

### PowerShot SD960 IS DIGITAL DIGITAL ELPH IXUS 110 IS

### **Camera User Guide**

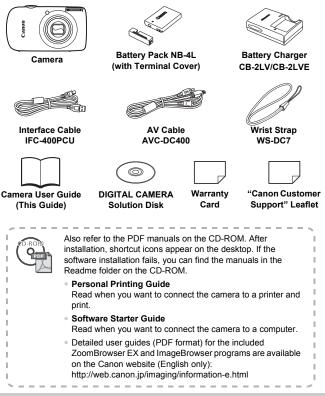




- ENGLISH
- Make sure you read this guide before using the camera.
- Store this guide safely so that you can use it in the future.

#### **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.



• A memory card is not included.

· Adobe Reader is required to view the PDF manuals.

#### **Read This First**

#### **Test Shots**

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

#### Warning Against Copyright Infringement

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

#### Warranty Limitations

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

#### LCD Monitor

The LCD monitor is produced with extremely high-precision manufacturing techniques. More than 99.99% of the pixels operate to specification, but occasionally non-performing pixels may appear as bright or dark dots. This is not a malfunction and has no effect on the recorded image.

#### **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

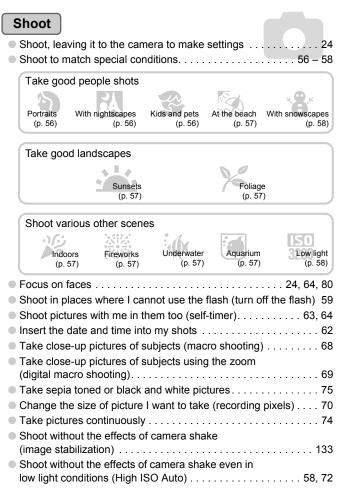
The various types of memory cards that can be used in this camera are collectively referred to as memory cards in this guide.

#### For CA, USA only

Included lithium battery contains Perchlorate Material - special handling may apply.

See www.dtsc.ca.gov/hazardouswaste/perchlorate/ for details.

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#### Conventions Used in this Guide

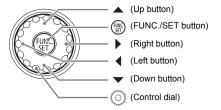
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#### **Conventions Used in this Guide**

- 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.



- Control Troubleshooting tips.
- \overline{O}
   : Hints for getting more out of your camera.
- ①: Things you should be careful about.
- Ø : Supplemental information.
- (p. xx): Reference pages. "xx" stands for page number.
- This chapter 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 may 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, benzine, or thinner to clean the equipment.
- Do not allow liquids or foreign objects to enter the camera. This could result in electrical shock or fire.
   If liquid or foreign objects come into contact with the camera interior, immediately turn the camera power off and remove the battery.
- Use only recommended power sources. Using other power sources could result in fire or electrical shock.

#### **Battery, Battery Charger**

- Use only recommended batteries.
- Do not place the battery near or in direct flame.
- Do not let the battery come into contact with water (e.g. sea water) or other liquids.
- Do not attempt to disassemble, alter or apply heat to the battery.
- Avoid dropping or subjecting the battery to severe impacts. This may cause explosions or leaks, resulting in fire, injury and damage to the surroundings. In the event that a battery leaks and the eyes, mouth, skin or clothing contacts these substances, immediately flush with water and seek medical assistance. If the battery charger becomes wet, unplug it from the outlet and consult your camera distributor or the closest Canon Customer Support Help Desk.
- Use only the specified battery charger to charge the battery.
- Do not cut, damage, alter or place heavy items on the power cord.
- Unplug the power cord periodically and wipe away any dust and dirt that has collected on the plug, the exterior of the power outlet, and the surrounding area.
- Do not handle the power cord with wet hands. This could result in electrical shock or fire.

#### 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 lead to injury or damage the camera.
- Do not use the equipment in a manner that exceeds the rated capacity of the electrical outlet or wiring accessories. Do not use if the power cord or plug are damaged, or not fully plugged into the outlet.
   This could result in electrical shock or fire.

Avoid using, placing or storing the camera in the following places.

- Places subject to strong sunlight.
- Places subject to temperatures above 40 °C (104 °F).
- Humid or dusty areas.

These could cause leakage, overheating or an explosion, resulting in fire, burns or other injuries. High temperatures may also cause deformation of the casing.

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

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

Plaving back for a long time may cause feelings of discomfort.

#### Caution

- Do not aim the camera at bright light sources (the sun, etc.). Doing so may cause malfunctions or damage the image sensor (CCD).
- When using the camera on a beach or at a windy location, be careful not to allow dust or sand to enter the camera.
- Do not use the flash with dirt, dust or other items stuck to the surface, or if it is covered by your fingers or clothing. This may cause the camera to malfunction.

- Unplug the battery charger from the power outlet after recharging is complete, or when you are not using it.
- Do not place anything, such as cloth, on top of the battery charger while it is charging.

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

- Remove and store the battery when you are not using the camera. If the battery is left inside the camera, damage caused by leakage may occur.
- Before you discard batteries, cover the terminals with tape or other insulators. Contacting other metal materials in waste containers may lead to fire or explosions.
- Keep the battery out of the reach of pets. If the battery is bitten, this could cause leakage, overheating or an explosion, resulting in fire, burns or other injuries.
- Do not sit in a chair with the camera in your pocket. Doing so may cause malfunctions or damage the LCD monitor.
- . When putting the camera in your bag, ensure that hard objects do not come into contact with the LCD monitor.
- Do not attach accessories to the strap. If this occurs, it may cause malfunctions or damage the LCD monitor.









## **Getting Started**

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

#### Attaching the Strap/Holding the Camera

- Attach the included strap and place it around your wrist to avoid dropping the camera during use.
- Keep your arms tight against your body while holding the camera firmly by the sides. Be sure that your fingers do not block the flash.



Strap

### **Charging the Battery**

Use the included charger to charge the battery.

#### Remove the cover.









#### Insert the battery.

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

#### Charge the battery.

- For CB-4L: Flip out the plug ① and plug the charger into a power outlet 2.
- For CB-4LE: Plug the power cord into the charger, then plug the other end into a power outlet.
- The charge lamp lights red and charging starts.
- The charge lamp will light green when charging has finished. Charging takes approx. 1 hour and 30 minutes.

#### Remove the battery.

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

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

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

Number of shots	200
Playback Time (Hours)	5 hours

 The number of shots that can be taken is based on the Camera & Imaging Products Association (CIPA) measurement standard.

· Under some shooting conditions, fewer shots can be taken.

#### **Battery Charge Indicator**

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

Display	Summary
- 7/4	Good.
- 74	Slightly depleted, but sufficient.
(Blinking red)	Nearly depleted.
"Change the battery pack."	Depleted. Recharge the battery.

#### Using the battery and charger effectively

• Charge the battery on the day, or the day before, it will be used.

Charged batteries continue to discharge naturally even if they are not used.



Attach the cover to a charged battery so that the  $\blacktriangle$  mark is visible.

How to store the battery for long periods.

Deplete and remove the battery from the camera. Attach the terminal cover and store the battery. Storing a battery for long periods of time (about a year) without depleting it may shorten its life span or affect its performance.

• The battery charger can also be used when abroad.

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

• The battery may develop a bulge.

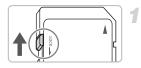
This is a normal characteristic of the battery and does not indicate a problem. However, if the battery bulges to the point where it will no longer fit into the camera, please contact a Canon Customer Support Help Desk.

 If the battery is quickly depleted even after charging, it has reached the end of its life span.

Purchase a new battery.

#### **Inserting the Battery and Memory Card**

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



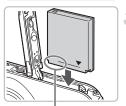


## 2 Open the cover.

Slide the cover ①, and open it ②.

up until vou hear a click.

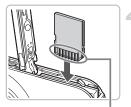
 Check the card's write-protect tab.
 If the memory card has a write-protect tab, you will not be able to record images if the tab is in the locked position. Slide the tab



#### Insert the battery.

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

Terminals



Terminals

#### Insert the memory card.

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



#### Close the cover.

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

#### **Removing the Battery and Memory Card**



#### Remove the battery.

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

#### Remove the memory card.

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



#### Approximate Number of Shots per Memory Card

Memory Card	2 GB	8 GB
Number of shots	626	2505

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

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

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



#### **Compatible Memory Cards**

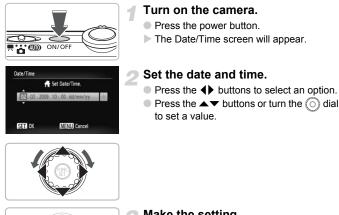
- SD memory cards
- SDHC memory cards
- MultiMediaCards
- MMCplus memory cards
- HC MMCplus memory cards

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

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

### Setting the Date and Time

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





#### 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 select  $\frac{1}{2}$  in Step 2 and press the  $\blacktriangle$  buttons or turn the  $\bigcirc$  dial and select  $\frac{1}{2}$ , you will set the time to daylight savings (1 hour ahead).

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

You can change the current date and time settings.

# O MENU

#### Display the menus.

Press the MENU button.



#### Select [Date/Time] in the **f** tab.

- Press the buttons to select the tab.
- Press the turn the dial to select [Date/Time], then press the button.



#### Change the date and time.

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

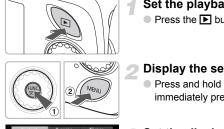
### ģ

#### Date/Time battery

- The camera has a built-in date/time battery (backup battery) that allows the date/time settings to be retained about three weeks after the battery pack has been removed.
- By inserting a charged battery or connecting an AC adapter kit (sold separately, p. 40) the date/time battery can be charged in about 4 hours even if the camera is not turned on.
- If the date/time battery is depleted, the Date/Time menu will appear when you turn the camera on. Follow the steps on p. 19 to set the date and time.

### **Setting the Display Language**

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



#### Svenska Türkçe Español 日本部

#### Set the playback mode.

Press the F button.

#### Display the settings screen.

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

#### Set the display language.

- Press the AT Duttons or turn the O dial to select a language, then press the (m) 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 display if too much time passes between pressing the () button and the MENU button in Step 2. If the clock appears, press the (m) button to remove the clock and repeat Step 2.



You can also change the display language by pressing the **MENU** button. selecting the **11** tab, and selecting 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.



#### Display the menus.

Press the MENU button.

#### Select [Format].

- Press the + buttons to select the ft tab.
- Press the ▲▼ buttons or turn the () dial to select [Format], then press the () button.

