Battery Charger CB-2LY

This product is not intended to be serviced. Should the product cease to function in its intended manner, it should be returned to the manufacturer or be discarded.

This power unit is intended to be correctly orientated in a vertical or floor mount position.

IMPORTANT SAFETY INSTRUCTIONS-SAVE THESE INSTRUCTIONS.
DANGER-TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS.
For connection to a supply not in the U.S.A., use an attachment plug adapter of the proper configuration for the power outlet.

This battery charger is for exclusive use with Battery Pack NB-6L (1.00 Ah). There is a danger of explosion if other battery packs are used.

Trademark Acknowledgments

- The SDHC logo is a trademark.
- HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

Disclaimer

- Reprinting, transmitting, or storing in a retrieval system any part of this guide without the permission of Canon is prohibited.
- Canon reserves the right to change the contents of this guide at any time without prior notice.
- Illustrations and screenshots in this guide may differ slightly from the actual equipment.
- Every effort has been made to ensure that the information contained in this guide is accurate and complete. However, if you notice any errors or omissions, please contact the Canon customer service center indicated on the customer support list included with the product.
- The above items notwithstanding, Canon accepts no liability for damages due to mistaken operation of the products.

Canon

DIGITAL CAMERA

PowerShot S90

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.
- Please use this manual along with the PDF manuals included on the CD-ROM (p. 2).
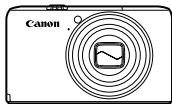
ENGLISH

CDI-E409

Checking the Package Contents

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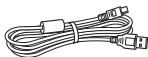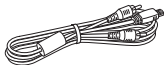
Camera

Battery Pack NB-6L (with Terminal Cover)

Battery Charger CB-2LY/CB-2LYE

Interface Cable IFC-400PCU

AV Cable AVC-DC400

Wrist Strap WS-DC9

Camera User Guide (This Guide)

DIGITAL CAMERA Solution Disk

Warranty Card

"Canon Customer Support" Leaflet

Using the PDF Manuals

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

- **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.
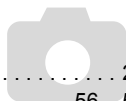
Camera Body Temperature

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

- Shoot, leaving it to the camera to make settings 24
- Shoot to match special conditions. . . . . 56 – 58

Take good people shots

Portraits (p. 56) | At night (p. 56) | Kids and pets (p. 57) | At the beach (p. 58) | Against snow (p. 58)

Take good landscapes

Landscape (p. 56) | Sunsets (p. 57) | Night Scene (p. 57) | Foliage (p. 58)

Shoot various other scenes

Indoors (p. 57) | Fireworks (p. 57) | Underwater (p. 58) | Aquarium (p. 58)

- Focus on faces 24, 67, 84, 88
- Shoot in places where I cannot use the flash (turn off the flash) 61
- Take pictures with me in them too (self-timer) 66, 67
- Insert the date and time into my shots 65
- Take close-up pictures of subjects (macro shooting) 75
- Take pictures with faded colors (Nostalgic) 59
- Take sepia toned or black and white pictures 80
- Change the size of picture I want to take (recording pixels) 72
- Take pictures continuously 79
- Shoot without the effects of camera shake (image stabilization) . . 153
- Shoot without the effects of camera shake even in low light
  conditions (Low Light Mode) 60
- Change the ISO speed 76
- Maintain the focus on moving subjects (Servo AF) 87
- Make dark subjects appear brighter (i-Contrast) 100

4

View

Shoot/View Movies

Print

Save

Other

5
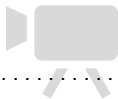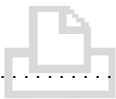
Table of Contents

Chapters 1 – 3 explain the basic operations and frequently used functions of this camera. Chapters 4 onward explain the advanced functions, letting you learn more as you read each chapter.

**5 Getting More Out of Your
Camera 83**

**6 Using Various Functions
for Shooting Movies 109**

**7 Using Playback and Other
Functions......................... 117**

Table of Contents

8 Customizing the Camera.....145

9 Useful Information............ 159

Conventions Used in this Guide

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

▲ (Up button)

(FUNC./SET button)

▶ (Right button)

◀ (Left button)

▼ (Down button)

(Control dial)

( ) (Control ring)
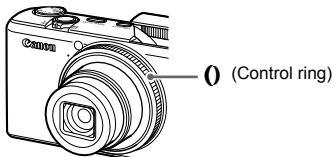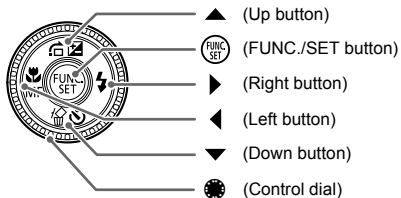
- ❓: Troubleshooting tips.
- ☆: Hints for getting more out of your camera.
- ⚠: Things you should be careful about.
- ✎: Supplemental information.
- (p. xx): Reference pages. "xx" stands for page number.
- This guide assumes all functions are at their default settings.

9

Safety Precautions

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

⚠ **Warning**   Denotes the possibility of serious injury or death.

⚠ **Caution**   Denotes the possibility of injury.

Caution   Denotes the possibility of damage to the equipment.

⚠ Warning

Camera

- **Do not trigger the flash in close proximity to 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 the recommended battery.**
- **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.**

10

● **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.**

11

Safety Precautions

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

● **Take care not to pinch your finger when the flash lowers.**
  This could result in injury.
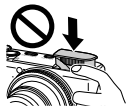
Caution

● **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.**
● **Do not forcibly push down or pull up the flash.**
  This may cause the camera to malfunction.

● **In regular use, small amounts of smoke may be emitted from the flash.**
  This is due to the high intensity of the flash burning dust and foreign materials stuck to the front of the unit. Please use a cotton swab to remove dirt, dust or other foreign matter from the flash to prevent heat build-up and damage to the unit.

● **Unplug the battery charger from the power outlet after recharging is complete, or when you are not using it.**

● **Do not place anything, such as cloth on top of the battery charger while it is charging.**
  Leaving the unit plugged in for a long period of time may cause it to overheat and distort, resulting in fire.

● **Remove and store the battery when you are not using the camera.**
  If the battery are left inside the camera, damage caused by leakage may occur.

● **Before you discard the battery, cover the terminals with tape or other insulators.**
  Contacting other metal materials 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.

12

1

Getting Started

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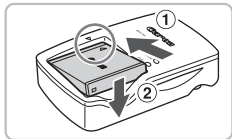

Strap
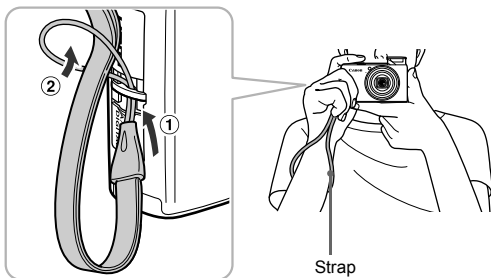
Charging the Battery

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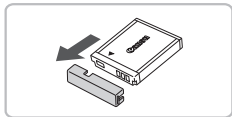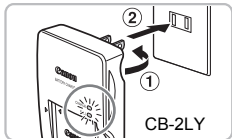
Remove the cover.

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

Charge the battery.
- **For CB-2LY:** Flip out the plug ① and plug the charger into a power outlet ②.
- **For CB-2LYE:** 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 55 minutes.

CB-2LY

CB-2LYE
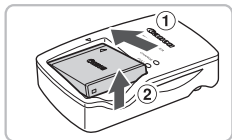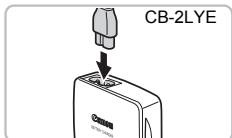
Remove the battery.
- Unplug the battery charger from the power outlet, then remove the battery by sliding it in ① and up ②.

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)	5

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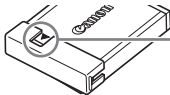
Attach the cover to a charged battery
so that the ▲ mark is visible.

• **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.**
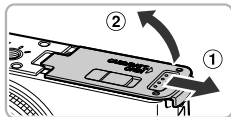Purchase a new battery.

15

Inserting the Battery and Memory Card

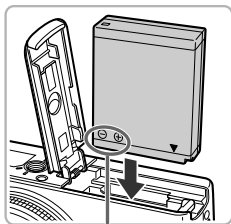Insert the included battery and a memory card into the camera.
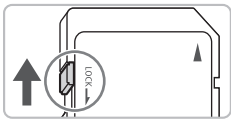
Check the card's write-protect tab.

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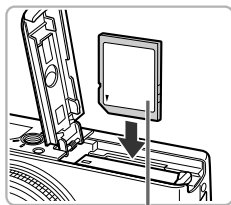
Open the cover.

● Slide the cover ①, and open it ②.

Insert the battery.

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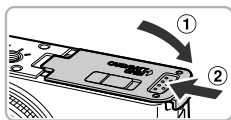● Be sure to insert the battery in the correct direction or it will not properly lock into place.

Terminals

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.
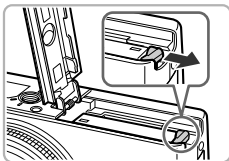
Label

Close the cover.

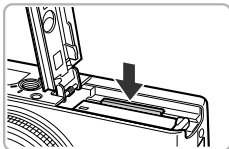● Close the cover ①, and slide it ② until it locks into place with a click.

Removing the Battery and Memory Card

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

2 **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	749	2994

• 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

17

Compatible Memory Cards

● SD memory cards
● SDHC memory cards
● 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.
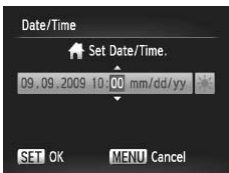
Setting the Date and Time

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.
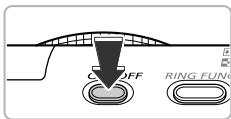
Turn on the camera.

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

Set the date and time.

Date/Time
🏠 Set Date/Time.
09 . 09 . 2009 10:00 mm/dd/yy ☀

SET OK   MENU Cancel

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

Make the setting.

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

Reappearing Date/Time screen

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

Daylight saving time settings

If you choose ☀ in Step 2 and press the ▲▼ buttons or turn the ● dial and choose ☀, you will set the time to daylight saving (1 hour ahead).
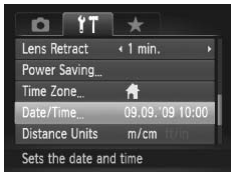
19

Changing the Date and Time

You can change the current date and time settings.
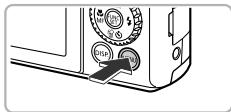
Display the menu.
● Press the MENU button.

Choose [Date/Time] in the ⍾ tab.
● Press the ◀▶ buttons to choose the ⍾ tab.
● Press the ▲▼ buttons or turn the ⊕ dial to choose [Date/Time], then press the ⊛ button.

🔘 ⍾	★
Lens Retract	‹ 1 min. ›
Power Saving_	
Time Zone_	🏠
Date/Time_	09.09.'09 10:00
Distance Units	m/cm
Sets the date and time	

Change the date and time.
● Follow Steps 2 and 3 on p. 19 to adjust the setting.
● To close the menu, press the MENU button.
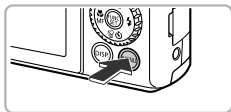
☼ Date/Time battery

● 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.
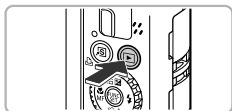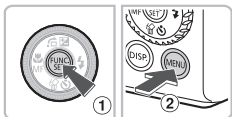
Enter Playback mode.

● Press the ▶ button.

Display the settings screen.

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

English	Svenska	Türkçe
Deutsch	Español	繁體中文
Français	简体中文	한국어
Nederlands	Русский	ภาษาไทย
Dansk	Português	العربية
Suomi	Ελληνικά	Română
Italiano	Polski	فارسى
Norsk	Čeština	日本語
Українська	Magyar	

Set the display language.

● Press the ▲▼◀▶ buttons or turn the ● dial to choose a language, then press the ⓕ button.

▶ Once the display language has been set, the settings screen will close.

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

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

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

Formatting Memory Cards

Before you use a new memory card or one that has been 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.
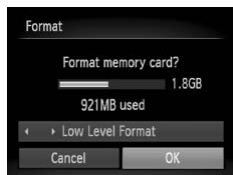
Hints & Tips	On Off
LCD Brightness	− +
Start-up Image...	
Format...	1.8GB
File Numbering	‹ Continuous ›
Clears all memory card data	

Display the menu.
● Press the MENU button.

Choose [Format].
● Press the ◀▶ buttons to choose the ᵧᵀ tab.
● Press the ▲▼ buttons or turn the ● dial to choose [Format], then press the (FUNC) button.

Format

Format memory card?
1.8GB
921MB used

‹ › Low Level Format
Cancel   OK

Format the memory card.
● Press the ◀▶ buttons or turn the ● dial to choose [OK], then press the (FUNC) 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.
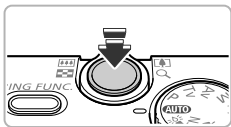
Press halfway (lightly to the first stop).

▶ 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.
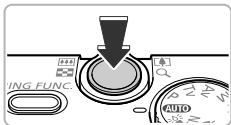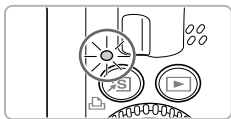
Press fully (to the second stop).

▶ 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.

❓ Does the length of the shutter sound change?

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

If you 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.
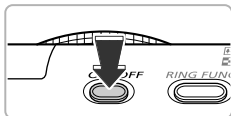
Turn on the camera.

- Press the power button.
- ▶ The start-up sound will play, and the start-up screen will appear.
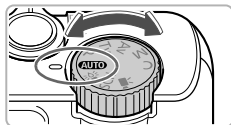
Choose AUTO mode.

- Set the mode dial 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.
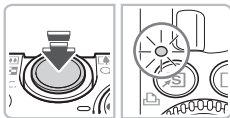- ▶ A white frame will follow a detected face that is moving and the gray frames will disappear.
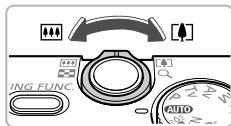
Compose the shot.

- 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.
- You can turn the () ring to zoom in on your subject (Step Zoom, p. 64).

24
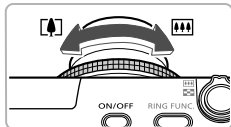
Focus.

● Press the shutter button halfway to focus (The flash will rise automatically in dark environments).

▶ 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 (Servo AF).

AF Frames
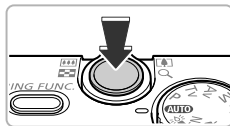
Shoot.

● 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...

● **the flash rises and lowers automatically?**
The flash will rise and lower automatically depending on the shooting scene and camera settings. If you attempt to push the flash down with your fingers or if you interfere with the moving flash, the warning [Wrong flash position Restart the camera] will appear on the screen.

- **a flashing ⚠ appears?**
  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 ft tab, and then choose [Mute]. Press the ◀▶ buttons to choose [Off].
- **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 50 cm – 6.5 m (1.6 – 21 ft.) at maximum wide angle, and approximately 50 cm – 2.5 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 5 cm (1.97 in.) or more away from your subject and shoot. Move about 30 cm (0.98 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 shoot?**
  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.

Subject \ Background		Bright	Bright Backlit	Including Blue Skies	Including Blue Skies Backlit	Sunsets	Dark	Dark When Using Tripod
People		◻	◻	◻	◻	–	◻	◻ *
	When Moving	◻	◻	◻	◻	–	–	–
Subjects Other Than People/Landscapes		AUTO	◻	AUTO	◻	◻	AUTO	◻ *
Close Subjects		◻	◻	◻	◻	–	◻	–
Icon Background Color		Gray		Light Blue		Orange	Dark 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), 🌳 or 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. 70).

Viewing Images

You can view your images on the screen.
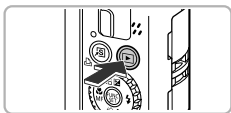
Enter Playback mode.
- Press the ▶ button.
▶ The last image you took will appear.

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, but they will appear coarse.
- Turning the ● dial counter-clockwise displays images in reverse order, while turning it clockwise displays images in the order they were taken.
- Pressing the shutter button halfway in Playback mode switches the camera to Shooting mode.
▶ The lens will retract after approximately 1 minute elapses (If the flash has been raised, the flash will lower.).

27

Erasing Images

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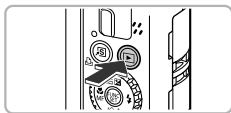
Enter Playback mode.

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

Choose an image to erase.

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

Erase the image.

● Press the ▼ button.
▶ [Erase?] appears.
● Press the ◀▶ buttons or turn the ● dial to choose [Erase], then press the ⊙ button.
▶ The displayed image will be erased.
● To exit instead of erasing, press the ◀▶ buttons or turn the ● dial to choose [Cancel], then press the ⊙ button.

Erase?   Cancel   Erase

Printing Images

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

Turn off the camera and printer.

Connect the camera to the printer.
- Open the cover, and insert the small 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.
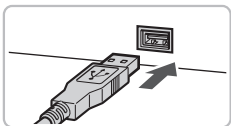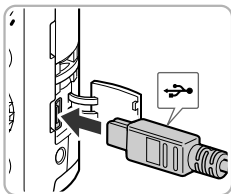
Turn on the printer.

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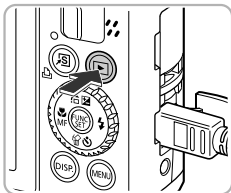
Choose an image to print.
- Press the ◀▶ buttons or turn the ● dial to choose an image.

Print images.

● Press the 凸 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.
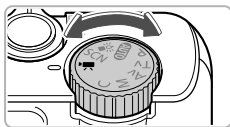
Set the mode dial to '🎥.
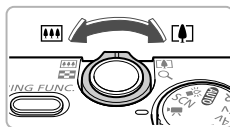
Shooting Time

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.

● Using the same procedures found in Step 3 on p. 24, you can zoom in on your subject (Step Zoom, p. 64).
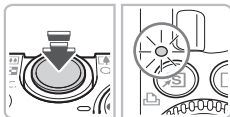
Focus

● Press the shutter button halfway to focus.

