

# Canon

# *PowerShot SX20 IS*

## Camera User Guide



**ENGLISH**

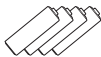
- Make sure you read this guide before using the camera.
- Store this guide safely so that you can use it in the future.

## Checking the Package Contents

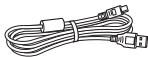
Check if the following items are included in your camera package. If anything is missing, contact the retailer from which you purchased the camera.



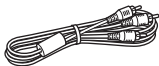
Camera



AA-size Alkaline  
Batteries (×4)



Interface Cable  
IFC-400PCU



Stereo Video  
Cable STV-250N



Neck Strap NS-DC4



Lens Cap



Lens Hood  
LH-DC50



Getting Started



DIGITAL CAMERA  
Solution Disk



Warranty  
Card



"Canon Customer  
Support" Leaflet

### Using the PDF Manuals

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

#### • Camera User Guide (This Guide)

Once you have mastered the basics, use the camera's many features to shoot more challenging photos.

#### • Personal Printing Guide

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

#### • Software Guide

Read when you want to use the included software.



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

# Read This First

## Test Shots

Take some initial test shots and play them back to make sure the images were recorded correctly. Please note that Canon Inc., its subsidiaries and affiliates, and its distributors are not liable for any consequential damages arising from any malfunction of a camera or accessory, including memory cards, that results in the failure of an image to be recorded or to be recorded in a way that is machine readable.

## Warning Against Copyright Infringement

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

## Warranty Limitations

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

## LCD Monitor

- The LCD monitor and viewfinder are 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

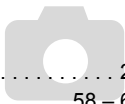
Please take care when operating the camera for an extended period as the camera body may become warm. This is not a malfunction.

## 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



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At night  
(p. 58)



At the beach  
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Against snow  
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### Take good landscapes



Landscape  
(p. 58)



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Foliage  
(p. 60)

### Shoot various other scenes



Sports  
(p. 58)



Indoors  
(p. 59)



Fireworks  
(p. 60)



Aquarium  
(p. 60)

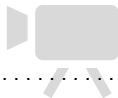


Low light  
(p. 61)

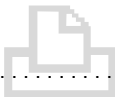
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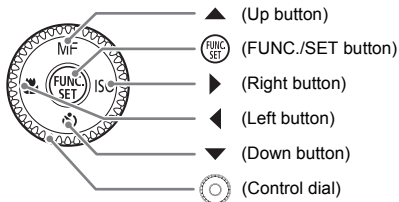
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## Conventions Used in this Guide

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



- : 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.

# 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, day/date battery: 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, benzene, or thinner to clean the equipment.**
- **Do not allow liquids or foreign objects to enter the camera.**  
This could result in fire or electrical shock.  
If liquid or foreign objects come into contact with the camera interior, immediately turn the camera power off and remove the batteries.
- **Use only recommended power sources.**  
Using other power sources could result in fire or electrical shock.

## Battery

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

## Other Warnings

- Do not play the supplied CD-ROM(s) in any CD player that does not support data CD-ROMs.  
Playing the CD-ROM(s) in an audio CD player (music player) could damage the speakers. It is also possible to suffer hearing loss from listening with headphones to the loud sounds of a CD-ROM played on a music CD player.

## Caution

- Be careful not to bang the camera or subject it to strong impacts or shocks when hanging it by the strap.
- Be careful not to bump or push strongly on the lens.  
This could damage the camera or lead to injury.
- Avoid using, placing or storing the camera in the following places.
  - Places subject to strong sunlight.
  - Places subject to temperatures above 40 °C (104 °F).
  - Humid or dusty areas.
 These could cause leakage, overheating or an explosion of the batteries, resulting in electrical shock, fire, burns or other injuries. High temperatures may also cause deformation of the casing.
- The slideshow transition effects may cause discomfort when viewed for prolonged periods.
- When using the flash, be careful not to cover it with your fingers or clothing.  
This could result in burns or damage to the flash.

### Caution

- **Do not aim the camera at bright light sources (the sun, etc.).**  
Doing so may cause malfunctions or damage the image sensor.

---

- **When using the camera on a beach or at a windy location, be careful not to allow dust or sand to enter the camera.**  
This may cause the camera to malfunction.

---

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

---

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

---

- **Before you discard batteries, cover the terminals with tape or other insulators.**  
Contacting other metal materials in waste containers may lead to fire or explosions.

---

- **When carrying the camera in a bag, close the LCD monitor to face inward to ensure that hard objects do not come into contact with the screen.**  
Failure to do so may cause malfunctions or damage the LCD monitor.

# 1

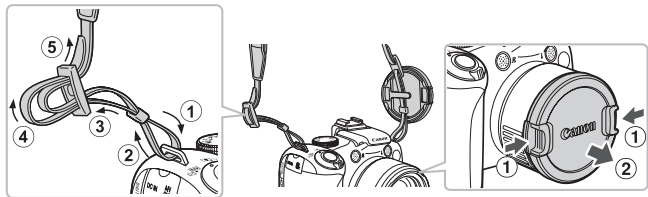
## Getting Started

This chapter explains preparations before shooting, how to shoot in **AUTO** mode, and then how to view, 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.

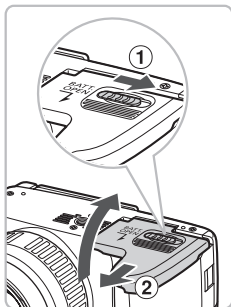
---

### Attaching the Strap/Removing the Lens Cap

- Attach the included strap and place it around your neck to avoid dropping the camera during use.
- Be sure to remove the lens cap before turning on the camera.
- Clip the lens cap to the neck strap when not in use.
- When not in use, store the camera with the lens cap attached.

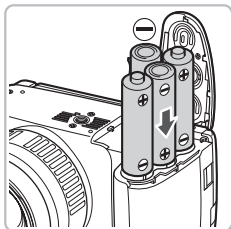


## Inserting the Batteries



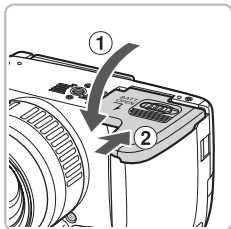
### 1 Open the cover.

- Slide and hold the cover lock ①, then slide and open the cover ② as shown.



### 2 Insert the batteries.

- Insert the batteries with (+) and (-) ends oriented correctly.



### 3 Close the cover.

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

## Approximate Number of Shots That Can Be Taken

Power Source		Alkaline Batteries (Supplied)	NiMH Batteries (Sold Separately)
Number of Shots	LCD Monitor On*	340	600
	Viewfinder On	350	620
Playback Time (Hours)		12	14

\* 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.
- Depending on the brand of alkaline batteries used, the number of shots that can be taken may vary widely.
- The values for NiMH batteries are based on fully charged batteries.

### Compatible Batteries

AA-size alkaline batteries and Canon AA-size NiMH batteries (sold separately) (pp. 38, 40).



#### Can any other batteries be used?

We cannot recommend the use of any other batteries than those listed above because performance varies widely.



#### Why use NiMH batteries?

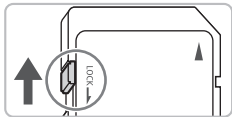
NiMH batteries last much longer than alkaline batteries, especially in cold weather.

### Battery Charge Indicator

When battery charge is low, an icon and message will appear. If the batteries are charged, the icon and message will not display.

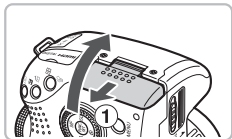
Display	Summary
	Battery charge is low. Prepare new batteries to continue using the camera.
"Change the batteries"	The batteries are depleted. Insert new batteries.

## Inserting the Memory Card



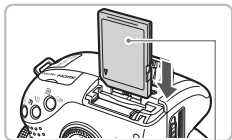
### 1 Check the card's write-protect tab.

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



### 2 Open the cover.

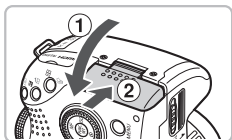
- Slide the cover ① to open it.



Label

### 3 Insert the memory card.

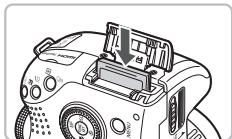
- Insert the memory card as shown until it locks into place with a click.
- Be sure the memory card is oriented correctly. Inserting the memory card in the wrong direction could damage the camera.



### 4 Close the cover.

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

## Removing 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

<b>Memory Card</b>	2 GB	8 GB
<b>Number of shots</b>	626	2505

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


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

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

Number of shots that can be taken



## Compatible Memory Cards

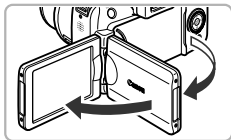
- SD memory cards
- SDHC memory cards 
- MultiMediaCards
- MMCplus memory cards
- HC MMCplus memory cards

### ? What is the write-protect tab?

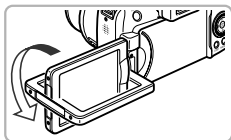
SD and SDHC memory cards have a write-protect tab. If this tab is in the locked position, [Card locked!] will appear on the screen and you will not be able to take or erase images.

# Opening the LCD Monitor

You can use the LCD monitor to compose pictures before shooting, operate menus or play back images.

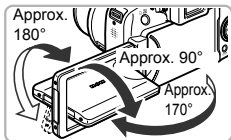


## 1 Open the LCD Monitor.



## 2 Rotate the LCD monitor.

- Rotate it 180° toward the lens (turn the top edge of the LCD monitor away from you).
- ▶ The displayed image is automatically flipped and reversed (Reverse Display function).
- The LCD monitor can be used in various positions.






## 3 Close the LCD Monitor.

- Close the LCD monitor until it clicks into place.
- The image will display normally (not reversed).



Always keep the LCD monitor closed with the display facing the camera body when the camera is not in use. When you push the LCD monitor until you hear the clicking sound, the LCD monitor will automatically turn off, and the image will display in the viewfinder.



To cancel the Reverse Display function, press the **MENU** button, choose [Reverse Disp.] from the  tab, and press the   buttons to choose [Off].

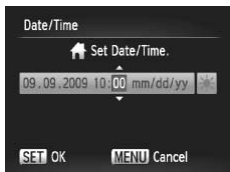
# Setting the Date and Time

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




## 1 Turn on the camera.

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




## 2 Set the date and time.

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






## 3 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

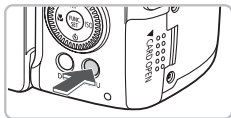
Set the correct date and time. If you have not set the date and time, the Date/Time screen will appear each time you turn on the camera.

## 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).

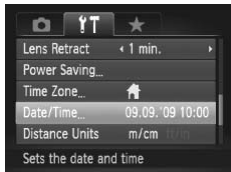
## Changing the Date and Time

You can change the current date and time settings.



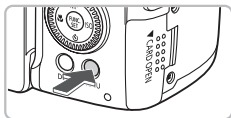
### 1 Display the menus.

- Press the **MENU** button.



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

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



### 3 Change the date and time.

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



### Date/Time battery

If [Date/Time] appear even when the date/time have been correctly set, insert a new date/time battery (p. 156).

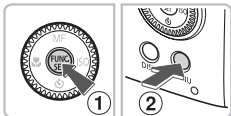
# Setting the Display Language

You can change the display language in the LCD monitor menus and messages.




## 1 Enter Playback mode.

- Press the  button.








## 2 Display the settings screen.

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





## 3 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 language menu 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.

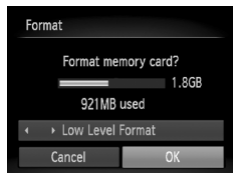
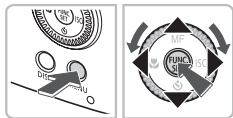


## 1 Display the menu.



- Press the **MENU** button.

## 2 Choose [Format].

- Press the ◀▶ buttons to choose the **YT** tab.
- Press the ▲▼ buttons or turn the  dial to choose [Format], then press the  button.



## 3 Format the memory card.

- Press the ◀▶ buttons or turn the  dial to choose [OK], then press the  button.
- ▶ The memory card will be formatted.
- ▶ When formatting has finished, the menu screen will reappear.



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



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

## Pressing the Shutter Button

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



### 1 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.



### 2 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.



### Holding the Camera

Keep your arms tight against your body while holding the camera firmly by the sides.



### 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.

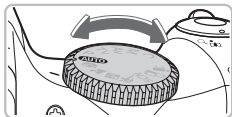
# Taking Pictures

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.



## 1 Turn on the camera.

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

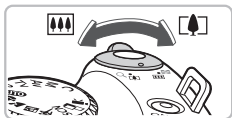


## 2 Choose **AUTO** mode.

- 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.



Image area when shooting movies (p. 27)



## 3 Compose the shot.

- Moving the zoom lever toward **1** will zoom in on your subject, making it appear larger. Moving the lever toward **3** will zoom out from your subject, making it appear smaller.
- If you move the zoom lever all the way to the left or right the size will change quickly, and if you move it slightly, the size will change slowly.

Focus range (approx.)

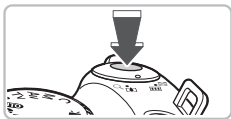
Zoom bar







AF Frames




## 4 Focus.

- Press the shutter button halfway to focus.
- ▶ When the camera focuses, it will beep twice.
- ▶ 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.
- If the [Raise the flash] message appears, it is recommended to shoot with the flash. Raise the flash manually to shoot. The flash will automatically fire. When you are not using the flash, lower it until it closes (the flash will turn off).

## 5 Shoot.

- Press the shutter button fully.
- ▶ The camera will play the shutter sound and shoot.
- ▶ The indicator will blink red 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...

- **a flashing  appears?**  
Attach the camera to a tripod so that the camera does not move and blur the image.
- **the screen does not turn on when you turn on the camera?**  
The display is set to the viewfinder. Press the **DISP.** button several times to restore the display to the screen.

## Taking Pictures

- **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 **f** 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 – 6.8 m (1.6 – 22 ft.) at maximum wide angle, and approximately 1.0 – 3.7 m (3.3 – 12 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 10 cm (3.9 in.) or more away from your subject and shoot. Move about 1 m (3.3 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		Bright		Including Blue Skies		Sunsets	Dark	
			Backlit		Backlit			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. 68).

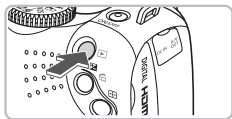


## What is the rectangular gray frame?


This is the area that will be recorded in a movie. Movies can be shot simply by pressing the movie button, no matter what position the mode dial is in (p. 31). To hide the frame, choose [Custom Display], then [Shooting Info] and remove the check mark (p. 148).

## Viewing Images

You can view your images on the screen.







### 1 Enter Playback mode.

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



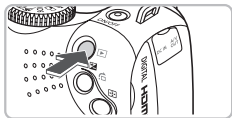
### 2 Choose an image.

- Pressing the  button will cycle through the images in 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.




# Erasing Images

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






## 1 Enter Playback mode.

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












## 2 Choose an image to erase.

- Press the   buttons or turn the  dial to display an image to erase.