#### Format the memory card.

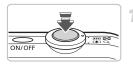
- Press the 
   buttons or turn the 
   dial to select [OK], then press the 
   button.
- ▶ The memory card will be formatted.
- When formatting has finished, the menu screen will reappear.

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.





## **Press halfway** (lightly to the first stop).

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



#### Press fully (to the second stop).

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



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

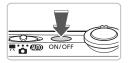
- Since the time required to shoot differs according to the scene you want to take, the length of the shutter sound may change.
- If the camera or subject moves while the shutter sound is playing, the recorded image may be blurry.



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

### **MD** Taking Pictures

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







## 

#### Turn on the camera.

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

#### Select the AMD mode.

- Set the mode switch to AUTO.
- When you point the camera toward the subject, the camera will make a slight noise as it determines the scene.
- The camera focuses on the subject it judges to be the main subject, and displays the icon for the determined scene 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.
- Even if the detected faces move, the camera will follow the faces within a certain range.

#### Compose the shot.

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

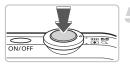




AF Frames

#### Focus.

- Press the shutter button halfway to focus.
- When the camera focuses, it will beep twice and the indicator will light green (orange when the flash will fire).
- Green AF frames appear where the subject is in focus.
- Several AF frames will appear when the camera focuses on more than one point.



#### Shoot.

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



#### What if...

#### • The camera does not play any sounds?

Pressing the ▼ 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, select the **1** tab, and then select [Mute]. Use the **4** buttons to select [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 30 cm – 4.0 m (12 in. – 13 ft.) at maximum wide angle, and approximately 30 cm – 2.0 m (12 in. – 6.6 ft.) at maximum telephoto.

#### Auto Taking Pictures

 The indicator blinks green and 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 2 cm (0.79 in.) or more away from your subject and shoot. Move about 30 cm (1.0 ft.) or more away when the camera is at maximum telephoto.

- The lamp lights when the shutter button is pressed halfway. To reduce red-eye and to assist in focusing, the lamp may light when shooting in dark areas.
- The **\$** icon blinks when you try to take an image? The flash is charging. You can shoot when recharging ends.

#### Scene Icons

The camera displays an icon for the scene it has determined and then automatically focuses and selects the optimum settings for subject brightness and color.

Background	Bri	ght	Including	Blue Skies			ark
Subject		Backlit		Backlit	Sunsets		When Using Tripod
People					-		
Subjects Other Than People Landscapes	AUTO	1	AUTO	-TJ		AUTO	
Close Subjects	<b>V</b>				-		-
Icon Background Color	Gr	ay	Light	Blue	Orange	Dark	Blue

\* Displays when the camera is attached to a tripod.

Under certain conditions, the icon that displays may not match the actual scene. Especially when there is an orange or blue colored background (a wall for example), and 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 the **P** mode (p. 66).

### Viewing Images

You can view your images on the screen.







#### Select the playback mode.

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

#### Select 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.
- If you hold the ◀ buttons pressed, the images advance continuously.
- Turning O counter-clockwise displays images in the reverse order they were taken, while turning it clockwise displays images in the order they were taken.
- Pressing the b button while the lens is extended will cause the shooting screen to reappear.
- The lens will retract after approximately 1 minute elapses. If you press the button with the lens retracted, the power will turn off.

#### Switching images quickly

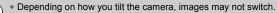


If you hold the ◀ button pressed and tilt the camera as shown in the illustration, the images advance quickly. However, the images appear coarse. When you hold the ▶ button pressed tilt the camera to the opposite direction.

#### Viewing Images

#### Active Display

If you tilt the camera gently from your wrist as shown in the illustration below, you can switch the images you are viewing.



- · Be careful not to accidentally bang people.
- Be sure to hold the camera with the strap around your wrist to avoid dropping it.



Switch to the next image



Switch to the previous image

#### **Erasing Images**

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





Select the playback mode.

The last image you took will appear.

#### Select an image to erase.

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







#### Erase the image.

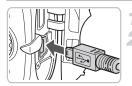
- Press the result of the set of
- [Erase?] appears on the screen.
- ▶ The displayed image will be erased.
- To exit instead of erasing, press the buttons or turn the [Cancel], then press the () button.

### **Printing Images**

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

#### **Items to Prepare**

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







#### Turn off the camera and printer.

#### Connect the camera to the printer.

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

#### Turn on the printer.

#### Turn on the camera.

Press the button to turn on the camera.



#### Select an image to print.

Press the 
 buttons or turn the 
 dial to select an image.



#### Print images.

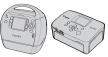
- Press the 
   button, and use the ▲▼ buttons or turn the 
   dial to select 
   h, then press the 
   button.
- ▶ The print selection screen appears.
- Press the to select [Print], then press the button.
- Printing will start.
- If you want to print additional images, repeat Steps 5 and 6 after printing 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 the best ways to print.

#### Canon-Brand PictBridge Compliant Printers (Sold Separately)

By connecting your camera to one of the Canon-brand PictBridge compliant printers below, you can print your images without having to use a computer.



Compact Photo Printers (SELPHY Series)



Inkjet Printers (PIXMA series)

For more information, visit your nearest Canon retailer.

### 🐂 Shooting Movies

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



#### Set the mode switch to '.



#### Select the 🐂 mode.

- Press the ∰ button, and use the ▲▼ buttons or turn the () dial to select ™, then press the ∰ button again.
- Press the A v buttons or turn the O dial to select , then press the button.



#### Compose the shot.

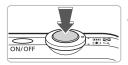
Moving the zoom lever toward [1] will zoom in on your subject, making it appear larger. Moving the lever toward [1] will zoom out from your subject, making it appear smaller.



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





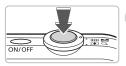


Elapsed Time





Microphone



#### Shoot.

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

#### Stop shooting.

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

#### **Estimated Shooting Times**

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

- Shooting times are based on default settings.
- Shooting time can be checked on the screen in Step 2.
- Recording will automatically stop when either the clip file size reaches 4 GB or the recording time reaches approximately 29 minutes and 59 seconds.

### Viewing Movies

You can view your movies on the screen.





#### Select the playback mode.

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

#### Select a movie.

- The movie control panel will appear on the screen.





#### Play the movie.

- Press the 
   buttons or turn the 
   dial to select >, then press the 
   button.
- The movie will play.
- You can pause/resume the movie by pressing the ( ) button again.
- Press the buttons to adjust the volume.

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

#### **Transferring Images to a Computer**

You can use the included software to transfer your camera images to a computer.

#### **System Requirements**

Even though these are recommended system requirements, not all computer functions can be guaranteed.

#### Windows

OS	Windows Vista (including Service Pack 1) 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	Canon Utilities	ZoomBrowser EX: 200 MB or more PhotoStitch: 40 MB or more
Display	1,024 × 768 pixels or higher	

#### 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	Canon Utilities	ImageBrowser: 300 MB or more PhotoStitch: 50 MB or more
Display	1,024 × 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 XP and Mac OS X (v10.4) are used for these explanations.



#### Windows

#### Place the DIGITAL CAMERA Solution Disk in the computer's CD-ROM drive.

#### Begin installation.

Click [Easy Installation] and follow the onscreen instructions to proceed with the installation





## Macintosh

## When the install finishes, click

### [Restart] or [Finish].

#### Remove the CD-ROM.

Remove the CD-ROM when your desktop screen appears.

#### 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





#### Connect the camera to the computer.

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



CameraWindow DC

#### Turn on the camera.

Press the button to turn on the camera.

#### Open CameraWindow.

#### Windows

- Select [Canon CameraWindow] and click [OK].
- CameraWindow will appear.
- If CameraWindow does not appear, click the [Start] menu and select [All Programs] or [Programs], followed by

[Canon Utilities] ► [CameraWindow] ► [CameraWindow] ► [CameraWindow].

ameraW	indow DC
A	Transfer Untransferred Images
MARK DOA	Operate Images on Camera

#### 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).

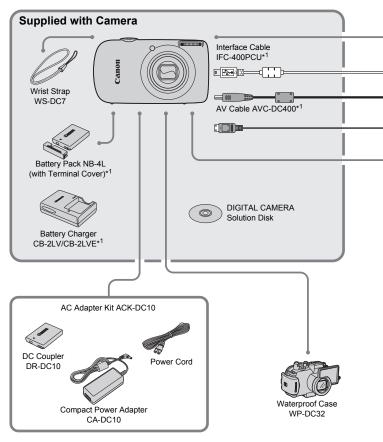
#### **Transferring Images to a Computer**



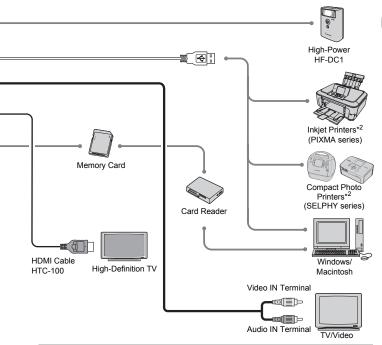
- Click [Transfer Untransferred Images].
- All images not previously transferred will transfer to the computer.
- After the transfer finishes, turn off the camera and unplug the cable.
- For further operations, refer to the Software Starter Guide.

Images transferred to the computer will be sorted by date and saved in separate folders in the "My Pictures" folder for Windows or the "Pictures" folder for Macintosh.

#### Accessories



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



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

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

#### CAUTION

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

### **Separately Sold Accessories**

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

#### **Power Supplies**

#### AC Adapter Kit ACK-DC10

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

Battery Charger CB-2LV/CB-2LVE

An adapter for charging Battery Pack NB-4L.

Battery Pack NB-4L

Rechargeable lithium-ion battery.

#### The battery charger can also be used when abroad.

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

#### Other Accessories

#### • HDMI Cable HTC-100

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

#### Waterproof Case WP-DC32

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

#### • High-Power Flash HF-DC1

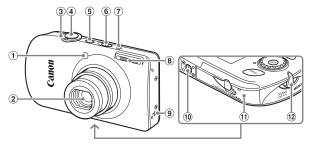
This attachable supplementary flash can illuminate subjects that are too distant for the light from the built-in flash to reach.