▶ When the camera focuses, it will beep twice and the indicator will light green.

31
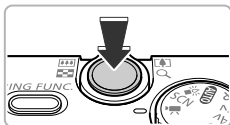
Elapsed Time

Microphone
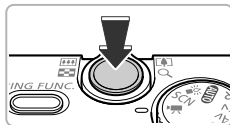
Shoot.

- 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 also zoom in and out with the zoom lever during shooting. However, you cannot use the 🔾 ring to zoom.
- Do not touch the microphone while shooting.
- Operational sounds 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	23 min. 49 sec.	1 hr. 35 min. 11 sec.

- Shooting times are based on default settings.
- Recording will automatically stop when either the clip file size reaches 4 GB or the recording time reaches approximately 1 hour.
- 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.
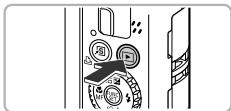
Enter Playback mode.

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

Choose a movie.

● Press the ◀▶ buttons or turn the ● dial to choose a movie, then press the ⬛ button.
▶ The movie control panel will appear on the screen.

Play the movie.

● Press the ◀▶ buttons or turn the ● dial 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.
▶ After the movie finishes, SET ⬚ appears.

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

Transferring Images to a Computer

You can use the included software to transfer your camera images to a computer. If you are already using ZoomBrowser EX/ImageBrowser/Digital Photo Professional, install the software from the included CD-ROM, overwriting your current installation.

System Requirements

Windows

OS	Windows Vista (including Service Pack 1 and 2) Windows XP Service Pack 2, Service Pack 3	
Computer model	The above OS should be pre-installed on computers with built-in USB ports.	
CPU	Viewing images	Pentium 1.3 GHz or higher
	Viewing movies	Core2 Duo 1.66 GHz or higher
RAM	1 GB or more	
Interface	USB	
Free Hard Disk Space	ZoomBrowser EX: 200 MB or more* PhotoStitch: 40 MB or more Digital Photo Professional: 200MB 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	1 GB or more	
Interface	USB	
Free Hard Disk Space	ImageBrowser: 300 MB or more PhotoStitch: 50 MB or more Digital Photo Professional: 200MB or more	
Display	1,024 x 768 pixels or higher	

Preparations

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

1 Install the software.

Windows

① **Place the DIGITAL CAMERA Solution Disk in the computer's CD-ROM drive.**
  ● Place the supplied CD-ROM (DIGITAL CAMERA Solution Disk) (p. 2) into the computer's CD-ROM drive.

② **Begin installation.**
  ● Click [Easy Installation] and follow the onscreen instructions to proceed with the installation.
  ● If the [User Account Control] window appears, follow the on-screen instructions to proceed.

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

④ **Remove the CD-ROM.**
  ● Remove the CD-ROM when your desktop screen appears.

Macintosh

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

35
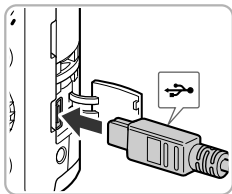
2 **Connect the camera to the computer.**

● Turn off the camera.
● Using the procedures from Step 2 on p. 29, connect the camera to the computer using the supplied interface cable.

3 **Turn on the camera.**

● Press the ▶ button to turn on the camera.

4 **Open CameraWindow.**

Windows

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

● Import Untransferred Images
● Select Images to Import
● Import All Images

▶ All images that have not yet been transferred will transfer to your computer.

● After the transfer finishes, click [×] to close CameraWindow, then turn off the camera and unplug the cable.

● For further operations, refer to the *Software Guide*.

Changing the software that displays after images have been transferred

● You can choose the software that displays after images have been transferred. Click the ▣ icon in the upper right corner of CameraWindow, then click [Import] in the screen that appears. Then, choose the [After Import] tab.
After making your settings, press [OK] and close the [Preferences] screen. Click the [×] icon to start the selected software.

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 will 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.
• RAW images or JPEG images recorded at the same time as RAW images may not transfer.
• 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

Supplied with Camera

Wrist Strap
WS-DC9
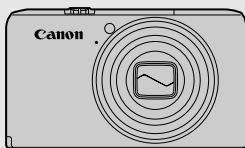
AV Cable
AVC-DC400[*1]
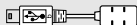
Interface Cable
IFC-400PCU[*1]

Battery Pack NB-6L[*1]
(with Terminal Cover)

Battery Charger
CB-2LY/CB-2LYE[*1]

DIGITAL CAMERA
Solution Disk

AC Adapter Kit ACK-DC40

DC Coupler
DR-40
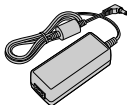
Power Cord

Compact Power Adapter
CA-DC10

Waterproof Case
WP-DC35

*1 Also available for purchase separately.
*2 See the user guide supplied with the printer for more information on the printer and interface cables.

HDMI Cable HTC-100

High-Definition TV

Video IN Terminal

Audio IN Terminal

TV/Video

Canon-Brand PictBridge Compliant Printers*2

Compact Photo Printers
(SELPHY series)

Inkjet Printers
(PIXMA series)

High-Power Flash
HF-DC1

Memory Card   Card Reader   Windows/Macintosh
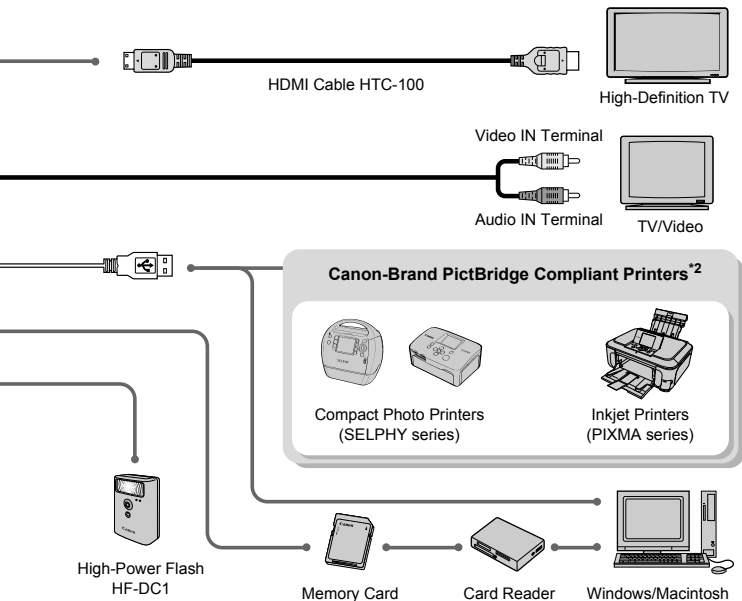
Use of genuine Canon accessories is recommended.

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.

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

39

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-DC40**
  This kit lets you power the camera using household power. Recommended for powering the camera for an extended period of time or when connecting to a computer or printer. Cannot be used to charge the battery inside the camera.
- **Battery Charger CB-2LY/CB-2LYE**
  An adapter for charging Battery Pack NB-6L.
- **Battery Pack NB-6L**
  Rechargeable lithium-ion battery.

Other Accessories

- **HDMI Cable HTC-100**
  Use this cable to connect the camera to the HDMI™ terminal on a high-definition TV set.
- **Waterproof Case WP-DC35**
  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.

USA and Canada only:
The Lithium ion/polymer battery that powers the product is recyclable.
Please call 1-800-8-BATTERY for information on how to recycle this battery.

For CA, USA only
Included lithium battery contains Perchlorate Material - special handling may apply.
See www.dtsc.ca.gov/hazardouswaste/perchlorate/ for details.

2

Learning More

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

Components Guide
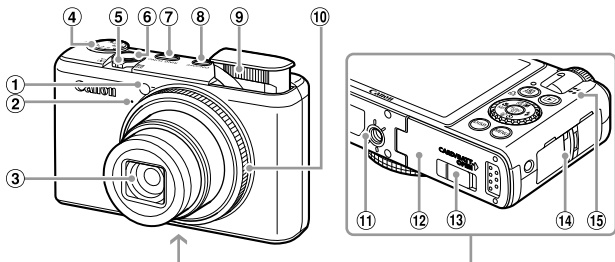
① Lamp (Self-Timer Lamp (p. 67) /
   AF Assist Beam (p. 150) / Red-Eye
   Reduction Lamp (p. 151))
② Microphone (p. 32)
③ Lens
④ Mode Dial
⑤ Zoom Lever
   Shooting: [♦] (Telephoto) / ▯▯▯ (Wide
   Angle) (p. 24)
   Playback: Q (Magnify) (p. 124) /
   ▦ (Index) (p. 118)

⑥ Shutter Button (p. 23)
⑦ RING FUNC. (Ring Function Selector)
   Button (p. 98)
⑧ Power Button
⑨ Flash (pp. 61, 71, 94)
⑩ Control Ring (pp. 24, 64, 98)
⑪ Tripod Socket
⑫ Memory Card / Battery Cover (p. 16)
⑬ DC Coupler Terminal Cover (p. 160)
⑭ Strap Mount (p. 13)
⑮ Speaker

Mode Dial

Use the mode dial to change the Shooting mode.

P, Tv, Av, M, C Mode
You can make settings such as the shutter speed and aperture
value in order to take the picture you want (pp. 70, 95, 96, 97, 104).

Auto Mode
You can leave it to the
camera to select
settings (p. 24).

Low Light Mode
Allows you to shoot in dimly
lit places with reduced
camera shake and subject
blur (p. 60).
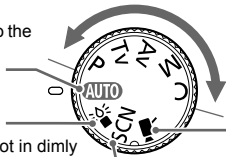
Movie Mode
For shooting movies (pp. 31, 109).

Special Scene Mode
The camera can automatically select all
settings appropriate for the conditions so that
you can take images just by pressing the
shutter button (p. 56).

42
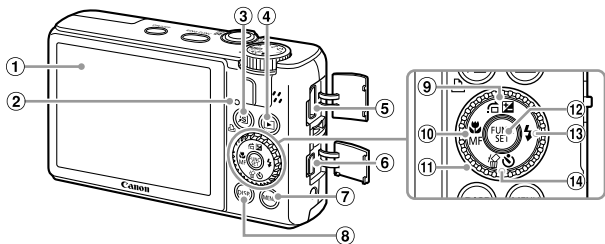
① Screen (LCD Monitor) (p. 44)
② Indicator (p. 46)
③ 🔗 (Short Cut) Button (p. 153) /
   🖳 (Direct Print) Button (p. 29)
④ ▶ (Playback) Button (pp. 27, 117)
⑤ HDMI Terminal (p. 126)
⑥ A/V OUT (Audio/Video Output)
   DIGITAL Terminal (p. 125)
⑦ MENU (Menu) Button (p. 48)
⑧ DISP. (Display) Button (pp. 44, 45)

⑨ 🔗 (Jump) Button (p. 119) /
   ☒ (Exposure) (p. 70) / ▲ Button
⑩ ♥ (Macro) (p. 75) /
   MF (Manual Focus) (p. 89) / ◀ Button
⑪ Control Dial (p. 43)
⑫ 🎯 FUNC./SET (Function/Set) Button
   (p. 47)
⑬ ♦ (Flash) (pp. 61, 71, 94) / ▶ Button
⑭ 🗑 (Single Image Erase) Button (p. 28) /
   ♦ (Self-Timer) (pp. 66, 67) / ▼ Button

Control Dial

Turning the control dial allows you to perform operations such as choosing items or switching images.

▶ Button

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

43

Information Displayed on the Screen

Shooting (Information Display)

① Battery Charge Indicator (p. 15)
② Camera Orientation*
③ White Balance (p. 77)
④ White Balance Correction (p. 78)
⑤ My Colors (p. 80)
⑥ i-Contrast (p. 100)
⑦ Drive Mode (p. 79)
⑧ Histogram (p. 46)
⑨ Metering Modes (p. 91)
⑩ Compression (Image Quality) (pp. 72, 111), Recording Pixels (p. 72)
⑪ Still Images: Recordable Shots (p. 17)
    Movies: Remaining Time/ Elapsed Time (p. 32)
⑫ Self-Timer (pp. 66, 67)

⑬ AF Frame (p. 25)
⑭ Focal Length (p. 64)
⑮ Spot AE Point Frame (p. 91)
⑯ Digital Zoom Magnification (p. 62) / Digital Tele-Converter (p. 63)
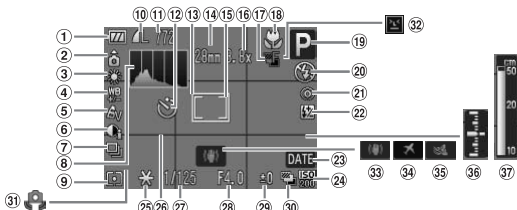⑰ Focus Bracketing (p. 90)
⑱ Macro (p. 75), Manual Focus (p. 89)
⑲ Shooting Mode
⑳ Flash Mode (pp. 61, 71, 94)
㉑ Red-Eye Correction (p. 101)
㉒ Flash Exposure Compensation (p. 102), Flash Output (p. 103)

㉓ Date Stamp (p. 65)
㉔ ISO Speed (p. 76)
㉕ AE Lock (pp. 92, 112), FE Lock (p. 92)
㉖ Grid Lines (p. 152)
㉗ Shutter Speed (p. 95)
㉘ Aperture Value (pp. 96, 97)
㉙ Exposure Compensation (p. 70)
㉚ AEB Shooting (p. 93)
㉛ Camera Shake Warning (p. 161)
㉜ Blink Detection (p. 103)
㉝ Image Stabilizer (p. 153)
㉞ Time Zone (p. 148)
㉟ Wind Filter (p. 112)
㊱ Exposure Level Indicator (p. 97)
㊲ MF Indicator (p. 89)

* ô : Standard, ô ô : 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

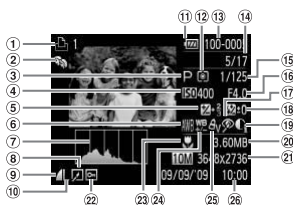You can change the display using the DISP. button.

No Information Display   Information Display

44

Playback (Detailed Information Display)

① Print List (p. 140)
② My Category (p. 132)
③ Shooting Mode
④ ISO Speed (p. 76)
⑤ Exposure Compensation (p. 70) / Exposure Shift Amount (p. 112)
⑥ White Balance (p. 77)
⑦ Histogram (p. 46)
⑧ Image Editing (pp. 135 – 139)
⑨ Compression (Image Quality) (p. 72), ᴹᴼᵛ (Movies)

⑩ Recording Pixels (p. 72)
⑪ Battery Charge Indicator (p. 15)
⑫ Metering Modes (p. 91)
⑬ Folder Number – File Number (p. 146)
⑭ Displayed image number / Total number of images
⑮ Shutter Speed (p. 95)
⑯ Aperture Value, Image Quality (Movies) (p. 111)
⑰ Red-Eye Correction (pp. 101, 139)
⑱ Flash (p. 71), Exposure Compensation (p. 102)

⑲ i-Contrast (pp. 100, 138)
⑳ File Size (p. 72)
㉑ Still Images: Recording Pixels (p. 72) Movies: Movie Length (p. 111)
㉒ Protect (p. 127)
㉓ Macro (p. 75), Manual Focus (p. 89)
㉔ White Balance Correction (p. 78)
㉕ My Colors (pp. 80, 137)
㉖ Shooting Date and Time (p. 65)

Switching the Display

You can change the display using the DISP. button.

No Information Display   Simple Information Display   Detailed Information Display   Focus Check Display (p. 122)

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].

45

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

High

Low

Dark ◄──────► Bright
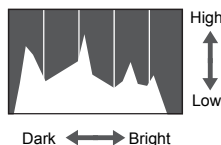
● The graph that appears in "Detailed Information Display" (p. 45) is called the histogram. The histogram shows the distribution and amount of brightness of an image. When the graph approaches the right side, the image is bright, but when it approaches the left side, the image is dark, and in this way you can judge the exposure.

● The histogram can also be displayed while shooting (p. 152).

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. 148)
	Blinks	Recording/reading/transmitting image data (pp. 25, 36)
Orange	Lights	Shooting preparation complete (flash on) (p. 25)
	Blinks	Camera shake warning (p. 61)

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

FUNC. Menu – Basic Operations

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

Choose a shooting mode.
● Set the mode dial to the desired shooting mode.

Display the FUNC. menu.
● Press the ∰ button.

Choose a menu item.
● Press the ▲▼ buttons to choose a menu item.
▶ The available options for the menu item appear in the lower part of the screen.

10M 3648x2736 **DISP.**
For printing up to
A2 size (16x20 in.) prints

M1 M2 M3 S ☒   772

Available Options

Menu Items

Choose an option.
● Press the ◀▶ buttons or turn the ● dial to choose an option.
● You can also choose settings by pressing the DISP. button on options that display **DISP.**.

Make the setting.
● Press the ∰ button.
▶ The shooting screen will reappear and the setting you chose will display on the screen.

MENU – Basic Operations

Various functions can be set from the menus. The menu items are organized under tabs, such as for shooting (■) and playback (▶). The available menu items differ depending on the mode (pp. 168 – 171).
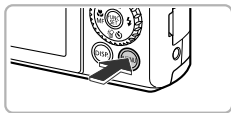
Display the menu.
● Press the MENU button.

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 or turn the ● dial 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.

48

Changing the Sound Settings

You can silence or adjust the volume of camera sounds.

Muting Sounds

Display the menu.
- Press the MENU button.

Choose [Mute].
- Press the ◆ buttons to choose the ↑↑ tab.
- Press the ▲▼ buttons or turn the ● dial to choose [Mute], then press the ◆ buttons to choose [On].

Adjusting the Volume
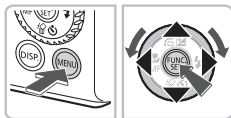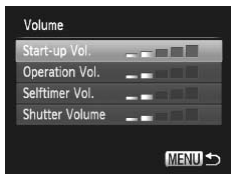
Display the menu.
- Press the MENU button.