## 3 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.



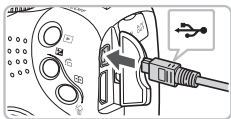
# Printing Images

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

## Items to Prepare

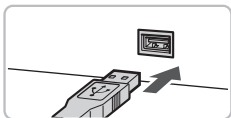
- Camera and PictBridge compliant printer (sold separately)
- Interface cable supplied with the camera (p. 2)

### 1 Turn off the camera and printer.




### 2 Connect the camera to the printer.

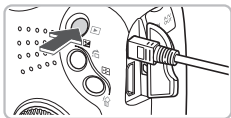
- Open the cover, and insert the small end of the plug firmly into the camera terminal in the direction shown.
- Insert the cable's larger plug into the printer. For connection details, refer to the user guide provided with the printer.






### 3 Turn on the printer.

### 4 Turn on the camera.

- Press the  button to turn on the camera.




### 5 Choose an image to print.

- Press the   buttons or turn the  dial to choose an image.





### 6 Print images.

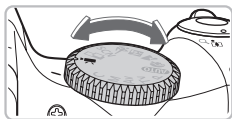
- Press the  button.
- ▶ Printing will start.
- If you want to print additional images, repeat Steps 5 and 6 after printing has completed.
- After printing has completed, turn off the camera and printer, and unplug the interface cable.



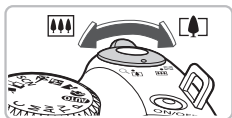
- Refer to the *Personal Printing Guide* for details on printing.
- Refer to p. 39 for Canon-brand Pictbridge compliant printers.

# Shooting Movies

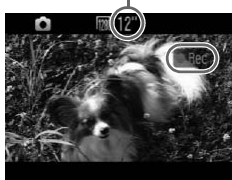
The camera can automatically select all settings so that you can shoot movies just by pressing the movie button. The audio will record in stereo. If you continue shooting for a long time, the camera may become warm. This is not a malfunction.




Shooting Time





Elapsed Time




## 1 Set the mode dial to .

- Movies can be shot by pressing the movie button even when the mode dial is in positions other than  (p. 107).

## 2 Compose the shot.

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

## 3 Shoot.

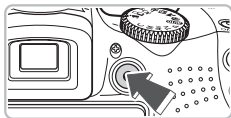
- Press the movie button.
- ▶ The camera will beep once, the movie will start shooting, and  and the elapsed time will appear on the screen.
- Once shooting begins, take your finger off the movie button.
- If you change the composition of your shot during shooting, the focus, brightness and tone will automatically adjust.
- You can also zoom in and out with the zoom lever during shooting.

## Shooting Movies



Microphone

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



### 4 Stop shooting.

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

## Estimated Shooting Times

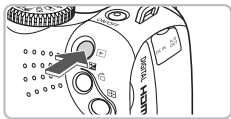
<b>Memory Card</b>	2 GB	8 GB
<b>Shooting Time</b>	10 min. 33 sec.	42 min. 11 sec.

- Shooting times are based on default settings.
- Max. clip length is approx. 29 minutes and 59 seconds. Recording also stops when the file size reaches 4 GB.
- Recording may stop even if the maximum clip length has not been reached on some memory cards. SD Speed Class 4 or higher memory cards are recommended.






# Viewing Movies

You can view your movies on the screen.







## 1 Enter Playback mode.

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













## 2 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.



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

# Transferring Images to a Computer

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

## System Requirements

### Windows

OS	Windows Vista (including Service Pack 1 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	Viewing images	Windows Vista: 1 GB or more Windows XP: 512 MB or more
	Viewing movies	1 GB or more
Interface	USB	
Free Hard Disk Space	ZoomBrowser EX: 200 MB or more* PhotoStitch: 40 MB or more	
Display	1,024 x 768 pixels or higher	

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

### Macintosh

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

## Items to Prepare

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

## Preparations

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

### 1 Install the software.

#### Windows



- 1 Place the DIGITAL CAMERA Solution Disk in 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].

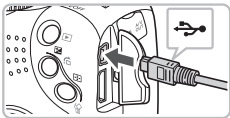
- 4 Remove the CD-ROM.

- 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.



### 2 Connect the camera to the computer.

- Turn off the camera.
- Follow the steps on p. 29 to connect the camera to a computer.

### 3 Turn on the camera.

- Press the  button to turn on the camera.

### 4 Open CameraWindow.



#### Windows

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



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.
- 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



Speedlite 220EX/270EX/  
430EX II<sup>\*4</sup>/580EX II<sup>\*4</sup>



Speedlite Transmitter  
ST-E2

## Supplied with Camera



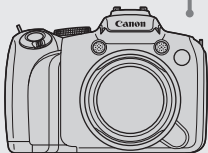
Neck Strap NS-DC4



Lens Cap



Lens Hood LH-DC50



Stereo Video Cable  
STV-250N<sup>\*1</sup>



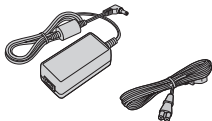
Interface Cable  
IFC-400PCU<sup>\*1</sup>



DIGITAL CAMERA  
Solution Disk

AA-size Alkaline  
Batteries (x4)

Compact Power Adapter  
CA-PS700



Battery and Charger Kit CBK4-300<sup>\*3</sup>



Battery Charger CB-5AH/CB-5AHE  
AA-size NiMH batteries NB-3AH (x4)

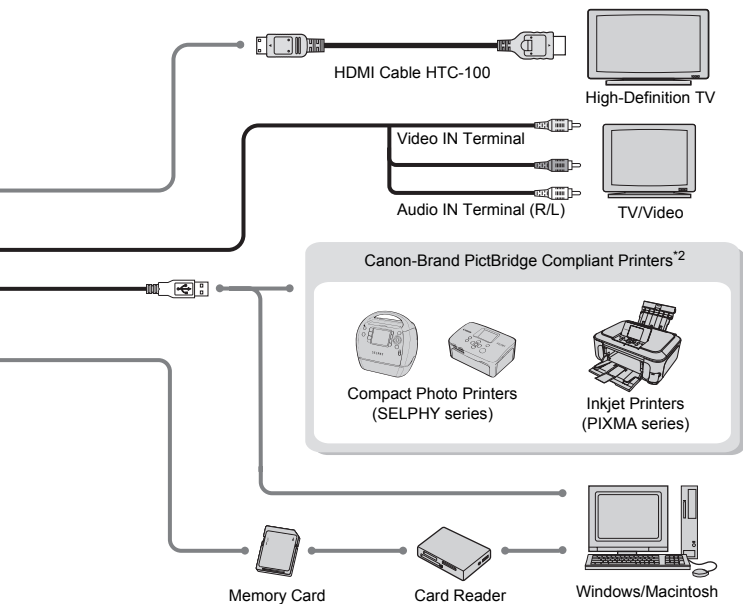
• NiMH Battery NB4-300 (set of 4 AA-size) also available separately.

\*1 Also available for purchase separately.

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

\*3 Battery and Charger Kit CBK4-200 can also be used.

\*4 Speedlite 430EX and 580EX may also be used.



### Use of genuine Canon accessories is recommended.

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

## Separately Sold Accessories

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

### Flash

- **Speedlite 220EX/270EX/430EX II\*/580EX II\***  
Speedlites for Canon EOS models. Subjects are optimally illuminated for crisp, natural images.  
\* Speedlite 430EX and 580EX may also be used.
- **Speedlite Transmitter ST-E2**  
This allows the wireless control of slave (remote) Speedlite flashes (except the Speedlite 220EX and 270EX).

### Power Supplies

- **Compact Power Adapter CA-PS700**  
This kit lets you power the camera using household power. Recommended for powering the camera for an extended period of time or when connecting to a computer. (Cannot be used to charge the camera batteries.)
- **Battery and Charger Kit CBK4-300**  
This dedicated battery charger kit includes both a charger unit and four rechargeable AA-size NiMH (nickel metal hydride) batteries. Convenient when taking or playing back large numbers of images. You can also purchase NiMH Battery NB4-300, a set of four rechargeable AA-size NiMH batteries separately.

### Other Accessories

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



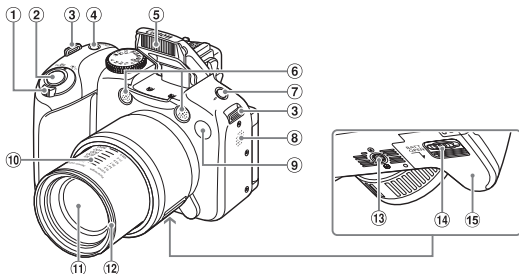
# 2

## **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 Zoom Lever  
Shooting: [T] (Telephoto) / [W] (Wide Angle) (p. 24)  
Playback: Q (Magnify) / [I] (Index) (p. 116)
- ② Shutter Button (p. 23)
- ③ Strap Mount (p. 13)
- ④ Power Button / Power Lamp (p. 47)
- ⑤ Flash (pp. 25, 69)
- ⑥ Microphone (p. 32)
- ⑦ [Lightning Bolt] (Flash) Button (p. 69)
- ⑧ Speaker
- ⑨ Lamp (Self-Timer Lamp (p. 66) / AF Assist Beam (p. 146) / Red-Eye Reduction Lamp (p. 147))
- ⑩ Focal Length (approx.)
- ⑪ Lens
- ⑫ Lens Hood Mount (p. 55)
- ⑬ Tripod Socket
- ⑭ Cover Lock (p. 14)
- ⑮ Battery Cover (p. 14)

## 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. 68, 93, 94, 95, 102).

### Auto Mode

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

### Scene Mode

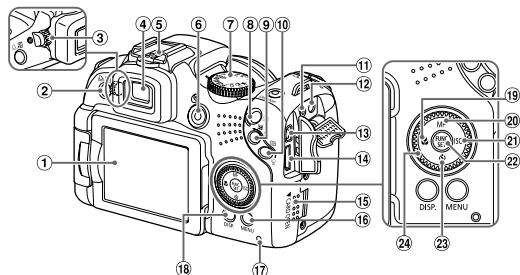
The camera can automatically select all settings appropriate for the conditions so that you can take images just by pressing the shutter button (p. 58).

### Movie Mode

You can use the largest possible portion of the screen to shoot movies (p. 31). Even if the mode dial is set to a position other than Movie mode, movies can be shot by pressing the movie button (p. 107).

### Stitch Assist Mode

Large subjects can be split into several shots (p. 105).



- |   |  |
|---|--|
| ① Screen (LCD Monitor) (pp. 18, 44)                                   | ⑫ A/V OUT (Audio/Video Output)                   |
| ②  (Direct Print) (p. 29) /  (Short Cut) Button (p. 149)              | ⑬ DIGITAL Terminal                               |
| ③ Diopter Adjustment Dial (p. 55)                                     | ⑭ HDMI Terminal                                  |
| ④ Viewfinder (p. 46)  | ⑮ Memory Card Slot Cover (p. 16)                 |
| ⑤ Hot Shoe (p. 158)   | ⑯ <b>MENU</b> (Menu) Button (p. 49)              |
| ⑥ Movie Button (pp. 31, 107)  | ⑰ Indicator (p. 47)                              |
| ⑦ Mode Dial   | ⑱ <b>DISP.</b> (Display) Button (p. 46)          |
| ⑧  (Playback) Button (pp. 27, 115)                                    | ⑲  (Macro) (p. 72) /  Button                     |
| ⑨  (Exposure) (p. 69) /  (Jump) Button (p. 117)                       | ⑳ <b>MF</b> (Manual Focus) (p. 88) /  Button     |
| ⑩  (AF Frame Selector) (p. 83) /  (Single Image Erase) Button (p. 28) | ㉑ <b>ISO</b> (p. 73) /  Button                   |
| ⑪ DC IN (Power Input) Terminal (p. 157)                               | ㉒ <b>FUNC./SET</b> (Function/Set) Button (p. 48) |
|   | ㉓  (Self-Timer) (pp. 65, 66) /  Button           |
|   | ㉔ Control Dial (p. 43)                           |

## Control Dial

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



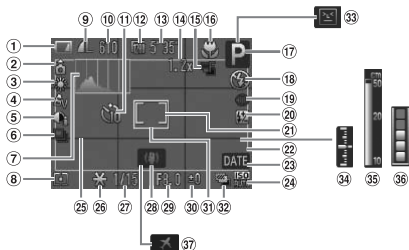
## Button

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.

# Information Displayed on the Screen

## Shooting (Information Display)

The same information will display on the viewfinder.



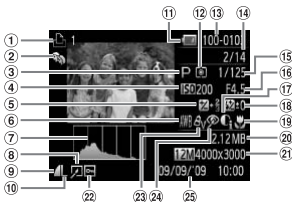
- ① Battery Charge Indicator (p. 15)
- ② Camera Orientation\*
- ③ White Balance (p. 74)
- ④ My Colors (p. 76)
- ⑤ i-Contrast (p. 96)
- ⑥ Drive Mode (p. 75)
- ⑦ Histogram (p. 148)
- ⑧ Metering Modes (p. 87)
- ⑨ Compression (Image Quality) (p. 70), Recording Pixels (p. 70)
- ⑩ Recordable Shots (p. 17)
- ⑪ Self-Timer (pp. 65, 66, 77, 78)
- ⑫ Recording Pixels (Movies) (p. 108)
- ⑬ Remaining Time / Elapsed Time (p. 32)
- ⑭ Digital Zoom Magnification (p. 62) / Digital Tele-Converter (p. 63)
- ⑮ Focus Bracketing (p. 89)
- ⑯ Macro (p. 72), Super Macro (p. 72), Manual Focus (p. 88)
- ⑰ Shooting Mode
- ⑱ Flash Mode (pp. 25, 69, 92)
- ⑲ Red-Eye Correction (p. 97)
- ⑳ Flash Exposure Compensation (p. 98), Flash Output (p. 99)
- ㉑ Spot AE Point Frame (p. 87)
- ㉒ Image Area: Movies (p. 27) / Image Area: Still Images (p. 108)
- ㉓ Date Stamp (p. 64)
- ㉔ ISO Speed (p. 73)
- ㉕ Grid Lines (p. 148)
- ㉖ AE Lock (pp. 90, 111), FE Lock (p. 91)
- ㉗ Shutter Speed
- ㉘ Image Stabilizer (p. 149)
- ㉙ Aperture Value
- ㉚ Exposure Compensation (p. 69)
- ㉛ AF Frame (p. 25)
- ㉜ AEB Shooting (p. 91)
- ㉝ Blink Detection (p. 101)
- ㉞ Exposure Level Indicator (p. 95)
- ㉟ MF Indicator (p. 88)
- ㊱ Buffer Warning
- ㊲ Time Zone (p. 143)

\* : Standard, : Held vertically

When shooting, the camera detects if it is held vertically or horizontally, and adjusts settings accordingly for the best shot. It also detects orientation during playback, so you can hold the camera in either orientation and it will automatically rotate images for correct viewing.

This function may not operate correctly when the camera is pointed straight up or down.