2

# **Learning More**

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

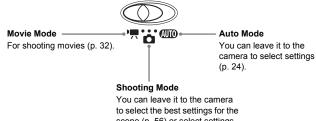
### **Components Guide**



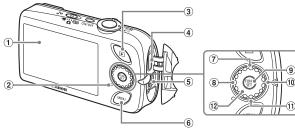
- Lamp (AF Assist Beam (p. 130)/ Red-Eye Reduction Lamp (p. 131)/ Self-Timer Lamp (p. 64))
- 2 Lens
- ③ Zoom Lever Shooting: [♣] (Telephoto)/ ₩ (Wide Angle) (p. 24) Playback: Q (Magnify)/ ♣ (Index) (p. 98)
- ④ Shutter Button (p. 23)
- ⑤ Power Button
- 6 Mode Switch
- ⑦ Microphone (p. 33)
- ⑧ Flash (p. 59)
- 9 Speaker
- 1 Tripod Socket
- 1 Memory Card / Battery Cover (p. 16)
- 12 Strap Mount (p. 13)

#### Mode Switch

Use the mode switch to change shooting modes.



scene (p. 56) or select settings yourself to take various types of pictures (pp. 55, 65, 79).



- ① Screen (LCD Monitor) (p. 44)
- 2 Indicator (p. 46)
- ③ **(**Playback) Button (pp. 27, 134)
- HDMI Out Mini Terminal
- ⑤ A/V OUT (Audio/Video Output) and DIGITAL Terminal
- 6 MENU Button (p. 48)
- ⑦ 🕲 (Self-Timer) (pp. 63, 64, 76, 77)/ ▲ Button

- ⑧ ♥ (Macro) (p. 68)/▲ (Infinity) (p. 67)/
   ◀ Button
- (9) FUNC./SET (Function/Set) Button (p. 47)
- 10 \$ (Flash) (p. 67)/ Button
- ① DISP. (Display) Button (pp. 44, 45)/
   ▼ Button
- 12 Control Dial (p. 43)

#### **Control Dial**

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

If you touch the control dial in shooting mode, a button description displays on the screen. When you switch to playback mode, a guidance will display for a few seconds.





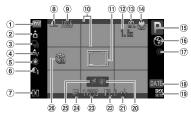
#### Button

When the lens is extended, you can use the **b** button to switch between the shooting and playback modes. When the lens is retracted, you can use it to turn the camera on and off in playback mode.



### Information Displayed on the Screen

#### **Shooting (Information Display)**



- Battery Charge Indicator (p. 15)
- ② Camera Orientation\*
- ③ Drive Mode (pp. 63, 64, 74, 77)
- ④ My Colors (p. 75)
- ⑤ White Balance (p. 73)
- 6 i-Contrast (p. 85)
- ⑦ Metering Modes (p. 83)
- 8 Compression (Image Quality) (p. 70)/ Recording Pixels (p. 70)
- Still Images: Recordable shots (p. 18) Movies: Remaining Time (p. 33)
- 10 Disp. Overlay (p. 132)
- AF Frame (p. 25), AE Point Frame (p. 83)
- Digital Zoom Magnification (p. 60), Digital Tele-Converter (p. 61)
- (13) ÄF Lock (p. 82)
- (1) Macro (p. 68), Infinity (p. 67)
- 15 Shooting Mode

- 16 Flash Mode (pp. 59, 67)
- 17 Red-Eye Correction (p. 86)
- (18) Date Taken/Recorded (p. 62)
- (19 ISO Speed (p. 72)
- 20 Image Stabilizer (p. 133)
- Exposure Compensation (p. 74)
- ② Aperture Value
- 23 Shutter Speed
- <sup>24</sup> AE Lock (pp. 83, 93), FE Lock (p. 84)
- 25 Time Zone (p. 127)
- 26 Self-Timer (pp. 63, 64, 76, 77)
- \* ô : Standard, ô ô : Held vertically When shooting, the camera detects if it is held vertically or horizontally, and adjusts settings accordingly for the best shot. It also detects orientation during playback, so you can hold the camera in either orientation and it will automatically rotate images for correct viewing.

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

#### Switching the Display

You can change the display using the  $\checkmark$  button.

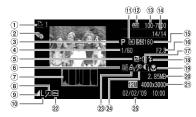


No Information Display



Information Display

#### **Playback (Detailed Information Display)**



- 1 Print List (p. 120)
- My Category (p. 112)
- ③ Shooting Mode
- ④ Shutter Speed
- Exposure Compensation (p. 74)
- 6 White Balance (p. 73)
- ⑦ Histogram (p. 46)
- Image Editing (pp. 114 119)
- ④ Compression (Image Quality) (p. 70), WW (Movies) (p. 92)

- 10 Recording Pixels (p. 70)
- ① Metering Modes (p. 83)② Battery Charge Indicator
  - (p. 15)
- Folder Number File Number (p. 128)
- Displayed Image Number /Total Number of Images
- (15 ISO Speed (p. 72)
- (ii) Aperture Value, Image Quality (Movies) (p. 92)
- 17 i-Contrast (p. 118)
- 18 Flash (p. 67)

- Macro (p. 68), Infinity (p. 67)
- 20 File Size (pp. 70, 92)
- Still Images: Recording Pixels (p. 70) Movies: Movie Length (p. 93)
- 2 Protect (p. 110)
- 23 My Colors (p. 75)
- (2) Red-Eye Correction (p. 119)
- (2) Shooting Date and Time (p. 62)

#### Switching the Display

You can change the display using the  $\checkmark$  button.



No Information Display



Simple Information Display



Detailed Information Display



Focus Check Display (p. 103)



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

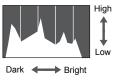
#### **Display in Dark Conditions during Shooting**

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

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

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

#### Histogram during Playback



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

### Indicator

The indicator on the back of the camera (p. 43) will light or blink under the following conditions.

Colors	Status	Operation Status
Green	Lights	Shooting preparation complete (p. 24)/Display Off (p. 126)
Green	Blinks	Recording/reading/transmitting image data (p. 24)
Orango	Lights	Shooting preparation complete (flash on) (p. 24)
Orange	Blinks	Camera shake warning (p. 59)

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

# FUNC. Menu – Basic Operations

Commonly used shooting functions can be set with the FUNC. menu. The menu and menu items differ depending on the shooting mode (p. 144). You can also use the FUNC. menu in the playback mode.





Press the button.

#### Select a menu item.

- Press the ▲▼ buttons or turn the ② dial to select a menu item, then press the ∰ button.
- Depending on the menu, the screen may switch. Select a menu item and make the setting.

#### Select an option.

- Press the ▲▼ buttons or turn the (○) dial to select an option.
- To return to the menu, press the ◀ button.

#### Make the setting.

- Press the button.
- The shooting screen will reappear and the setting you selected will display on the screen.



Selectable Options

Menu Items



# MENU – Basic Operations

Various functions can be set from the menus. The menu items are organized under tabs, such as for shooting (( $\Box$ ) and playback ( $\Box$ ). The menu items differ depending on the mode (pp. 146 – 149).



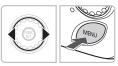
#### Display the menu.

Press the MENU button.









#### Select a tab.

Press the **♦** buttons, or move the zoom lever (p. 42) left or right to select a tab (category).

#### Select a menu item.

- Press the A vector buttons or turn the O dial to select a menu item.
- Some items require you to press the () button to display a submenu in which you change the setting.

#### Select an option.

Press the + buttons to select an option.

#### Make the setting.

- Press the MENU button.
- The standard screen will reappear.

## **Changing the Sound Settings**

You can silence or adjust the volume of camera sounds.

#### **Muting Sounds**



#### Display the menu.

Press the MENU button.

#### Select [Mute].

- Press the + buttons to select the + tab.
- Press the ▲▼ buttons or turn the () dial to select [Mute], then use the ◀▶ buttons to select [On].

#### **Adjusting the Volume**

# Volume Startuag Vol. \_\_\_\_\_ Operation Vol. \_\_\_\_\_ Settimer Vol. Shutter Volume \_\_\_\_



#### Display the menu.

Press the MENU button.

#### Select [Volume].

- Press the **\** buttons to select the **?** tab.
- Press the ▲▼ buttons or turn the () dial to select [Volume], then press the () button.

#### Change the volume.

Press the A buttons or turn the iteration item, then use the buttons to adjust the volume.

# **Changing the Screen Brightness**

The screen brightness can be changed in two ways.

#### With the MENU Button





#### Display the menu.

Press the MENU button.

#### Select [LCD Brightness].

- Press the buttons to select the tab.
- Press the ▲▼ buttons or turn the () dial to select [LCD Brightness].

#### Change the brightness.

- Press the **\** buttons to change the brightness.
- Press the MENU button again to complete the setting.

#### With the 🔻 Button



- Press the button for more than one second.
- The screen increases to maximum brightness regardless of the setting in the ft tab.
- Pressing the v 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 selected in the **f** tab.

Ø

### **Returning the Camera to Default Settings**

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





Reset settings to default?

#### Display the menu.

Press the MENU button.

#### Select [Reset All].

- Press the + buttons to select the + tab.
- Press the ▲▼ buttons or turn the () dial to select [Reset All], then press the () button.

#### Reset the settings.

- Press the 
   buttons or turn the 
   dial to select [OK], then press the 
   button.
- The camera will reset to the default settings.

# ?

Reset All

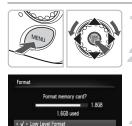
Cancel

#### Are there functions that cannot be reset?

- The [Date/Time] (p. 19) in the ft tab, [Language] (p. 21), [Video System] (p. 105), [Time Zone] (p. 127), the image registered as [Start-up Image] (p. 135).
- The saved data for custom white balance (p. 73).
- Colors that were selected in Color Accent (p. 88) or Color Swap (p. 89).

# Low Level Memory Card Formatting

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



#### Display the menu.

Press the MENU button.

#### Select [Format].

- Press the + buttons to select the ft tab.
- Press the ▲▼ buttons or turn the () dial to select [Format], then press the () button.

#### Perform the low level format.

- Press the ▲▼ buttons or turn the () dial to select [Low Level Format], then use the ↓ buttons to display √.
- Press the ▲▼◀ buttons or turn the dial to select [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 selecting [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 retracted yet, 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. 126).

• You can adjust the time before the monitor turns off (p. 126).

### **Clock Functions**

You can check the current time.



- Hold the (m) button pressed.
- A screen like that on the left appears showing the current time.
- You can change the display color by changing the camera's orientation,
  - pressing the  $\clubsuit$  buttons or turning the  $\bigcirc$  dial.
- Press the () button to cancel the clock display.



Press and hold the  $(\ensuremath{\textcircled{}{\text{B}}})$  button, then press the power button to display the clock.