Choose [Volume].
- Press the ◆ buttons to choose the ↑↑ tab.
- Press the ▲▼ buttons or turn the ● dial to choose [Volume], then press the 🔘 button.

Change the volume.
- Press the ▲▼ buttons or turn the ● dial to choose an item, then press the ◆ buttons to adjust the volume.

Changing the Screen Brightness

The screen brightness can be changed in two ways.

With the Menu

| ○ | ΥT | ★ |

Volume...
Sound Options...
Hints & Tips   On   Off
LCD Brightness   ▬▬▬▬
Start-up Image...

Sets screen brightness
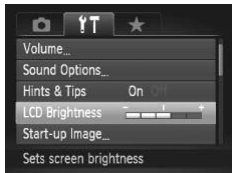
1 **Display the menu.**
  ● Press the MENU button.

2 **Choose [LCD Brightness].**
  ● Press the ◀▶ buttons to choose the ΥT tab.
  ● Press the ▲▼ buttons or turn the ● dial to choose [LCD Brightness].

3 **Change the brightness.**
  ● Press the ◀▶ buttons to change the brightness.
  ● Press the MENU button again to complete the setting.

With the DISP. Button
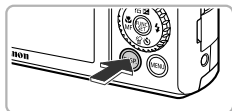
  ● Press the DISP. button for more than one second.
  ▶ The screen increases to maximum brightness regardless of the setting in the ΥT tab.
  ● Pressing the DISP. button again for more than one second will return the screen to the original brightness.

  • The next time you turn on the camera, the screen will be at the brightness setting chosen in the ΥT tab.
  • When you have set the brightness to its highest setting in the ΥT 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.

Date/Time.	09.09.'09 10:00	
Distance Units	m/cm	
Video System	NTSC	
Language...	English	
Reset All...		

Restores default settings
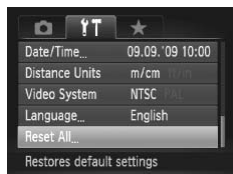
1 Display the menu.
● Press the MENU button.

2 Choose [Reset All].
● Press the ◆▶ buttons to choose the ⚙ tab.
● Press the ▲▼ buttons or turn the ● dial to choose [Reset All], then press the ⬛ button.

Reset All

Reset settings to default?

Cancel   OK
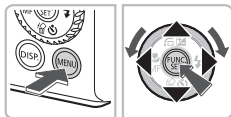
3 Reset the settings.
● Press the ◆▶ buttons or turn the ● dial to choose [OK], then press the ⬛ button.
▶ The camera will reset to the default settings.

❓ Are there functions that cannot be reset?

• The [Date/Time] (p. 19) in the ⚙ tab, [Language] (p. 21), [Video System] (p. 125), [Time Zone] (p. 148), the image registered as [Start-up Image] (p. 156).
• The saved data for custom white balance (p. 77).
• Colors that were chosen in Color Accent (p. 105) or Color Swap (p. 106).

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.

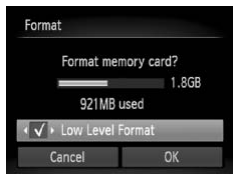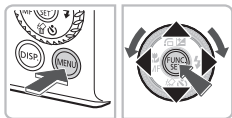|	
☐ ⁶⁺ ★ Hints & Tips On Off LCD Brightness ▬ ▬ ▬ ▬ + Start-up Image... Format... ☐ 1.8GB File Numbering ◄ Continuous ► Clears all memory card data	**1 Display the menu.** ● Press the **MENU** button. **2 Choose [Format].** ● Press the ◀▶ buttons to choose the ⁶⁺ tab. ● Press the ▲▼ buttons or turn the ● dial to choose [Format], then press the (⬛) button.
Format Format memory card? ▬▬▬▬▬▬▬▬▬ 1.8GB 921MB used ◄ ✓ ► Low Level Format Cancel OK	**3 Perform the low level format.** ● Press the ▲▼ buttons or turn the ● dial to choose [Low Level Format], then press the ◀▶ buttons to display ✓. ● Press the ▲▼◀▶ buttons or turn the ● dial to choose [OK], then press the (⬛) button. ▶ 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. If the flash has been raised, the flash will lower.

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.
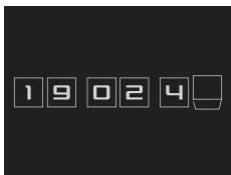
Power Saving during Playback

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

- You can turn off the Power Saving Function (p. 147).
- You can adjust the time before the monitor turns off (p. 148).

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 or turn the ● dial to change the display color.
● Press the ⓕ button to cancel the clock display.

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

3

Shooting in Special Conditions and Commonly Used Functions

This chapter explains how to shoot in different conditions, as well as how to use common functions, such as the flash and self-timer.
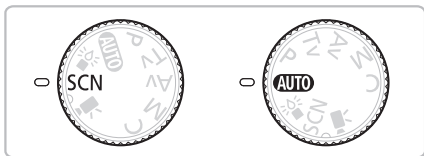
- When you choose a Shooting mode that matches a particular set of conditions, the camera will automatically select any necessary settings. All you need do is press the shutter button to take an optimized picture.
- This chapter assumes the mode is set to **AUTO** for "Turning the Flash Off" (p. 61) to "Using the Face Self-Timer" (p. 67). When shooting in a scene mode, check which functions are available in that mode (pp. 166 – 169).

Shooting in Various Conditions

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

1 **Set the mode dial to SCN.**

2 **Choose a Shooting mode.**
● Turn the ● dial to choose a shooting mode.

3 **Shoot.**

♥ Take portraits (Portrait)
● Produces a soft effect when photographing people.

▲ Take landscapes (Landscape)
● Lets you shoot majestic landscapes.

◙ 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.

🌃 Take nightscapes (Night Scene)

● Lets you take beautifully lit city nightscapes or night backgrounds.
● You can also take beautifully lit pictures of people along with the backgrounds due to the slower shutter speed.

🎆 Take shots of fireworks (Fireworks)

● Lets you take shots of fireworks in vivid colors.

57

☒ **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)**

● When using the Waterproof Case WP-DC35 (sold separately), you can shoot underwater landscapes and creatures with natural tones.

☒ **Take shots of aquatic life in an aquarium (Aquarium)**

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

☒ **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.

58

- • In 🖾, 🐾, 🎒, 🖐 or 🗊 mode, images may appear coarse because the ISO speed (p. 76) is increased to match the shooting conditions.
  - • In 🗊 mode, make sure the subject does not move until the shutter sound plays, even after the flash fires.
  - • In 🗊 or 🕸 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. 153).

Shooting with Faded Colors (Nostalgic)

This effect fades the colors and roughens the image so that you can take a picture that seems to be many years old. You can choose from 5 effect levels.

Choose 🖾 .
- ● Use Step 2 on p. 56 to choose 🖾 .

Apply the effect.
- ● Turn the ◯ ring to choose the effect level.

Shoot.

- • Digital zoom (p. 62), date stamp (p. 65), and red-eye correction (p. 101) are not available.
  - • In the shooting screen, the colors will change, but the roughness will not display. You can check the roughness in image playback (p. 27).
  - • In some cases, you may not obtain the expected result.

59

Shooting in ☀ Mode (Low Light Mode)

The ISO speed will be set automatically between ISO320 and ISO12800. Depending on the scene, the ISO speed will be set higher and the shutter speed faster than in **AUTO** mode so that you can shoot in dark places with reduced camera shake and subject blur. Recommended for shooting in candlelight or similarly lit scenes.

Choose the Shooting mode.
● Set the mode dial to ☀.

Shoot.

● In Low Light mode, recording pixels are fixed to **M** (1824×1368).
● By pressing the ◀ button, you can choose either ▲ or **MF**. In either case, the focusing range from the end of the lens will be approximately 5 cm (2.0 in.) – infinity at maximum wide angle, and approximately 30 cm (12 in.) – infinity at maximum telephoto.

60

Turning the Flash Off

You can shoot with the flash turned off.

Press the ▶ button.

Choose ⑤.

● Press the ◀▶ buttons or turn the ● dial to choose ⑤, then press the ⑤ button.
▶ If the flash has been raised, the flash will lower automatically.
▶ ⑤ will appear on the screen.
● Follow the steps above to return the setting to ⚡ᴬ.

❓ What if the indicator blinks orange and a flashing 🔄 appears?

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

Zooming in More Closely on Subjects (Digital Zoom)

You can use the digital zoom to zoom up to a maximum of 15x 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. 72) and the zoom factor used.
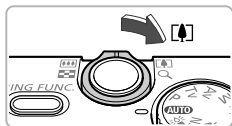
Move the zoom lever toward [ ].
- Hold the lever until zooming stops.
▶ The zoom will stop when the largest possible zoom factor without image deterioration has been reached, and the zoom factor will appear.
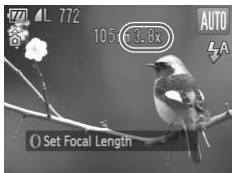
Move it toward [ ] again.
▶ The digital zoom will zoom in even further on the subject.

Zoom Factors at which Images Deteriorate

Recording Pixels	Optical Zoom (28 – 105 mm)*	Digital Zoom (105 – 420 mm)*		
L	3.8x →			
M1	3.8x →			
M2		5.3x→		
M3			8.7x →	
S				15x →

☐ : No image deterioration (zoom factor appears white)

█ : Image deterioration (zoom factor appears blue)

→ : Maximum zoom factor without deterioration (Safety Zoom)

* Focal length (35mm equivalent)

62

Turning off the digital zoom

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

Digital Tele-Converter

The focal length of the lens can be increased by an equivalent of 1.4x or 2.3x. This enables a faster shutter speed and less chance of camera shake than the zoom (including digital zoom) used by itself at the same zoom factor.

The images may appear coarse, however, depending on the combination of recording pixel (p. 72) and digital tele-converter settings used.

Choose [Digital Zoom].
- Press the **MENU** button.
- Press the ◀▶ buttons to choose the ◯ tab, then press the ▲▼ buttons or turn the ● dial to choose [Digital Zoom].

Accept the setting.
- Press the ◀▶ buttons to choose [1.4x] or [2.3x].
- 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.
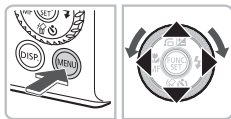
### Combinations that Cause Image Deterioration

- Using [1.4x] at a recording pixel setting of L or M1 will cause image deterioration (the zoom factor will display in blue).
- Using [2.3x] 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 [1.4x] and [2.3x] are 39.2 – 147 mm and 64.4 – 241.5 mm (35mm film equivalent).
- The digital tele-converter cannot be used together with the digital zoom.

Shoot Using Preset Focal Lengths (Step Zoom)

You can shoot using preset focal lengths of 28mm, 35mm, 50mm, 85mm or 105mm (35mm film equivalents). This feature is useful when you want to shoot at a particular focal length.
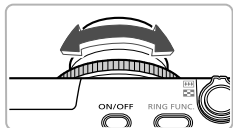
Choose a focal length.

- Turn the () ring.
- ▶ Turn the () ring counter clockwise until you hear a clicking sound and the focal length changes from 28mm to 35mm. If you continue to turn the () ring, the focal length will be set to 50mm, 85mm, and 105mm.

- While in digital zoom (p. 62), turning the () ring counterclockwise will not change the zoom settings. However, turning clockwise will set the focal length to 105mm.
- When shooting movies (p. 31), you cannot change the focus with the () ring.

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).
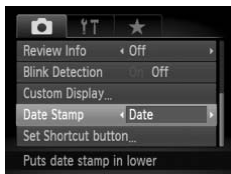
Review Info ‹ Off	**Choose [Date Stamp].**
Blink Detection Off	● Press the MENU button.
Custom Display...	● Press the ◀▶ buttons to choose the ◯ tab, and press the ▲▼ buttons or turn the ● dial to choose [Date Stamp].
Date Stamp ‹ Date	
Set Shortcut button...	
Puts date stamp in lower	

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.

09/09/2009

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

• **Use the DPOF print settings (p. 141) 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

Use the self timer for pictures where the photographer is also included in the shot. You can set the time delay between when the shutter button is pressed and the shot is taken (0 – 30 seconds) and also the number of shots (1 – 10 shots).
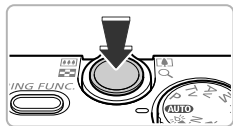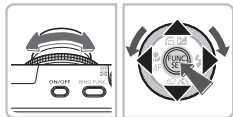
Press the ▼ button.

Choose $\circlearrowleft$.

- Press the ▲▼ buttons or turn the ● dial to choose $\circlearrowleft$.
- Quickly turn the () ring to choose the time delay, then press the ◀▶ buttons to choose the number of shots and press the ⊕ button.

Shoot.

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

? **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.

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. 84).

Choose $\langle \hat{\cdot} \rangle$ **.**

● Follow Step 2 on p. 66 and choose $\langle \hat{\cdot} \rangle$.

Compose the shot and press the shutter button halfway.

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

Press the shutter button fully.

▶ The camera will enter shooting stand-by, and [Look straight at camera to start count down] will appear on the screen.

▶ The lamp will blink and the self-timer sound will play.
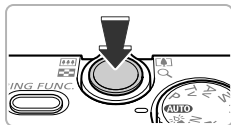
Join the subjects and look at the camera.

▶ When the camera detects a new face, the lamp and sound will speed up (the lamp remains lit when the flash will fire), and two seconds later the shutter will release.

● To cancel shooting with the self-timer after countdown has started, press the ▼ button.

▶ The second and third shots will continue in succession.

● To restore the original setting, choose $\mathbb{Q}_{\text{FF}}$ in Step 2 on p. 66.

💡 Change the number of shots

After the screen in Step 1 has been displayed, press the ◀▶ buttons quickly to change the number of shots, then press the 🔘 button to set.

❓ 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.

4

Choosing Settings Yourself

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

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

Shooting in Program AE

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

Set the mode dial to P.

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

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 are shown in orange. Try the following settings to obtain the correct exposure.

● Turn on the flash (p. 71)
● Choose a higher ISO speed (p. 76)

Adjusting the Brightness (Exposure Compensation)

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

Adjust the brightness.

● Turn the ● dial to adjust the brightness.

You can also adjust the exposure using the ❍ ring (p. 98).

Turning the Flash On

You can make the flash fire every time you shoot. At maximum wide angle, the flash range is approximately 50 cm – 6.5 m (1.6 – 21 ft.), and at maximum telephoto, it is 50 cm – 2.5 m (1.6 – 8.2 ft.)

Choose ↯.

● After pressing the ▶ button, press the ◀▶ buttons or turn the ● dial to choose ↯, then press the (FUNC/SET) button.
▶ If the flash has been lowered, the flash will rise automatically.
▶ Once set, ↯ will appear.

Changing the Recording Pixels (Image Size)

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

10M 3648x2736 DISP	**Choose the recording pixels.** ● After pressing the (∰) button, press the ▲▼ buttons to choose **▲**. **Choose an option.** ● Press the ◀▶ buttons or turn the ● dial to choose an option, then press the (∰) button. ▶ The setting you chose will display on the screen.

For printing up to A2 size (16x20 in.) prints

L M1 M2 M3 S ☒ ▶ 772

If you choose **☒**, you cannot use Digital Zoom (p. 62) or Digital Tele-Converter (p. 63).

Changing the Compression Ratio (Image Quality)

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

|	
Fine DISP **L** *Shoot high quality images*	**Choose the recording pixels.** ● After pressing the (∰) button, press the ▲▼ buttons to choose **▲**. **Choose the image quality.** ● Press the DISP. button. ● Press the ◀▶ buttons or turn the ● dial to choose an option, then press the (∰) button. ▶ The setting you chose will display on the screen.

▲ **▲** 772

Approximate Values for Recording Pixels and Compression Ratio

Recording Pixels	Compression Ratio	Single Image Data Size (Approx. KB)	Number of Recordable Images	
			2 GB	8 GB
L (Large) 10 M/3648 x 2736	▲	2565	749	2994
	▟	1226	1536	6140
M1 (Medium 1) 6 M/2816 x 2112	▲	1620	1181	4723
	▟	780	2363	9446
M2 (Medium 2) 4 M/2272 x 1704	▲	1116	1707	6822
	▟	556	3235	12927
M3 (Medium 3) 2 M/1600 x 1200	▲	558	3235	12927
	▟	278	6146	24562
S (Small) 0.3 M/640 x 480	▲	150	10245	40937
	▟	84	15368	61406
𝕎 (Widescreen) 3648 x 2048	▲	1920	1007	4026
	▟	918	2048	8187
𝖱𝖠𝖶 (RAW) 3648 x 2736	–	12825	135	540
𝖱𝖠𝖶 + ▲L 3648 x 2736	–	15390	113	455

• 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

A2			L
A3			M1
A4, Letter size	M2		
5" x 7"	M3		
Postcard size			
3.5" x 5"			
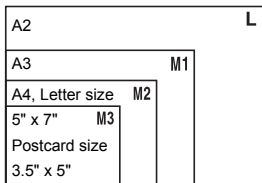
● S Suitable for sending images as e-mail attachments.
● 𝕎 For printing on wide size paper.

73

Shooting in RAW

A RAW image is raw data recorded with nearly no deterioration in image quality resulting from image processing inside the camera. You can use the supplied software to broadly adjust the image with minimal loss in image quality.

Choose .

● Follow Steps 1 – 2 on p. 72 to choose .

Shoot.

RAW 3648x2736

Records a RAW image for post processing options

◄ M1 M2 M3 S ⓦ RAW   137

Differences between RAW images and JPEG images.

● **JPEG Images (L M1 M2 M3 S ⓦ)**
When JPEG images are recorded, the images are processed inside the camera for optimum image quality, and also compressed to allow a larger number of images to be stored on the memory card. However, the compression process is irreversible, meaning that the raw data cannot be recovered once it has been compressed. Moreover, the image processing results in a deterioration in quality.