## Playback (Detailed Information Display)



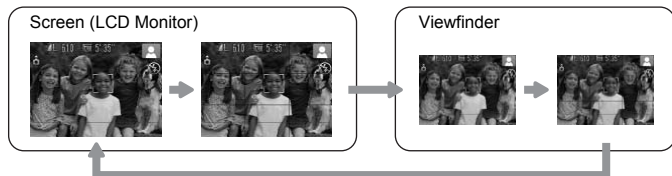
- |  |  |  |
|--|--|--|
| ① Print List (p. 137)  | ⑪ Battery Charge Indicator (p. 15)                         | ⑳ File Size (p. 70)                      |
| ② My Category (p. 129)   | ⑫ Metering Modes (p. 87)                                   | ㉑ Still Images: Recording Pixels (p. 70) |
| ③ Shooting Mode  | ⑬ Folder Number – File Number (p. 144)                     | ㉒ Movies: Movie Length (p. 108)          |
| ④ ISO Speed (p. 73)  | ⑭ Displayed image number / Total number of images          | ㉓ Protect (p. 124)                       |
| ⑤ Exposure Compensation (p. 69) / Exposure Shift Amount (p. 111) | ⑮ Shutter Speed  | ㉔ My Colors (pp. 76, 134)                |
| ⑥ White Balance (p. 74)  | ⑯ Aperture Value, Image Quality (Movies) (p. 108)          | ㉕ Red-Eye Correction (pp. 97, 136)       |
| ⑦ Histogram (p. 47)  | ⑰ i-Contrast (pp. 96, 135)                                 | ㉖ Shooting Date and Time (p. 64)         |
| ⑧ Image Editing (pp. 132 – 136)                                  | ⑱ Flash (p. 69), Exposure Compensation (p. 98)             |  |
| ⑨ Compression (Image Quality) (p. 70), MOV (Movies)              | ㉑ Macro (p. 72), Super Macro (p. 72), Manual Focus (p. 88) |  |
| ⑩ Recording Pixels (p. 70)                                       |  |  |

## Switching the Display

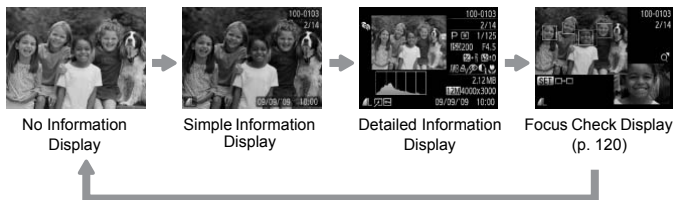
You can change the display using the **DISP.** button.

### Shooting

You can change the displayed content. Closing the screen turns on the viewfinder.




### Playback



Closing the screen turns on the viewfinder.



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

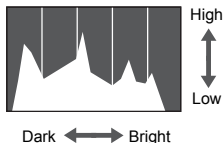
### Display in Dark Conditions during Shooting

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

## Overexposure Warning during Playback

In “Detailed Information Display” (p. 45), overexposed areas of the image flash on the screen.

### Histogram



- 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. 148).

## Indicators

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

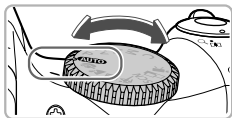
Lamp	Status	Camera Status
Power Lamp	Lights orange	Shooting mode (p. 24)
	Lights green	Playback mode (p. 27)/Connected to a printer (p. 29)
	Lights yellow	Connected to a computer (p. 36)
Indicator	Blinks red	Recording/reading/transmitting image data (p. 25)



When the indicator blinks red, 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).



### 1 Choose a shooting mode.

- Set the mode dial to the desired shooting mode.




### 2 Display the FUNC. menu.

- Press the  button.






### 3 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.




### 4 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 .



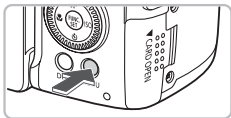
### 5 Make the setting.

- 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).



## 1 Display the menu.



- Press the **MENU** button.



## 2 Choose a tab.

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

## 3 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.

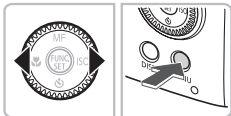


## 4 Choose an option.

- Press the ◀▶ buttons to choose an option.

## 5 Make the setting.

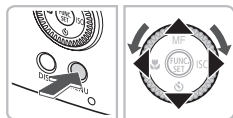
- Press the **MENU** button.
- ▶ The normal screen will reappear.



# Changing the Sound Settings

You can silence or adjust the volume of camera sounds.


## Muting Sounds



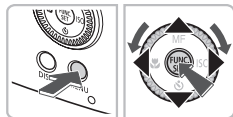
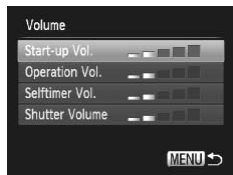
### 1 Display the menu.

- Press the MENU button.

### 2 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




### 1 Display the menu.

- Press the MENU button.

### 2 Choose [Volume].

- Press the ◀▶ buttons to choose the ↑↓ tab.
- Press the ▲▼ buttons or turn the  dial to choose [Volume], then press the  button.

### 3 Change the volume.

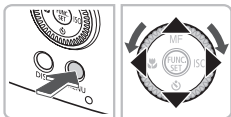
- Press the ▲▼ buttons or turn the  dial to choose an item, then press the ◀▶ buttons to adjust the volume.

# Changing the Screen Brightness

The screen brightness can be changed in two ways.

You can set the brightness of the LCD monitor and viewfinder separately (Press the **DISP.** button to switch to the desired display before making settings).


## With the Menu



### 1 Display the menu.

- Press the **MENU** button.

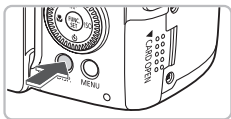
### 2 Choose [LCD Brightness].

- Press the **◀▶** buttons to choose the **↑↓** 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



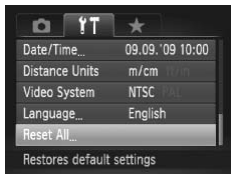
- Press the **DISP.** button for more than one second.
- ▶ The screen increases to maximum brightness regardless of the setting in the **↑↓** tab.
- Pressing the **DISP.** button again for more than one second will return the screen to the original brightness.



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

# Returning the Camera to Default Settings



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

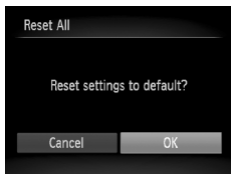
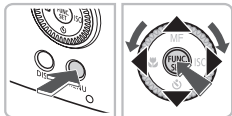


## 1 Display the menu.



- Press the **MENU** button.

## 2 Choose [Reset All].

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



## 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 **Y** tab, [Language] (p. 21), [Video System] (p. 122), [Time Zone] (p. 143), the image registered as [Start-up Image] (p. 152).
- The saved data for custom white balance (p. 74).
- Colors that were chosen in Color Accent (p. 103) or Color Swap (p. 104).
- The shooting direction chosen in Stitch Assist mode (p. 105).

# 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.

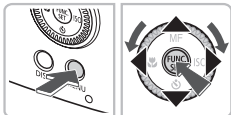


## 1 Display the menu.




- Press the **MENU** button.

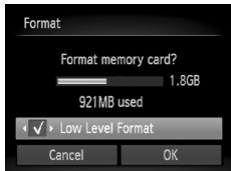
## 2 Choose [Format].

- Press the **◀▶** buttons to choose the **⚙** tab.
- Press the **▲▼** buttons or turn the  dial to choose [Format], then press the  button.



## 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. 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. 142).
- You can adjust the time before the monitor turns off (p. 142).


## Clock Functions

You can check the current time.



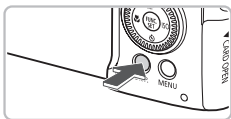
- Press and hold the  button.
- ▶ A screen like that on the left appears showing the current time.
- If you hold the camera vertically while using the clock function, it will switch to vertical display. Press the  buttons or turn the  dial to change the display color.
- Press the  button to cancel the clock display.



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

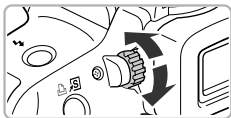
## Adjusting the Viewfinder

You can adjust the viewfinder so that Information Display is clearly visible.



### 1 Set the viewfinder display.

- Press the DISP. button several times (p. 46).

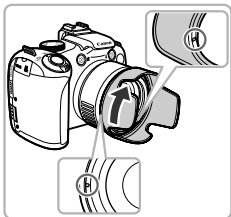


### 2 Adjust the diopter.

- Adjust the diopter dial while looking through the viewfinder.

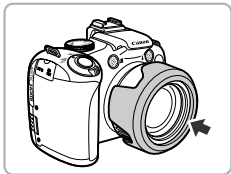
## Attaching the Lens Hood

When shooting a wide-angle photo that is backlit without using a flash, we recommend attaching Lens Hood LH-DC50 to reduce the amount of light entering the lens.



**Align the notch (■) on the lens hood with the ■ mark on the camera, and turn the lens hood in the direction of the arrow until locked.**

- Turn the lens hood in the opposite direction to remove it.
- When not in use, attach the lens hood to the camera as shown.



If you use the built-in flash with the lens hood attached, portions of the image may appear darker.





# 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 dial is set to **AUTO** for “Zooming in More Closely on Subjects (Digital Zoom)” (p. 62) to “Using the Face Self-Timer” (p. 66). 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 Choose the Shooting mode.

- Set the mode dial to the desired Shooting mode.

## 2 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 moving subjects (Sports)

- Shoots continuous images while focusing automatically.



In **PA** or mode, images may appear coarse because the ISO speed (p. 73) is increased to match the shooting conditions.

## Shooting in Special Scenes

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



### 1 Choose a Shooting mode.

- Set the mode dial to **SCN**.
- Turn the dial to choose the shooting mode.



### 2 Shoot.



#### 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.



### **Take shots of people at the beach (Beach)**

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



### **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.



## Shoot using high ISO speed (ISO 3200)

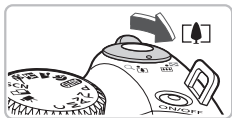
- Lets you set the ISO speed to 3200, and lets you shoot without camera shake or subject blurring even in low light conditions.
- Recording pixels are set to **M3** (1600 x 1200 pixels) (p. 70).



- In  or  mode, images may appear coarse because the ISO speed (p. 73) 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. 149).
- In  mode, images may appear coarse.

# Zooming in More Closely on Subjects (Digital Zoom)

You can use the digital zoom to zoom up to a maximum of 80x 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. 70) and the zoom factor used.



## 1 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.






## 2 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 – 560 mm)*	Digital Zoom (560 – 2240 mm)*
<b>L W</b>	20x →	
<b>M1</b>	25x →	
<b>M2</b>		31x →
<b>M3</b>		50x →
<b>S</b>		80x →

  : No image deterioration (zoom factor appears white)


 : Image deterioration (zoom factor appears blue)

→ : Maximum zoom factor without deterioration (Safety Zoom)

\* Focal length (35mm equivalent)



## Turning off the digital zoom

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


## Digital Tele-Converter

The focal length of the lens can be increased by an equivalent of 1.5x or 2.0x. This enables a faster shutter speed and less chance of camera shake than the zoom (including digital zoom) used by itself at the same zoom factor.



The images may appear coarse, however, depending on the combination of recording pixel (p. 70) and digital tele-converter settings used.

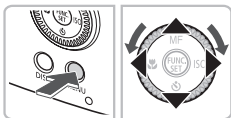


### 1 Choose [Digital Zoom].



- Press the **MENU** button and choose the  tab, then choose [Digital Zoom].

### 2 Accept the setting.

- Press the   buttons to choose [1.5x] or [2.0x].
- Pressing the **MENU** button will restore the shooting screen.
- ▶ The view will be enlarged and the zoom factor will appear on the screen.
- To return to standard digital zoom, choose [Digital Zoom] and the [Standard] option.



## Combinations that Cause Image Deterioration

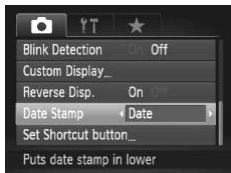
- Using [1.5x] at a recording pixel setting of **L**, **M1** or  will cause image deterioration (the zoom factor will display in blue).
- Using [2.0x] at a recording pixel setting of **L**, **M1**, **M2** or  will cause image deterioration (the zoom factor will display in blue).





- The respective focal lengths when using [1.5x] and [2.0x] are 42 – 840 mm and 56 – 1120 mm (35mm film equivalent).
- The digital tele-converter cannot be used together with the digital zoom.

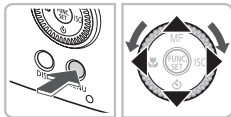
# Inserting the Date and Time

You can insert the shooting date and time in the lower right corner of an image. Once inserted, however, they cannot be deleted. Be sure to check beforehand that the date and time are correctly set (p. 19).



## 1 Choose [Date Stamp].

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



## 2 Accept the setting.

- Press the **◀▶** buttons to choose [Date] or [Date & Time].
- Pressing the **MENU** button will restore the shooting screen.
- ▶ [DATE] will appear on the screen.



## 3 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 1.



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

- Use the **DPOF** print settings (p. 138) to print.
- Use the included software to print.  
Refer to the *Software Guide* for details.
- Connect the camera to a printer to print.  
Refer to the *Personal Printing Guide* for details.

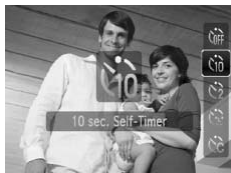


## Using the Self-Timer



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

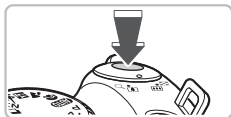


### 1 Press the ▼ button.




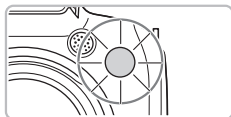
### 2 Choose 10.

- Press the ▲▼ buttons or turn the  dial to choose 10, then press the  button.
- ▶ Once set, 10 will appear.



### 3 Shoot.

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




You can change the delay time and number of shots (p. 78).

## 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. 82).

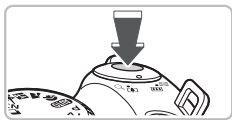


### 1 Choose .

- Follow Step 2 on p. 65 and choose .

### 2 Compose the shot and press the shutter button halfway.

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




### 3 Press the shutter button fully.

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



### 4 Join the subjects and look at the camera.

- ▶ When the camera detects a new face, the lamp and sound will speed up (the lamp remains lit when the flash will fire), and two seconds later the shutter will release.
- ▶ The second and third shots will continue in succession.
- To restore the original setting, choose  in Step 2 on p. 65.







### What if a face is not detected?

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



### Changing the number of shots

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

# 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.



- 1 Set the mode dial to **P**.**
- 2 Adjust the settings according to your purposes (pp. 69 – 78).**
- 3 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. 69)
- Choose a higher ISO speed (p. 73)

## Adjusting the Brightness (Exposure Compensation)



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



### 1 Choose the exposure compensation.

- Press the  button.

### 2 Adjust the brightness.

- While watching the screen, turn the  dial to adjust the brightness and press the  button.




## Turning the Flash On

You can make the flash fire every time you shoot. At maximum wide angle, the flash range is approximately 50 cm – 6.8 m (1.6 – 22 ft.), and at maximum telephoto, it is 1.0 – 3.7 m (3.3 – 12 ft.)