# 3

# Shooting in Special Conditions and Commonly Used Functions

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



- When you select a mode that matches a particular set of conditions, the camera will automatically select any necessary settings. All you need do is press the shutter button to take an optimized picture.
- This chapter assumes the mode switch is set to or AUTO.

### **Shooting in Various Conditions**

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



#### Set the mode switch to 🗖 (p. 42).

#### Select the desired shooting mode.

- After pressing the ∰ button, press the
   ▲ → buttons or turn the O dial to select
   P, then press the ∰ button.
- Press the A buttons or turn the indication of the desired mode, then press the button.
- Shoot.

#### Take portraits (Portrait)

 Produces a soft effect when photographing people.

# Take snapshots at night (Night Snapshot)

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

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

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





















#### Take indoor shots (Indoor)

Lets you shoot indoors with natural colors.

#### 📥 Shoot sunsets (Sunset)

Lets you take shots of sunsets in vivid colors.

#### 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.

#### Inderwater (Underwater)

 Lets you shoot underwater with Waterproof Case WP-DC32 (sold separately).

# 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.

#### **Shooting in Various Conditions**





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

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

# Shoot using high ISO speed (ISO3200)

- Sets 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 × 1200 pixels, p. 70).
- In M, S, K, k or mode, images may appear coarse because the ISO speed (p. 72) is increased to match the shooting conditions.
- In mode, attach the camera to a tripod to prevent the camera from moving and blurring the image. Additionally, you are recommended to set [IS Mode] to [Off] (p. 133).
- In some may appear coarse.

# S Turning the Flash Off

You can shoot with the flash turned off.



#### Press the button.





#### Select 🚯.

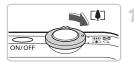
- Press the 
   buttons or turn the 
   dial to select s, then press the 
   button.
- S will appear on the screen.
- Follow the steps above to return the setting to 4<sup>A</sup>.

#### What if the indicator blinks orange and a flashing appears?

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

# Zooming in More Closely on Subjects (Digital Zoom)

You can use the digital zoom to zoom up to a maximum of 16x and capture subjects that are too far away for the optical zoom (p. 24) to enlarge. The images may appear coarse, however, depending on the recording pixel setting (p. 70) and the zoom factor used.



#### Move the zoom lever toward [4].

- Hold the lever until zooming stops.
- When you release the zoom lever, the largest possible zoom factor without image deterioration will appear.



#### Move it toward [4] again.

The digital zoom will further zoom in on the subject.

#### Zoom Factors at which Images Deteriorate

Recording Pixels	Optical Zoom	Digital Zoom
L [	4.0x →	
M1 (	4.9	x→
M2		6.2x→
M3		10x →
S		16x →

- : No image deterioration (zoom factor appears white)
- : Image deterioration (zoom factor appears blue)
- : Maximum zoom factor without deterioration (Safety Zoom)

#### 🗑 Turning off the digital zoom

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



**→** 

The focal length when using digital zoom is  $112-448\ \text{mm}$  (35mm film equivalent).

#### **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.





#### Select [Digital Zoom].

- Press the MENU button.
- Select the tab, then press the buttons to select [Digital Zoom].

#### Accept the setting.

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

#### **Combinations that Cause Image Deterioration**

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



 The respective focal lengths when using [1.5x] and [2.0x] are 42 – 168 mm and 56 – 224 mm (35mm film equivalent).

• The digital tele-converter cannot be used together with the digital zoom.

### **Inserting the Date and Time**

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





#### Select [Date Stamp].

- Press the MENU button and select the tab, then select [Date Stamp] and use the buttons to select [Date] or [Date & Time].
- Press the MENU button again to accept the setting.
- ▶ [DATE] will appear on the screen.





#### Shoot.

- You can insert the shooting date and time in the image's lower right corner.
- To restore to the original setting, select [Off] in Step 1.



# Inserting and printing the date and time in images which do not have an embedded date and time

- Use the DPOF print settings (p. 121) to print.
- Use the included software to print. Refer to the Software Starter Guide for details.
- Connect the camera to a printer to print. Refer to the *Personal Printing Guide* for details.

# 🔞 Using the Self-Timer

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



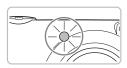
#### Press the A button.



#### Select Cid.

- Press the ▲▼ buttons or turn the () dial to select (), then press the () button.
- ▶ Once set, ଔ will appear.





#### 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 restore the original setting, select in Step 2.

You can change the delay time and number of shots (p. 77).

# 😧 Using the Face Self-Timer

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







#### Select 🔂.

Follow Step 2 on p. 63 and select C:

# Compose the shot and press the shutter button halfway.

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

#### Press the shutter button fully.

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

# Join the subjects and look at the camera.

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

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

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

#### Changing the number of shots

For the screen in Step 1, press the **MENU** button, then press the ◀► buttons to change the number of shots. Press the () button to accept the setting.

# 4

# **Selecting Settings Yourself**

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



- This chapter assumes that the mode switch is set to and the camera is in P mode.
- P stands for Program AE.
- Before attempting to shoot using a function explained in this chapter in modes other than P mode, check if the function is available in those modes (pp. 144 – 147).

# P Shooting in Program AE

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



#### Set the mode switch to 🗖 (p. 42).

#### Select P.

- Select P in Step 1 2 on page 47 and press the () button.
- Adjust the settings according to your purposes (pp. 67 77).

Shoot.



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

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

- Turn on the flash (p. 67)
- Select a higher ISO speed (p. 72)

# **4** Turning the Flash On

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



#### Select \$.

- Once set, \$ will appear.

# A Shooting Far Away Subjects (Infinity)

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



#### Select 🔺.

- Once set, will appear.

# Shooting Close-ups (Macro)

You can shoot an object at a close distance or even shoot extreme closeups of it. The possible shooting range is approximately 2 - 50 cm (0.8 in - 1.6 ft.) from the end of the lens when the zoom lever is moved to the maximum wide angle, and approximately 30 - 50 cm (12 in - 1.6 ft.) when the zoom lever is moved to the maximum telephoto side.



#### Press the 4 button.





#### Select 🖏.

- Press the 
   buttons or turn the 
   dial to select 

   then press the 
   button.
- will appear on the screen.
- To restore to the original setting, select
   A.

# ල් Using 🖄

You are recommended to attach the camera to a tripod and shoot in  $\mathfrak{O}_2$ , to prevent the camera from moving and blurring the image (p. 76).



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

# Ø Zooming In on Close Subjects (Digital Macro)

You can zoom in on close subjects. The possible shooting range is approximately 2 - 10 cm (0.79 in. - 3.9 ft.) from the end of the lens. However, you can zoom in even closer on the subject using the digital zoom. The digital zoom may cause images to appear coarse at some recording pixel settings (p. 70).



#### Set the mode switch to 🗖 (p. 42).

#### Select 🤀.

- Select (1) in Step 1 3 on page 47 and press the (1) button.
- The optical zoom will lock at the maximum wide angle.

# Use the zoom lever to compose the shot.

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

#### Zoom Factors at which Images Deteriorate

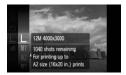
- No image deterioration (zoom factor appears white)
- Image deterioration (zoom factor appears blue)

### 🍯 Using 🖄

You are recommended to attach the camera to a tripod and shoot in  $\Im$ , to prevent the camera from moving and blurring the image (p. 76).

# **Changing the Recording Pixels**

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



#### Select the recording pixels.

 Press the (m) button and select L, then press the (m) button.

#### Select an option.

- Press the v buttons or turn the dial to select an option, then press the button.
- The setting you selected will display on the screen.



If you select  $\mathbf{M}$ , you cannot use the Digital Zoom (p. 60) or Digital Tele-Converter (p. 61).

# Changing the Compression Ratio (Image Quality)

You can select from the following two levels of image quality: (Fine), (Normal),



#### Select the compression ratio.

 Press the (m) button and select (m), then press the (m) button.

#### Select an option.

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

#### Approximate Values for Recording Pixels and Image Quality

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

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

#### Approximate Values for Paper Size

A2		L
A3	M1	
A4, Letter size M2		
5" × 7" M3		
Postcard size		
3.5" × 5"		

• S Suitable for sending images as e-mail 

### **Changing the ISO Speed**



#### Select the ISO speed.

- Press the () button and select (), then press the () button.
- Press the v buttons or turn the dial to select an option, then press the button.
- Once set, the ISO speed will appear on the screen.

#### Approximate Values for ISO Speed

ISO AUTO	Automatically adjusts the ISO speed to the shooting mode and shooting conditions.	
[달0 [달0 [달0 80 100 200	Low	Fine weather conditions, outdoor shooting.
150 150 400 800	1	Cloudy, Twilight
150 1600	High	Nightscapes, Dark interiors

#### 🖄 Changing the ISO speed

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



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

• With ISO3200 you can set an even faster speed (p. 58).

# **Adjusting the White Balance**

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



#### Select the white balance.

#### Select an option.

- Press the ▲▼ buttons or turn the ② dial to select an option, then press the ∰ button.
- The setting you selected will display on the screen.

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

#### Custom White Balance

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



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

# 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.



# Select the exposure compensation.

- Press the () button to select ±0, then press the () button.
- Adjust the brightness.
- While watching the screen, press the ▲▼ buttons or turn the O dial to adjust the brightness and press the m button.

# Continuous Shooting

You can shoot continuously at about 0.8 images/second.



#### Select the drive mode.

- Press the () button to select □, then press the button.
- Press the ▲▼ buttons to select ⊒, then press the () button.

#### Shoot.

- As long as you hold the shutter button down, the camera will shoot successive images.
- Cannot be used with the self-timer (pp. 63, 64, 76, 77).
- For continuous shooting, the focus and exposure are locked when the shutter button is pressed halfway.
- As the number of images increases, the shooting intervals may take longer.
- If the flash fires, shooting intervals may take longer.

# Changing the Tone of an Image (My Colors)

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



Ø

#### Select My Colors.

● Press the ()) button and select (), then press the ()) button.

#### Select an option.

- Press the ▲▼ buttons or turn the ② dial to select an option, then press the ∰ button.
- The setting you selected will display on the screen.
- After shooting, return the setting to GFF.

