper left and the trimmed image will display in the lower right.
- If you move the zoom lever to the left or right, you can change the frame size.
- If you press the ▲▼◀▶ buttons, you can move the frame.
- If you press the DISP, button, you can change the frame size.
- 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 m button.
- Press the MENU button.

Save as a new image and display.

Perform Steps 4 and 5 on p. 121.



- ■, S, and XS images cannot be trimmed.
- 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. 74 for details on each menu item.





Choose [My Colors].

Press the MENU button, choose the tab and [My Colors], and press the button.

Choose an image.

Press the ◀▶ buttons to choose the image and press the (♣) button.

Choose a menu option.

- Press the buttons to choose an option.
- You can magnify the image by following the operations in "Magnifying Images" (p. 110).
- If you press the button during magnified display, you can switch to the original image. Pressing the MENU button restores the menu screen.
- Press the button.

Save as a new image and display.

Perform Steps 4 and 5 on p. 121.



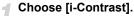
- If you repeatedly change the color of an image, the quality will gradually deteriorate and you may not achieve the expected color.
- The coloration of images changed with this function may vary from those recorded with the My Colors function (p. 74).

Correcting the Brightness (i-Contrast)

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

You can choose from four levels of correction: [Auto], [Low], [Medium] or [High]. The corrected image is saved as a separate file.





- Press the MENU button, choose the tab and [i-Contrast], then press the button.
- Choose an image.
 - Press the ◀▶ buttons to choose the image and press the (button.
 - Choose a menu item.
 - Press the ◀▶ buttons to choose an option, then press the ∰ button.
 - Save as a new image and display.
 - Perform Steps 4 and 5 on p. 121.



∢ Auto

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 exposure setting may not be suitable.
- Repeatedly adjusting the same image may cause the quality to deteriorate

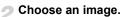
Correcting the Red-Eye Effect

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

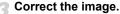


Choose [Red-Eye Correction].

- Press the MENU button, choose the tab and [Red-Eye Correction], then press the button.
- The [Red-Eye Correction] screen will appear.



■ Press the ◀▶ buttons to choose an image.



- Press the (st) button.
- Red-eye detected by the camera will be corrected and a frame will appear around the corrected portion.
- You can zoom the image using the procedures in "Magnifying Images" (p. 110).

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.
- Perform Step 5 on p. 121.



Red-Eve Correction

- 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.

Printing from the Print List (DPOF)

You can add images to the print list (DPOF) directly after shooting or while in playback with 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



Choose an image.

- Press the buttons to choose the image.
- Choose ♣ (videos will be excluded).
 - Press the ∰ button to choose ♣ in the FUNC. menu, then press the ∰ button again.

Print list.

- Press the ▲▼ buttons and choose the number of prints, 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 ♠ buttons to choose [Remove] and press the ⊕ button.

Print Added Images

The following examples use the Canon SELPHY series printers. Please also refer to the *Personal Printing Guide*.

Number of copies to print



Connect the camera to the printer (p. 29).

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 certain images on a memory card for printing (up to 998 images) and specify the number of print copies so they can be printed together or processed at a photo developer service. You can then print all the chosen images at once or take the memory card to a photo developer to order prints. These selection methods comply with the DPOF (Digital Print Order Format) standards.

Print Settings

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



Choose [Print Settings].

● Press the MENU button and choose the tab, then choose [Print Settings] and press the (m) button.

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 date from the shooting information.
	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 print 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.
- Images with the date embedded always print with the date, regardless of the [Date] setting. As a result, some printers may print the date twice on these images if [Date] is also set to [On].



- With [Index] chosen, the [Date] and [File No.] options cannot be set to [Onl at the same time.
- The date will be printed in the style set in the [Date/Time] function in the †† tab (p. 19).

Choosing the Number of Copies



Choose [Select Images & Qty.].

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

Choose an image.

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

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



Choose [Select Range].

- Choose [Select Range] in Step 1 on
 p. 129 and press the () button.
- Choose images according to Steps 3 and 4 on p. 114.