### 1 Raise the flash.



### 2 Choose .

- After pressing the  button, press the  buttons or turn the  dial to choose ,
- then press the  button.
- ▶ Once set,  will appear.

## Changing the Recording Pixels (Image Size)

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



### 1 Choose the recording pixels.

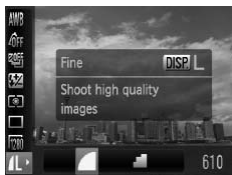
- After pressing the **FUNC SET** button, press the **▲▼** buttons to choose **L**.

### 2 Choose an option.

- Press the **◀▶** buttons or turn the **○** dial to choose an option, then press the **FUNC SET** button.
- ▶ The setting you chose will display on the screen.

## Changing the Compression Ratio (Image Quality)

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















### 1 Choose the recording pixels.

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

### 2 Change the image quality.

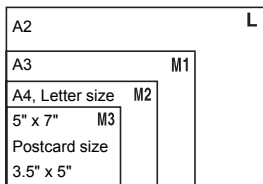
- Press the **DISP** button.
- Press the **◀▶** buttons or turn the **○** dial to choose an option, then press the **FUNC SET** button.
- ▶ The setting you chose will display on the screen.

## Approximate Values for Recording Pixels and Compression Ratio

Recording Pixels	Compression Ratio	Single Image Data Size (Approx. KB)	Number of Recordable Images	
			2 GB	8 GB
<b>L</b> (Large) 12 M/4000 x 3000		3084	626	2505
		1474	1280	5116
<b>M1</b> (Medium 1) 8 M/3264 x 2448		2060	930	3721
		980	1920	7675
<b>M2</b> (Medium 2) 5 M/2592 x 1944		1395	1365	5457
		695	2672	10679
<b>M3</b> (Medium 3) 2 M/1600 x 1200		558	3235	12927
		278	6146	24562
<b>S</b> (Small) 0.3 M/640 x 480		150	10245	40937
		84	15368	61406
<b>W</b> (Widescreen) 3840 x 2160		2132	903	3611
		1019	1862	7442



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

## Approximate Values for Paper Size



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








## Shooting Close-ups (Macro/Super Macro)

You can shoot an object at a close distance or even shoot extreme close-ups of it. In  mode you can approach the subject even closer than in  mode. The optical zoom (p. 24) or digital zoom (p. 62) cannot be used.





1 Press the  button.




2 Choose  or .

- Press the   buttons or turn the  dial to choose  or , then press the  button.
- ▶ The icon for the mode will appear.
- ▶ In , the zoom will lock at the maximum wide angle.

### Shooting Range


Macro Mode	Shooting Range (Maximum Wide Angle)
 Macro	10 – 50 cm (3.9 in. – 1.6 ft.)
 Super Macro	0 – 10 cm (0 – 3.9 in.)

### ? About the zoom bar in

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



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

- You are recommended to attach the camera to a tripod and shoot in , to prevent the camera from moving and blurring the image (p. 77).
- You can reduce the AF frame size when you want to focus on a specific portion of the subject (p. 83).





- If you use the flash when shooting in Macro mode, the edges of the image may darken.
- Be careful to avoid damaging the lens when shooting in Super Macro mode.



## Changing the ISO Speed



### Choose the ISO speed.

- After pressing the **▶** 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.

<b>ISO</b> AUTO	Automatically adjusts the ISO speed to the Shooting mode and shooting conditions.			
<b>ISO</b> 80	<b>ISO</b> 100	<b>ISO</b> 200	Low	Fine weather conditions, outdoor shooting.
<b>ISO</b> 400	<b>ISO</b> 800		↑ ↓	Cloudy, Twilight
<b>ISO</b> 1600			High	Nightsapes, Dark interiors



### Changing the ISO speed

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



- When the camera is set to **ISO AUTO**, you can press the shutter button halfway to display the automatically set ISO speed.
- With ISO 3200 you can set an even faster speed (p. 61).

# 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**.

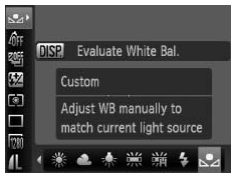
## 2 Choose an option.


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

 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.
 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.



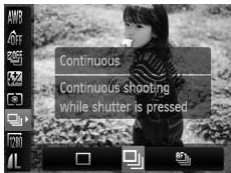
- In Step 2 above, choose .
- Make sure the entire screen is filled with a white colored subject, then press the **DISP.** button.
- ▶ The tint on the screen will change when a white balance data is set.



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

# Continuous Shooting

You can shoot continuously at a fixed interval.



## 1 Choose a Drive mode.




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

## 2 Choose an option.


- Press the **◀▶** buttons or turn the **○** dial to choose **□** or **AF**, then press the **FUNC SET** button.

## 3 Shoot.

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

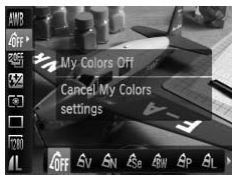
Drive Mode	Shooting Interval	Description
 Continuous	Approx. 1.0 images/sec.	For continuous shooting, the focus and exposure are locked when the shutter button is pressed halfway.
 Continuous Shooting AF	Approx. 0.7 images/sec.	The camera shoots continuously and focuses. The [AF Frame] is set to [Center].
 Continuous Shooting LV	Approx. 0.7 images/sec.	The camera shoots continuously with the focus locked to the position set in the first shot.



- Cannot be used with the self-timer (pp. 65, 66, 77, 78).
- As the number of images increases, the shooting intervals may take longer.
- If the flash fires, shooting intervals may take longer.
- When in  or manual focus (p. 88) modes, **AF** will change to **LV**.

# 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 .

## 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.

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



- The white balance cannot be set in the  and  modes (p. 74).
- In the  and  mode, colors other than people's skin color may change. You may not obtain the expected results with some skin colors.

## AC Custom Color

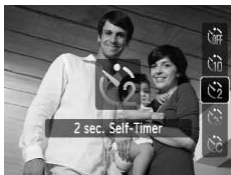
The contrast, sharpness, color saturation, red, green, blue, and skin tones in an image can be chosen and set from 5 different levels.



- Follow Step 2 on p. 76 to choose **AC**, 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 the Two Second Self-Timer

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

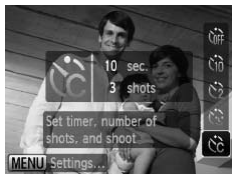


### Choose **2**.





- After pressing the **▼** button, press the **▲▼** buttons or turn the **⊙** dial to choose **2**, then press the **FUNC SET** button.
- ▶ Once set, **2** will appear on the screen.
- Follow Step 3 on p. 65 to shoot.

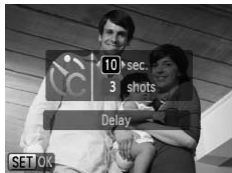
# Customizing the Self-Timer

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









## 1 Choose .

- After pressing the  button, press the  buttons or turn the  dial to choose , then press the **MENU** button.



## 2 Choose the settings.

- Press the   buttons to choose [Delay] or [Shots].
- Press the   buttons or turn the  dial to choose a value, then press the  button.
- Follow Step 3 on p. 65 to shoot.



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

- Exposure and white balance settings are set with the first shot.
- When you set the time delay for more than 2 seconds, the self-timer lamp and sound speed up 2 seconds before the shutter releases (when the flash will fire, the lamp lights).



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

## Shooting Using a TV Monitor

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

- Connect the camera to a TV as described in “Viewing Images on a TV” (p. 122).
- 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.
- Digital Zoom is not available while the camera is connected to a TV, and the recording pixels are set to **W**.

## Changing the Composition with the Focus Lock

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



### 1 Focus.

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



### 2 Recompose.

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

### 3 Shoot.

- Press the shutter button fully.






# 5

## Getting More Out of Your Camera

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

---




- This chapter assumes that the mode dial is set to **P**.
- The sections “Setting the Shutter Speed” (p. 93), “Setting the Aperture Value” (p. 94), “Setting the Shutter Speed and Aperture Value” (p. 95), assume that the mode dial is set to these modes.
- The section “Adjusting the Flash Output” (p. 99) assumes that the mode dial is set to **M**.
- This chapter explains the modes available in “Changing the Color and Shooting” (p. 103), and assumes the mode dial is set to **SCN**.
- “Shooting Stitch Assist Images” (p. 105) assumes that the mode dial is set to .
- 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.



### 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 Detect

- 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 and only gray frames (no white frame) appear, AF Frame will be set to [Center].
- 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.

## FlexiZone/Center

A single AF frame will be used. This is effective for focusing on a specific point.

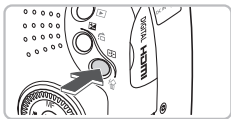
In [FlexiZone], you can change the position and size of the AF frame.



- If the camera cannot focus when you press the shutter button halfway in [FlexiZone] or [Center], the AF frame will turn yellow, and  will appear.

# Changing the AF Frame Position and Size

When the AF frame mode is set to [FlexiZone] (p. 82) you can change the position and size of the AF frame.









## 1 Press the button.

- ▶ The AF frame will turn orange.



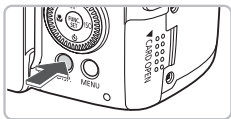
## 2 Move the AF frame.

- Turn the  dial to move the AF frame.
- Press the     buttons to make fine adjustments.
- When faces are detected, each press of the **MENU** button will move the AF frame to another face.
- If you keep the  button pressed, the AF frame will return to the original position (center).



## 3 Change the AF frame size.

- Press the **DISP.** button.
- ▶ The AF frame will become small.
- Pressing the **DISP.** button again will restore the AF frame to normal size.



## 4 Complete settings.

- Press the  button.




- The Spot AE Point frame can be linked with the AF frame (p. 87).
- The AF frame will be set to normal size when using Digital Zoom (p. 62) or Digital Tele-Converter (p. 63).

# Magnifying the Focal Point

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



## 1 Choose [AF-Point Zoom].

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



## 2 Check the focus.

- Press the shutter button halfway.
- ▶ In [Face Detect], the face selected as the main subject will appear magnified.
- ▶ In [FlexiZone] or [Center] the contents of the AF frame will appear magnified.



### What if the display does not magnify?

The display will not appear magnified in [Face Detect] if a face cannot be detected or is too big in relation to the screen (p. 82). In [FlexiZone] or [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. 85), or when connected to a TV (p. 79).

## Shooting with the AF Lock

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



### 1 Lock the focus.

- Keep the shutter button pressed halfway and press the ▲ button.
- ▶ **MF** and the MF indicator appear. You can check the distance to the subject.

### 2 Compose the scene and shoot.

## Shooting with Servo AF

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



### 1 Choose [Servo AF].

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

### 2 Focus.

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

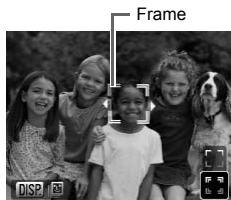


- The camera may not be able to focus in some conditions.
- If a correct exposure cannot be obtained, the shutter speed and aperture value display in orange. Release your finger from the shutter button, then press it again halfway.
- You cannot shoot with the AF lock in this mode.
- You cannot set the Servo AF mode if you have set the [AF-Point Zoom] option in the tab to [On].
- Not available in Self-Timer (pp. 65, 66, 77, 78).





# Choosing the Person to Focus On (Face Select)

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

## 1 Set the camera to [Face Detect] (p. 82).









## 2 Set Face Select mode.

- Point the camera toward the face of the subject and press the  button.
- ▶ After [Face Select : On] displays, an orange 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.




## 3 Choose the face on which to focus.

- If you press the   buttons or turn the  dial, the face frame  will move to another face detected by the camera.
- If you press the  button or the  button, the frame around the chosen face will turn white.



## 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

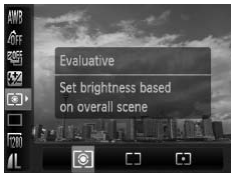
Pressing the **DISP.** button will display the number of faces detected by the camera (35 at the most) (orange: main subject's face, white: detected face).



Pressing the   buttons in Step 3, and choosing , or holding down the  button in Step 4, will cancel Face Select mode.

## Changing the Metering Mode

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



### 1 Choose the Metering mode.

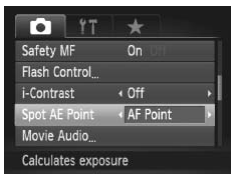
- After pressing the **FUNC SET** button, press the **▲▼** buttons to choose **[ ]**.

### 2 Choose an option.

- Press the **◀▶** buttons or turn the **○** dial to choose an option, then press the **FUNC SET** button.
  - ▶ The setting will display on the screen.

<b>[ ]</b> Evaluative	Suitable for standard shooting conditions, including back lit shots. Automatically adjusts the exposure to match the the shooting conditions.
<b>[ ]</b> Center Weighted Avg.	Averages the light metered from the entire frame, but gives greater weight to the center.
<b>[ ]</b> Spot	Only meters within the <b>[ ]</b> (Spot AE Point frame) that appears at the center of the screen. The Spot AE Point frame can be linked to the AF frame.

## Linking the Spot AE Point Frame to the AF Frame



### 1 Choose **[ ]**.

### 2 Set the AF Frame to **[FlexiZone]** (p. 82).

### 3 Choose **[Spot AE Point]**.

- Press the **MENU** button, choose the **📷** tab, and then choose **[Spot AE Point]** menu item. Press the **◀▶** buttons to choose **[AF Point]**.
  - ▶ The Spot AE Point frame will be linked to the AF frame that was moved.

# 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.



## 1 Choose MF.

- Press the **▲** button.
- ▶ **MF** and the MF indicator will appear.



## 2 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.

## 3 Fine tuning the focus.

- If you press the shutter button halfway or press the **□** button, you can fine tune the focus (Safety MF).



- You cannot change the AF frame setting or size while focusing manually (p. 82). 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. 79), 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 shots in the following order: one at the manual focus position, and one each with focus positions preset farther and nearer. The three shots are taken at the same interval as continuous shooting (p. 75). The focus adjustment can be set in 3 levels.








### 1 Choose .

- After pressing the  button, press the  buttons to choose , then press the  buttons or turn the  dial to choose .



### 2 Set the focus adjustment level.

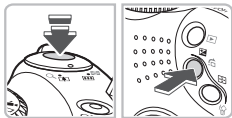
- Press the  button.
- Press the  buttons or turn the  dial.
- Pressing the  button will widen the interval, and pressing the  button will narrow the interval. The camera will focus on the spot nearest the center (where the focus is set).






- If the flash fires, a single, normal image will be shot.
- Continuous shooting (p. 75) cannot be used in this mode.

## 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”.




### 1 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.

### 2 Compose the scene and shoot.



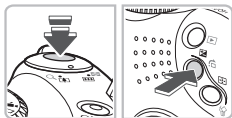
#### Program Shift

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. 90), you can lock the exposure for shooting with the flash. FE stands for “Flash Exposure”.

### 1 Raise the flash and choose (p. 69).



### 2 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.









### 3 Compose the scene and shoot.

## Auto Exposure Bracketing (AEB Mode)

The camera automatically changes the exposure to take three shots at the same interval as continuous shooting (p. 75). The images are shot in the following order: Standard exposure, underexposure, and overexposure.