∠0FF	My Colors Off	-			
Av	Vivid	Emphasizes the contrast and color saturation for a vivid impression.			
â <sub>N</sub>	Neutral	Tones down the contrast and color saturation for neutral hues.			
Æse	Sepia	Sepia tones.			
∕₿w	B/W	Black and white.			
Ар	Positive Film	Like the Vivid Red, Vivid Green or Vivid Blue effects, produces intense natural appearing colors like those obtained with positive film.			
AL	Lighter Skin Tone	Makes skin tones lighter.			
ΑD	Darker Skin Tone	Makes skin tones darker.			
₿B	Vivid Blue	Emphasizes blue tints. Makes the sky, ocean and other blue subjects more vivid.			
ÂG	Vivid Green	Emphasizes green tints. Makes mountains, foliage and other green subjects more vivid.			
<i>A</i> <sub>R</sub>	Vivid Red	Emphasizes red tints. Makes red subjects more vivid.			
Ac	Custom Color	You can adjust contrast, sharpness, and color saturation etc. to your preference.			

• The white balance cannot be set in the  $\pounds$  and  $\pounds$  modes (p. 73).

 In the A<sub>L</sub> and A<sub>D</sub> modes, colors other than people's skin color may change. You may not obtain the expected results with some skin colors.

#### $A_{C}$ Custom Color

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



- Follow Step 2 on page 75 and select A<sub>C</sub>, then press the MENU button.
- Press the ▲▼ buttons to select an option, then use the ◀▶ buttons or turn the dial to select 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 MENU 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.



#### Select 🖄.

- After pressing the ▲ button, press the
   ▲▼ buttons or turn the (○) dial to select
  - €, then press the () button.
- Once set, 2 will appear.
- Follow Step 3 on page 63 to shoot.

# C Customizing the Self-Timer

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





#### Select ල්.

- After pressing the ▲ button, press the
   ▲ buttons or turn the ③ dial to select
   Co, then immediately the press the MENU button.
- Select the settings.
  - Press the ▲▼ buttons to select [Delay] or [Shots].
  - Press the 
     the buttons, or turn the 
     odial to select a value, then press the 
     button.
  - Follow Step 3 on page 63 to shoot.



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

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



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

# Shooting Using a TV Monitor

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

- Connect the camera to a TV as described in "Viewing Images on a TV" (p. 105).
- Shooting procedures are the same as when using the camera's monitor.

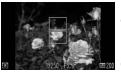


TV display is not available when using the HDMI Cable HTC-100 (sold separately) to connect the camera to a high-definition TV.

# Changing the Composition with the Focus Lock

While you press and hold the shutter button halfway, the focus and exposure are fixed. You can now recompose and shoot. This is called Focus Lock.





#### Focus.

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

#### Recompose.

 Hold the shutter button pressed halfway and recompose the scene.

#### Shoot.

Press the shutter button fully.

# 5

# Getting More Out of Your Camera

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



- This chapter assumes that the mode switch is set to and the camera is in P mode.
- "★ Shooting Long Exposures" (p. 87), "Changing the Color and Shooting" (p. 88) and "□ Shooting Stitch Assist Images" (p. 90) assume you have set the mode switch to □ and selected the corresponding mode.
- Before attempting to shoot using a function explained in this chapter in modes other than P mode, check if the function is available in those modes (pp. 144 – 147).

# **Changing the AF Frame Mode**

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

AF Frame	Face AiAF	
AFFrame Size	4 Norrial	
Servo AF	On Off	
Digital Zoom	<ul> <li>Standard</li> </ul>	
AF-Point Zoom	Off	
AF-assist Beam	On	

#### Select [AF Frame].

Press the MENU button, select the tab, select [AF Frame], then press the select an option.

### Face AiAF

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



- If a face is not detected and only gray frames (no white frame) appear, up to 9 green frames will appear on the areas the camera focuses on when the shutter button is pressed halfway.
- Examples of faces that cannot be detected:
  - · Subjects that are far away or extremely close.
  - · Subjects that are dark or light.
  - Faces turned to the side or at a diagonal, or faces with a portion hidden.
- The camera may mistakenly identify non-human subjects as a face.
- If the camera cannot focus when you press the shutter button halfway, the AF frame will not appear.

#### Center

The AF frame is fixed at the center. This is effective for focusing on a specific point.



#### You can reduce the AF frame size

- Press the MENU button, select the at tab, then select the [AF Frame Size] menu item and [Small] option.
- The setting is configured to [Normal] when the Digital Zoom or Digital Tele-converter is used.



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

# **Magnifying the Focal Point**

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





#### Select [AF-Point Zoom].

Press the MENU button and select [AF-Point Zoom] on the tab. Use the buttons to select [On].

#### Check the focus.

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



#### What if the display does not magnify?

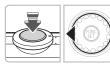
The display will not appear magnified in [Face AiAF] mode if a face cannot be detected (p. 80) or is too big in relation to the screen. In [Center] mode, it will not appear magnified if the camera cannot focus.



The magnified display will not appear when using the Digital Zoom (p. 60) or Digital Tele-Converter (p. 61), or when connected to a TV (p. 78).

# AFL Shooting with the AF Lock

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



#### Lock the focus.

- Keep the shutter button pressed halfway and press the < button.</p>
- The focus locks and AFL is displayed on the screen.
- If you release your finger from the shutter button, and press the 
   button once more, AFL will disappear and the focus will unlock.

#### Compose the scene and shoot.

# Shooting with Servo AF

Since focus will be maintained on a subject while you press the shutter button halfway, you can shoot moving subjects without missing photo opportunities.

AF Frame	<ul> <li>Face AiAF</li> </ul>	
Servo AF	On Off	
Digital Zoom	<ul> <li>Standard</li> </ul>	
AF-assist Beam		

#### Select [Servo AF].

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

#### Focus.

- While the shutter button is pressed halfway, the focus will continue to adjust on the spot where the blue frame appears.
- The camera may not be able to focus in some conditions.
- 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 **t** tab to [On].
- Not available in FaceSelf-Timer (p. 64).

# **Changing the Metering Mode**

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



#### Select the metering mode.

 Press the () button and select (), then press the () button.

#### Select an option.

- Press the ▲▼ buttons or turn the ② dial to select an option, then press the ∰ button.
- The setting will display on the screen.

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

# AEL Shooting with the AE Lock

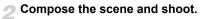
When you wish to take several shots with the same exposure, you can set the exposure and focus separately using the AE lock. AE stands for "Auto Exposure".



#### Lock the exposure.

- Point the camera toward the subject and press the 

   button while pressing the shutter button halfway.
- When AEL appears, the exposure will be set.
- If you release your finger from the shutter button and press the ▲ button again, AEL will disappear and the AE will unlock.



# FEL Shooting with the FE Lock

Just as with the AE lock (p. 83), you can lock the exposure for shooting with the flash. FE stands for "Flash Exposure".



#### Select **\$** (p. 67).

#### Lock the exposure.

- Point the camera toward the subject and press the 

   button while pressing the shutter button halfway.
- The flash will fire and when FEL appears, the flash output will be retained.
- If you release your finger from the shutter button and press the ▲ button again, FEL will disappear and the FE will unlock.

Compose the scene and shoot.

# **5** 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.



#### Select 4\*.

- After pressing the ▶ button, press the ◀▶ buttons or turn the dial to select 42, then press the ∰ button.
- Once set, 12 will appear on the screen.

#### Shoot.

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

Attach the camera to a tripod to prevent the camera from moving and blurring the image. It is recommended to set the [IS Mode] to [Off] when shooting with a tripod (p. 133).

# $\ensuremath{\mathbb{C}}_i$ Making Dark Subjects Appear Brighter (i-Contrast)

The camera can automatically detect and compensate for faces or subjects that appear dark in certain shooting conditions.



#### Select [i-Contrast].

- Press the MENU button, select [i-Contrast] from the tab, and use the
   buttons to select [Auto].
- C<sub>i</sub> will appear on the screen.



Under some conditions, the image may appear coarse or the exposure setting may not be suitable.



You can correct recorded images (p. 118).

# Red-Eye Correction

You can automatically correct red eyes in images taken with the flash.



#### Select [Flash Settings].

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

#### Adjust the setting.

- Press the tuttons or turn the idea to select [Red-Eye Corr.] and press the buttons to select [On].
- • will appear on the screen.

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

- You can correct recorded images (p. 119).
- If you press the b button as shown on the screen in Step 2 and then press the MENU button, the Flash Settings screen will display (p. 48).

# **Checking for Shut Eyes**

When the camera detects that there is a possibility that people have their eyes shut,  $\boxed{\underline{x}}$  appears.



#### Select [Blink Detection].

Press the MENU button, select the tab, and then select [Blink Detection]. Use the buttons to select [On].

#### Shoot.

When a person with shut eyes is detected, a frame and ≚ appear for a few seconds.

Ø

# $\star$ Shooting Long Exposures

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



#### t \*Select

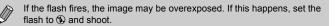
Set the mode switch to ▲, then select ★, in Step 1 – 3 on page 47 and press the ⊕ button.

#### Select the shutter speed.

- Press the () button, and use the buttons or turn the () dial to select [1"], then press the () button again.
- Press the A buttons or turn the indication is a button of the speed, then press the button.

#### Confirm the exposure.

- When you press the shutter button halfway, the exposure for the selected shutter speed will appear.
- The brightness of the image may differ from the brightness of the screen in Step 3 when the shutter button was pressed halfway.
  - When shutter speeds of 1.3 seconds or slower are used, images are processed to eliminate noise after being taken. A certain amount of processing time may be needed before you can take the next shot.
  - It is recommended to set the [IS Mode] to [Off] when shooting with a tripod (p. 133).



# **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 select to retain a single color and change the rest to black and white in a composition.





Recorded color

### Select 🛵.

Follow Step 2 on page 56 to select A.

#### Hold the MENU button pressed.

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

#### Specify the color.

- Position the center frame so it is filled with the color you want and press the 4 button.
- The specified color will be recorded.

#### Specify the range of colors.

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

• Using the flash may cause unexpected results in this mode.

• The recorded color will be saved even if you turn off the power.

Ø

# ∦s Color Swap

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



#### Select /s.

Follow Step 2 on page 56 to select /s.

#### Hold the MENU button pressed.

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

#### Specify the color to be swapped.

- Position the center frame so it is filled with the color you want and press the 4 button.
- The specified color will be recorded.

#### Specify the target color.

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

# Specify the range of colors to be swapped.

- Press the A vert buttons or turn the O dial to adjust the range of colors affected.
- Select a negative value to limit the range of colors. Select a positive value to extend the range of colors to similar colors.
- Pressing the MENU button accepts the setting and restores the shooting screen.

#### Shooting Stitch Assist Images

- Using the flash may cause unexpected results in this mode.
- The recorded color and range of colors will be saved even if you turn off the power.
- 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.