Make print settings.

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

Set All Images to Print Once



Choose [Select All Images].

- Choose [Select All Images] in Step 1 on p. 129 and press the button.
- Make print settings.
 - Press the ♠ buttons to choose [OK] and press the (button.

Clearing All Selections



Choose [Clear All Selections].

 Choose [Clear All Selections] in Step 1 on p. 129, and press the (button.

All selections will be cleared.

Press the ♠ buttons to choose [OK], then press the (FINC) button.

Customizing the Camera

You can customize various functions 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 Functions

You can customize convenient and commonly used functions from the **ft** tab (p. 48).

Turning off Hints & Tips

When you choose an item in the FUNC. menu (p. 47) or MENU (p. 48), 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 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	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, 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 (p. 52).
- Refer to the Software Guide for information regarding folder structure or image types.

Creating Folders by Shooting Date

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



- Choose [Create Folder], then press 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. 27). You can set the retraction 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. 53) 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 careful not to forget to turn off the camera after use.

Setting the Screen Shut-Off Time

You can adjust the time the screen takes to shut off automatically (p. 53). 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, it is recommended to choose less than [1 min.].

Using the World Clock

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









Set the home time zone.

- Choose [Time Zone] 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 ☀.

Set the world time zone.

- Press the ▲▼ buttons to choose ⋨, then press the (आ) button.
- Press the ◀▶ buttons to choose the destination time zone, then press the ® button.
- You can also set the daylight saving time as in Step 1.

Choose the world time zone.

- Press the ▲▼ buttons to choose [Home/ World].
- Press the ◀▶ buttons to choose ⋨, then press the MENU button.
- will appear in the [Time Zone] or shooting screen (p. 44).



If you change the date or time in the \nearrow setting, (p. 19), your \P time and date will automatically change.

Changing Shooting Functions

If you set the mode switch to , and the mode to P, you can change the settings in the tab (p. 48).



Before attempting to shoot using a function explained in this chapter in modes other than $\bf P$ mode, check if the function is available in those modes (pp. 148 – 151).

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

You can change the length of time the images display directly 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	Only displays the image taken.
Detailed	Displays detailed information (p. 45).
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. 109).

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	The areas outside the 3:2 range are grayed out. 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. It is recommended to set the IS Mode to [Off] when the camera is attached to a tripod.
- When using [Panning], hold the camera horizontally. Image stabilization does not work when the camera is held vertically.

Changing Playback Functions

You can adjust the settings in the **\bigcite** tab by pressing the **\bigcite** button (p. 48).

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.

Changing the Start-up Image or Sound

In the **f†** tab, you can change the sounds played for each camera operation or set the start-up image that appears when the camera power is turned on.

Change Sounds



- Choose [Sound Options], then press the button.
- Press the ▲▼ buttons to choose an option.
- Press the ◆ buttons to choose a setting.
 - Preset sounds.

 You can register your sounds using the supplied software (p. 140).
- Changing the Start-up Screen



- Choose [Start-up Image], then press the button.
- Press the ◆ buttons to choose a setting.
- No start-up image.

 Preset images.

 You can register your images.

Setting a Recorded Image as the Start-up Screen Image

When you press the **D** 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 substant.



- Press the ♠ buttons to choose an image, then press the (button.
- Press the ◀▶ buttons to choose [OK], then press the ∰ button to complete registration.



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



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.

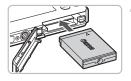
Useful Information

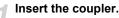
This chapter introduces how to use the AC adapter kit (sold separately), troubleshooting tips and contains lists of functions. The index also appears at the end.



Using Household Power

If you use AC Adapter Kit ACK-DC10 (sold separately), you can use the camera without worrying about how much charge is left in the battery.



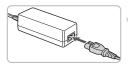


- Open the cover (p. 16) and insert the coupler as shown until it locks into place with a click.
- Close the cover (p. 16).



Plug the cord into the coupler.

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



Connect the power cord.