### 1 Choose .

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



### 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  $\pm 2$  stops in 1/3-stop increments. If exposure compensation (p. 69) is already being used, settings are made with the compensated value as the base.








- If the flash fires, a single, normal image will be shot.
- Continuous shooting (p. 75) cannot be used in this mode.

## Shooting with Slow Synchro

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

### 1 Raise the flash (p. 69).

### 2 Choose .

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

### 3 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. 149).

## 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  dial 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, 1/2000, 1/2500, 1/3200

- 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. 94).




- 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. 149).

## 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  dial to set the aperture value.
- 3 Shoot.

### Available Aperture Values

F2.8, F3.2, F3.5, F4.0, F4.5, F5.0, F5.6, F5.7, 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 the aperture value you set.
- Depending on the zoom position, some aperture values may not be available.




### 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.





Shutter Speed

Aperture Value



Exposure Level Indicator

Standard Exposure Level

Exposure Level

- Press the  button to choose the shutter speed or aperture value.
- Turn the  dial to set a 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  $\pm 2$  stops, the set exposure level appears in orange. When you press the shutter button halfway, “-2” or “+2” appears in orange.





- The standard exposure is calculated according to the metering method chosen (p. 87).
- 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 raised and set to , the monitor brightness will not change.
- If you press the  button while holding down the shutter button halfway, the shutter speed or aperture value (whichever is not currently chosen) will automatically adjust to obtain the correct exposure. However, the correct exposure may not be obtained depending on the settings.

## 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].
- ▶  will appear on the screen.



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



You can correct recorded images (p. 135).



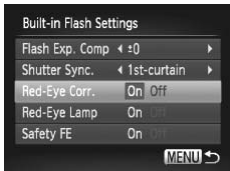
# Red-Eye Correction

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



## 1 Choose [Flash Control].

- Press the **MENU** button, choose [Flash Control] from the tab and press the button.



## 2 Adjust the setting.

- Press the or turn the to choose [Red-Eye Corr.] and press the to choose [On].
- ▶ will appear on the screen.



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



- You can correct recorded images (p. 136).
- If you hold down the button, the Built-in Flash Settings screen will appear.
- With the flash raised, if you press the button and immediately press the **MENU** button, the Flash Settings screen will appear.

# Adjusting the Flash Exposure Compensation



Just like with exposure compensation (p. 69), you can adjust the exposure  $\pm 2$  stops in 1/3-stop increments when using the flash.




## 1 Choose $\pm 2/3$ .

- After pressing the  button, press the  $\blacktriangle$ / $\blacktriangledown$  buttons to choose  $\pm 2/3$ .

## 2 Make the setting.


- Press the  $\blacktriangleleft$ / $\blacktriangleright$  buttons or turn the  dial to choose the flash exposure compensation, then press the  button.
- ▶  $\pm 2/3$  will appear on the screen.



To set the flash exposure compensation, choose [Flash Control] (p. 97) from the  tab, then choose [Flash Exp. Comp] and press the  $\blacktriangleleft$ / $\blacktriangleright$  buttons to choose a setting (p. 49).



## 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 Control] is set to [Off], the shutter speed and aperture value will not automatically adjust.


# 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 an option, then press the  button.




- To set the flash output, choose [Flash Control] (p. 97) from the  tab, then choose [Flash Exp. Comp] and press the  buttons to choose a setting (p. 49).
- In **Tv** and **Av** modes, you can set the flash output if you choose the  tab, then [Flash Control] and set the [Flash Mode] option to [Manual].

# Changing the Flash Timing

You can change the timing for the flash and shutter.

## 1 Choose [Flash Control] (p. 97).

## 2 Make the setting.

- Press the ▲▼ buttons or turn the  dial to choose [Shutter Sync.] and press the ◀▶ buttons to choose [1st-curtain] or [2nd-curtain].



## What are the 1st-curtain and 2nd-curtain?




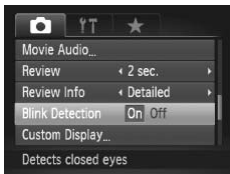
With the 1st-curtain, the flash fires right after the shutter opens.






With 2nd-curtain, the flash fires right before the shutter closes.

## Checking for Shut Eyes


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










### 1 Choose [Blink Detection].

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

### 2 Shoot.

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



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

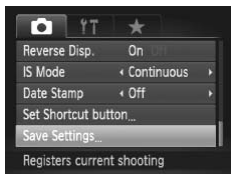
# Registering Shooting Settings

You can register commonly used shooting modes and settings. By simply turning the mode dial to **C**, you can use previously registered settings to shoot. Even if you switch shooting modes or turn off the power, settings that usually cancel (continuous shooting, 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. 69 – 95)
- Items in the shooting menu
- Zoom position
- Manual focus position (p. 88)
- My Menu items (p. 150)





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

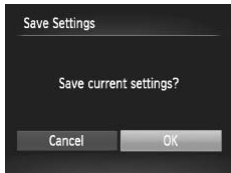


**2** Choose [Save Settings].

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

**3** Register the settings.

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



- To change part of a pre-registered setting (except for Shooting modes), choose **C** to make the changes, then register the setting again. These settings will not be reflected in other Shooting modes.
- To return registered contents to the default settings, turn the mode dial to **C** and choose [Reset All] (p. 52).

## 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.


### **Color Accent**

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



Recorded color

#### **1 Choose .**

- Follow Step 1 on p. 59 to choose .


#### **2 Press the DISP. button.**

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

#### **3 Specify the color.**

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

#### **4 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.

### **Color Swap**

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



#### **1 Choose .**

- Follow Step 1 on p. 59 to choose .



#### **2 Press the DISP. button.**

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



#### **3 Specify the color to be swapped.**

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




#### **4 Specify the target color.**

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



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

- Press the ▲▼ buttons 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.


## Shooting Stitch Assist Images

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



### 1 Set the mode dial to .

### 2 Choose a shooting direction.

- Turn the  dial.
    - : Left to right horizontally.
    - ←: Right to left horizontally.
    - ↑: Bottom to top vertically.
    - ↓: Top to bottom vertically.
- Shoots 4 images from the upper left in a clockwise direction.

### 3 Take the first shot.


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



### 4 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. (Except for images shot clockwise.)

### 5 Finish shooting.


- Press the  button.



### 6 Merge the images on a computer.

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



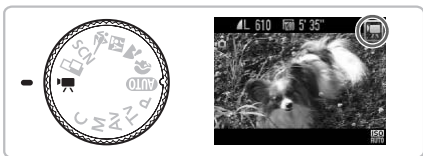
- This function is not available when a TV is used as the monitor (p. 79).
- To use AF lock, register AFL to the  button (p. 149).



# 6

## Using Various Functions for Shooting Movies

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

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- This chapter assumes that the mode dial is set to . However, even if the mode dial is set to a position other than , movies can be shot by pressing the movie button.

### Shooting Movies in Modes Other than

- Some of the settings previously set in menus such as the FUNC. and Rec. menus may be changed to those of the movie recording mode.
- AE Lock/Exposure Shift (p. 111), AF Lock (p. 85), and Manual Focus (p. 88) cannot be set before shooting. Make these settings while shooting.
- When you finish shooting a movie, the settings will return to those before the movie was shot. Also, AE Lock/Exposure Shift (p. 111) settings will be canceled.
- When shooting in Color Accent (p. 103) or Color Swap (p. 104) modes, choose the color you wish to leave, or the color to change before pressing the movie button.

# Changing the Image Quality

You can choose between three image quality settings.



## 1 Choose the image quality.

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

## 2 Choose an option.

- Press the **◀▶** buttons or turn the **○** dial to choose an option, and press the **FUNC SET** button.
- ▶ The setting will display on the screen.

## Image Quality Table

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

## Estimated Shooting Time

Image Quality	Shooting Time	
	2 GB	8 GB
<b>1280</b>	10 min. 33 sec.	42 min. 11 sec.
<b>640</b>	22 min. 45 sec.	1 hr. 30 min. 57 sec.
<b>320</b>	1 hr. 4 min. 1 sec.	4 hrs. 15 min. 51 sec.

\* Based on Canon's testing standards.

● Maximum clip length is approximately 29 minutes and 59 seconds in **1280**, 1 hour in **640** and **320**. Recording also stops when the file size reaches 4 GB.

● Recording may stop even if the maximum clip length has not been reached on some memory cards. SD Speed Class 4 or higher memory cards are recommended.



In **640** and **320** when the recording pixels setting for still images is set to **W**, a gray frame will appear around the area that can be shot as a still image.

# Taking Still Images while Shooting a Movie

You can shoot still images while shooting a movie.



## 1 Focus while shooting a movie.

- Press the shutter button halfway.
- ▶ The focus and exposure will readjust (the camera will not beep).
- The movie will continue shooting.

## 2 Shoot.

- Press the shutter button fully.
- ▶ The still image will record.





- While shooting in  $\overline{1280}$ , the recording pixel setting for taking a still image is  $\overline{W}$  (p. 70).
- If you take a still image while shooting in  $\overline{640}$  or  $\overline{320}$ , the recording pixel setting will change to  $\overline{L}$  even if you set it to  $\overline{W}$  (p. 70).
- The shutter sound and black screen when shooting a still image will be recorded in the movie.
- The flash will not fire.
- The date and time an image was shot cannot be recorded in the lower right corner.
- The ISO speed is locked to  $\overline{ISO AUTO}$ .
- i-Contrast (p. 96) cannot be used.
- If shooting still images fills the internal memory, the movie may stop recording.



## What if changes and you can't take a still image?

You may not be able to take still images when the writing speed to the memory card is slow, or when there is insufficient internal memory.

-  (blinking): processing recorded image. You can shoot when it stops blinking.
- : Still images cannot be taken due to insufficient internal memory.

## Sound Settings

The sound recording levels and Wind Filter can be set.

### Adjusting the recording volume

You can manually set the recording volume for shooting movies.



- Press the **MENU** button, choose [Movie Audio] from the tab and press the button.
- Press the or turn the dial to choose [Mic Level], then press the buttons to choose [Manual].

Auto	The recording volume is automatically adjusted to reduce sound distortion.
Manual	After pressing the , press the  to set the sound recording level (recording volume).

### 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.





- Choose [Movie Audio] and press the button.
- Press the or turn the dial to choose [Wind Filter], then 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  $\pm 2$  before or during shooting.





### 1 Lock the exposure.

- Press the  button to lock the exposure. The exposure shift bar appears.
- Press the  button again to release the lock.




### 2 Change the exposure.

- While watching the screen, turn the  dial to adjust the brightness.

## Other Shooting Functions

When shooting with the AF Lock, you can register  to the  button to easily call it up for use (p. 149).

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












- **Zooming in More Closely On Subjects**  
The optical and digital zoom (p. 62) are available.
- **Using the Self-Timer (p. 65)**
- **Shooting Close-ups (Super Macro) (p. 72)**  
In , focusing is possible up to the start of the  range.
- **Adjusting the White Balance (p. 74)**
- **Changing the Tone of an Image (My Colors) (p. 76)**
- **Shooting Using the Two Second Self-Timer (p. 77)**
- **Shooting Using a TV Monitor (p. 79)**
- **Shooting in Manual Focus Mode (p. 88)**
- **Shooting with the AE Lock (p. 90)**
- **Turning off the AF Assist Beam (p. 146)**
- **Customizing Display Information (p. 148)**
- **Changing the IS-Mode Settings (p. 149)**  
You can switch between [Continuous] and [Off].
- **Registering Functions to the  Button (p. 149)**

# Playback Functions

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

- Erasing Images (p. 28)
- Quickly Searching Images (p. 116)
- Viewing Images in Filtered Playback (p. 117)
- Viewing Slideshows (p. 119)
- Changing Image Transitions (p. 121)
- Viewing Images on a TV (p. 122)
- Protecting Images (p. 124)
- Erasing All Images (p. 127)
- Organizing Images by Category (My Category) (p. 129)
- Rotating Images (p. 131)

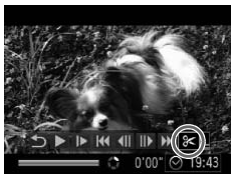
## Summary for “Viewing Movies” (p. 33)

	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. 113)
	Appears when connected to a PictBridge compliant printer (p. 29). Refer to the <i>Personal Printing Guide</i> for details.



## Editing

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




Movie Editing Panel













Movie Editing Bar





### 1 Choose ✂.

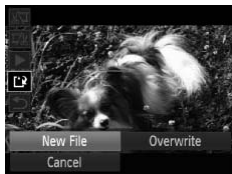
- Follow Steps 1 and 3 on p. 33, choose ✂ and press the  button.
- ▶ The movie editing panel and the movie editing bar will appear.

### 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 light blue section indicated with  will be the section of the movie that remains after editing.

### 3 Check the edited movie.

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



### 4 Save the edited movie.

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




- When [Overwrite] is chosen in Step 4, the unedited movie is overwritten with the edited movie, erasing the original movie.
- When there is not enough space left on the memory card, only [Overwrite] can be chosen.
- If the batteries are depleted partway through editing, the edited movie clips may not be saved. When editing movies, you should use fully charged NiMH AA batteries or Compact Power Adapter CA-PS700 (both sold separately) (p. 40).

# 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.

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

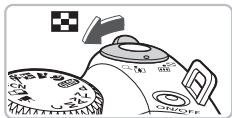


- It may not be possible to play back or edit images that have been edited on a computer, had their file name changed, or have been taken on a different camera.
- The edit function (pp. 132 – 136) cannot be used if the memory card does not have free space available.



## Quickly Searching Images

### Searching Images Using Index Display

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




#### 1 Move the zoom lever toward .





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



#### 2 Change the displayed images.

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

#### 3 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).



#### 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. 124) or delete (p. 127) 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. 129).
	Still Image Jump	Jumps to still images only.
	Jump to Movie	Jumps to a movie.
	Jump 10 Images	Jumps over 10 images at a time.
	Jump 100 Images	Jumps over 100 images at a time.

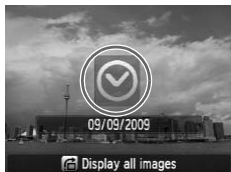
### Search by , , and








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.






## 2 Viewing images using filter playback.




- Pressing the  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  button cancels filtered playback.

## Jump by and Images




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

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

When you chose  in Step 1 on p. 117, 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 .

## Filter playback

In filter playback (Step 2), you can view filtered images with “ Searching Images Using Index Display” (p. 116), “Viewing Slideshows” (p. 119), and “Magnifying Images” (p. 121). You can process all filtered images at once while performing operations in “Protecting Images” (p. 124), “Erasing All Images” (p. 127), or “Printing from the Print List (DPOF)” (p. 137), by choosing [All Filtered Images].

However, if you change the category (p. 129), or edit an image and save it as a new image (p. 132), a message will appear, and filtered playback will cancel.