● **RAW Images (RAW)**
A RAW image is raw data recorded with nearly no deterioration in image quality resulting from image processing inside the camera. This data cannot be used as is for viewing or printing on a computer. The supplied software (Digital Photo Professional) must first be used to convert the image data to a JPEG or TIFF file. When converting the image data, you can adjust the image with minimal deterioration in image quality.

Simultaneously Recording RAW and JPEG Images

Two images, a RAW image and a JPEG image will be recorded with each shot. Since a JPEG image is also recorded, you can print the image or view it on a computer without using the supplied software.

The file extension for RAW images is ".CR2", and the extension for JPEG images is ".JPG". The JPEG images will be recorded with L recording pixels with ◢ image compression.

Choose [Record RAW + ◢L].

● Press the MENU button, and choose [Record RAW + ◢L] from the ◘ tab and press the ◀▶ buttons to choose [On].

Custom Display
IS Mode   ◄ Continuous ►
Date Stamp   ◄ Off ►
Record RAW + ◢L   On Off
Set Shortcut button
Records both RAW and JPEG images

Be sure to use the supplied software to transfer both the RAW images and the JPEG images that were recorded at the same time.

Digital Zoom (p. 62), Digital Tele-Converter (p. 63), and Date Stamp (p. 65) are not available when shooting in [RAW].

Shooting Close-ups (Macro)

You can shoot an object at a close distance or even shoot extreme close-ups of it. The shooting range is approximately 5 – 50 cm (2.0 in. – 1.6 ft.) from the end of the lens (when the zoom lever is pushed to maximum [444]).

Choose ♥.

● After pressing the ◀ button, press the ◀▶ buttons or turn the ● dial to choose ♥, then press the ∰ button.

▶ Once set, ♥ will appear.

⚆ How can I take better close-ups?

● It is recommended to attach the camera to a tripod to prevent the camera from moving and blurring the image.
● You can reduce the AF frame size when you want to focus on a specific portion of the subject (p. 84).

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

75

Changing the ISO Speed

Choose the ISO speed.

● Turn the 𝗼 ring to choose the ISO speed.

ISO AUTO	Automatically adjusts the ISO speed to the Shooting mode and shooting conditions.	
ISO 80 – ISO 200	Low	Fine weather conditions, outdoor shooting.
ISO 250 – ISO 800		Cloudy, Twilight
ISO 1000 – ISO 3200	High	Nightscapes, Dark interiors

Changing the ISO speed

• Lowering the ISO speed results in sharper images, but there may be an increased chance of image blurring in certain shooting conditions.
• Raising the ISO speed results in a faster shutter speed, reducing camera shake and letting the flash reach greater distances to the subject. The images, however, will appear coarse. If ISO 3200 is insufficient to reduce blurring, you are recommended to use ※ mode (p. 60).

  • You can also set the ISO speed by pressing the ⒡ button and choosing ISO AUTO. Press the ◀▶ buttons or turn the 𝗼 ring or ● dial to choose a setting, then press the ⒡ button again. Press the DISP. button while in the setting screen to set ISO AUTO.
  • When the camera is set to ISO AUTO, you can press the shutter button halfway to display the automatically set ISO speed.
  • In ※ mode (p. 60), depending on the scene, the ISO speed will be set higher than in AUTO mode.

Adjusting the White Balance

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

1 Choose the white balance.
- After pressing the ⏺ button, press the ▲▼ buttons to choose AWB.

2 Choose an option.
- Press the ◀▶ buttons or turn the ⏺ dial 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
☁	Cloudy	Cloudy, shady, twilight conditions
💡	Tungsten	Tungsten, bulb-type (3-wavelength) fluorescent lighting
🎚	Fluorescent	Warm-white fluorescent, cool-white fluorescent, warm-white-type (3-wavelength) fluorescent lighting
🎚	Fluorescent H	Daylight fluorescent, daylight-type (3-wavelength) fluorescent lighting
⚡	Flash	When shooting with the flash.
🐠	Underwater	Underwater Sets the optimum white balance for taking pictures underwater. Reduces blue tones to produce natural, vibrant hues.
🔲	Custom	Manually sets a custom white balance.

🔲 Custom White Balance

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

- In Step 2 above, choose 🔲.
- Make sure the entire screen is filled with a white colored subject, then press the MENU 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.

Manually Correcting the White Balance

You can correct the white balance. This adjustment will have the same effect as using a commercially-available color temperature conversion filter or color compensating filter.

Correct the White Balance.

● In Step 1 on p. 77, choose AWB and turn the $()$ ring to adjust the B and A correction.
▶ The $^{WB}_{+/-}$ icon displays on the screen.

● For even more specific adjustments, press the DISP. button.
▶ The selection screen appears.
● Turn the $()$ ring and ● dial or press the ▲▼◀▶ buttons to adjust the level of correction.
● To reset the correction level, press the MENU button.
● Press the DISP. button to complete the setting.

● B stands for blue, A for amber, M for magenta, and G for green.
● Even if you change the white balance setting in Step 1 on p. 77 after making adjustments in the correction level, those adjustments will be retained. However, the adjustments will be reset if Custom White Balance data is recorded.
● You can also assign white balance correction to the $()$ ring (p. 98).
● One level of the blue/amber correction is equivalent to 7 mireds of a color temperature conversion filter. (Mired: Measuring unit indicating the density of a color temperature conversion filter.)

Continuous Shooting

You can shoot continuously at a fixed interval.
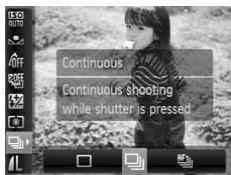
Choose a Drive mode.
● After pressing the ⊕ button, press the ▲▼ buttons to choose □.

Choose an option.
● Press the ◀▶ buttons or turn the ● dial to choose ⬛▮ or ⬛▮, then press the ⊕ button.

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

Drive Mode		Description
⬛▮ Continuous	Approx. 0.9 images/sec.	For continuous shooting, the focus and exposure are locked when the shutter button is pressed halfway.
⬛▮ Continuous Shooting AF	Approx. 0.6 images/sec.	The camera shoots continuously and focuses. The [AF Frame] is set to [Center].
⬛▮ Continuous Shooting LV	Approx. 0.6 images/sec.	The camera shoots continuously with the focus fixed to the position set in manual focus.

● Cannot be used with the self-timer (pp. 66, 67).
● In ⁂ mode (p. 60), the shooting intervals will be faster.
● As the number of images increases, the shooting intervals may take longer.
● If the flash fires, shooting intervals may take longer.
● When in ▒, AF Lock (p. 86), or manual focus (p. 89) modes ⬛▮ will change to ⬛▮.

Changing the Tone of an Image (My Colors)

You can change the tone of an image to sepia or black and white when shooting.
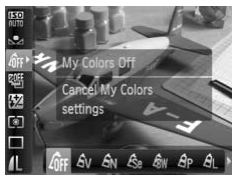
1 **Choose My Colors.**
- After pressing the ⬤ button, press the ▲▼ buttons to choose ᗍᖴᖴ.

2 **Choose an option.**
- Press the ◀▶ buttons or turn the ⬤ dial to choose an option, then press the ⬤ button.
- The setting you choose will display on the screen.

ᗍᖴᖴ	My Colors Off	—
ᗋᵥ	Vivid	Emphasizes the contrast and color saturation for a vivid impression.
ᗋₙ	Neutral	Tones down the contrast and color saturation for neutral hues.
ᗋₛₑ	Sepia	Sepia tones.
ᗋвw	B/W	Black and white.
ᗋₚ	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.
ᗋₗ	Lighter Skin Tone	Makes skin tones lighter.
ᗋᴅ	Darker Skin Tone	Makes skin tones darker.
ᗋв	Vivid Blue	Emphasizes blue tints. Makes the sky, ocean and other blue subjects more vivid.
ᗋɢ	Vivid Green	Emphasizes green tints. Makes mountains, foliage and other green subjects more vivid.
ᗋʀ	Vivid Red	Emphasizes red tints. Makes red subjects more vivid.
ᗋᴄ	Custom Color	You can adjust contrast, sharpness, and color saturation etc. to your preference (p. 81).

- Not available when shooting in ☒☒.
- The white balance cannot be set in the ᗋₛₑ and ᗋвw modes (p. 77).
- In the ᗋₗ and ᗋᴅ mode, colors other than people's skin color may change. You may not obtain the expected results with some skin colors.

θ_C 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. 80 to choose θ_C, then press the DISP. button.
● Press the ▲▼ buttons to choose an option, then press the ◀▶ buttons or turn the ● dial to choose a value.
● The more to the right, the stronger/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 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. 125).
● Shooting procedures are the same as when using the camera's monitor.

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

81

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.

Recompose.

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

Shoot.

● Press the shutter button fully.

5

Getting More Out of Your Camera

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

- This chapter assumes that the mode dial is set to **P**.
- The sections "Setting the Shutter Speed" (p. 95), "Setting the Aperture Value" (p. 96), "Setting the Shutter Speed and Aperture Value" (p. 97), assume that the mode dial is set to these modes.
- The section "Adjusting the Flash Output" (p. 103) assumes that the mode dial is set to **M**.
- The explanations for "Changing the Color and Shooting" (p. 105) and "Shooting Stitch Assist Images" (p. 108) assumes the mode dial is set to **SCN**, and that the scene mode for the respective function has been 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. 166 – 169).

Changing the AF Frame Mode

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

○ ↑↑ ★	
AF Frame	‹ Center ›
AF Frame Size	‹ Normal ›
Digital Zoom	‹ Standard ›
AF-Point Zoom	Off
Servo AF	Off
Focuses on what appears	

Choose [AF Frame].

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

Face AiAF

● Detects people's faces and sets the focus, exposure (evaluative metering only) and white balance (AWB only).
● When the camera is pointed at subjects, a white frame appears on the face the camera judges to be the main subject, and gray frames (max. 2) will appear on other faces. 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 or 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. 62), Manual Focus (p. 89) or Digital Tele-converter (p. 63) is used.

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

Magnifying the Focal Point

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

AF Frame	‹ Center ›		
AF Frame Size	‹ Normal ›		
Digital Zoom	‹ Standard ›		
AF-Point Zoom	On Off		
Servo AF	Off		

Displays magnified view

Choose [AF-Point Zoom].
● Press the MENU button, choose the ☐ tab, and then choose the [AF-Point Zoom] menu item. Press the ◄► buttons to choose [On].

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 (p. 84). In [Center], it will not appear magnified if the camera cannot focus.

The magnified display will not appear when using Digital Zoom (p. 62) or Digital Tele-Converter (p. 63), Servo AF (p. 87), or when connected to a TV (p. 81).

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.
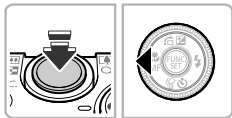
Lock the focus.

- Keep the shutter button pressed halfway and press the ◀ button.

▶ ☐ and the MF indicator appear. You can check the distance to the subject.

Compose the scene and shoot.

Shooting with Servo AF

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

AF Frame Size ‹ Normal ›	
Digital Zoom ‹ Standard ›	
AF-Point Zoom On Off	
Servo AF On Off	
AF-assist Beam On Off	
Continues to focus while	
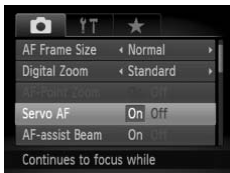
1 Choose [Servo AF].
- Press the **MENU** button and choose [Servo AF] from the ◘ tab, and press the ◀▶ buttons to choose [On].

2 Focus.
- The focus and exposure will be maintained where the blue AF frame appears while you press the shutter button halfway.
- ▶ If a face is not detected when AF Frame is set to [Face AiAF] (p. 84), the AF frame will be set to Center.

- The camera may not be able to focus in some conditions.
- If a correct exposure cannot be obtained, the shutter speed and aperture value display in orange. Release your finger from the shutter button, then press it again halfway.
- You cannot shoot with the AF lock in this mode.
- While in Servo AF mode, [AF-Point Zoom] in the ◘ tab cannot be set to [On].
- Not available in Self-timer (pp. 66, 67) or Manual Focus (p. 89).

Choosing the Person to Focus On (Face Select)

You can choose a specific person's face to focus on and then shoot.

1. **Register ⊡ to the ⚆ button (p. 153).**
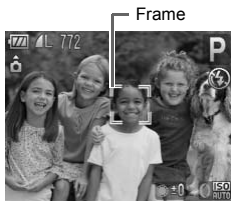
2. **Set Face Select mode.**
   - Point the camera toward the face of the subject and press the ⚆ button.
   - After [Face Select : On] displays, a white face frame ⌐ ⌐ will appear around the face detected as the main subject.
   - Even if the subject moves, the face frame ⌐ ⌐ will follow the subject within a certain range.
   - If a face is not detected, ⌐ ⌐ will not appear.

   Frame

3. **Choose the face on which to focus.**
   - If you press the ⚆ button, the face frame ⌐ ⌐ will move to another face detected by the camera.
   - When the frame has scrolled through all the detected faces, [Face Select: Off] will display, and face select will be disabled.

4. **Shoot.**
   - Press the shutter button halfway. The face frame of the chosen face will change into a green ☐.
   - Press the shutter button fully to shoot.

ⓖ Confirming the number of detected faces

Keeping the ⚆ button pressed will display the number of faces detected by the camera (35 at the most) (orange: main subject's face, white: detected face).

⚠ Cannot be used when in ▨, Stitch Assist or Movie modes.

88

Shooting in Manual Focus Mode

You can use manual focus when auto focus is not possible. If you press the shutter button halfway after roughly focusing manually, you can fine tune the focus.

Choose MF.

● After pressing the ◀ button, press the ◀▶ buttons or turn the ● dial to choose MF, then press (FUNC) button.

▶ MF and the MF indicator will appear.

Focusing roughly.

● Using the bar that shows the distance display and AF point zoom as a guide, turn the ● dial while looking at the magnified display to adjust the focus.

▶ The image at the center of the AF frame is displayed enlarged.

Fine tuning the focus.

● If you press the shutter button halfway, you can fine tune the focus (Safety MF).

  - You can also focus using the () ring (p. 98).
  - You cannot change the AF frame setting or size while focusing manually (p. 84). If you want to change the AF frame mode or size, cancel Manual focus mode first.
  - In order to focus accurately, you are recommended to fix the camera to a tripod.
  - Magnified display cannot be used with the Digital Zoom (p. 62), the Digital Tele-Converter (p. 63) or when connected to a TV (p. 81), however the focus can be adjusted.
  - If [MF-Point Zoom] is set to [Off] in the ● tab, the magnified display will not be available.
  - If [Safety MF] is set to [Off] in the ● tab, you will not be able to fine tune the focus even if you press the shutter button.

Focus Bracketing (Focus-BKT Mode)

The camera automatically takes three continuous shots in the following order: one at the manual focus position, and one each with focus positions preset farther and nearer. The focus adjustment can be set in 3 levels.

Choose 蜒.

● After pressing the ⓜ button, press the ▲▼ buttons to choose 蜒, then press the ◀▶ buttons or turn the ● dial to choose 蜒.

Set the focus adjustment level.

● Press the DISP. button.
● Press the ◀▶ buttons or turn the ● dial.
● Pressing the ▶ button will widen the interval, and pressing the ◀ button will narrow the interval. The camera will focus on the spot nearest the center (where the focus is set).

Shoot.

● Shoot in manual focus. (p. 89)

● In flash settings other than ⑤ (p. 61), Focus Bracketing is not available.
● Continuous shooting (p. 79) cannot be used in this mode.

Changing the Metering Mode

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

Choose the Metering mode.
- After pressing the ⓕ button, press the ▲▼ buttons to choose ⌷.

Choose an option.
- Press the ◀▶ buttons or turn the ⬤ dial to choose an option, then press the ⓕ button.
▶ The setting will display on the screen.

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

91

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".
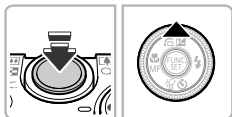
Lock the exposure.
● Point the camera toward the subject and press the ▲ button while pressing the shutter button halfway.
▶ When ✳ appears, the exposure will be set.
● If you release your finger from the shutter button and press another button, ✳ will disappear and the AE will unlock.

Compose the scene and shoot.

☼ Program Shift

If you lock the exposure and then turn the ● dial, you can change the shutter speed and aperture value combination.

Shooting with the FE Lock

Just as with the AE lock (p. 92), you can lock the exposure for shooting with the flash. FE stands for "Flash Exposure".
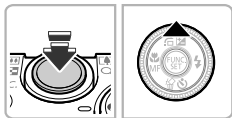
Choose ✦ (p. 71).

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 ✳ appears, the flash output will be retained.
● If you release your finger from the shutter button and press another button, ✳ will disappear and the FE will unlock.

Compose the scene and shoot.

Auto Exposure Bracketing (AEB Mode)

The camera takes 3 continuous shots while automatically adjusting the exposure to standard exposure, underexposure and overexposure, in that order.

1 **Choose ⁴⁄ .**

- After pressing the ⏺ button, press the ▲▼ buttons to choose ⁴⁄₂ , then press the ◀▶ buttons or turn the ● dial to choose ⁴⁄ .

2 **Set the exposure compensation amount.**

- Press the DISP. button.
- Press the ◀▶ buttons or turn the ● dial to adjust the setting.
- From the exposure set by the camera, you can adjust the amount of compensation ±2 stops in 1/3-stop increments. If exposure compensation (p. 70) is already being used, settings are made with the compensated value as the base.

- In flash settings other than ⑤ (p. 61), AEB is not available.
- Continuous shooting (p. 79) cannot be used in this mode.

93

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.

Choose ⚡.

● After pressing the ▶ button, press the ◀▶ buttons or turn the ● dial to choose ⚡,
then press the ⬜ button.

▶ Once set, ⚡ will appear on the screen.

Shoot.

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

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. 153).

Setting the Shutter Speed

You can set the shutter to the speed at which you want to shoot. The camera will set the appropriate aperture value for the shutter speed you set.
Tv stands for "Time value".