- Connect the power cord to the compact power adapter, then plug the other end into a power outlet.
- 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 and power cord with the camera turned on. This could erase images you have taken or damage the camera.

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 properly inserted (p. 16).
- Confirm that the memory card/battery cover is securely closed (p. 16).
- 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 such as 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. 16).

TV output

Image is distorted or not showing on TV (p. 111).

Shooting

Cannot shoot.

When in Playback mode (p. 27), press the shutter button halfway (p. 23).

Screen does not display properly in dark places (p. 46).

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.
- 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. 26).
- appears when the shutter button was pressed halfway (p. 59).
- Set the [IS mode] to [Continuous] (p. 138).
- Set the flash to \$ (p. 67).
- Increase the ISO speed (p. 71).
- Attach the camera to a tripod.

Troubleshooting

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. 155).
- Set the [AF-assist Beam] to [On] (p. 136).
- Confirm that functions which you do not intend to use (macro, etc.) are not set.
- Shoot using the focus lock or AF lock (pp. 77, 82).

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. 67).
- Adjust the brightness with exposure compensation (p. 66).
- Adjust the brightness with the i-Contrast function (pp. 87, 124).
- Use the AE lock, or spot metering to shoot (p. 85).

Subject is too bright (overexposed).

- Set the flash to (1) (p. 59).
- Adjust the brightness with exposure compensation (p. 66).
- Use the AE lock, or spot metering to shoot (p. 85).
- Reduce the light illuminating the subject.

Image is dark even though the flash fired (p. 26).

- Increase the ISO speed (p. 71).
- Shoot within an appropriate distance for flash photography (p. 67).

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

- Shoot within an appropriate distance for flash photography (p. 67).
- Set the flash to (p. 59).

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. 71).
- Depending on the Shooting mode, when shooting in a high ISO speed the image may appear rough or grainy (p. 58).

Eyes appear red (p. 88).

Set the [Red-Eye Lamp] to [On] (p. 136). When shooting with the flash, the lamp (on the front of the camera) lights (p. 42), and for approximately 1 second while the camera is reducing red-eye, it is not possible to shoot. It is more effective if the subject is looking directly at the lamp. Even better results can be obtained by increasing the lighting in indoor settings or approaching closer to the subject.

Recording images to the memory card takes a long time, or continuous shooting slows down.

Perform a low-level format of the memory card in the camera (p. 52)

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. Refer to "Functions Available in Each Shooting Mode" (p. 148).

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 (p. 32).

appeared on the LCD monitor, and shooting ended automatically.

The camera's internal memory was insufficient. Try one of the following.

- Perform a low-level format of the memory card in the camera (p. 52).
- Change the compression ratio (p. 97).
- Use a memory card capable of recording at high speeds.

Zoom does not operate.

You can use the digital zoom while recording, but not the optical zoom (p. 99).

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 (p. 52).
- If you copy a movie to a memory card that reads slowly, playback may interrupt momentarily.
- Depending on its capabilities, the computer may drop frames, or the audio may cut out, when playing movies.

Computer

Cannot transfer images to a computer.

The problem may be solved by performing the following operations to slow down transfer speed when the camera is connected to a computer by a <u>cable</u>.

 Press and hold down the MENU button, then press 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 LCD monitor, 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. 16).

Card locked!

The SD memory card or SDHC memory card's write protect tab is set to "LOCK".
 Unlock the write protect tab (p. 18).

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 when shooting (p. 16).

Memory card error (p. 52)

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

Memory card full

There is not enough free space on the memory card to shoot (pp. 24, 55, 65, 79) or edit images (pp. 121 – 125). Erase the images (pp. 28, 115) to open space for new images, or insert an empty memory card (p. 16).

Change the battery pack. (p. 16) No Image.

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

Protected! (p. 113)

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

- Unsupported images or data, or corrupted image 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. 110), rotated (p. 120), edited (pp. 121 – 125), registered to the start-up screen (p. 140), categorized (p. 118), or added to a print list (p. 128).
- 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. 110), edited (pp. 121 125), added to a print list (p. 126), or registered to the start-up screen (p. 139).