# Viewing Slideshows

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



## 1 Choose [Slideshow].

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

## 2 Make the setting.

- Press the 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

## 3 Choose [Start].

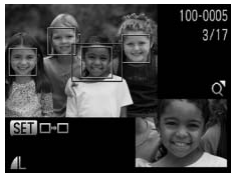
- Press the or turn the dial to choose [Start], the press the button.
- ▶ The slideshow will start a few seconds after [Loading image...] displays.
- You can pause/restart a slideshow by pressing the button again.



- If you press the or turn the dial during playback, the image will switch. If you keep the pressed, you can fast-forward through images.
- The power saving function does not work during slideshows (p. 54).
- You cannot change [Play Time] if [Bubble] is chosen in [Effect].

## Checking the Focus

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



### 1 Press the **DISP.** button, and switch to the focus check display (p. 46).

- ▶ 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.

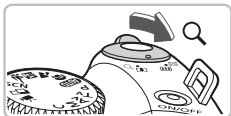
- Move the zoom lever toward **Q** once.
- ▶ The screen at the left will appear.
- Press the **FUNC SET** button to move to a different frame when multiple frames appear.

### 3 Change the magnification level or location.

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








## Magnifying Images



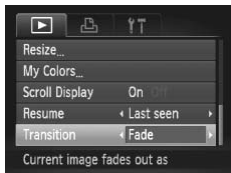
Approximate Location  
of Displayed Area

### Move the zoom lever toward .




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

## Changing Image Transitions

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



### Choose [Transition].

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

## Viewing Images on a TV

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

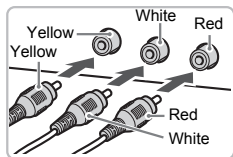
### Items to Prepare

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



**1 Turn off the camera and TV.**

**2 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.


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



**4 Turn on the camera.**

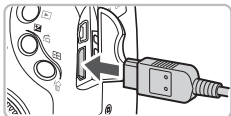
- Press the  button to turn on the camera.
- ▶ The image will appear on the TV (nothing will appear on the monitor of the camera).
- After you finish viewing, turn off the camera and TV, and unplug the stereo video cable.

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

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

## Viewing Images on a High-Definition TV

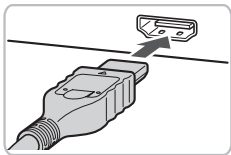
Use the separately sold HDMI Cable HTC-100 to connect the camera to a high-definition TV for enhanced viewing experience.



**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. 122 to display the images.





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

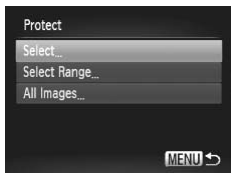
# Protecting Images

You can protect important images so that they cannot be erased by the camera (pp. 28, 127).







## 1 Choose [Protect].

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



## 2 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, 53), 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

## 1 Choose [Select].

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




## 2 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.





## Select Range

### 1 Choose [Select Range].

- Follow Step 2 on p. 124 to choose [Select Range] and press the  button.








### 2 Choose the starting image.

- Press the  button.
- Press the  buttons or turn the  dial to choose the image and press the  button.




### 3 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.






### 4 Protect images.

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




### Choose images with the dial

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



## Choose All Images



### 1 Choose [All Images].

- Follow Step 2 on p. 124 to choose [All Images] and press the  button.

### 2 Protect images.

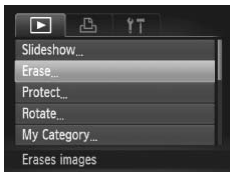
- Press the ▲▼ buttons or turn the  dial to choose [Protect] and press the  button.



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].

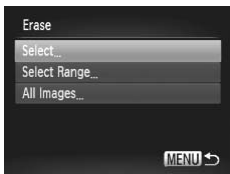
## Erasing All Images

You can choose images and erase them in groups. Since erased images cannot be recovered, exercise adequate caution before erasing. Protected images (p. 124) cannot be erased.



### 1 Choose [Erase].

- Press the **MENU** button, choose the tab and [Erase], and press the button.



### 2 Choose a selection method.

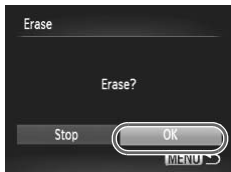
- Press the buttons or turn the dial to choose a selection method, and press the .
- Pressing the **MENU** button will restore the menu screen.

## Choosing Images Individually





### 1 Choose [Select].

- Follow Step 2 above to choose [Select] and press the .
- Follow Step 2 on p. 124 to choose the image.
- ▶ Once set, will appear on the screen.
- Pressing the once more will cancel the selection, and will disappear.
- To choose multiple images, repeat the above operation.

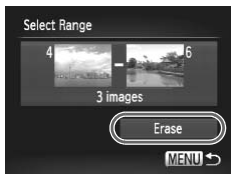


**2 Press the MENU button.**


**3 Erase.**

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

## Select Range



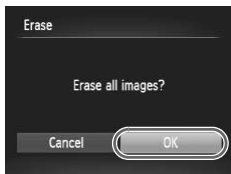
**1 Choose [Select Range].**

- Follow Step 2 on p. 127 to choose [Select Range] and press the  button.
- Follow Steps 2 and 3 on p. 125 to choose images.


**2 Erase.**

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



## Choose All Images



**1 Choose [All Images].**

- Follow Step 2 on p. 127 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. 117) and process all images at once by using the functions below.

- Viewing Slideshows (p. 119), Protecting Images (p. 124), Erasing All Images (p. 127), Choosing Images for Printing (DPOF) (p. 138)



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

: Images shot as , , or images with faces detected.

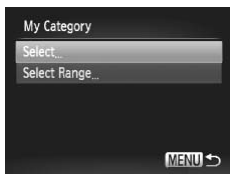
: Images detected as or in **AUTO** mode, or images shot in ,

or .

: Images shot in , , , , , , .

## 1 Choose [My Category].

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



## 2 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

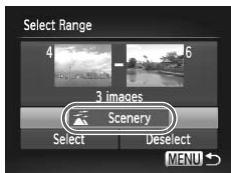


### Choose [Select].





- Follow Step 2 above to choose [Select] and press the button.
- Follow Step 2 on p. 124 to choose images.
- Press the buttons, choose a category and press the button.
- Once set, will appear on the screen.
- Pressing the button again deselects the category and disappears.

- To choose multiple images, repeat the above operation.



### Select Range



#### 1 Choose [Select Range].

- Follow Step 2 on p. 129 to choose [Select Range] and press the  button.
- Follow Steps 2 and 3 on p. 125 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.

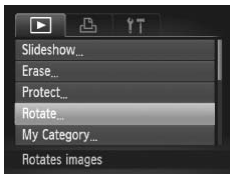
- Press the  button to choose [Select] and press the  button.





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

# Rotating Images

You can change the orientation of an image and save it. Movies with a resolution of 1280 cannot be rotated.







## 1 Choose [Rotate].

- Press the **MENU** button, choose the  tab and [Rotate], and press the  button.

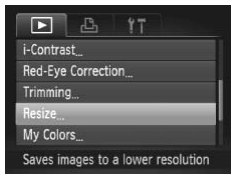


## 2 Rotate the image.



- 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.

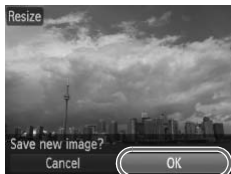
## 3 Choose an image size.

- 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.

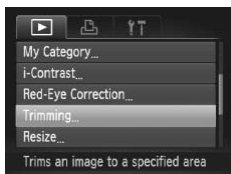
- When you press the **MENU** button, the [Display new image?] screen will appear.
- Press the   buttons, or turn the  dial to choose [Yes] and press the  button.
  - ▶ The saved image will display.





- You cannot resize an image to a larger size.
- You cannot resize images taken with the **W** and **XS** settings.

# Trimming





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



## 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.

Trimming Area













Trimming Area Display

Recorded pixels after trimming



## 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 .
- After pressing the , press the   buttons or turn the  dial to choose [OK], then press the  button again.

## 4 Save as a new image and display.

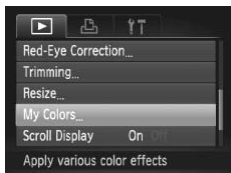
- Perform Steps 4 and 5 on p. 132.





- **W**, **S** and **XS** images cannot be trimmed.
- The width and height ratio of an image that can be changed is fixed at 4:3 (for a vertical image 3:4).
- The number of recorded pixels in a trimmed image will be smaller than before trimming.

## Adding Effects with the My Colors Function





You can change the color of an image and save it as a separate image. Refer to p. 76 for details on each menu item.








### 1 Choose [My Colors].

- Press the **MENU** button, choose the  tab and [My Colors], 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 a menu option.

- Press the   buttons or turn the  dial to choose an option.
- After choosing the menu option, you can magnify the image by following the operations in "Magnifying Images" (p. 121).
- 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.

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

- Perform Steps 4 and 5 on p. 132.

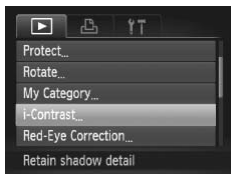




- If you repeatedly change the color of an image, the quality will gradually deteriorate and you may not achieve the expected color.
- The coloration of images changed with this function may vary from those recorded with the My Colors function (p. 76).

## 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 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. 132.



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

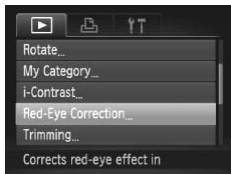
Choose [Low], [Medium] or [High] and adjust the image.





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

# Correcting the Red-Eye Effect




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




## 1 Choose [Red-Eye Correction].

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

## 2 Choose an image.







- Press the   buttons or turn the  dial to choose an image.

## 3 Correct the image.

- Press the .
- ▶ 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. 121).



## 4 Save as a new image and display.


- Press the     buttons, or turn the  dial to choose [New File], and press the .
- ▶ The image will be saved as a new file.
- Perform Step 5 on p. 132.



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





## Printing from the Print List (DPOF)

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











#### 1 Choose an image.

- Press the  buttons or turn the  dial and choose the image.

#### 2 Press the button (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  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



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

#### 2 Print.

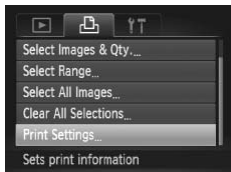
- Press the  buttons, choose [Print now] and press the  button.
- ▶ Printing will start.
- If you stop the printer during printing and start again, it will start from the next print.

## Choosing Images for Printing (DPOF)



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

### Print Settings






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



#### 1 Choose [Print Settings].


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

#### 2 Adjust the settings.

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

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



- Some printers or photo developer services may not be able to reflect all of the print settings in the output.
-  may appear when using a memory card with print settings set by a different camera. These settings will be overwritten with those set by your camera.
- Images with the date embedded always print with the date, regardless of the [Date] setting. As a result, some printers may print the date twice on these images if [Date] is also set to [On].



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

## Choosing the Number of Copies



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

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

### 2 Choose an image.

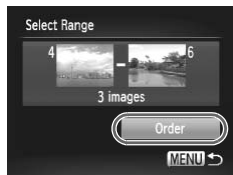
- Press the buttons or turn the dial to choose an image, then press the button.
  - ▶ You will be able to set the number of print copies.
- If you choose [Index], appears on the screen. Press the button again to deselect the images. will disappear.




### 3 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.

## Choose Range



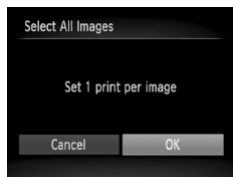
### 1 Choose [Select Range].

- Choose [Select Range] in Step 1 on p. 139 and press the  button.
- Choose images according to Steps 2 and 3 on p. 125.


### 2 Make print settings.

- Press the   buttons, choose [Order] and press the  button.





## Set All Images to Print Once



### 1 Choose [Select All Images].

- Choose [Select All Images] from the screen in Step 1 on p. 139 and press the  button.


### 2 Make print settings.

- Press the   buttons or turn the  dial to choose [OK] and press the  button.





## Clearing All Selections



### 1 Choose [Clear All Selections].

- Choose [Clear All Selections] in Step 1 on p. 139, and press the  button.

### 2 All selections will be cleared.

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

# 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.

---

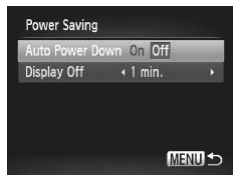






## Changing Functions

You can customize convenient and commonly used functions from the **FT** tab (p. 49).

### Turning off the Power Saving Function

You can set the power saving function (p. 54) to [Off]. Setting it to [On] is recommended to save battery power.







- Choose [Power Saving], then press the  button.
- Press the  buttons or turn the  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.

### Setting the Screen Shut-Off Time

You can adjust the time the screen takes to shut off automatically (p. 54). This also works when [Auto Power Down] is set to [Off].



- 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.



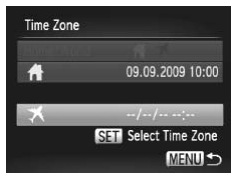
### 1 Set the home time zone.

- 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 .



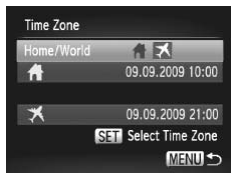
### 2 Set the world time zone.

- 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.



### 3 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.

## Turning off Hints & Tips

When you choose an item in the FUNC. menu (p. 48) or Menu (p. 49), hints and tips display. You can turn off this function.



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

## Changing the File Number Assignment

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



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

Continuous	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. 53).
- Refer to the *Software Guide* for information regarding folder structure or image types.



## Creating Folders by Shooting Date

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



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

## Changing Distance Units

You can change the distance units that display in the zoom bar (p. 24) and the MF indicator (p. 88) from m/cm to ft/in.



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


## Changing the Lens Retract Time

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



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

## Changing Shooting Functions

If you set the mode dial to **P**, you can change the settings in the  tab (p. 49).





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

### Switching the Focus Setting

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

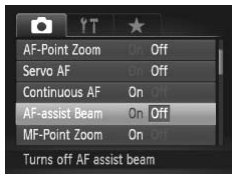




- Choose [Continuous AF], then press the   buttons to choose [Off].

On	The camera focuses continuously until you press the shutter button halfway, allowing you to shoot without missing opportunities.
Off	This conserves battery power.

### Turning off the AF Assist Beam

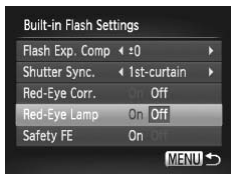
The lamp will automatically light to assist focusing in low light conditions when you press the shutter button halfway. You can turn off the lamp.



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

## Turning off the Red-Eye Reduction Function

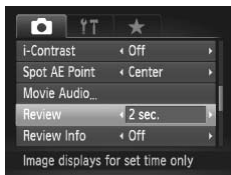
The red-eye reduction lamp lights in order to reduce the red-eye effect that occurs when shooting in dark conditions with the flash. You can turn off this function.



- Choose [Flash Control], then press the 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.

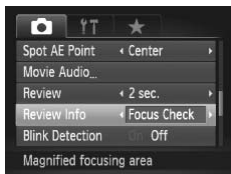


- Choose [Review], then press the buttons to choose an option.