1. **Set the mode dial to Tv.**
2. **Make the setting.**
   - Turn the () ring to set the shutter speed.
3. **Shoot.**

Available Shutter Speeds

15", 13", 10", 8", 6", 5", 4", 3"2, 2"5, 2", 1"6, 1"3, 1", 0"8, 0"6, 0"5, 0"4, 0"3, 1/4, 1/5, 1/6, 1/8, 1/10, 1/13, 1/15, 1/20, 1/25, 1/30, 1/40, 1/50, 1/60, 1/80, 1/100, 1/125, 1/160, 1/200, 1/250, 1/320, 1/400, 1/500, 1/640, 1/800, 1/1000, 1/1250, 1/1600

- 2" indicates 2 seconds, 0"3 indicates 0.3 second and 1/160 indicates 1/160 second.
- The fastest shutter speed when using the flash is 1/500 second. The camera automatically resets the shutter speed to 1/500 second if a faster speed is chosen.
- Depending on the zoom position, some shutter speeds may not be available.

What if aperture value is displayed in orange?

If the aperture value displays in orange when the shutter button is pressed halfway, the scene has exceeded the correct exposure limits. Adjust the shutter speed until the aperture value displays in white. Safety shift can also be used (p. 96).

- 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 lowering the shutter speed and shooting with a tripod (p. 153).

Setting the Aperture Value

You can set the aperture to a value at which you want to shoot. The camera will set the appropriate shutter speed for the aperture value you set. **Av** stands for "Aperture value".

1 Set the mode dial to Av.

2 Make the setting.
● Turn the () ring to set the aperture value.

3 Shoot.

Available Aperture Values

F2.0, F2.2, F2.5, F2.8, F3.2, F3.5, F4.0, F4.5, F4.9, F5.0, F5.6, F6.3, F7.1, F8.0

● The fastest shutter speed when using the flash is 1/500 second. As a result, the camera will not set a shutter speed faster than 1/500 second regardless of the aperture value you set.
● Depending on the zoom position, some aperture values may not be available.

② What if shutter speed is displayed in orange?

If the shutter speed displays in orange when the shutter button is pressed halfway, the scene has exceeded the correct exposure limits. Adjust the aperture value until the shutter speed displays in white. Safety shift can also be used.

☼ Safety Shift

With **Tv** and **Av** modes, if [Safety Shift] is set to [On] in the 🔴 tab, the shutter speed or aperture value is automatically adjusted for the correct exposure when it cannot otherwise be obtained. Safety Shift is disabled when the flash is enabled.

Setting the Shutter Speed and Aperture Value

You can manually set the shutter speed and aperture to shoot images. **M** stands for "Manual".

1 Set the mode dial to **M**.

2 Make the setting.

- ● Turn the ● dial to set the shutter speed, or turn the () ring to set the aperture value.
- ▶ The set exposure level appears on the indicator. You can check the difference against the standard exposure level.
- ▶ When the difference is more than ±2 stops, the set exposure level appears in orange. When you press the shutter button halfway, "–2" or "+2" appears in orange.

Aperture Value

Shutter Speed

Exposure Level Indicator

Standard Exposure Level
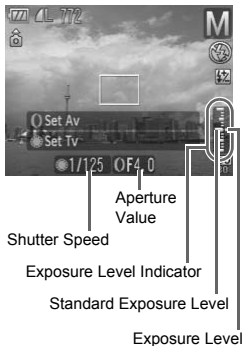
Exposure Level

- ● The standard exposure is calculated according to the metering method chosen (p. 91).
- ● If you use the zoom after making settings or change the composition, the exposure level may change.
- ● Depending on the shutter speed or aperture value set, the monitor brightness may change. If the flash is set to ✦, the monitor brightness will not change.
- ● If you press the ▲ button while holding down the shutter button halfway, the shutter mode or aperture setting (whichever was not adjusted in Step 2) will be automatically adjusted to obtain the correct exposure. However, the correct exposure may not be obtained depending on the settings.

Making Settings using the Control Ring

You can change the function assigned to the control ring. By performing operations with the control ring, you can enjoy the feeling of using a fully manual camera.
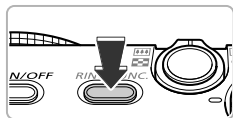
1 Assign a function to the () ring.

● Press the ring function selector button.

● Press the ring function selector button, the ◀▶ buttons, or turn the ● dial to choose an option.

● Press the (ⁿᵘⁿᶜ) button to make the setting.

2 Adjust the settings.

● Turn the () ring or the ● dial to adjust the settings of the assigned functions.
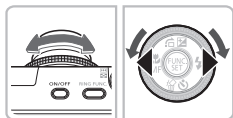
Functions Assignable to the Control Ring

The functions you can assign to the control ring are different depending on the shooting mode. The functions assigned to the control dial also change.

Assignable Function / Shooting mode		**M**	**Av**	**Tv**	**P**
STD	0	Aperture Value	Aperture Value	Shutter Speed	ISO Speed
	●	Shutter Speed	Exposure Compensation	Exposure Compensation	Exposure Compensation
ISO	0	ISO Speed	ISO Speed	ISO Speed	ISO Speed
	●	Aperture Value/Shutter Speed	Aperture Value/ Exposure Compensation	Shutter Speed/ Exposure Compensation	Exposure Compensation
⚡	0	Shutter Speed	Exposure Compensation	Exposure Compensation	Exposure Compensation
	●	Aperture Value	Aperture Value	Shutter Speed	ISO Speed
MF	0	Adjust Focus	Adjust Focus	Adjust Focus	Adjust Focus
	●	Aperture Value/Shutter Speed	Aperture Value/ Exposure Compensation	Shutter Speed/ Exposure Compensation	Exposure Compensation
WB +/−	0	White Balance Correction	White Balance Correction	White Balance Correction	White Balance Correction
	●	Aperture Value/Shutter Speed	Aperture Value/ Exposure Compensation	Shutter Speed/ Exposure Compensation	Exposure Compensation
ZOOM	0	Step Zoom	Step Zoom	Step Zoom	Step Zoom
	●	Aperture Value/Shutter Speed	Aperture Value/ Exposure Compensation	Shutter Speed/ Exposure Compensation	Exposure Compensation

- While Face Self Timer (p. 67) is chosen, MF is not available.
- While ⚘w or ⚘se in My Colors (p. 80) is chosen, WB+/− is not available.
- When shooting in AUTO, SCN (except 🎆), 🎨, and movie modes, the 0 ring is used for step zoom (p. 64).

Correcting the Brightness and Shooting (i-Contrast)

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

Choose [i-Contrast].

● Press the **MENU** button, choose the ◻ tab, and then choose the [i-Contrast] menu item. Press the ◀▶ buttons to choose [Auto].
▶ 𝐂ᵢ will appear on the screen.

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

● Not available when shooting in RAW.
● You can correct recorded images (p. 138).

100

Red-Eye Correction

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

☐ ⚙ ★		
AF-assist Beam	On	Off
MF-Point Zoom	On	Off
Safety MF	On	Off
Flash Settings...		
i-Contrast	◄ Off ►	
Sets flash settings		

1 **Choose [Flash Settings].**
- Press the MENU button, choose [Flash Settings] from the ☐ tab and press the ⚄ button.

Flash Settings		
Flash Exp. Comp	◄ ±0 ►	
Shutter Sync.	◄ 1st-curtain ►	
Red-Eye Corr.	On	Off
Red-Eye Lamp	On	Off
Safety FE	On	Off
MENU ↰		

2 **Adjust the setting.**
- Press the ▲▼ buttons or turn the ● dial 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.

> ⌀ • Not available when shooting in RAW.
> • You can correct recorded images (p. 139).
> • You can also display the screen in Step 2 by pressing the MENU button while the screen in Step 2 on p. 61 is displayed.

Adjusting the Flash Exposure Compensation

Just like with exposure compensation (p. 70), you can adjust the exposure ±2 stops in 1/3-stop increments when using the flash.

Choose ⚡.

● After pressing the ⬤ button, press the ▲▼ buttons to choose ⚡.

Make the setting.

● Press the ◀▶ buttons or turn the ⬤ dial to choose the flash exposure compensation, then press the ⬤ button.

▶ ⚡ will appear on the screen.

You can also set the flash exposure compensation by pressing the MENU button, choosing [Flash Settings] from the ⬤ tab and pressing the ⬤ button. Then choose [Flash Exp. Comp] and press the ◀▶ buttons to make the setting. Or, you can press the ▶ button, then the MENU button to display the settings screen.

Safety FE

The camera automatically changes the shutter speed or aperture value when the flash fires to avoid overexposing and blowing out the highlights in the scene. In the ⬤ tab, if [Safety FE] in [Flash Settings] is set to [Off], the shutter speed and aperture value will not automatically adjust.

102

Adjusting the Flash Output

In **M** mode, you can choose 3 levels of flash output.

1 Set the camera to M mode.

2 Choose the flash output.
● After pressing the ⓕ button, press the ▲▼ buttons to choose ✖.

3 Make the setting.
● Press the ◀▶ buttons or turn the ● dial to choose the flash output, then press the ⓕ button.

● You can also set the flash output by pressing the **MENU** button, choosing [Flash Settings] from the ● tab, and then pressing the ⓕ button. Choose [Flash Output] and press the ◀▶ buttons to make the setting.
● In **Tv** and **Av** modes, you can set the flash output if you choose the ● tab, then [Flash Settings] and set the [Flash Mode] option to [Manual].

Checking for Shut Eyes

When the camera detects the possibility that people have their eyes shut, ☒ appears.

●	ⓨT	★
i-Contrast	‹ Off	
Review	‹ 2 sec.	
Review Info	‹ Off	
Blink Detection	On Off	
Custom Display...		
Detects closed eyes		

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

2 Shoot.
▶ When a person with shut eyes is detected, a frame and ☒ appear.

● In ⓧ, ⓩ ⓩ or ⓩ modes, this function is only available for the last image shot.
● Not available in ⓛ or ⓔⓛ, ⓥⓛ.

103

Registering Shooting Settings

You can register your commonly used shooting modes and function settings. Set the mode dial to $\mathbb{C}$ to use your registered settings. Even if you switch shooting modes or turn off the power, settings that usually cancel (self timer, etc.) will be saved.

Settings that Can be Registered

- Shooting modes (**P**, **Tv**, **Av** or **M**)
- Items set in **P**, **Tv**, **Av** or **M** (pp. 70 – 97)
- Items in the shooting menu
- Zoom position
- Manual focus position (p. 89)
- My Menu items (p. 154)

1 Enter the Shooting mode you want to register and make the settings.

2 Choose [Save Settings].

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

IS Mode	‹ Continuous ›
Date Stamp	‹ Off ›
Record ⅏ ·▲L	Off
Set Shortcut button	
Save Settings	
Registers current shooting	

3 Register the settings.

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

Save Settings

Save current settings?

Cancel   OK
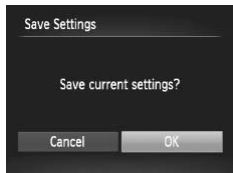
- To change part of the pre-registered settings (except the shooting mode), set the mode dial to $\mathbb{C}$, make the changes, and then repeat Steps 2 – 3.
- To return registered contents to the default settings, turn the mode dial to $\mathbb{C}$ and choose [Reset All] (p. 51).

104

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.

⟋A Color Accent

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

Choose ⟋A.
● Follow Step 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.

Recorded color

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

> ● Using the flash may cause unexpected results in this mode.
> ● When using the Self Timer (p. 66) you can set the time delay to 10 sec. or 2 sec., and the number of shots will be fixed to 1.

$\sqrt{s}$ Color Swap

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

Choose $\sqrt{s}$.

● Follow Step 2 on p. 56 to choose $\sqrt{s}$.

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.

106

5 **Specify the range of colors to be swapped.**

● Press the ▲▼ buttons or turn the ● dial 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.

● When using the Self Timer (p. 66) you can set the time delay to 10 sec. or 2 sec., and the number of shots will be fixed to 1.

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.

Set the mode dial to SCN.

Choose ⊑ or ⊒.
● Follow Step 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 ⊛ 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. 81).
- To use AF lock, register AFL to the ⌞S button (p. 153).
- When using the Self Timer (p. 66) you can set the time delay to 10 sec. or 2 sec., and the number of shots will be fixed to 1.

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 dial is set to '🎬.

Changing the Movie Mode

You can choose between three Movie modes.

Set the mode dial to '🎥.

Choose a Movie mode.

● Turn the ● dial to choose a Shooting mode.

'🎥 Standard	Normal mode.
🎨 Color Accent	These Shooting modes let you change all colors except the chosen color to black and white, or exchange the chosen color for another color, when shooting. See "Changing the Color and Shooting" (p. 105) for details.
🎨 Color Swap	

Under some conditions, colors may not turn out as expected in the 🎨 and 🎨 mode.

Changing the Image Quality

You can choose between three image quality settings.

Choose the image quality.
- After pressing the ⓕ button, press the ▲▼ buttons to choose 640.

Choose an option.
- Press the ◀▶ buttons or turn the ● dial 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
640 640 x 480 pixels, 30 frames/sec.	For shooting standard quality movies.
320 320 x 240 pixels, 30 frames/sec.	Since the number of recording pixels is smaller, the image quality will be lower than with 640, but you can record three times the length.

Estimated Shooting Time

Image Quality	Shooting Time	
	2 GB	8 GB
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.
• Recording will automatically stop when either the clip file size reaches 4 GB or the recording time reaches approximately 1 hour.
• 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.

111

Using the Wind Filter

Wind Filter suppresses noise when the wind is strong. However, unnatural sound may result when used to record in locations with no wind.

○ ↑T	★
Digital Zoom	‹ Standard ›
AF-assist Beam	On Off
Safety MF	On Off
Wind Filter	On Off
Custom Display...	
Reduces noise caused by	

● Press the **MENU** button, choose [Wind Filter] from the ○ tab and press the ◀▶ buttons to choose [On].

AE Lock/Exposure Shift

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

Focus.

● Press the shutter button halfway to focus.

Lock the exposure.

● 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, turn the ● dial to adjust the brightness.

Shoot.

Other Shooting Functions

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

- **Zooming in More Closely On Subjects**
  The digital zoom (p. 62) is available.
- **Using the Self-Timer (p. 66)***
  You can set the time delay to 10 sec. or 2 sec., and the number of shots will be
  fixed to 1.
- **Shooting Close-ups (Macro) (p. 75)***
- **Adjusting the White Balance (p. 77)**
- **Changing the Tone of an Image (My Colors) (p. 80)**
- **Shooting Using a TV Monitor (p. 81)***
- **Shooting with the AF Lock (p. 86)***
- **Shooting in Manual Focus Mode (p. 89)***
- **Turning off the AF Assist Beam (p. 150)***
- **Customizing Display Information (p. 152)***
  [3:2 Guide] is not available.
- **Changing the IS-Mode Settings (p. 153)***
  You can switch between [Continuous] and [Off].
- **Registering Functions to the 𝕊 Button (p. 153)***

Playback Functions

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

● **Erasing Images (p. 28)**
● **Quickly Searching Images (p. 118)**
● **Viewing Images in Filtered Playback (p. 119)**
● **Viewing Slideshows (p. 123)**
● **Changing Image Transitions (p. 124)**
● **Viewing Images on a TV (p. 125)**
● **Protecting Images (p. 127)**
● **Erasing All Images (p. 130)**
● **Organizing Images by Category (My Category) (p. 132)**
● **Rotating Images (p. 134)**

Summary for "Viewing Movies" (p. 33)

↰	Exit
▶	Playback
▮▶	Slow Motion Playback (you can use the ◀▶ buttons to adjust the speed. Sound will not play back.)
◀◀	Display the first frame
◀▮	Previous frame (Rewind if you hold down the 🛞 button.)
▮▶	Next frame (Fast forward if you hold down the 🛞 button.)
▶▶	Display the last frame
✂	Edit (p. 115)
🖳	Appears when connected to a PictBridge compliant printer (p. 29). Refer to the *Personal Printing Guide* for details.

Editing

You can trim the beginnings and ends of recorded movies in one-second increments.

Movie Editing Panel

Movie Editing Bar

1 Choose ✂.

● Follow Steps 1 and 3 on p. 33, choose ✂ and press the ⓕ button.
▶ The movie editing panel and the movie editing bar will appear.

2 Set the editing range.

● Press the ▲▼ buttons and choose 🕱 or 🕱 .
● Press the ◀▶ buttons or turn the ● dial to move ▌. ✂ will display at each one-second interval. If you choose 🕱 , you can trim the beginning of the movie from ✂ . If you choose 🕱 , you can trim the end of the movie from ✂ .
▶ Even if you move ▌ to a point other than a ✂ point, only the portion from the nearest ✂ to the left will be trimmed when 🕱 is chosen. Only the portion from the nearest ✂ to the right will be trimmed when 🕱 is chosen.
▶ The section indicated with ▌ will be the section of the movie that remains after editing.

115

Check the edited movie.

● Press the ▲▼ buttons to choose ▶ (Play), then press the (FUNC) button. The edited movie will play.

● To edit the movie again, repeat Step 2.

● To cancel editing, press the ▲▼ buttons, and choose ↰ . After pressing the (FUNC) button, press the ◀▶ buttons or turn the ● dial to choose [OK], and press the (FUNC) button again.
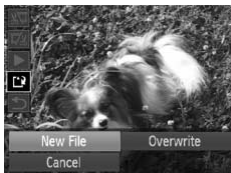
Save the edited movie.

● Press the ▲▼ buttons to choose ⌊�⌋, then press the (FUNC) button.

● Press the ◀▶ buttons or turn the ● dial to choose [New File], then press the (FUNC) 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).

116

7

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. 135 – 139) 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.
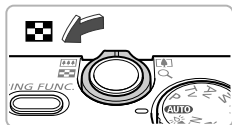
Move the zoom lever toward ⊟.

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

1/42

Change the displayed images.

● Turn the ● dial to switch to the next set of images set in Step 1.