Cannot select!

- When choosing the selection range (pp. 117, 113, 119), 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.
- You tried to choose more than 501 images in the selection range (pp. 117, 113, 119).

Too many marks.

 You chose more than 998 images in print settings. Choose less than 998 images (p. 128).

Cannot complete!

 Print settings could not be saved correctly. Reduce the number of selected images and try again (p. 128).

Naming error!

• The file name could not be created because there is an image with the same name as the folder that the camera is attempting to create, or the highest possible file number has already been reached (p. 133). In the *f* menu, change [File Numbering] to [Auto Reset] (p. 132) or format the memory card (p. 52).

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.

Lens error, restart camera

- A lens error was detected. Press the power button to turn the camera off and back on (p. 42). If this error message continues to appear, contact your Canon Customer Support Help Desk as there may be a problem with the lens.
- 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.

Exx (xx: number)

- A camera error was detected. Press the power button to turn the camera off and back on (p. 42).
- If an error code appears directly after taking a picture, the shot may not have been recorded. Check image in Playback mode.
- If this error code reappears, note the number and contact your Canon Customer Support Help Desk as there may be a problem with the camera.

Functions Available in Each Shooting Mode

	Shooting modes	AUTO		ď	.	
Function		AUIU	Р	P	Å	28
	\$ ^A	0	0	0	*1	0
Flash (pp. 59, 67, 86)	4	_	0	0	*1	0
1 lash (pp. 55, 67, 56)	\$ <u>*</u>	_	0	_	_	_
	③	0	0	0	0	0
	All Range	0	_	_	_	_
Focusing Zone (pp. 67, 68)	▲ A	_	0	0	0	0
Tocasing Zone (pp. 07, 00)	₩	-	0	0	0	_
	A	_	0	0	0	_
Exposure Compensation (p. 66)/Exposure Shift (p. 98)		_	0	0	0	0
	COFF	0	0	0	0	0
Self-Timer (pp. 63, 64, 75, 76)	GO C2	0	0	0	0	0
осн-типст (рр. 00, 04, 70, 70)	G	0	0	0	0	0
	€2 *2	0	0	0	0	0
AF Lock (p. 82)		_	0	_	_	_
AE Lock (pp. 85, 98)/FE Lock (p. 85)		_	0	_	_	_
TV Display (p. 77)		0	0	0	0	0
Information Display (p. 44)	On	0	0	0	0	0
illioilliation Display (p. 44)	Off	0	0	0	0	0

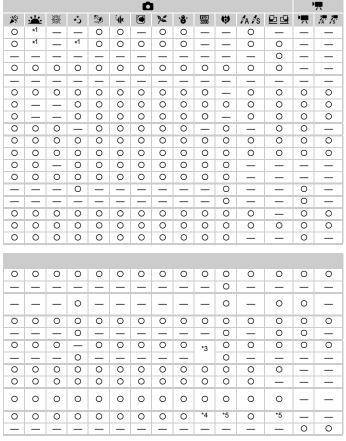
Func. Menu						
Light Metering (p. 84)	(3)	0	0	0	0	0
Light Wetering (p. 04)	[][]	_	0	_	_	_
My Colors (p. 74)	AFF AV AN ASE ASW AP AL AD AB AG AR AC	_	0	_	_	_
White Balance (p. 72)	AWB	0	0	0	0	0
Write Balance (p. 72)	☀▲★₩♬恳	_	0	_	_	_
ISO Speed (p. 71)	ISO AUTO	0	0	0	0	0
	150 150 150 150 150 150 80 100 200 400 800 1600	_	0	_	_	_
Drive Mode (p. 73)		0	0	0	0	0
Drive Wode (p. 70)	밀	_	0	0	0	0
Compression Ratio (Image Quality) (p. 69)	4.4	0	0	0	0	0
Recording Pixels (p. 69, 97)	L M1M2M3S 🔯	0	0	0	0	0
1 x c c c d i i g i i x c i s (p. 0 s, 9 i)	1280 640 320	_	_	_	_	_

^{*1} Set to 🗱 when flash fires.