### Select 🖳 or 🖳

Follow Step 2 on page 56 to select or
 <u>P</u>.

#### Take the first shot.

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

#### Take subsequent shots.

- Overlap part of the first shot when taking the second shot.
- Minor discrepancies in the overlapping portions will be corrected when the images are merged.
- You can repeat the procedure for the second shot to take up to 26 shots.
- When you have finished taking shots, proceed to Step 4.

#### Finish shooting.

Press the button.



#### Merge the images on a computer.

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

This function is not available when a TV is used as the monitor (p. 78).

Ø

# 6

# Using Various Functions for Shooting Movies

This chapter provides more advanced information than the "
➡ Shooting Movies" and "
► Viewing Movies" sections of Chapter 1.



This chapter assumes that the mode switch is set to 
.

# **Changing the Movie Mode**

You can select between three movie modes.



#### Set the mode switch to M.

#### Select a movie mode.

- Press the ▲▼ buttons or turn the () dial to select a mode, then press the () button.

🛒 Standard	For shooting standard quality movies.	
🖟 Color Accent	These shooting modes let you change all colors except the selected color to black and white, or exchange the selected color	
🖟 Color Swap	for another color, when shooting. See "Changing the Color and Shooting" (p. 88) for details.	

Under some conditions, colors may not turn out as expected in the  $\mathbb{R}$  and  $\mathbb{R}$  mode.

# **Changing the Image Quality**

You can select between three image quality settings.



#### Select the image quality.

After pressing the <sup>(</sup>∰) button, press the
 ▲ → buttons or turn the <sup>(</sup>◯) dial to select
 <sup>(</sup>∭), then press the <sup>(</sup>∰) button.

#### Select an option.

- Press the buttons or turn the idal to select an option, and press the button.
- The setting will display on the screen.

Ĵ,

#### Image Quality Table

Image Quality (Recording Pixels/Frame Rate)	Content
1280 × 720 pixels, 30 frames/sec.	For shooting high-definition movies.
640 × 480 pixels, 30 frames/sec.	For shooting standard quality movies.
🕅 320 × 240 pixels, 30 frames/sec.	Since the number of the recording pixels is smaller, the image quality will be lower than with 441, but you can record three times the length.

#### **Estimated Shooting Time**

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

- Based on Canon's testing standards.
- Recording will automatically stop when either the clip file size reaches 4 GB or the recording time reaches approximately 29 minutes and 59 seconds in  $\boxed{100}$ , 1 hour in  $\boxed{100}$  and  $\boxed{200}$ .
- Recording may stop even if the maximum clip length has not been reached on some memory cards. SD Speed Class 4 or higher memory cards are recommended.

# **AE Lock/Exposure Shift**

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



#### Focus.

#### Lock the exposure.

- While pressing the shutter button halfway, press the ▲ button to lock the exposure. The exposure shift bar appears.
- Press the button again to release the lock.

#### Change the exposure.

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

# **Other Shooting Functions**

The following functions can be used in the same way as for still images. For  $\frac{1}{\sqrt{2}}$  and  $\frac{1}{\sqrt{2}}$  modes, the functions with an \* attached can be used in the same way as for still images.

Zooming in More Closely on Subjects (Digital Zoom) (p. 60)
 You can use the digital zoom, but the optical zoom cannot be used. If you want to shoot at the maximum zoom factor, you should adjust the optical zoom to the maximum before shooting.

The sound of the zoom will be recorded.

- 的 Using the Self-Timer (p. 63)\*
- Shooting Close-ups (Macro) (p. 68)\*
- Shooting Far Away Subjects (Infinity) (p. 67)\*
- Adjusting the White Balance (p. 73)
- Changing the Tone of an Image (My Colors) (p. 75)
- Shooting Using the Two Second Self-Timer (p. 76)\*
- Shooting Using a TV Monitor (p. 78)\*
- AFL Shooting with the AF Lock (p. 82)
- Turning off the AF Assist Beam (p. 131)\*
- Displaying the Overlay (p. 132)\* [3:2 Guide] is not available.
- Changing the IS-Mode Settings (p. 133)\* You can switch between [Continuous] and [Off].

## **Playback Functions**

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

- Quickly Searching Images (p. 98)
- Viewing Images in Filtered Playback (p. 100)
- Viewing Slideshows (p. 101)
- Changing Image Transitions (p. 104)
- Viewing Images on a TV (p. 105)
- A Erasing All Images (p. 107)
- Om Protecting Images (p. 110)
- Organizing Images by Category (My Category) (p. 112)
- Q Rotating Images (p. 114)

•	Exit			
	Playback			
	Slow Motion Playback (you can use the <b>♦</b> buttons to adjust the speed Sound will not play back.)			
M	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			
Ж	Edit (p. 95)			
ക	Displays when connected to a PictBridge compliant printer (p. 30). Refer to the <i>Personal Printing Guide</i> for details.			

#### Summary for " Viewing Movies" (p. 34)

## **℅ Editing**

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



Movie Editing Panel



Movie Editing Bar

# Select %.

- Follow Step 1 to 3 on p. 34, select and press the () button.
- The movie editing panel and the movie editing bar will display.

#### Set the editing range.

- Press the ▲▼ buttons and select ½♥ or ♥ .
- Press the ◀ buttons or turn the ② dial to move ♥. & will display at each one-second interval. If you select 以□, you can trim the beginning of the movie from 𝔅. If you select 以□, you can trim the end of the movie from 𝔅.

- ► Even if you move ↓ to a point other than a & point, only the portion from the nearest & to the left will be trimmed when 叔 is selected. Only the portion from the nearest & to the right will be trimmed when 叔 is selected.
- ► The section selected with ■ will be the section of the movie that remains after editing.

#### Check the edited movie.

- Press the ▲▼ buttons to select ▶, then press the (m) button. The edited movie will play.
- To edit the movie again, repeat Step 2.
- To cancel editing, press the ▲▼ buttons, and select '5. After pressing the () button, press the ↓ buttons or turn the ○ dial to select [OK], and press the () button.

#### Save the edited movie.

- Press the ▲▼ buttons to select L, then press the () button.
- Press the 
   buttons or turn the 
   dial to select [New File], then press the
   button.
- The movie will be saved as a new file.
- When [Overwrite] in Step 4 is selected, 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 selected.
  - If the battery is depleted partway through editing, the edited movie clips may not be saved. When editing movies, you should use a fully charged battery or the separately sold AC adapter kit (p. 40).



# 7

# Using Playback and Other Functions

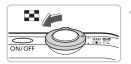
The first part of this chapter explains various ways to play back and edit images. The latter part explains how to specify images for printing.

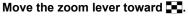
- Press the 
   button to select the Playback mode before operating the camera.
  - It may not be possible to play back or edit images that have been edited on a computer, had their file name changed, or have been taken on a different camera.
    - The edit function (pp. 114 119) cannot be used if the memory card does not have free space available.

# Quickly Searching Images

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

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





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

#### Change the displayed images.

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

#### Select an image.

- Press the A + buttons to select an image.
- An orange frame appears on the selected image.
- Press the () button to display the selected 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.



#### Select an image.

- If you set the single image playback and turn the o 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 (m) button restores the single image playback.

# 📅 Viewing Images in Filtered Playback

When there are many images on the memory card, you can filter and display them by a specified condition. You can also delete (p. 107) or protect (p. 110) all images at once in the filtered condition.

#### **Setting the Conditions**



#### Select $rac{W}{V}$ .

Press the () button to select ', then press the () button.

#### Select a condition.

Press the A buttons or turn the dial to select a condition, then press the button.



#### View the filtered images.

- Press the A buttons or turn the interview of the press the interview of the press the button.
- Filtered playback starts and a yellow frame displays.
- If you select [All Images] in Step 2, filtered playback will be canceled.

## Search by 🕑 , 🗊 , 🗋 and 🧣

⊘ Date	Displays the images shot on the specified date
My Category	Displays the images of the specified category
🗋 Folder	Displays the images in a specified folder
🗣 File Format	Displays only still images or movies

#### What if you can't select a target?

Conditions containing no images cannot be selected.

#### Siltered Playback

You can use the following functions in filtered playback for processing the filtered images at once.

"Erasing Images" (p. 29), "
 Viewing Slideshows" (p. 101), "
 Protecting Images" (p. 110), "Selecting Images for Printing (DPOF)" (p. 121)

# Viewing Slideshows

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



#### Select 🕸.

- Press the () button to select (), then press the () button.
- The slideshow will start a few seconds after [Loading image...] displays.
- In filtered playback (p. 100), only images in a filtered condition play back.
- You can pause/restart a slideshow by pressing the () button again.
- Press the MENU button to stop the slideshow.



- If you press the 
   buttons or turn the 

   dial during playback, the image will switch. If you press and hold down the 

   buttons you can fast-forward through images.
- The power saving function does not work during slideshows (p. 53).

#### **Changing Settings**

You can change the time that slideshow images are displayed, transition effects and set the slideshow to repeat. You can select from seven transition effects when switching between images.

sec. +
ade 🔸
(MENU) ±

#### Select [Slideshow].

 Press the MENU button and select the tab, then select [Slideshow] and press the
 button.

#### Make the setting.

- Press the ▲▼ buttons, or turn the dial to select an item, then press the ◀↓ buttons to adjust the setting.
- If you select [Start] and press the button, the slideshow starts with your settings.
- Pressing the MENU button restores the slideshow screen.

# **Checking the Focus**

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



# Press the $\checkmark$ button, and switch to the focus check display (p. 45).

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

#### 14/14 MRND⊕ SSTD-0 A.

# Change the magnification level or location.

- Move the zoom lever toward Q once.
- Use the zoom lever to change the display size, and the ▲▼◀▶ buttons to change the display position while checking the focus.

#### Switch frames.

- Pressing the () button will switch to a different frame.
- Pressing the MENU button resets the display to Step 1.

# Q Magnifying Images





Approximate Location of Displayed Area

#### Move the zoom lever toward Q.

- The display will zoom in on the image and, if you continue to hold the zoom lever, it will continue to zoom in up to a factor of 10x.
- If you press the A + 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 O dial, you can switch images in the zoomed state.

### Changing Image Transitions

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

Þ	4	ΎΤ		
EX Re	esize_			
A 1	y Colors_			
CO R	otate_			
Q'A	ctive Display			1
	esume		Last seen	
10 10	ansition	1	Fade	

#### Select [Transition].

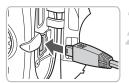
- Press the MENU button and select the tab, then select [Transition] and use the
   buttons to select a transition effect.
- Press the MENU button to accept the setting.