2 – 10 sec.	Displays images for the set time.
Hold	The image displays until you press the shutter button halfway.
Off	No image displays

## Changing the Way the Image Displays Right After Shooting

You can change the way the image displays after shooting.




















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

Off	Displays the image only.
Detailed	Displays detailed information (p. 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. 120).

## Customizing Display Information

You can choose which information is displayed when the **DISP.** button is pressed, as well as the information displayed on the LCD monitor or viewfinder.



- Choose [Custom Display], then press the  button.
- To set what displays when pressing the **DISP.** button, press the     buttons to choose an available custom display group (, , , ), and press the  button. However, the currently set display mode cannot be disabled.
  - ▶  will appear.
- To turn information display on or off, press the     buttons to choose an option, then press the  button.
  - ▶ Items with a  will display.

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 <b>P</b> , <b>Tv</b> , <b>Av</b> , <b>M</b> .

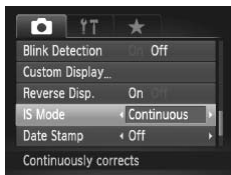


If you press the shutter button halfway and return to the shooting screen from the custom display settings screen, the settings will not be saved.



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

## Changing the IS-Mode Settings



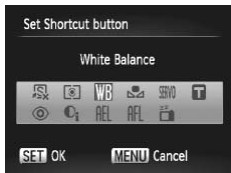
- Choose [IS Mode], then press the ◀▶ buttons to choose an option.





Continuous	Image stabilization is always on. You can confirm the result directly on the display, which makes it easier to check the composition or focus.
Shoot Only	Image stabilization is only active at the moment of shooting.
Panning	Image stabilization only counters up and down motion. This option is recommended for shooting objects moving horizontally.











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

## Registering Functions to the Button




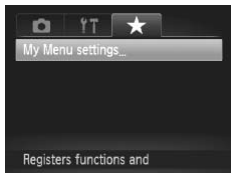
- Choose [Set Shortcut button], then press the  button.
- Press the ▲▼▶ buttons or turn the  dial to choose the functions to register, then press the  button.
- Pressing the  button will call up the registered function.



- Choose  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  button records white balance data (p. 74), and the white balance settings change to .
- In AFL, each press of the  button will adjust and lock the focus, and AFL will appear on the screen.
- If you press the  button in , both the LCD monitor and viewfinder 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
  - Open and close the LCD monitor
  - Raise and lower the flash

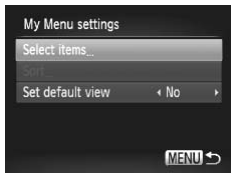
## Registering Commonly Used Shooting Menus

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.








### 1 Choose [My Menu settings].

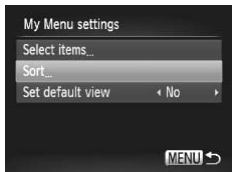
- Choose [My Menu settings], in the  tab, then press the  button.






### 2 Choose the menu items to register.

- Press the  buttons to choose [Select items], then press the .
- Press the  buttons to choose a menu to register (up to 5) and press the .

- ▶ ✓ will appear.
- To cancel registration, press the  button, and the ✓ will disappear.
- Press the **MENU** button.



### 3 Change the order in which menu items are displayed.

- Press the ▲▼ buttons to choose [Sort], then press the .
- Press the ▲▼ buttons to choose the menu item you would like to move, and press the .
- Press the ▲▼ buttons to change the order, then press the .
- Press the **MENU** button.

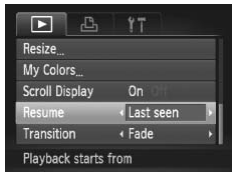


- Gray items in Step 2 can also be set, however, they may not be available depending on the Shooting mode.
- Choose [Set default view] and press the ◀▶ buttons to choose [Yes]. My Menu can now be displayed by pressing the **MENU** button when in a shooting mode.

## Changing Playback Functions

You can adjust the settings in the  tab by pressing the  button (p. 49).

### Choosing the Image that First Displays in Playback



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

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

## Changing the Start-up Image or Sound

In the **Fn** 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 with your recorded sounds. However, when starting the camera with the viewfinder display, the start-up image will not display, and there will be no start-up sound.

### Change Sounds



- Choose [Sound Options], then press the **FUNC SET** button.
- Press the **▲▼** buttons or turn the **○** dial to choose an option.
- Press the **◀▶** buttons to choose a setting.

1	Preset sounds.
2	You can register your sounds using the supplied software (p. 153).

### Changing the Start-up Screen



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

No start-up image.

1	Preset images.
2	You can register your images.

### Registering the Start-up Screen





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



- Choose [Start-up Image], then press the **FUNC SET** button.
- Press the **◀▶** buttons to choose [2], then press the **FUNC SET** 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 change the date/time battery, the use of separately sold accessories, troubleshooting tips, and contains lists of functions.

The index also appears at the end.

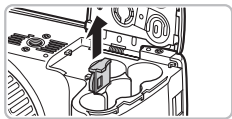
---



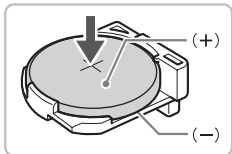
## Replacing the Date/Time Battery

The life of the date/time battery (back-up battery) is approximately 7 years. If the Date/Time settings screen appears every time the camera is turned on, replace the date/time battery with a new one (CR1220).

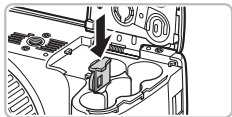
- 1 Turn off the camera.**
- 2 Open the cover and remove the AA batteries (p. 14).**



- 3 Remove the date/time battery holder.**



- 4 Replace the battery.**
  - Insert the battery with (+) and (-) sides oriented correctly.



- 5 Insert the battery holder.**
- 6 Insert the batteries and close the cover.**
- 7 Turn on the camera's power and set the date/time (p. 19).**

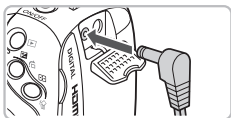
## Using Household Power

If you use Compact Power Adapter CA-PS700 (sold separately), you can use the camera without worrying about how much charge is left in the battery.

### 1 Turn off the camera.

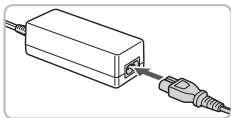
### 2 Plug the cord into the camera.

- 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.



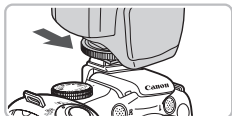
Do not unplug the plug and power cord with the camera turned on. This could erase images you have taken or damage the camera.

## Using an Externally Mounted Flash (Sold Separately)

You can make your flash photography even clearer and more natural appearing with the use of a separately sold externally mounted flash. You are recommended to set the white balance to .




- When an external flash is mounted, you cannot set the built-in flash.
- Some functions on Speedlite 220EX, 270EX, 430EX II, and 580EX II cannot be used with this camera.
- The flash may not fire when using Canon brand flashes other than Speedlite EX series models. Also, automatic red-eye correction is not available.
- Using a non-Canon brand flash (particularly a high-voltage flash) or flash accessories may inhibit normal operation or damage the camera.





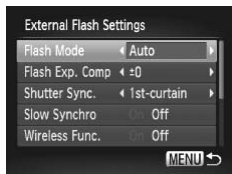
**1 Attach the flash to the camera's hot shoe.**

**2 Turn the external flash on and turn the camera on.**






- ▶  (red) appears on the LCD monitor (or the viewfinder).
- ▶ When the flash is charged, its pilot lamp will light.

**3 Display the flash settings screen.**

- Choose the [Flash Control] from the  tab, then press the  button.
- ▶ The options set on the flash will appear.



**4 Make the setting.**

- Press the   buttons or turn the  dial to choose a menu item, then press the   buttons to complete the setting.
- The available settings differ depending on the flash (p. 159).
- In modes other than **P**, **Tv**, **Av**, and **M**, flash settings cannot be changed since the flash adjusts and fires automatically.

## Speedlite 220EX, 270EX, 430EX II, and 580EX II

- The maximum flash synchro shutter speed is 1/250 second.
- The flash will automatically adjust its output when [Flash Mode] is set to [Auto]. Flash exposure compensation and safety FE can be set when the flash is set to auto exposure. However, when performing flash exposure compensation with the camera, make sure to set the flash exposure compensation on the flash to [+0].
- The flash output can be adjusted on the camera or the flash if [Flash Mode] is set to [Manual]. With Speedlite 220EX and 270EX, settings cannot be made on the flash. In **M** mode, you can set the flash output with the camera even if the flash unit is set to E-TTL automatic flash exposure compensation. [E-TTL] will display on the flash, but the flash will fire manually. Also, if the flash compensation value is changed on the flash, the flash output will also change.
- Settings available on the camera are as follows.

Item	Options	Shooting mode			
		P	Tv	Av	M
Flash Mode	Auto/Manual	○	○	○	*1
Flash Exp.Comp	-3 to +3	○	○	○	-
Flash Output	1/128*2 to 1/1 (in 1/3 steps)	○	○	○	○
Shutter Sync.	1st-curtain/2nd-curtain/Hi-Speed*3	○	○	○	○
Slow Synchro	On/Off	○	*4	○	*4
Wireless Func.*5	On/Off	○	○	○	○
Red-Eye Corr.	On/Off	○	○	○	○
Red-Eye Lamp	On/Off	○	○	○	○
Safety FE	On/Off	○	○	○	*6
Clear Flash Settings*7	Resets settings to their default values.	○	○	○	○

\*1 Fixed to [Manual].

\*2 1/64 for Speedlite 220EX, 270EX and 430EX II.

\*3 Not available with Speedlite 220EX.

\*4 Fixed to [On].

\*5 Settings aside from On/Off are set on the flash. Not available with Speedlite 220EX or 430EX II. When set to [On], [Shutter Sync.] cannot be set to [2nd-curtain]. Even if you set [Shutter Sync.] to [2nd-curtain] with the camera, it will change to [1st-curtain].

\*6 Fixed to [Off].

\*7 [Slow Synchro], [Safety FE], [Red-Eye Corr.] and [Red-Eye Lamp] can also be returned to their default values using [Reset All] in the camera's **Fn** menu (p. 52). Setting is not available with the Speedlite 220EX.

## Using an Externally Mounted Flash (Sold Separately)

- The settings from the flash are applied to the flash mode, flash exposure compensation, flash output, shutter synchro, and wireless function when you turn on the camera.
- Available functions aside from those in the table on p. 159 are as follows.
  - Auto Exposure (Set the camera to E-TTL mode)
  - FE Lock (When [Flash Mode] is [Auto])
  - Auto Zoom (Not available with the 220EX or 270EX)



- Please read the manuals that came with the flash and speedlite transmitter.
- For continuous shooting, the flash can be used in quick flash mode (pilot lamp lit green). In this case, light emission may be less than with full flash (pilot lamp lit red) (580EX II only).
- If the external flash has been set to stroboscopic flash, the flash's set up menu cannot be chosen (580EX II only).
- Speedlite 380EX, 420EX, 430EX, 550EX, and 580EX can be used in the same way.

## Canon Flashes Other than Speedlite EX Series

Since other flashes fire at full strength, refer to the guide number listed in the flash's user guide for the optimal aperture values and ISO speeds for the distance to the subject.



# 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 batteries are properly inserted (p. 14).
- Confirm that the batteries are not depleted (p. 15).
- Confirm that the memory card/battery cover is securely closed (p. 14).
- If the battery terminals are dirty, battery performance will decrease. Clean the terminals with a cotton swab and re-insert the batteries several times.

### Batteries are consumed quickly.

- Battery performance decreases at low temperatures. Warm the batteries by, for example, placing them in your pocket, taking care that the terminals do not come into contact with any metal objects.

### Lens will not retract.

- Confirm that the memory card/battery cover is securely closed. After closing the memory card/battery cover, turn the power on then back off (p. 14).

## TV output

### Image is distorted or not showing on TV (p. 122).

## Shooting

### Cannot shoot.

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

### The screen is off (p. 25).

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

### Screen does not display properly while shooting.

Please note, the following will not be recorded in still images, but will be recorded in movies.

- When the camera is subjected to powerful light sources, the display may darken.
- Under fluorescent lighting, the screen may flicker.
- When shooting bright light sources, a bar of light (purplish red) may appear on the screen.

### ⚡ appears on the screen and the shot cannot be taken even though the shutter button was pressed fully (p. 25).

### 🔦 appears when the shutter button was pressed halfway (p. 25).

- Set the [IS mode] to [Continuous] (p. 149).
- Raise the flash and shoot (p. 69).
- Increase the ISO speed (p. 73).
- 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. 146).
- Confirm that functions which you do not intend to use (macro, etc.) are not set.
- Shoot using the focus lock or AF lock (pp. 79, 85).


### **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.**

- Raise the flash and shoot (p. 69).
- Adjust the brightness with exposure compensation (p. 69).
- Adjust the brightness with the i-Contrast function (pp. 96, 135).
- Use the AE lock, or spot metering to shoot (p. 90).


### **Subject is too bright (overexposed).**

- Lower the flash to set it to  (p. 25).
- Adjust the brightness with exposure compensation (p. 69).
- Use the AE lock, or spot metering to shoot (p. 90).
- Reduce the light illuminating the subject.

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

- Increase the ISO speed (p. 73).
- Shoot within an appropriate distance for flash photography (p. 69).
- Adjust the flash exposure compensation or the flash output (pp. 98, 99).

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

- Shoot within an appropriate distance for flash photography (p. 69).
- Lower the flash to set it to  (p. 25).
- Adjust the flash exposure compensation or the flash output (pp. 98, 99).

### **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. 73).
- Depending on the Shooting mode, when shooting in a high ISO speed the image may appear rough or grainy (pp. 59, 61).

### **Eyes appear red (p. 97).**

- Set the [Red-Eye Lamp] to [On] (p. 147). 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. 53)

## 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).

### The buffer warning (p. 44) indicates full, and shooting automatically stopped.

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. 53).
- Change the image quality setting (p. 108).
- Use a memory card capable of recording at high speeds (p. 108).

## 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. 53).
- If you copy a movie to a memory card that reads slowly, playback may interrupt momentarily.
- Depending on its capabilities, the computer may drop frames, or the audio may cut out, when playing movies.

## Computer

### Cannot transfer images to a computer.

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

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

## List of Messages that Appear on the Screen

If error messages appear on the LCD monitor, try one of the following solutions.

### No memory card

- The memory card is not installed in the correct direction. Install the memory card in the correct direction (p. 16).

### Card locked!

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

### Cannot record!

- You attempted to shoot an image without the a memory card, or with a memory card installed incorrectly. Install the memory card in the correct direction when shooting (p. 16).

### Memory card error (p. 53)

- 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, 57, 67, 81) or edit images (pp. 132 – 136). Erase the images (pp. 28, 127) to open space for new images, or insert an empty memory card (p. 16).

### Change the batteries (p. 14)

### No image.

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

### Protected! (p. 124)

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

- Unsupported images or data, or corrupted image data cannot be displayed.
- Images manipulated on a computer, that have had their file name changed, or have been taken with a different camera may not display.