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

^{*3} ISO 3200 (p. 58) is set by default. *4 Fixed to M3. *5 M is not selectable.

Functions Available in Each Shooting Mode



O Selectable, or set automatically. — Not selectable

Menus

Shooting Menu

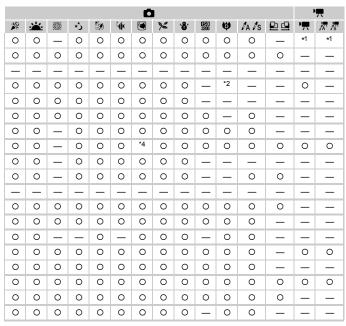
	Shooting modes		AUTO	Ď			
Function			AUIU	Р	P	兹	1
AF Frame (p. 80)	Face AiAF		0	0	0	0	0
Ai Traine (p. 00)	Center		_	0	0	0	0
AF Frame Size (p. 80)	Normal/Small		_	0	_	_	_
Digital Zoom (p. 60)	Standard/Off		0	0	0	0	0
Digital 200111 (p. 00)	Digital Tele-conve	rter (1.5x/2.0x)	0	0	0	0	0
AF-Point Zoom (p. 81)	On/Off		0	0	0	0	0
Servo AF (p. 83)	On/Off		*3	0	0	0	0
AF-assist Beam (p. 136)	On/Off		0	0	0	0	0
Floor Cottings (n. 00)	Red-Eye Corr.	On/Off	0	0	0	0	0
Flash Settings (p. 88)	Red-Eye Lamp	On/Off	0	0	0	0	0
i-Contrast (p. 87)	Off/Auto		*2	0	_	_	_
Review (p. 137)	Off/2 – 10 sec./Hold		0	0	0	0	0
Review Info (p. 137)	Off/Detailed/Focus Check		0	0	0	0	0
Blink Detection (p. 89)	On/Off		0	0	0	0	0
Dian Overlay (n. 129)	Off/Grid Lines		0	0	0	0	0
Disp. Overlay (p. 138)	3:2 Guide/Both		0	0	0	0	0
IC Mode (n. 129)	Continuous/Off		*2	0	0	0	0
IS Mode (p. 138)	Shoot Only/Panning		_	0	0	0	0
Date Stamp (p. 62)	Off/Date/Date & Time		0	0	0	0	0

^{*1} AiAF

^{*2} Always [On].

^{*3 [}On] when movement is detected.

^{*4} Available when \$ is chosen.



O Selectable, or set automatically. — Not selectable

f† Set up Menu ■

Item	Options/Summary	Ref. Page
Mute	On/Off*	p. 49
Volume	Set all operation sounds (5 levels).	p. 49
Sound Options	Set the sounds for each camera operation.	p. 139
Hints & Tips	On*/Off	p. 132
LCD Brightness	Set within a range of ±2.	p. 50
Start-up Image	Add an image as start-up image.	p. 139
Format	Formats memory card, erasing all data	p. 52
File Numbering	Continuous*/Auto Reset	p. 132
Create Folder	Monthly*/Daily	p. 133
Lens Retract	1 min.*/0 sec.	p. 133
Power Saving	Auto Power Down: On*/Off Display Off: 10, 20 or 30 sec./1*, 2 or 3 min.	p. 53, 134
Time Zone	Home/World	p. 135
Date/Time	Date and time settings	p. 20
Video System	NTSC/PAL	p. 111
Language	Choose display language.	p. 21
Reset All	Returns camera to default settings.	p. 51

^{*} Default setting

▶ Playback Menu |

Item	Options/Summary	Ref. Page
Slideshow	Plays back images automatically.	p. 107
Erase	Erases images.	p. 115
Protect	Protects images.	p. 113
Rotate	Rotates images.	p. 120
My Category	Categorizes images.	p. 118
i-Contrast	Corrects dark portions and contrast in still images.	p. 124
Red-Eye Correction	Corrects red eyes in still images.	p. 125
Trimming	Trims portions of still images.	p. 122
Resize	Resizes and saves still images.	p. 121
My Colors	Adjusts colors in still images.	p. 123
Scroll Display	On*/Off	p. 105
Resume	Last seen*/Last shot	p. 139
Transition	Fade*/Scroll/Slide/Off	p. 110