Choose an image.

● Press the ▲▼◀▶ buttons to choose an image.
▶ An orange frame appears on the chosen image.
● Press the ⓕ button to display the chosen image by itself.

Searching Images Using the Control Dial

Turn the control dial to quickly search images. You can also jump by the shooting date (Scroll Display).

4/16

09/09/'09 ⬍   SET ↩

Choose an image.

● If you set single image playback and turn the ● dial quickly, the images will display as shown on the left.
● If you press the ▲▼ buttons, you can search images by the shooting date.
● Pressing the ⓕ button restores single image playback.

To turn off this function, press the MENU button, choose the ▶ tab and [Scroll Display], then choose [Off].

Viewing Images in Filtered Playback

When there are many images on the memory card, you can filter and display them by a specified filter. You can also protect (p. 127) or delete (p. 130) all images at once while filtered.

ⓒ Jump Shot Date	Displays the images shot on a specified date.
ⓝ Jump to My Category	Displays the images of a specified category (p. 132).
ⓐ Jump to first	Jumps to still images only.
ⓜ Jump to Movie	Jumps to a movie.
⑩ Jump 10 Images	Jumps over 10 images at a time.
⑩⑩ Jump 100 Images	Jumps over 100 images at a time.

Search by ⓒ, ⓝ, ⓐ and ⓜ

Target Filters

1 Choose a target filter.

● In single image playback, press the ▲ button, then press the ▲▼ buttons to choose a jump method.
● In ⓒ or ⓝ, press the ◀▶ buttons to choose a filter. Turning the ⬤ dial will display only images that have the same shooting date (category) as the currently chosen image.
● Press the DISP. button to switch between Information Display and No Information Display.
● Pressing the MENU button restores the single image display.

119

2 **Viewing images using filtered playback.**

● Pressing the (FUNC) button will start filtered playback, and the jump method and a yellow frame will appear.

● If you press the ◀▶ buttons or turn the ● dial, the chosen target images will display.

● Pressing the ▲ button displays [Filtered playback settings cleared]. Pressing the (FUNC) button cancels filtered playback.

09/09/2009

(□) Display all images

Jump by 📸 and 📷 Images

● In single image playback, press the ▲ button, then press the ▲▼ buttons to choose a jump method.

Jump 10 Images

100-0700

● If you press the ◀▶ buttons, the display will advance to the image that is the chosen number of images away.

● Pressing the MENU button restores the single image display.

09/09/2009   MENU ←

Using the Control Ring to Jump

Turn the control ring to jump images using the 📸, 📸, and 📷 functions.

● In single image playback, turn the ( ) ring, then press the ▲▼ buttons to choose a jump method.

Jump 10 Images

● If you turn the ( ) ring, the display will advance to the image that is the chosen number of images away.

📸 and 📷 cannot be selected when in index display.

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

When you choose ⓒ in Step 1 on p. 119, if there are only images with the same date, you can only choose one filter. Also, you can only choose 🐦 if there are no images sorted into categories in 🐦 .

☀ **Filtered playback**

In filtered playback (Step 2), you can view filtered images with "Quickly Searching Images" (p. 118), "Viewing Slideshows" (p. 123), and "Magnifying Images" (p. 124). You can process all filtered images at once while performing operations in "Protecting Images" (p. 127), "Erasing All Images" (p. 130), or "Printing from the Print List (DPOF)" (p. 140), by choosing [All Filtered Images].

However, if you change the category (p. 132), or edit an image and save it as a new image (p. 135), a message will appear, and filtered playback will cancel.

Checking the Focus

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

1. **Press the DISP. button, and switch to the focus check display (p. 44).**
   ▶ A white frame will appear where the AF frame or face was when the focus was set.
   ▶ A gray frame will appear on a face detected during playback.
   ▶ The area within the orange frame appears magnified.

2. **Switch frames.**
   ● Move the zoom lever toward Q once.
   ▶ The screen at the left will appear.
   ● Press the ⬜ button to move to a different frame when multiple frames appear.

3. **Change the magnification level or location.**
   ● Use the zoom lever to change the display size, and the ▲▼◀▶ buttons to change the display position while checking the focus.
   ● Pressing the MENU button resets the display to Step 1.

Viewing Slideshows

You can automatically play back images recorded to a memory card.

▶ 凸 ↑↑ **Slideshow** Erase... Protect... Rotate... My Category... Plays a slideshow	**Choose [Slideshow].** ● Press the MENU button, choose [Slideshow] from the ▶ tab and press the ⓕ button.
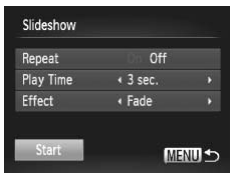
Slideshow Repeat ◄ Off ► Play Time ◄ 3 sec. ► Effect ◄ Fade ► **Start** MENU ↰	**Make the setting.** ● Press the ▲▼ buttons or turn the ● dial to choose an item, and press the ◀▶ buttons to adjust the setting.

Repeat	Repeats playback of images
Play Time	Display time for each image
Effect	Transition effects when switching between images

Slideshow Loading image... **SET** ❙❙ / ▶ **MENU** Exit	**Choose [Start].** ● Press the ▲▼ buttons or turn the ● dial to choose [Start], the press the ⓕ button. ▶ The slideshow will start a few seconds after [Loading image…] displays. ● You can pause/restart a slideshow by pressing the ⓕ button again. ● Press the MENU button to stop the slideshow.

⊘ • If you press the ◀▶ buttons or turn the ● dial 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).

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

Magnifying Images

Move the zoom lever toward Q.

● The display will zoom in on the image and, 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.

● If you turn the ● dial, you can switch images in the zoomed state.
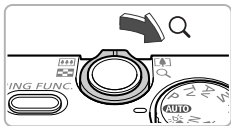
Approximate Location of Displayed Area

Changing Image Transitions

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

▶	凸	↑↑
Resize...		
My Colors...		
Scroll Display	On	
Resume	◀ Last seen	▶
Transition	◀ Fade	▶
Current image fades out as		
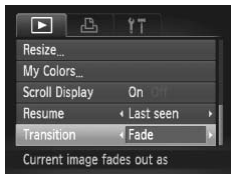
Choose [Transition].

● Press the MENU button and choose the ▶ tab, then choose [Transition] and press the ◀▶ buttons to choose a transition effect.

Viewing Images on a TV

Using the supplied AV cable, 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.

White or black

Yellow

Yellow

Black
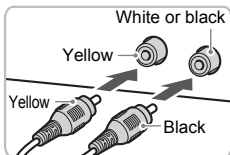
Turn on the TV and switch it to the input to which the cable is connected.
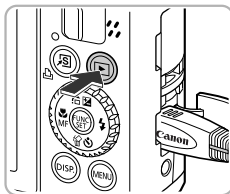
Turn on the camera.
- Press the ▶ button to turn on the camera.
▶ The image will appear on the TV (nothing will appear on the monitor of the camera).
- After you finish viewing, turn off the camera and TV, and unplug the AV cable.

❓ 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 ft 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 enhanced viewing experience.
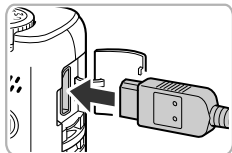
1 **Turn off the camera and TV.**

2 **Connect the camera to the TV.**
- Open the cover and fully insert the cable plug into the camera's HDMI terminal.
- Fully insert the cable plug into the TV's HDMI terminal.
- Follow Steps 3 and 4 on p. 125 to display the images.
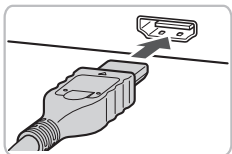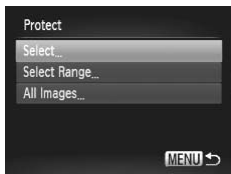
Operation sounds will not play when connected to a high-definition TV.

Protecting Images

You can protect important images so that they cannot be erased by the camera (pp. 28, 130).

Choose [Protect].
- Press the MENU button, choose the ▶ tab and [Protect], and then press the ⬤ button.

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

> ⚠ If you format the memory card (pp. 22, 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.

Choosing Images Individually

Choose [Select].
- Follow Step 2 above to choose [Select] and press the ⬤ button.

Choose images.
- Press the ◀▶ buttons or turn the ⬤ dial to choose the image and press the ⬤ button.
- ▶ Once set, ⊶ 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.

127

Select Range

Choose [Select Range].
● Follow Step 2 on p. 127 to choose [Select Range] and press the ⓕⓤⓝⓒ button.

Choose the starting image.
● Press the ⓕⓤⓝⓒ button.
● Press the ◀▶ buttons or turn the ● dial 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, or turn the ● dial to choose an image, and press the ⓕⓤⓝⓒ button.
● You cannot choose images before the first image.

128

Protect images.

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

Select Range

4 — 6

3 images

Protect   Unlock

MENU ↰

> ☆ **Choose images with the ⌘ dial**

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

Choose All Images

Protect

Protect
Unlock
Stop

MENU ↰

Choose [All Images].

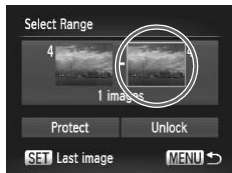● Follow Step 2 on p. 127 to choose [All
Images] and press the ⌘ button.

Protect images.

● Press the ▲▼ buttons or turn the ⌘ dial
to choose [Protect] and press the ⌘
button.

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

129

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. 127) cannot be erased.

Choose [Erase].
- Press the MENU button, choose the ▶ tab and [Erase], and press the (⏎) button.
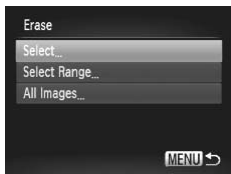
Choose a selection method.
- Press the ▲▼ buttons or turn the ⬤ dial to choose a selection method, and press the (⏎) button.
- Pressing the MENU button will restore the menu screen.

Choosing Images Individually

Choose [Select].
- Follow Step 2 above to choose [Select] and press the (⏎) button.
- Press the ◀▶ buttons or turn the ⬤ dial to choose the image, and press the (⏎) button.
- Once set, ✓ 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.

Erase

Erase?

Stop   OK

MENU ↰

2 **Press the MENU button.**

3 **Erase.**
● Press the ◆▶ buttons or turn the ● dial to choose [OK] and press the ⓘ button.

Select Range

1 **Choose [Select Range].**
● Follow Step 2 on p. 130 to choose [Select Range] and press the ⓘ button.
● Follow Steps 2 and 3 on p. 128 to choose images.

Select Range

4   —   6

3 images

Erase

MENU ↰

2 **Erase.**
● Press the ▼ button to choose [Erase], then press the ⓘ button.

Choose All Images

Erase

Erase all images?

Cancel   OK
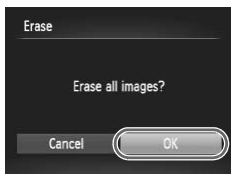
1 **Choose [All Images].**
● Follow Step 2 on p. 130 to choose [All Images] and press the ⓘ button.

2 **Erase.**
● Press the ◆▶ buttons or turn the ● dial 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. 119) and process all images at once by using the functions below.

- Viewing Slideshows (p. 123), Protecting Images (p. 127), Erasing All Images (p. 130), Choosing Images for Printing (DPOF) (p. 141)

> 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 🌊.
>
> 🔍 : Images shot in 🎆, 🎇, 🌅, 🎤, 🍃, 🐾.
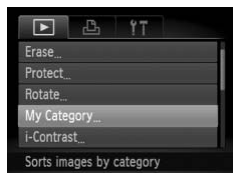
▶ ᗪ ᵧᵀ Erase... Protect... Rotate... **My Category...** i-Contrast... Sorts images by category	**Choose [My Category].** ● Press the **MENU** button and choose the ▶ tab, then choose [My Category] and press the ⏺ button.
My Category Select... Select Range... MENU ↩	**Make the setting.** ● Press the ▲▼ buttons or turn the ⊕ dial to choose a category and press the ⏺ button. ● Press the **MENU** button to return to the menu screen.
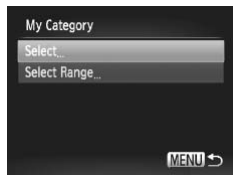
Choosing Images Individually

Choose [Select].

● Follow Step 2 on p. 132 to choose [Select] and press the ⓕ button.

● Press the ◀▶ buttons or turn the ● dial to choose the image, and press the ⓕ button.

● 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

1 Choose [Select Range].

● Follow Step 2 on p. 132 to choose [Select Range] and press the ⓕ button.

● Follow Steps 2 and 3 on p. 128 to choose images.

● Press the ▼ button, choose the item and press the ◀▶ buttons, or turn the ● dial to choose a type.

2 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.

133

Rotating Images

You can change the orientation of an image and save it.
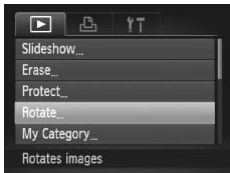
Choose [Rotate].

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

Rotate the image.

● Press the ◀▶ buttons or turn the ● dial to choose an image.
● The image will rotate 90° with each press of the ⓕ 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.
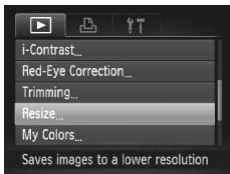
1 **Choose [Resize].**
- Press the **MENU** button and choose the ▶ tab, then choose [Resize] and press the ⬤ button.

2 **Choose an image.**
- Press the ◀▶ buttons or turn the ⬤ dial to choose the image and press the ⬤ button.

3 **Choose an image size.**
- Press the ◀▶ buttons or turn the ⬤ dial to choose an option, then press the ⬤ button.
▶ The [Save new image?] screen will appear.

4 **Save the new image.**
- Press the ◀▶ buttons or turn the ⬤ dial to choose [OK] and press the ⬤ button.
▶ The image will be saved as a new file.
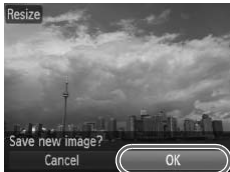
5 **Display the new image.**
- When you press the **MENU** button, the [Display new image?] screen will appear.
- Press the ◀▶ buttons, or turn the ⬤ dial to choose [Yes] and press the ⬤ button.
▶ The saved image will display.

- You cannot resize an image to a larger size.
- You cannot resize images taken with the ▥, XS and RAW settings.

Trimming

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

▶	凸	↑T
My Category...		
i-Contrast...		
Red-Eye Correction...		
Trimming...		
Resize...		
Trims an image to a specified area		

Trimming Area

6M 2816x2112

DISP 🔁
● 🔲
SET 🖼
MENU ↰

Trimming Area Display

Recorded pixels after trimming

2M 1600x1200

DISP 🔁
● 🔲
SET 🖼
MENU ↰

1 **Choose [Trimming].**
● Press the MENU button, choose the ▶ tab and [Trimming], then press the ⊛ button.

2 **Choose an image.**
● Press the ◀▶ buttons or turn the ● dial to choose the image and press the ⊛ button.

3 **Adjust the trimming area.**
▶ A frame will appear around the portion of the image to be trimmed.
▶ The original image will display in the upper left and the trimmed image will display in the lower right.
● If you move the zoom lever to the left or right, you can change the frame size.
● If you press the ▲▼◀▶ buttons, you can move the frame.
● If you press the DISP. button, you can change the frame 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 turning the ● dial.
● Press the ⊛ button.

4 **Save as a new image and display.**
● Perform Steps 4 and 5 on p. 135.

Ø • 🅆 , 🆂 , 🆇🆂 and 🆁🅰� 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. 80 for details on each menu item.
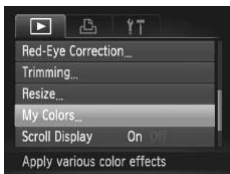
Choose [My Colors].
- Press the MENU button, choose the ▶ tab and [My Colors], and press the ⓕ button.

Choose an image.
- Press the ◀▶ buttons or turn the ● dial to choose the image and press the ⓕ button.

Choose a menu option.
- Press the ◀▶ buttons or turn the ● dial to choose an option.
- You can magnify the image by following the operations in "Magnifying Images" (p. 124).
- 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. 135.

- 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. 80).
- My Colors settings cannot be performed on [RAW] images.

137

Correcting the Brightness (i-Contrast)

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

You can choose from 4 levels of correction: [Auto], [Low], [Medium] or [High]. Corrected images will be saved as a new file.
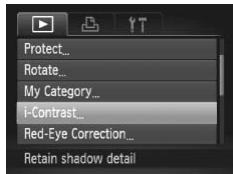
1 **Choose [i-Contrast].**
  ● Press the MENU button, choose the ▶ tab and [i-Contrast], then press the ⬤ button.

2 **Choose an image.**
  ● Press the ◀▶ buttons or turn the ● dial to choose the image and press the ⬤ button.

3 **Choose a menu item.**
  ● Press the ◀▶ buttons or turn the ● dial to choose an option, then press the ⬤ button.

4 **Save as a new image and display.**
  ● Perform Steps 4 and 5 on p. 135.

? 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.
> ● Contrast correction cannot be performed on RAW images.

138

Correcting the Red-Eye Effect

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

| ▶ | ♫ | ↑↑ |

Rotate...
My Category...
i-Contrast...
Red-Eye Correction...
Trimming...

Corrects red-eye effect in
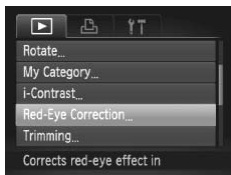
Choose [Red-Eye Correction].

● Press the **MENU** button, choose the ▶ tab and [Red-Eye Correction], then press the ⬤ button.

Choose an image.

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

Correct the image.

● Press the ⬤ button.
▶ Red-eye detected by the camera will be corrected and a frame will appear around the corrected portion.
● You can zoom the image using the procedures in "Magnifying Images" (p. 124).

Red-Eye Correction

New File   Overwrite
Cancel
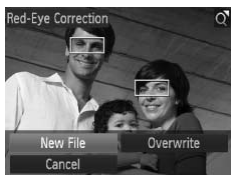
Save as a new image and display.