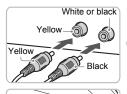
# Viewing Images on a TV

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

#### **Items to Prepare**

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





#### Turn off the camera and TV.

#### Connect the camera to the TV.

- Open the camera's terminal cover and fully insert the plug of the supplied AV cable into the camera's A/V OUT terminal.
- Insert the cable plug fully into the video input terminals as shown in the illustration.

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

#### Turn on the camera.

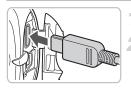
Press the b button to turn on the camera.
 The image will appear on the TV (nothing will appear on the monitor of the camera).
 After you finish viewing, turn off the camera and TV, and unplug the AV cable.

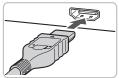
#### What if the images don't properly display on the TV?

Images will not display correctly if the camera's video output setting (NTSC/PAL) does not match the TV system. Press the **MENU** button, select the **\Upsilon** 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 with a high-definition TV for enhanced viewing experience.





#### Turn off the camera and TV.

#### Connect the camera to the TV.

- Open the camera's terminal cover and fully insert the plug of the supplied AV cable into the camera's HDMI out mini terminal.
- Insert the cable plug fully into the TV's HDMI terminal as shown in the illustration.
- Follow Steps 3 4 on p. 105 to display the images.

# 🖗 Erasing All Images

You can select images and erase them in groups. Since erased images cannot be recovered, exercise adequate caution before erasing. Protected images (p. 110) cannot be erased.



#### Select [Erase].

 Press the MENU button, select the 
tab and [Erase], and press the 
button.

#### Select a selection method.

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

#### **Selecting Images Individually**





#### Select [Select].

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

#### Select images.

- To select multiple images, repeat the above operation.

#### Press the MENU button.

#### Erase.

Press the 
 buttons or turn the 
 dial, select [OK] and press the 
 button.

#### Select Range







#### Select [Select Range].

 Follow Step 2 on p. 107 to select [Select Range] and press the () button.

#### Select the starting image.

- Press the button.
- Press the buttons or turn the dial, select the image and press the button.

#### Select the ending image.

- Press the button, select [Last image] and press the () button.
- You cannot select images before the first image.
- Press the buttons or turn the dial to select an image, and press the button.





#### Erase.

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



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

#### Select All Images

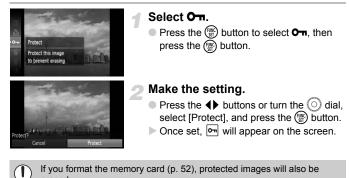
iges?
OK

#### Select [All Images].

- Follow Step 2 on p. 107 to select [All Images] and press the () button.
- Erase.
- Press the 
   buttons or turn the 
   dial, select [OK] and press the 
   button.

# Om Protecting Images

You can protect important images so that they cannot be erased by the camera (pp. 29, 107).



erased.

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

#### Select Range



#### Select [Protect].

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

#### Select [Select Range].

- Press the A buttons or turn the O dial, select [Select Range], and press the button.
- Follow Steps 2 and 3 on p. 108 to select the range.

#### Protect images.

Press the ▼ button, select [Protect] and press the (m) button.

#### Select All Images



#### Select [All Images].

 Follow Step 2 above to select [All Images] and press the (m) button.

#### Protect images.

 Press the A buttons or turn the dial, select [Protect] and press the
 button.



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

# Organizing Images by Category (My Category)

You can categorize images. You can also use the categorized images in the following functions.

 Viewing Images in Filtered Playback (p. 100), Slideshow (p. 101), Erase All (p. 107), Protect (p. 110), Print Settings (DPOF) (p. 121)



#### Select 🕼.

 Press the () button to select (), then press the () button.

#### Make the setting.

- Press the ▲▼ buttons, select a category and press the (m) button.
- ▶ Once set, 🖌 will appear on the screen.
- To select multiple images, press the buttons or turn the image, then repeat the above operation.

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

- Similar State in State in
- images shot in AUTO and detected as W or I or images shot in
   W or K will be categorized to K.
- 💜 : Images shot in 🎉, 📽, 🖏, 🎆, 🖲, 🕼 will be categorized to 🔍 .

Ø

#### **Selecting Images Individually**



Select	_	
Select Range_		-

#### Select [My Category].

 Press the MENU button, select the tab and [My Category], and press the () button.

#### Select [Select].

 Press the ▲▼ buttons or turn the dial, select [Select], and press the button.

#### Make the setting.

- Follow Step 2 to set the category.
- Pressing the MENU button will restore the menu screen.



#### Select [Select Range].

- Follow Step 2 above to select [Select Range] and press the () button.
- Follow Steps 2 and 3 on page 108 to select images.
- Press the ▼ button, select the item and press the ↓ buttons, or turn the dial, and select a type.

#### Select the setting.

Press the ▼ button to select [Select] and press the () button.



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

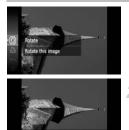
#### Select Range

#### 113

# Rotating Images

MENILOR

You can change the orientation of an image and save it. Movies with a resolution of  $\frac{1}{100}$  (1280 × 780) cannot be rotated.



#### Select @.

 Press the () button to select (), then press the () button.

#### Make the setting.

- Press the buttons to select the rotation direction and press the button.
- The image will rotate 90° in the selected direction.
- Pressing the MENU button will restore the menu screen.

# P Red-Eye Correction\_ Trimming\_ Previze\_\_\_\_\_\_ Wy Colors\_\_\_\_\_\_ Motors\_\_\_\_\_\_ Instate\_\_\_\_\_ Active Display On

Select All Images



#### Select [Rotate].

 Press the MENU button and select the tab, then select [Rotate] and press the
 button.

#### Rotate the image.

- Press the 
   buttons or turn the 
   dial to select an image to rotate.
- The image will rotate 90° with each press of the () button.
- If you want to rotate multiple images, press the buttons or turn the dial, select an image and repeat the operations above.
- 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.









#### Select [Resize].

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

#### Select an image.

Press the 
 buttons or turn the 
 dial, select the image and press the 
 button.

#### Select an image size.

- Press the 
   buttons or turn the 
   dial to select an option, then press the
   button.
- The [Save new image?] screen will appear.

#### Save the new image.

- Press the 
   buttons or turn the 
   dial to select [OK] and press the 
   button.
- The image will be saved as a new file.

#### Display the new image.

- You cannot resize an image to a larger size.
- $\bullet$  You cannot resize images taken with the  ${\ensuremath{\overline{\mathrm{M}}}}$  and  ${\ensuremath{\mathrm{XS}}}$  settings.

# 다 **Trimming**

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





Trimming Area Display Recorded pixels after trimming



#### Select [Trimming].

Press the MENU button, select the L tab and [Trimming], then press the () button.

#### Select an image.

Press the 
 buttons or turn the 
 dial, select the image and press the 
 button.

#### Adjust the trimming area.

- A frame will appear around the portion of the image to be trimmed.
- The original image will display in the upper left and the trimmed image will display in the lower right.
- If you move the zoom lever to the left or right, you can change the frame size.
- If you press the () button, you can change the vertical/horizontal orientation of the frame.
- In an image with a detected face, a gray frame will appear around faces located in the upper left of the frame, and the frame can be used for trimming. You can switch between frames by turning the O dial.
- After pressing the MENU button, press the ◀▶ buttons or turn the O dial to select [OK], and press the () button.

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

Perform Steps 4 and 5 on p. 115.

•  $\mathbf{M}$ , **S** and **XS** images cannot be trimmed.

- Trimming is only possible for images shot at aspect ratio 4:3 (vertical 3:4).
- The number of recorded pixels in a trimmed image will be smaller than before trimming.

Ø

# $\mathcal{L}_{\mathbf{E}}$ 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. 75 for details on each menu item.





#### Select [My Colors].

Press the MENU button, select the tab and [My Colors], and press the () button.

#### Select an image.

Press the 
 buttons or turn the 
 dial, select the image and press the 
 button.

#### Select a menu option.

- Press the 
   buttons or turn the 
   dial to select an option, then press the
   button.
- After selecting the menu option, you can zoom the image by following the operations in "Q Magnifying Images" (p. 104).
- If you press the result of the second second

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

Perform Steps 4 and 5 on p. 115.

- 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. 75).

# $\mathbb{C}_{i}$ Making Dark Subjects Appear Brighter (i-Contrast)

Detects and compensates for dark sections of subjects or people's faces and saves the image as a separate file. You can select 4 levels of correction: [Auto], [Low], [Medium] or [High].





Press the MENU button, select the tab and [i-Contrast], then press the button.

#### Select an image.

Press the 
 buttons or turn the 
 dial, select the image and press the 
 button.



#### Select an option.

Press the 
 buttons or turn the 
 dial to select an option, then press the
 button.

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

Perform Steps 4 and 5 on p. 115.

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

Select [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.

# ${\ensuremath{ {ar p} }}$ Correcting the Red-Eye Effect

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

🗅 🗅 11	
My Category_	
A Erase_	
Om Protect_	
Ci i-Contrast	
Pad-Eye Correction_	
‡ Trimming	



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

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

#### Select an image.

- Press the 
   buttons or turn the 
   dial, select the image.
- You can zoom the image using the procedures in "Q Magnifying Images" (p. 104).

#### Correct the image.

- Press the 
  button.
- Frames appear at the corrected areas.
- You can zoom the image using the procedures in "Q Magnifying Images" (p. 104).

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

- Press the A 4 buttons, or turn the dial to select [New File], and press the button.
- The image will be saved as a new file.
- Display the new image using the operation in Step 5 on p. 115.
- Some images may not be properly corrected.
  - When [Overwrite] in Step 4 is selected, 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 using the FUNC. menu. You can print from a print list simply by connecting your camera and printer. These selection methods comply with the DPOF (Digital Print Order Format) standards.

#### **Easily Add Images to the Print List**



#### Select an image.

- Press the 
   buttons or turn the 
   dial, select the image.
- Select 🗳 (videos will be excluded).
  - Press the () button to select 止, then press the () button again.

#### Print list.

- Press the ▲▼ buttons and select the number of prints, press the ◀▶ buttons or turn the ③ dial, select [Add] and press the ∰ button.

#### **Print Added Images**

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

Number of copies to print



# Connect the camera to the printer (p. 30).

#### Print.

- Press the ▲▼ buttons, select [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.

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

You can select 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 selected 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 selected for printing.