^{*} Default setting

🕒 Print Menu

Item	Options/Summary	Ref. Page
Print	Displays printing screen.	p. 29
Select Images & Qty.	Chooses individual images for printing.	p. 129
Select Range	Chooses starting and ending images for printing.	p. 130
Select All Images	Chooses all images for printing.	p. 130
Clear All Selections	Cancels all settings for printing.	p. 130
Print Settings	Sets the printing style.	p. 128

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 or motors 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 LCD monitor, 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 LCD monitor.
- Use a commercially available blower brush to remove dust from the lens.
 For stubborn dirt contact the closest 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. 12.1 million Approx. 12.4 million) 35mm film equivalent: 28 (W) - 112 (T) mm f/2.8 (W) - f/5.9 (T)with the optical zoom) LCD Monitor......2.7-inch type TFT color LCD monitor Approx. 230,000 dots. Picture coverage 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)/ 50 cm (1.6 ft.) - infinity (T) Normal: 30 cm (12 in.) - infinity (W)/ 50 cm (1.6 ft.) - infinity (T) Macro: 3 - 50 cm (1.2 in. - 1.6 ft.) (W) Infinity: 3 m (9.8 ft.) - infinity Digital Macro: 3 - 10 cm (1.2 - 3.9 in.) Kids&Pets: 1 m (3.3 ft.) - infinity Shutter Mechanical shutter and electronic shutter 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 (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 reduction/Red-eye correction/FE Lock settings available 50 cm - 2.0 m (1.6 - 6.6 ft.) (T) Shooting Modes......Shooting Mode: Auto, P, Portrait, Night Snapshot, Kids&Pets, Indoor, Sunset, Fireworks, Long Shutter, Beach, Underwater, Aguarium, Foliage, Snow, ISO 3200, Digital Macro, Color Accent, Color Swap, Stitch Assist Movie Mode: Standard, Color Accent, Color Swap

Continuous Shooting Approx. 0.8 images/sec.

Specifications

i-Contrast Off/Auto Recording Media SD memory card, SDHC memory card, MultiMediaCard, MMCplus card, HC MMCplus card File Format..................Design rule for Camera File system and DPOF compliant Movies: MOV (Image data: H.264, Audio data: Linear PCM) (Mono) Compression Fine, Normal Number of Recording Pixels (Still images) Large: 4000 x 3000 pixels Medium 1: 3264 x 2448 pixels Medium 2: 2592 x 1944 pixels Medium 3: 1600 x 1200 pixels Small: 640 x 480 pixels Widescreen: 4000 x 2248 pixels 640 x 480 pixels (30 frames/sec.) 320 x 240 pixels (30 frames/sec.) Number of Possible Shots Approx. 220 images (Based on CIPA standardized measurement) Playback Function Single Image, Movie, Magnified Focus, Index, Magnified, Filtered Playback, Slideshow Editing Function Erase, Protect, My Category, Resize, My Colors, i-Contrast, Trimming, Rotate, Red-Eye Correction

Direct Print Type PictBridge capable

type of digital, audio and video*) HDMI (HDMI Mini Connector)

* mini-B compatible

Video/Audio output (NTSC and PAL capable, mono audio)

Communication Settings MTP, PTP

Power.....Battery Pack NB-4L

(rechargeable lithium-ion battery)

Dimensions (excluding protrusions). .89.5 x 54.9 x 20.0 mm (3.52 x 2.16 x 0.79 in.)

Weight (camera body only) Approx. 120 g (4.23 oz.)

Battery Pack NB-4L

Type......Rechargeable lithium-ion battery

Battery Charger CB-2LV/CB-2LVE

(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)

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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