### Cannot magnify!/Cannot rotate/Cannot modify image/Cannot register this image!/Cannot modify/Cannot assign to category

- Incompatible images cannot be magnified (p. 121), rotated (p. 131), edited (pp. 132 – 136), registered to the start-up screen (p. 152), categorized (p. 129), or added to a print list (p. 138).
- 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. 121), edited (pp. 132 – 136), added to a print list (p. 137), or registered to the start-up screen (p. 152).

### **Cannot select!**

- When choosing the selection range (pp. 125, 128, 140), 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. 125, 128, 140).

### **Too many marks.**

- You chose more than 998 images in print settings. Choose less than 998 images (p. 138).

### **Cannot complete!**

- Print settings could not be saved correctly. Reduce the number of selected images and try again (p. 138).

### **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. 145). In the **Y** menu, change [File Numbering] to [Auto Reset] (p. 144) or format the memory card (p. 53).

### **Communication error**

- Images could not be transferred to the computer or printed due to the large amount of images (approx. 1000) stored on the memory card. Use a commercially available USB card reader to transfer the images. Insert the memory card into the printer's card slot to print.

### **Lens error, restart camera**

- A lens error was detected. Press the power button to turn the camera off and back on (p. 42). If this error message continues to appear, contact your Canon Customer Support Help Desk as there may be a problem with the lens.
- This error can occur if you hold the lens while it is in motion or when using it in a location with excessive dust or sand in the air.

### **Exx (xx: number)**

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

# Functions Available in Each Shooting Mode

Function	Shooting modes					
	C	M	Av	Tv	P	
Exposure Compensation (p. 69)/Exposure Shift (p. 111)	*1	—	○	○	○	
ISO Speed (p. 73)		*1	—	○	○	
		*1	○	○	○	
Self-Timer (pp. 65, 66, 77, 78)		*1	○	○	○	
		*1	○	○	○	
		*1	○	○	○	
Flash (pp. 25, 69, 92)*3		*1	—	—	○	
		*1	○	○	○	
		*1	—	○	—	
		*1	—	—	—	
Program Shift (p. 90)	*1	—	○	○	○	
AE Lock (pp. 90, 111)/FE Lock (p. 91)	*1	—	○	○	○	
AF Lock (p. 85)	*1	○	○	○	○	
Focusing Zone (p. 72)		*1	○	○	○	
		*1	○	○	○	
		*1	○	○	○	
	All Range*5	—	—	—	—	
Manual Focus	*1	○	○	○	○	
Changing AF Frame Position and Size	*1	○	○	○	○	
Face Selection (p. 86)	*1	○	○	○	○	
Func. Menu						
White Balance (p. 74)	AWB	*1	○	○	○	○
		*1	○	○	○	○
My Colors (p. 76)	OFF	*1	○	○	○	○
		*1	○	○	○	○
Bracketing (pp. 89, 91)	OFF	*1	○	○	○	○
		*1	○	○	○	○
Flash Exposure Compensation (p. 98)	*1	—	○	○	○	
Flash Output Settings	*1	○	○	○	—	
Light Metering (p. 87)		*1	○	○	○	○
	[ ] [+]	*1	○	○	○	○
Drive Mode (p. 75)		*1	○	○	○	○
		*1	○	○	○	○
	*6	*1	○	○	○	○
Recording Pixels (pp. 70, 108)/Compression Ratio (Image Quality) (p. 70)	*1	○	○	○	○	

\*1 The available settings depend on the registered shooting modes. \*2 ISO 3200 is set by default.

\*3 Fixed to when the flash is lowered, otherwise selectable when the flash is raised.

\*4 Not selectable, but turned on whenever flash is used. \*5 Except for .

## Functions Available in Each Shooting Mode

					SCN													
AUTO													ISO 3200	A/S				
—	○	○	○	○	○	○	○	○	○	○	○	○	—	—	○	○		
○	○	○	○	○	○	○	○	○	○	○	○	○	*2	○	○	○		
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
○	○	○	○	—	○	○	○	○	○	○	○	○	○	○	○	○		
○	○	○	○	—	○	○	○	—	○	○	○	○	○	—	—	—		
○	○	○	○	—	○	○	○	○	○	○	○	○	○	—	—	—		
○	○	○	○	—	○	○	○	—	○	—	○	○	—	○	—	—		
—	○	○	○	—	○	○	○	—	○	○	○	○	—	○	○	—		
—	—	*4	*4	—	—	*4	*4	—	—	—	—	—	—	—	○	—		
—	—	—	—	○	—	—	—	○	—	—	—	—	○	—	—	—		
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	○		
—	○	○	○	○	○	○	○	—	○	○	○	○	○	○	○	○		
—	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
—	○	—	○	—	○	—	○	—	○	○	○	○	○	○	○	—		
—	—	—	—	—	—	—	—	—	—	—	—	—	—	○	—	○		
○	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
—	○	○	○	—	○	○	○	—	○	○	○	○	○	○	—	○		
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
○	○	○	○	—	○	○	○	—	○	○	○	○	○	○	—	○		

Func. Menu																
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	○	*7
○	○	○	○	○	○	○	○	○	○	○	○	○	○	—	○	○
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	○	—	—	—	—	—	—	—	—	—	—	—	—
○	○	○	○	○	○	○	○	○	○	○	○	○	*8	○	*9	○

\*6 MF and set to . \*7 not available. \*8 Recording pixels are fixed to M3. \*9 Recording pixel setting not selectable.

○ Selectable, or set automatically. — Not selectable

# Menus

## Shooting Menu

Function		Shooting modes	C	M	Av	Tv	P
AF Frame (p. 82)	Face Detect		*1	○	○	○	○
	FlexiZone		*1	○	○	○	○
	Center		*1	—	—	—	—
Digital Zoom (p. 62)	Standard		*1	○	○	○	○
	Off		*1	○	○	○	○
	Digital Tele-Converter (1.5x/2.0x)		*1	○	○	○	○
AF-Point Zoom (p. 84)	On/Off		*1	○	○	○	○
Servo AF (p. 85)	On/Off		*1	○	○	○	○
Continuous AF	On/Off		*1	○	○	○	○
AF-assist Beam (p. 146)	On/Off		*1	○	○	○	○
MF-Point Zoom	On/Off		*1	○	○	○	○
Safety MF (p. 88)	On/Off		*1	○	○	○	○
Flash Control (pp. 97, 98, 99, 100, 147)	Flash Mode	Auto	*1	—	○	○	○
		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	—	○	○	○	
i-Contrast (p. 96)	Auto/Off		*1	○	○	○	○
Spot AE Point (p. 87)	Center/AF Point		*1	○	○	○	○
Safety Shift (p. 94)	On/Off		*1	—	○	○	—
Movie Audio (p. 110)	Mic Level (Auto/Manual*3), Wind Filter		*1	○	○	○	○
Review (p. 147)	Off/2 – 10 sec./Hold		*1	○	○	○	○
Review Info (p. 147)	Off/Detailed/Focus Check		*1	○	○	○	○
Blink Detection (p. 101)	On/Off		*1	○	○	○	○
Custom Display*2 (p. 148)	Shooting Info		*1	○	○	○	○
	Grid Lines		*1	○	○	○	○
	3:2 Guide		*1	○	○	○	○
	Histogram		*1	○	○	○	○
Reverse Disp. (p. 18)	On/Off		*1	○	○	○	○
IS Mode (p. 149)	Continuous/Off/Shoot Only/Panning		*1	○	○	○	○
Date Stamp (p. 64)	Off/Date/Date & Time		*1	○	○	○	○
Set Shortcut button (p. 149)			*1	○	○	○	○
Save Settings (p. 102)			○	○	○	○	○

\*1 The available settings depend on the registered shooting modes. \*2 Fixed to [Auto]. \*3 Input level setting available. \*4 Fixed to [On]. \*5 Available only when shooting still images.



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AUTO																		
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\*6 9 points when a face is not detected. \*7 [On] when movement is detected.

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

## †† Set up Menu

Item	Options/Summary	Ref. Page
Mute	On/Off*	p. 50
Volume	Set all operation sounds (5 levels).	p. 50
Sound Options	Set the sounds for each camera operation.	p. 152
Hints & Tips	On*/Off	p. 144
LCD Brightness	Set within a range of $\pm 2$ .	p. 51
Start-up Image	Add an image as start-up image.	p. 152
Format	Formats memory card, erasing all data	pp. 22, 53
File Numbering	Continuous*/Auto Reset	p. 144
Create Folder	Monthly*/Daily	p. 145
Lens Retract	1 min.*0 sec.	p. 145
Power Saving	Auto Power Down: On*/Off Display Off: 10, 20 or 30 sec./1*, 2 or 3 min.	p. 54
Time Zone	Home/World	p. 143
Date/Time	Date and time settings	p. 20
Distance Units	m/cm* ft/in	p. 145
Video System	NTSC/PAL	p. 122
Language	Choose display language.	p. 21
Reset All	Returns camera to default settings.	p. 52

\* Default setting

## Playback Menu

Item	Options/Summary	Ref. Page
Slideshow	Plays back images automatically.	p. 119
Erase	Erases images.	p. 127
Protect	Protects images.	p. 124
Rotate	Rotates images.	p. 131
My Category	Categorizes images.	p. 129
i-Contrast	Corrects dark portions and contrast in still images.	p. 135
Red-Eye Correction	Corrects red eyes in still images.	p. 136
Trimming	Trims portions of still images.	p. 133
Resize	Resizes and saves still images.	p. 132
My Colors	Adjusts colors in still images.	p. 134
Scroll Display	On*/Off	p. 117
Resume	Last seen*/Last shot	p. 151
Transition	Fade*/Slide 1/Slide 2/Off	p. 121

\* Default setting

## Print Menu

Item	Options/Summary	Ref. Page
Print	Displays printing screen.	p. 29
Select Images & Qty.	Chooses individual images for printing.	p. 139
Select Range	Chooses starting and ending images for printing.	p. 140
Select All Images	Chooses all images for printing.	p. 140
Clear All Selections	Cancel all settings for printing.	p. 140
Print Settings	Sets the printing style.	p. 138

# Handling Precautions

## Equipment

- 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.

## Memory Cards

- A memory card is a high-precision electronic device. Do not bend, apply force or subject it to strong impacts. Doing so may corrupt image data recorded on the memory card.
- Do not spill liquids on the memory card. Do not touch the memory card's terminals with your hands or metallic objects.
- Do not store memory cards near a TV, speakers or other devices that generate magnetic fields or static electricity. Doing so may corrupt image data recorded on the memory card.
- Do not store memory cards in hot, humid or dusty locations.

# Specifications

Camera Effective Pixels	Approx. 12.1 million
Image Sensor	1/2.3-inch type CCD (Total number of pixels: Approx. 12.4 million)
Lens	5.0 (W) – 100.0 (T) mm 35mm film equivalent: 28 (W) – 560 (T) mm f/2.8 (W) – f/5.7 (T)
Digital Zoom	Approx. 4.0x (Up to approx. 80x in combination with the optical zoom)
Viewfinder	0.44-inch type TFT color, approx. 235,000 dots, picture coverage rate 100% Dioptric adjustment: –6.0 – +2.0 m <sup>-1</sup> (dpt)
LCD Monitor	2.5 TFT LCD color monitor Approx. 230,000 dots, Picture coverage 100%
AF Frame Mode	Face Detect/Center/FlexiZone
Servo AF	On/Off
Focusing Range (from end of lens)	Auto: 10 cm (3.9 in.) – infinity (W)/1.0 m (3.3 ft.) – infinity (T) Normal: 50 cm (1.6 ft.) – infinity (W)/1.0 m (3.3 ft.) – infinity (T) Macro: 10 – 50 cm (3.9 in. – 1.6 ft.) (W) Super Macro: 0 – 10 cm (0 – 3.9 in.) Sports mode: 1.0 m (3.3 ft.) – infinity (W)/ 4.0 m (13 ft.) – infinity (T) Manual Focus: 10 cm (3.9 in.) – infinity (W)/ 1.0 m (3.3 ft.) – infinity (T)
Shutter	Mechanical shutter and electronic shutter
Shutter Speed	1 – 1/3200 sec. 15 – 1/3200 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 80/100/200/400/800/1600
White Balance	Auto, Day Light, Cloudy, Tungsten, Fluorescent, Fluorescent H, Flash, Custom
Built-in Flash	Auto, On, Slow Synchro, Off * Flash exposure compensation/Flash output/2nd- curtain synchro/Red-eye reduction/Red-eye correction/FE lock/Safety FE settings available
Built-in Flash Range	50 cm – 6.8 m (1.6 – 22 ft.) (W)/ 1.0 – 3.7 m (3.3 – 12 ft.) (T)
Terminals for External Flash	Hot shoe flash-sync contacts
Shooting Modes	Shooting Mode: C, M, Av, Tv, P, Auto, Portrait, Landscape, Night Snapshot, Sports, SCN, Stitch Assist, Movie SCN Mode: Indoor, Sunset, Night Scene, Fireworks, Beach, Aquarium, Foliage, Snow, ISO 3200, Color Accent, Color Swap
Continuous Shooting	Continuous: Approx. 1.0 images/sec. Continuous Shooting AF: Approx. 0.7 images/sec. Continuous Shooting LV: Approx. 0.7 images/sec.

## Specifications

Self-timer	Approx. 10-sec./Approx. 2-sec. delay, FaceSelf-Timer, Custom Timer
i-Contrast	Auto/Off
Recording Media	SD memory card, SDHC memory card, MultiMediaCard, MMCplus memory card, HC MMCplus memory card
File Format	Design rule for Camera File system and DPOF compliant
Data Type	Still images: Exif 2.2 (JPEG) Movies: MOV (Image data: H.264, Audio data: Linear PCM) (Stereo)
Compression	Fine, Normal
Number of Recording Pixels (Still images)	Large: 4000 x 3000 pixels Medium 1: 3264 x 2448 pixels Medium 2: 2592 x 1944 pixels Medium 3: 1600 x 1200 pixels Small: 640 x 480 pixels
(Movies)	Widescreen: 3840 x 2160 pixels 1280 x 720 pixels (30 frames/sec.) 640 x 480 pixels (30 frames/sec.) 320 x 240 pixels (30 frames/sec.)
Number of Possible Shots	LCD Monitor On: Approx. 340 images (Based on CIPA standardized measurement) Viewfinder On: Approx. 350 images
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, stereo audio)
Communication Settings	MTP, PTP
Power	4 AA-size alkaline batteries 4 AA-size NiMH batteries (NB-3AH sold separately) Compact Power Adapter CA-PS700 (sold separately)
Operating Temperatures	0 – 40 °C (32 – 104 °F)
Operating Humidity	10 – 90%
Dimensions (excluding protrusions)	124.0 x 88.3 x 86.9 mm (4.88 x 3.48 x 3.42 in.)
Weight (camera body only)	Approx. 560 g (19.8 oz.)

**Lens Hood LH-DC50**

## Dimensions

Diameter x Length . . . . . 69.7 mm x 30.0 mm (2.74 x 1.18 in.)

Weight . . . . . Approx. 10 g (0.35 oz.)

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

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# MEMO

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