● Press the ▲▼◀▶ buttons, or turn the ⬤ dial to choose [New File], and press the ⬤ button.
▶ The image will be saved as a new file.
● Perform Step 5 on p. 135.

> ● 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.
> ● Red-eye correction cannot be performed on ☐☐☐ images.
> ● When shooting in [Record ☐☐☐ + ◢L], red-eye correction can be performed on the JPEG image, but the original image 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 by pressing the 凸 button. 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

Add to Print List?
Cancel   Add

1 Choose an image.

● Press the ◀▶ buttons or turn the ● dial and choose the image.

2 Press the 凸 button (RAW images and videos will be excluded).

3 Print list.

● Press the ▲▼ buttons and choose the number of prints, press the ◀▶ buttons or turn the ● dial to choose [Add] and press the ⓕ button.

● To cancel adding images, choose the added images and press the 凸 button, then press the ◀▶ buttons, or turn the ● dial 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

Print List

Print now
Print later

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

2 Print.

● Press the ▲▼ buttons, choose [Print now] and press the ● button.

▶ Printing will start.

● If you stop the printer during printing and start again, it will start from the next print.

140

Choosing Images for Printing (DPOF)

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

Print Settings

You can set the print type, date and file number. These settings apply to all images chosen for printing.
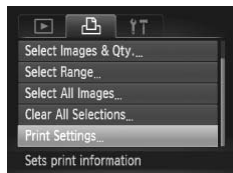
Select Images & Qty.	**Choose [Print Settings].**
Select Range	● Press the MENU button and choose the ⤶ tab, then choose [Print Settings] and press the 🔘 button.
Select All Images	
Clear All Selections	**Adjust the settings.**
Print Settings	● Press the ▲▼ buttons or turn the ● dial
Sets print information	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].

141

- You cannot shoot movies in ![RAW].
- With [Index] chosen, the [Date] and [File No.] options cannot be set to [On] at the same time.
- The date will be printed in the style set in the [Date/Time] function in the ⑆ tab (p. 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 or turn the ● dial 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. Press the ⓢ button again to deselect the images. ✓ will disappear.

Set the number of prints.
- Press the ▲▼ buttons or turn the ● dial to set the number of prints (maximum 99).
- Repeat Steps 2 and 3 to choose other images and the number of prints for each.
- You cannot set the number of 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.

142
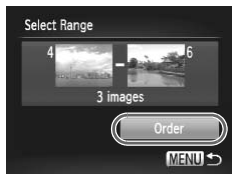
Select Range

Choose [Select Range].
- Choose [Select Range] in Step 1 on p. 142 and press the ⚬ button.
- Choose images according to Steps 2 and 3 on p. 128.

Make print settings.
- Press the ▲▼ buttons, choose [Order] and press the ⚬ button.

Select Range
4 — 6
3 images
Order
MENU ↩

Set All Images to Print Once

Choose [Select All Images].
- Choose [Select All Images] in Step 1 on p. 142 and press the ⚬ button.

Make print settings.
- Press the ◀▶ buttons or turn the ● dial to choose [OK] and press the ⚬ button.

Select All Images
Set 1 print per image
Cancel   OK

Clearing All Selections
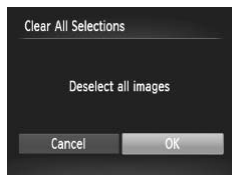
Choose [Clear All Selections].
- Choose [Clear All Selections] in Step 1 on p. 142, and press the ⚬ button.

All selections will be cleared.
- Press the ◀▶ buttons or turn the ● dial to choose [OK], then press the ⚬ button.

Clear All Selections
Deselect all images
Cancel   OK

8

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 ⚙️ tab (p. 48).

Turning off Hints & Tips

When you choose an item in the FUNC. menu (p. 47) or Menu (p. 48), hints and tips display. You can turn off this function.

⚙️ ★	● Choose [Hints & Tips], then press the ◀▶ buttons to choose [Off].
Mute On Off	
Volume...	
Sound Options...	
Hints & Tips On Off	
LCD Brightness ▬▬▮▬ +	
Start-up Image...	

Changing the File Number Assignment

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

⚙️ ★	● Choose [File Numbering], then press the ◀▶ buttons to choose an option.
LCD Brightness ▬▬▮▬ +	
Start-up Image...	
Format... 🗎 1.8GB	
File Numbering ◀ Continuous ▶	
Create Folder ◀ Monthly ▶	
Sequential numbers even	

Continuous	Even if you shoot using a new memory card, the file numbers are assigned consecutively until an image with the number 9999 is taken/saved.
Auto Reset	If you replace the memory card with a new one, 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.

☐ ¡T ★
Start-up Image...
Format... ☐ 1.8GB
File Numbering ‹ Continuous ›
Create Folder ‹ Daily ›
Lens Retract ‹ 1 min. ›
Creates a new folder each day

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

Changing the Lens Retract Time

For safety reasons, the lens retracts about 1 minute after pressing the ▶ button when in a Shooting mode (p. 27). You can set the retraction time to [0 sec.].

☐ ¡T ★
Format... ☐ 1.8GB
File Numbering ‹ Continuous ›
Create Folder ‹ Monthly ›
Lens Retract ‹ 0 sec. ›
Power Saving...
Lens retracts right after

- 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.

Power Saving
Auto Power Down On **Off**
Display Off ‹ 1 min. ›
MENU ↰

- Choose [Power Saving], then press the ⓕ button.
- Press the ▲▼ buttons or turn the ● dial to choose [Auto Power Down], then press 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.

147

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].

Power Saving	
Auto Power Down	On Off
Display Off	◂ 1 min. ▸
	MENU ⇆

● Choose [Power Saving], then press the ⏺ button.
● Press the ▲▼ buttons or turn the ● dial to choose [Display Off], then press 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.

Time Zone	
🏠	09.09.2009 10:00
	SET Select Time Zone
	MENU ⇆

🏠 09.09.2009 11:00 ☀

Daylight Saving Time
New York

SET OK   **MENU** Cancel

1 **Set the home time zone.**

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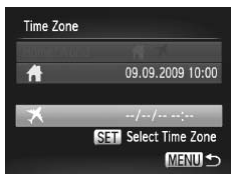
Set the world time zone.

● Press the ▲▼ buttons or turn the ● dial to choose ✈, then press the 🔘 button.
● Press the ◀▶ buttons or turn the ● dial 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 or turn the ● dial 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 ✈ setting (p. 19), your 🏠 time and date will automatically change.

Changing Distance Units

You can change the distance units that display in the MF indicator (p. 89) from m/cm to ft/in.

● Choose [Distance Units], then press the ◀▶ buttons to choose [ft/in].

149

Changing Shooting Functions

If you set the mode dial 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 **P** mode, check if the function is available in those modes (pp. 166 – 169).

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.

○ ᵀᵀ ★	
Digital Zoom	‹ Standard ›
AF-Point Zoom	On **Off**
Servo AF	On **Off**
AF-assist Beam	On **Off**
MF-Point Zoom	**On** Off
Turns off AF assist beam	

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

Changing the Flash Timing

You can change the timing for the flash and shutter.

Flash Settings	
Flash Exp. Comp	‹ ±0 ›
Shutter Sync.	‹ 1st-curtain ›
Red-Eye Corr.	**Off**
Red-Eye Lamp	**On** Off
Safety FE	**On** Off
MENU ↰	

● Choose [Flash Settings] and press the ⑇ button.
● Press the ▲▼ buttons or turn the ⊕ dial to choose [Shutter Sync.] and press the ◀▶ buttons to choose a setting.

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

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.

Flash Settings	
Flash Exp. Comp	◄ ±0 ►
Shutter Sync.	◄ 1st-curtain ►
Red-Eye Corr.	On **Off**
Red-Eye Lamp	On **Off**
Safety FE	On Off
MENU ↰	
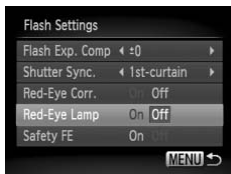
● Choose [Flash Settings], then press the ((FUNC/SET)) button.
● Press the ▲▼ buttons or turn the ● dial to choose [Red-Eye Lamp], then press the ◀▶ buttons to choose [Off].

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.

● ↹† ★	
Safety MF	On Off
Flash Settings...	
i-Contrast	◄ Off ►
Review	◄ 2 sec. ►
Review Info	◄ Off ►
Image displays for set time only	

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.

● ↹† ★	
Flash Settings...	
i-Contrast	◄ Off ►
Review	◄ 2 sec. ►
Review Info	◄ Focus Check ►
Blink Detection	On Off
Magnified focusing area	

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

Off	Displays the image only.
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. 122).

Customizing Display Information

You can change which information is displayed by switching between custom displays with each press of the DISP. button.

Custom Display	
	🔳 🔳
Shooting Info	✓ ✓
Grid Lines	✓
3:2 Guide	
Histogram	✓

SET ✓ MENU ↰

● Choose [Custom Display], then press the ⬛ button.
● Press the ▲▼◀▶ buttons or turn the ⬤ dial to select an item and press the ⬛ button to put a ✓ mark on items you would like to display.
▶ Items with a ✓ will display.
● To turn off a custom display, choose 🔳 or 🔳 and press the ⬛ button. A ◯ mark will appear.
  However, the custom display currently being used in the shooting screen cannot be turned off.

Shooting Info	Displays shooting information (p. 44).
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.
Histogram	Histogram displays in shooting modes **P**, **Tv**, **Av**, **M**.

> If you press the shutter button halfway and return to the shooting screen from the custom display settings screen, the settings will not be saved.

> Gray items can also be set, however, they may not display depending on the Shooting mode.

152

Changing the IS-Mode Settings

<table>
<tr><td></td><td>Continuous</td><td>Image stabilization is always on. You can confirm the result directly on the display, which makes it easier to check the composition or focus.</td></tr>
<tr><td></td><td>Shoot Only</td><td>Image stabilization is only active at the moment of shooting.</td></tr>
<tr><td></td><td>Panning</td><td>Image stabilization only counters up and down motion. This option is recommended for shooting objects moving horizontally.</td></tr>
</table>
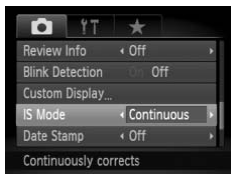
● Choose [IS Mode], then press the ◆▶ buttons to choose an option.

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.

Registering Functions to the ⌷S⌷ Button

● Choose [Set Shortcut button], then press the ⒻⓊⓃⒸ button.
● Press the ▲▼◆▶ buttons or turn the ● dial to choose the functions to register, then press the ⒻⓊⓃⒸ button.
● Pressing the ⌷S⌷ button will call up the registered function.

✐ • Choose ⌷S⌷ if you want to cancel registration.
• When this ◯ symbol is shown on the bottom right of an icon, the function cannot be used in the current Shooting mode or function setting.
• In ⌷, each press of the ⌷S⌷ button records white balance data (p. 77), and the white balance settings change to ⌷.
• In AFL, each press of the ⌷S⌷ button will adjust the focus and AFL will appear on the screen.
• If you press the ⌷S⌷ button in ⌷, both the LCD monitor displays will turn off. Perform one of the following operations to solve the problem.
  • Press any button other than the power button
  • Change the camera's vertical or horizontal orientation

Registering Commonly Used Shooting Menus

You can register shooting menu items in the ★ tab to fit your preferences.
You can quickly access commonly used menu items from a single screen by registering them in My Menu.
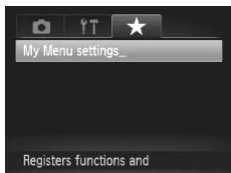
☐ ↑T ★ My Menu settings_ Registers functions and	**Choose [My Menu settings].** ● Choose [My Menu settings], in the ★ tab, then press the (FUNC) button.

1 **Choose [My Menu settings].**
● Choose [My Menu settings], in the ★ tab, then press the (FUNC) button.

My Menu settings
Select items_
Sort_
Set default view   ‹ No ›
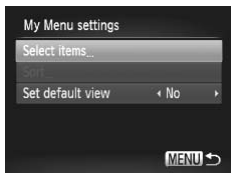
MENU ↰

2 **Choose the menu items to register.**
● Press the ▲▼ buttons or turn the ● dial to choose [Select items], then press the (FUNC) button.
● Press the ▲▼ buttons or turn the ● dial to choose a menu to register (up to 5) and press the (FUNC) button.
▶ ✓ will appear.
● To cancel registration, press the (FUNC) button, and the ✓ will disappear.
● Press the MENU button.

My Menu settings
Select items_
Sort_
Set default view   ‹ No ›
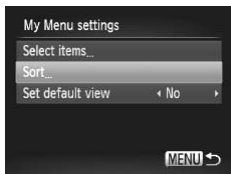
MENU ↰

3 **Change the order in which menu items are displayed.**
● Press the ▲▼ buttons or turn the ● dial to choose [Sort], then press the (FUNC) button.
● Press the ▲▼ buttons or turn the ● dial to choose the menu item you would like to move, and press the (FUNC) button.
● Press the ▲▼ buttons or turn the ● dial to change the order, then press the (FUNC) button.
● Press the MENU button.

- Gray items in Step 2 can also be set, however, they may not be available depending on the Shooting mode.
- Choose [Set default view] and press the ◀▶ buttons to choose [Yes]. My Menu can now be displayed by pressing the MENU button when in a shooting mode.

Changing Playback Functions

You can adjust the settings in the ▶ tab by pressing the ▶ button (p. 48).

Choosing the Image that First Displays in Playback
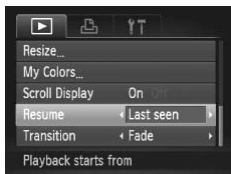
● Choose [Resume], then press the ◀▶ buttons to choose an option.

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

155

Changing the Start-up Image or Sound

In the ʔ tab, you can set one of your recorded images as the start-up image when the camera power is turned on, or change the sounds played for each camera operation.

Change Sounds

Sound Options			
Start-up Sound	1	2	3
Operation Sound	1	2	3
Selftimer Sound	1	2	3
Shutter Sound	1	2	3

MENU ↰

● Choose [Sound Options], then press the ⬛ button.
● Press the ▲▼ buttons or turn the ⬤ dial to choose an option.
● Press the ◀▶ buttons to choose a setting.

1, 2	Preset sounds.
3	You can register your sounds using the supplied software (p. 157).

Changing the Start-up Screen

PowerShot S90

Start-up Image
↴ 1 2 3

MENU ↰

● Choose [Start-up Image], then press the ⬛ button.
● Press the ◀▶ buttons to choose a setting.

↴	No start-up image.
1, 2	Preset images.
3	You can register the images you take. You can also register your images using the supplied software (p. 157).

Registering the Start-up Screen

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

● Choose [Start-up Image], then press the ⬅ button.
● Press the ◀▶ buttons to choose [3], then press the ⬅ button.

● Press the ◀▶ buttons or turn the ● dial to choose an image, then press the ⬅ button.
● Press the ◀▶ buttons or turn the ● dial to choose [OK], then press the ⬅ button to complete registration.

Register images or sounds saved on a computer

You can register images or sounds to the camera using the included software. Refer to the *Software Guide* for details.

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

9

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-DC40 (sold separately), you can use the camera without worrying about how much charge is left in the battery.
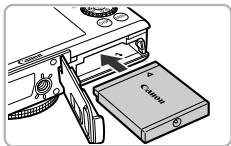
1 Insert the coupler.
- Open the cover (p. 16) and insert the coupler as shown until it locks into place with a click.
- Close the cover (p. 16).
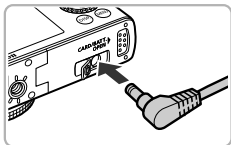
2 Plug the cord into the camera.
- Open the cover and fully insert the plug into the camera.
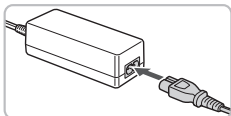
3 Connect the power cord.
- Connect the power cord to the compact power adapter, then plug the other end into a power outlet.
- You can turn the camera on to use it.
- After you finish, turn off the camera and unplug the power cord from the power outlet.

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

The AC adapter kit can also be used when abroad

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

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 by placing it, for example, 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. 125).

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.

$\frac{1}{2}$ 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. 26).
- Set the [IS mode] to [Continuous] (p. 153).
- Set the flash to $\frac{1}{2}$ (p. 71).
- Increase the ISO speed (p. 76).
- Attach the camera to a tripod.

Image is blurred.
- Press the shutter button halfway to focus on the subject, then press fully to shoot (p. 23).
- Shoot the subject within the focusing distance (p. 173).
- Set the [AF-assist Beam] to [On] (p. 150).
- Confirm that functions which you do not intend to use (macro, etc.) are not set.
- Shoot using the focus lock or AF lock (pp. 82, 86).

Even when you press the shutter button halfway, the AF frame does not appear, and the camera does not focus.
- If you center on the light and dark contrasting area of the subject and push the shutter button halfway, or repeatedly push the shutter button halfway, the frame will appear and the camera will focus.

Subject is too dark.
- Set the flash to $ (p. 71).
- Adjust the brightness with exposure compensation (p. 70).
- Adjust the brightness with the i-Contrast function (pp. 100, 138).
- Use the AE lock, or spot metering to shoot (pp. 91, 92).

Subject is too bright (overexposed).
- Set the flash to ⑤ (p. 61).
- Adjust the brightness with exposure compensation (p. 70).
- Use the AE lock, or spot metering to shoot (pp. 91, 92).
- Reduce the light illuminating the subject.

Image is dark even though the flash fired (p. 26).
- Increase the ISO speed (p. 76).
- Shoot within an appropriate distance for flash photography (p. 71).
- Adjust the flash exposure compensation or the flash output (pp. 102, 103).

Image taken using the flash is too bright (overexposed).
- Shoot within an appropriate distance for flash photography (p. 71).
- Set the flash to ⑤ (p. 61).
- Adjust the flash exposure compensation or the flash output (pp. 102, 103).

White dots appear on the image when shooting with the flash.
- Light from the flash has reflected off dust particles or other objects in the air.

Image appears rough or grainy.
- Shoot with the ISO speed on a lower setting (p. 76).
- Depending on the Shooting mode, when shooting in a high ISO speed the image may appear rough or grainy (p. 60).

Eyes appear red (p. 101).
- Set the [Red-Eye Lamp] to [On] (p. 151). 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. 166).

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 image quality setting (p. 111).
• Use a memory card capable of recording at high speeds (p. 111).

Zoom does not operate.
• You can use the digital zoom while recording, but not the optical zoom (p. 62).

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 when transferring images from the camera via the cable by performing the following operations to slow down transfer speed.
• Remove the cable, then press and hold the MENU button and press the ▲ and ⬜ buttons. In the screen that appears, choose [B] and press the ⬜ button.

163

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, 69, 83) or edit images (pp. 135 – 139). Erase the images (pp. 28, 130) 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. 127)

Unidentified Image/Incompatible JPEG/Image too large./Cannot play back AVI
* 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. 124), rotated (p. 134), edited (pp. 135 – 139), registered to the start-up screen (p. 157), categorized (p. 132), or added to a print list (p. 141).
* 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. 124), edited (pp. 135 – 139), added to a print list (p. 140), or registered to the start-up screen (p. 156).

164

Cannot select!

● When choosing the selection range (pp. 128, 131, 143), 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. 128, 131, 143).

Too many marks.

● You chose more than 998 images in print settings. Choose less than 998 images (p. 141).

Cannot complete!

● Print settings could not be saved correctly. Reduce the number of selected images and try again (p. 141).

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. 147). In the ♈ menu, change [File Numbering] to [Auto Reset] (p. 146) 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.

Wrong flash position Restart the camera

● If this message continues to appear after you have restarted the camera several times, there may be a problem with the camera. Please contact your Canon Customer Support Help desk.

165

Functions Available in Each Shooting Mode

Function		C	M	Av	Tv	P	AUTO	ᵜ
Exposure Compensation (p. 70)/Exposure Shift (p. 112)		*1	—	O	O	O	—	—
Self-Timer (pp. 66, 67)	⏱off	*1	O	O	O	O	O	O
	⏱	*1	O	O	O	O	O	O
	⏱	*1	O	O	O	O	O	O
	⏱₁₀ ⏱₂	—	—	—	—	—	—	—
Flash (pp. 61, 71, 94)	⚡A	*1	—	—	—	O	O	O
	⚡	*1	O	O	O	O	—	—
	⚡⁑	*1	—	O	—	O	*2	—
	⚡	*1	O	O	O	O	O	O
Program Shift (p. 92)		*1	O	O	O	O	—	—
AE Lock (pp. 92, 112)/FE Lock (p. 92)		*1	—	O	O	O	—	—
AF Lock (p. 86)		*1	O	O	O	O	—	O
Focusing Zone (pp. 75, 89)	▲	*1	O	O	O	O	—	*7
	♥	*1	O	O	O	O	—	—
	MF	*1	O	O	O	O	—	O
	All Range	—	—	—	—	—	O	—
Face Selection (p. 88)		*1	O	O	O	O	O	O

	FUNC. Menu	C	M	Av	Tv	P	AUTO	ᵜ
ISO Speed (p. 76)	AUTO	*1	—	O	O	O	O	O
	80 100 125 160 200 250 320 400 500 640 800 1000 1250 1600 2000 2500 3200	*1	O	O	O	O	—	—
White Balance (p. 77)	AWB	*1	O	O	O	O	O	O
	☀ ☁ ☀ ☀ ☀ ⚡ ☀ ☀	*1	O	O	O	O	—	—
My Colors (p. 80)	off	*1	O	O	O	O	O	O
	(others)	*1	O	O	O	O	—	—
Bracketing (pp. 90, 93)	off	*1	O	O	O	O	O	O
	☷ ☷	*1	O	O	O	O	—	—
Flash Exposure Compensation (p. 102)		*1	—	O	O	O	—	—
Flash Output Settings (p. 103)		*1	O	O	O	—	—	—
Light Metering (p. 91)	▣	*1	O	O	O	O	O	O
	[ ] ⊡	*1	O	O	O	O	—	—
Drive Mode (p. 79)	☐	*1	O	O	O	O	O	O
	☐	*1	O	O	O	O	—	O
	☐ *4	*1	O	O	O	O	—	O
Recording Pixels (pp. 72, 111)/Compression Ratio (Image Quality) (p. 72)		*1	O	O	O	O	O	*5

*1 The available settings depend on the registered shooting modes. *2 Not selectable, but turned on whenever flash is used. *3 ⚡ not available. *4 MF, ▦ and AF Lock are set to ☐. *5 Recording pixels are fixed to M .

	SCN																	🎬	
	🐟	🏔	🎆	🎇	☀	🌅	📷	❄	🌊	🕯	🎨	✂	🎈	⁄A⁄S	🚫	🖼🖼	🖼	🎬	🎬
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	—	O	O	O	—
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	—	O	—	—	—
	O	O	O	O	O	O	O	—	O	O	O	O	O	O	—	O	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	O	—	O	O	O	
	O	O	O	O	O	O	O	—	O	O	—	O	O	O	O	O	—	—	—
	O	O	O	O	O	O	O	—	O	O	O	O	O	O	O	O	—	—	—
	—	*2	*2	—	—	*2	*2	—	—	—	—	—	—	—	—	O			
	O	O	O	O	O	O	O	—	O	O	O	O	O	O	O	O	—	—	—
	O	O	O	O	O	O	O	—	O	O	O	O	O	O	O	O	O	O	O
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
	O	—	O	—	O	—	O	—	O	O	O	O	O	O	O	O	O	O	O
	O	O	O	O	O	O	O	—	O	O	O	O	O	O	O	O	—	O	O
	O	O	O	O	O	O	O	—	O	O	O	O	O	O	O	O	—	—	O

	FUNC. Menu																		
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	O	*3	—
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	O	O	—
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	—	—
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	—	—
	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	*6	O	O

*6 Recording pixel setting 🔲 and 🔳 not selectable. *7 Focusing Zone is the same as in **AUTO**.
O Selectable, or set automatically. — Not selectable.

167

Menus

◻ Shooting Menu

Function		C	M	Av	Tv	P	AUTO	🎨
AF Frame (p. 84)	Face AiAF	*1	○	○	○	○	○	○
	Center	*1	○	○	○	○	—	—
AF Frame Size (p. 84)	Normal/Small	*1	○	○	○	○	—	—
Digital Zoom (p. 62)	Standard	*1	○	○	○	○	○	—
	Off	*1	○	○	○	○	○	○
	Digital Tele-Converter (1.4x/2.3x)	*1	○	○	○	○	○	—
AF-Point Zoom (p. 85)	On/Off	*1	○	○	○	○	○	○
Servo AF (p. 87)	On/Off	*1	○	○	○	○	*3	○
AF-assist Beam (p. 150)	On/Off	*1	○	○	○	○	○	○
MF-Point Zoom	On/Off	*1	○	○	○	○	—	○
Safety MF (p. 89)	On/Off	*1	○	○	○	○	—	○
Flash Settings (pp. 101, 102, 103, 150, 151)	Flash Mode — Auto	*1	—	○	○	○	○	○
	Flash Mode — Manual	*1	—	○	○	○	—	—
	Flash Exp. Comp –2 to +2	*1	—	○	○	○	—	—
	Flash Output — Minimum/Medium/Maximum	*1	○	○	○	—	—	—
	Shutter Sync. — 1st-curtain/2nd-curtain	*1	○	○	○	○	—	—
	Red-Eye Corr. On/Off	*1	○	○	○	○	○	○
	Red-Eye Lamp On/Off	*1	○	○	○	○	○	○
	Safety FE On/Off	*1	—	○	○	○	*4	*4
i-Contrast (p. 100)	Auto/Off	*1	○	○	○	○	*5	*5
Safety Shift (p. 96)	On/Off	*1	—	○	○	—	—	—
Wind Filter (p. 112)	On/Off	*1	—	—	—	—	—	—
Review (p. 151)	Off/2 – 10 sec./Hold	*1	○	○	○	○	○	○
Review Info (p. 151)	Off/Detailed/Focus Check	*1	○	○	○	○	○	○
Blink Detection (p. 103)	On/Off	*1	○	○	○	○	○	○
Custom Display*2 (p. 152)	Shooting Info	*1	○	○	○	○	○	○
	Grid Lines	*1	○	○	○	○	○	○
	3:2 Guide	*1	○	○	○	○	○	○
	Histogram	*1	○	○	○	○	△	△
IS Mode (p. 153)	Continuous/Off/Shoot Only/Panning	*1	○	○	○	○	*4	△
Date Stamp (p. 65)	Off/Date/Date & Time	*1	○	○	○	○	○	—
Record 🎬+🔘 (p. 74)	On/Off	*1	○	○	○	○	—	—
Set Shortcut button (p. 153)		*1	○	○	○	○	○	○
Save Settings (p. 104)		○	○	○	○	○	—	—

*1 The available settings depend on the registered shooting modes. *2 AiAF
*3 [On] when subject movement is detected. *4 Fixed to [On]. *5 Fixed to [Auto].

	SCN																	🎥	
	○	○	○	○	○	○	○	—	○	○	○	○	○	○	○	○	—	*2	*2
	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	○	○	○	○	○	○	○	○	○	○	○	○	○	○	—	—	—	○	—
	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	—	—	—	—
	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	—	—
	○	○	○	○	○	○	○	—	○	○	○	○	○	○	○	○	○	—	—
	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	○	○	○	○	○	○	○	—	○	○	○	○	○	○	○	○	—	—	—
	○	○	○	○	○	○	○	—	○	○	○	○	○	○	○	○	—	○	○
	○	○	○	○	○	○	○	—	○	○	○	○	○	○	○	○	○	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	○	○	○	○	○	○	○	—	○	○	○	○	○	—	—	—	—	—	—
	○	○	○	○	○	○	○	—	○	○	○	○	○	○	○	○	—	—	—
	*4	*4	*4	*4	*4	*4	*4	—	*4	*4	*4	*4	*4	*4	—	*4	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	○	○
	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	—	—
	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	—	—
	○	○	○	○	○	○	○	—	○	○	—	○	○	○	○	○	○	—	—
	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	△	○	○
	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

○ Selectable, or set automatically. △ :Selectable only, no settings available. — Not selectable

ᵞᵗ 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. 156
Hints & Tips	On*/Off	p. 146
LCD Brightness	Set within a range of ±2.	p. 50
Start-up Image	Add an image as start-up image.	p. 156
Format	Formats memory card, erasing all data	pp. 22, 52
File Numbering	Continuous*/Auto Reset	p. 146
Create Folder	Monthly*/Daily	p. 147
Lens Retract	1 min.*/0 sec.	p. 147
Power Saving	Auto Power Down: On*/Off Display Off: 10, 20 or 30 sec./1*, 2 or 3 min.	p. 53
Time Zone	Home/World	p. 148
Date/Time	Date and time settings	p. 20
Distance Units	m/cm* ft/in	p. 149
Video System	NTSC/PAL	p. 125
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. 123
Erase	Erases images.	p. 130
Protect	Protects images.	p. 127
Rotate	Rotates images.	p. 134
My Category	Categorizes images.	p. 132
i-Contrast	Corrects dark portions and contrast in still images.	p. 138
Red-Eye Correction	Corrects red eyes in still images.	p. 139
Trimming	Trims portions of still images.	p. 136
Resize	Resizes and saves still images.	p. 135
My Colors	Adjusts colors in still images.	p. 137
Scroll Display	On*/Off	p. 119
Resume	Last seen*/Last shot	p. 155
Transition	Fade*/Slide 1/Slide 2/Off	p. 124

* Default setting

凸 Print Menu

Item	Options/Summary	Ref. Page
Print	Displays printing screen.	p. 29
Select Images & Qty.	Chooses individual images for printing.	p. 142
Select Range	Chooses starting and ending images for printing.	p. 143
Select All Images	Chooses all images for printing.	p. 143
Clear All Selections	Cancels all settings for printing.	p. 143
Print Settings	Sets the printing style.	p. 141

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. 10 million
Image Sensor	1/1.7-inch type CCD (Total number of pixels: Approx. 10.4 million)
Lens	6.0 (W) – 22.5 (T) mm 35mm film equivalent: 28 (W) – 105 (T) mm f/2.0 (W) – f/4.9 (T)
Digital Zoom	Approx. 4.0x (Up to approx. 15x in combination with the optical zoom)
LCD Monitor	3.0-inch type TFT LCD color monitor Approx. 461,000 dots, Picture coverage 100%
AF Frame Mode	Face AiAF/Center
Servo AF	On/Off
Focusing Range (from end of lens)	Auto, Low Light, Manual Focus: 5 cm (2.0 in.) – infinity (W)/30 cm (12 in.) – infinity (T) Normal: 50 cm (1.6 ft.) – infinity Macro: 5 – 50 cm (2.0 in. – 1.6 ft.) (W) Kids&Pets: 1 m (3.3 ft.) – infinity
Shutter	Mechanical shutter and electronic shutter
Shutter Speed	1 – 1/1600 sec. 15 – 1/1600 sec. (Total shutter speed range)
Image Stabilization	Lens-shift type
Metering System	Evaluative, Center-weighted average or Spot
Exposure Compensation	±2 stops in 1/3-stop increments
ISO speed (Standard Output Sensitivity, Recommended Exposure Index)	Auto, ISO 80/100/125/160/200/250/320/400/500/640/ 800/1000/1250/1600/2000/2500/3200
White Balance	Auto, Day Light, Cloudy, Tungsten, Fluorescent, Fluorescent H, Flash, Underwater, Custom
Built-in Flash	Auto, On, Slow Synchro, Off * Flash exposure compensation/Flash output/Shutter Sync./Red-eye reduction/Red-eye correction/FE lock/Safety FE settings available
Built-in Flash Range	50 cm – 6.5 m (1.6 – 21 ft.) (W)/ 50 cm – 2.5 m (1.6 – 8.2 ft.) (T)
Shooting Modes	Shooting Mode: C, M, Av, Tv, P, Auto, Low Light, SCN, Movie SCN Mode: Portrait, Landscape, Night Snapshot, Kids&Pets, Indoor, Sunset, Night Scene, Fireworks, Beach, Underwater, Aquarium, Foliage, Snow, Color Accent, Color Swap, Nostalgic, Stitch Assist
Continuous Shooting	Continuous: Approx. 0.9 images/sec. (Auto), Approx. 2.1 images/sec. (Low Light) Continuous Shooting AF: Approx. 0.6 images/sec. Continuous Shooting LV: Approx. 0.6 images/sec.
Self-timer	Custom Timer, Face Self-Timer
i-Contrast	Auto/Off
Recording Media	SD memory card, SDHC memory card, MultiMediaCard, MMCplus memory card, HC MMCplus memory card

Specifications

File Format	Design rule for Camera File system and DPOF compliant
Data Type	Still images: Exif 2.2 (JPEG)/ RAW (CR2)*
	Movies: MOV (Image data: H.264, Audio data: Linear PCM (Mono))
	*Use Digital Photo Professional for processing.
Compression	Fine, Normal
Number of Recording Pixels	
(Still images)	Large: 3648 x 2736 pixels
	Medium 1: 2816 x 2112 pixels
	Medium 2: 2272 x 1704 pixels
	Medium 3: 1600 x 1200 pixels
	Small: 640 x 480 pixels
	Widescreen: 3648 x 2048 pixels
	RAW: 3648 x 2736 pixels
(Movies).	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, Scroll Display
Editing Function.	Erase, Protect, My Category, Resize, My Colors, i-Contrast, Trimming, Rotate, Red-Eye Correction
Direct Print Type	PictBridge capable
Interface	Hi-Speed USB (Dedicated connector with unified 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-6L
	(rechargeable lithium-ion battery)
	AC adapter kit ACK-DC40
Operating Temperatures	0 – 40 °C (32 – 104 °F)
Operating Humidity	10 – 90%
Dimensions (excluding protrusions) . . .	100.0 x 58.4 x 30.9 mm (3.94 x 2.30 x 1.22 in.)
Weight (camera body only)	Approx. 175 g (6.17 oz.)

Battery Pack NB-6L

Type . . . . Rechargeable lithium-ion battery
Voltage . . . . 3.7 V DC
Capacity . . . . 1000 mAh
Charging cycles . . . . Approx. 300 times
Operating temperature . . . . 0 – 40 °C (32 – 104 °F)
Dimensions. . . . . 34.4 x 41.8 x 6.9 mm (1.35 x 1.65 x 0.27 in.)
Weight . . . . Approx. 21 g (0.74 oz.)

Battery Charger CB-2LY/CB-2LYE

Rated input . . . . 100 – 240 V AC (50/60 Hz), 0.085 A (100 V) –
0.05 A (240 V)
Rated output. . . . . 4.2 V DC, 0.7 A
Charge time . . . . Approx. 1 hour 55 min.
Operating temperature . . . . 0 – 40 °C (32 – 104 °F)
Dimensions. . . . . 58.6 x 86.4 x 24.1 mm (2.31 × 3.40 × 0.95 in.)
Weight . . . . Approx. 70 g (2.47 oz.) (CB-2LY)
Approx. 61 g (2.15 oz.) (CB-2LYE) (excluding power
cord)

* All data is based on tests by Canon.
* Camera specifications or appearance are subject to change without notice.

About MPEG-4 Licensing
This product is licensed under AT&T patents for the MPEG-4 standard and
may be used for encoding MPEG-4 compliant video and/or decoding MPEG-
4 compliant video that was encoded only (1) for a personal and non-
commercial purpose or (2) by a video provider licensed under the AT&T
patents to provide MPEG-4 compliant video.
No license is granted or implied for any other use for MPEG-4 standard.
* Notice displayed in English as required.

Index

Canadian Radio Interference Regulations