#### Select [Print Settings].

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

#### Adjust the settings.

- Press the ▲▼ buttons or turn the () dial to select a menu item, then press the ↓ buttons to select an option.
- Pressing the MENU button accepts the settings and restores the menu screen.

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

- Some printers or photo developer services may not be able to reflect all of the print settings in the output.
  - **()** may display when using a memory card with print settings set by a different camera. These settings will be overwritten by 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] selected, 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  $\uparrow\uparrow$  tab (p. 19).

#### **Selecting the Number of Copies**



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

#### Select an image.

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

#### Selecting Images for Printing (DPOF)



#### Set the number of prints.

- Press the A volume buttons or turn the O dial to set the number of prints (maximum 99).
- Repeat Steps 2 and 3 to select other images and the number of prints for each.
- You cannot set the number of print copies for Index prints. You can only select which images to print in Step 2.
- Pressing the MENU button accepts the settings and restores the menu screen.

#### Select Range



#### Select [Select Range].

- Select [Select Range] in Step 1 on p. 122 and press the () button.
- Select images according to Steps 2 and 3 on p. 108.

#### Make print settings.

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

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



#### Select [Select All Images].

 Select [Select All Images] from the screen in Step 1 on p. 122 and press the result button.

#### Make print settings.

Press the 
 buttons or turn the 
 dial, select [OK] and press the 
 button.

#### **Clearing All Selections**

Select Images & Qty	
Select Range_	
Select All Images_	
Clear All Selections_	
Print Settings	
	(DPOF)

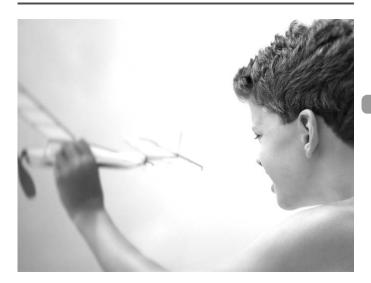
#### Select [Clear All Selections].

- Select [Clear All Selections] in Step 1 on p. 122, and press the () button.
- Press the 
   buttons or turn the 
   dial to select [OK], then press the 
   button.
- All selections will be cleared.

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 **f** tab (p. 48).

#### **Turning off the Power Saving Function**

You can set the power saving function (p. 53) to [Off]. Setting it to [On] is recommended to save battery power.

isplay Off	• 1 min.	
spie) on		

- Select [Power Saving], then press the model
   button.
- Press the A buttons or turn the indication of the dial to select [Auto Power Down], then use the buttons to select [Off].
- If you set the Power Saving function to [Off], be careful not to forget to turn off the camera after use.

#### Setting the Screen Shut-Off Time

You can adjust the time the screen takes to shut off automatically (p. 53). This also works when [Auto Power Down] is set to [Off].

Auto Power Down		
Display Off	t min.	

- Select [Power Saving], then press the whether button.
- Press the ▲▼ buttons or turn the () dial to select [Display Off], then use the ◀▶ buttons to select a time.
- In order to save battery power, it is recommended to select less than [1min.].

#### **Using the World Clock**

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





SET Select Time

#### Set the home time zone.

- Select [Time Zone] and press the the button.
- When setting this for the first time, confirm the information that displays on the screen at the left, and press the () button.
- Press the ↓ buttons or turn the ③ dial to select the home time zone, then press the ∰ button. To set daylight saving time (adds 1 hour), press the ▲▼ buttons to select ¥.

#### Set the world time zone.

- Press the ▲▼ buttons or turn the dial to select ≯, then press the ∰ button.
- Press the 
   buttons or turn the 
   idial to select the destination time zone, then press the 
   press the 
   button.
- You can also set the daylight saving time as in Step 1.

#### Select the world time zone.

- Press the A vectors or turn the O dial and select [Home/World].
- Press the ◀ buttons to select ズ, 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  $\bigstar$  setting, (p. 19), your  $\clubsuit$  time and date will automatically change.

#### **Turning off Hints & Tips**

When you select an item in the FUNC. menu or when using the **AV()** buttons, hints and tips display. You can turn off this function.

Volume					
Sound Options					
LCD Brightness				<b>.</b>	
Start-up Image					
Hints & Tips	01	Off			
Format_	<u>г</u>		1.8G	3	

 Select [Hints & Tips] and press the buttons to select [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.

LCD Brightness	- 1 +	
Start-up Image		
Hints & Tips		
Format_	1.8GB	
File Numbering	Continuous	

•	Numbering], then press the <b>(</b> ) elect 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. 22).
- Refer to the Software Starter Guide for information regarding folder structure or image types.

#### **Creating a Folder**

You can create new folders in which to save images.



- Select [Create Folder], then press the model
   button.
- Select [Create New Folder], then press the ↓ buttons to select √.
- Shots will be recorded into the new folder.

#### **Creating Folders by Day and Time**

You can set a day and time for folder creation.

◆Create New Fold	er	
Auto Create	<ul> <li>Daily</li> </ul>	•
	6:00	

- Select [Create Folder], then press the model
   button.
- Select [Auto Create], then press the buttons to select an interval.
- Select [Time], then press the buttons to set a time.
- The new folder will be created on the set day and time. Images shot after the creation date are saved to the new folder.

#### Turning off Auto Rotate

When you play back images on the camera, images shot in vertical orientation automatically rotate and display vertically. You can turn off this function.

Hints & Tips	On Off	
Format	1.868	
File Numbering	< Continuous	
Create Folder		
Auto Rotate	On Off	
Lens Retract	< 1 min.	

 Select [Auto Rotate], then press the buttons to select [Off].

#### **Changing the Lens Retract Time**

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

Format_	1.8GB	
File Numbering	< Continuous	
Create Folder		
Auto Rotate		
Lens Retract	0 sec.	13

 Select [Lens Retract], then press the buttons to select [0 sec.].

## **Changing Shooting Functions**

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



Before attempting to shoot using a function explained in this chapter in modes other than  $\mathbf{P}$  mode, check if the function is available in those modes (pp. 144 – 147).

#### **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.

Red-Eye Corr.	On Off	
Red-Eye Lamp	On Cff	

- Select [Flash Settings], then press the model
   button.
- Press the A buttons or turn the () dial to select [Red-Eye Lamp], then press the buttons to select [Off].

#### **Turning off the AF Assist Beam**

If the camera cannot focus in low light conditions when you press the shutter button halfway, the lamp will automatically light to assist focusing. You can turn off the lamp.

Servo AF	On Off	
Digital Zoom	<ul> <li>Standard</li> </ul>	
AF-Point Zoom	Off	
AF-assist Beam	On Off	

Select [AF-assist Beam], then press the
 buttons to select [Off].

#### **Changing the Image Display Time**

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



- Select [Review], then press the buttons to select an option.
- If you select [Off], the image will not display.
- If you select [Hold], the image displays until you press the shutter button halfway.

#### **Changing the Image Display Right After Shooting**

You can change the image display that appears after shooting.



 Select [Review Info], then press the ↓ buttons to select an option.
 Detailed Displays detailed information (p. 45).
 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. 103).

#### **Displaying the Overlay**

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

• IT		
i-Contrast		
Review	< 2 sec.	
Review Info	+ Off	
Blink Detection	On Off	
Disp. Overlay	Grid Lines	
IS Mode	< Continuous	•

	-	sp. Overlay], then press the ◀▶ select an option.
	Grid Lines	A grid overlays the display.
	3:2 Guide	The areas outside the 3:2 range are grayed out. This area will not print when printing on paper with a 3:2 aspect ratio.
	Both	Both grid lines, and the 3:2 guide will display.

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

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

Review	< 2 sec.	
Review Info	< Off	
Blink Detection	On Off	
Disp. Overlay	+ Off	
IS Mode	Continuous	
Date Stamp	+ Off	•

Select [IS Mode], then press the 
 to select 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 fixed to a tripod.
  - When using [Panning], hold the camera horizontally. Image stabilization does not work when the camera is held vertically.

### **Changing Playback Functions**

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

#### **Turning off Active Display**

When you shake or tilt the camera gently you can display the next image or you can change the speed at which images switch. You can turn off this function.



- Select [Active Display], then press the model
   button.
- Press the **\** buttons to select [Off].

#### Selecting the Image that First Displays in Playback

	T	
Resize		
A My Colors		
Rotate_		
🗳 Active Display	Ciri Off	
Er Resume	Last seen	
Transition	<ul> <li>Fade</li> </ul>	•

Select [Resume], then press the buttons to select an option.

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

#### **Changing the Start-up Image or Sound**

In the **f** tab, you can 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.

#### **Change Sounds**



- Select [Sound Options], then press the model
   button.
- Press the A volume buttons or turn the O dial to select an option.
- Press the I buttons to change the sound.
  - 1 Preset sound.
    - You can register your sounds using the
  - 2 supplied software (ZoomBrowser EX/ ImageBrowser) (p. 136).

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



- Select [Start-up Image], then press the button.
- Press the buttons to change the image.
  - X No start-up image.
    - 1 Preset image.
  - 2 You can register your images.

#### **Register the Start-up Screen**

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



- Select [Start-up Image], then press the button.
- Press the buttons to select [2], then press the button.
- Press the 
   buttons or turn the 
   dial to select an image, then press the
   button.
- Press the 
   buttons or turn the 
   dial to select [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 (ZoomBrowser EX / ImageBrowser). Refer to the *Software Starter Guide* for details.

Any previously registered start-up image will be overwritten when registering a new start-up image (p. 136).

# 9

# **Useful Information**

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



# **Using Household Power**

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



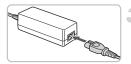


#### Insert the coupler.

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

#### Plug the cord into the coupler.

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



#### Connect the power cord.

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

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

#### Troubleshooting

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

#### Power

#### You pressed the power button, but nothing happened.

- Confirm that the battery is properly inserted (p. 16).
- Confirm that the memory card/battery cover is securely closed (p. 16).
- If the battery terminals are dirty, battery performance will decrease. Clean the terminals with a cotton swab and re-insert the battery several times.

#### Battery is consumed quickly.

 Battery performance decreases at low temperatures. Warm the battery by such methods as placing them in your pocket with the terminal cover on.

#### Lens will not retract.

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

#### **TV** output

#### Image is distorted or not showing on TV (p. 105).

#### Shooting

#### Cannot shoot.

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

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

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

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

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

#### The \$ icon blinks when you try to shoot (p. 26).

#### O appears when the shutter button was pressed halfway (p. 59).

- Set [IS Mode] to [Continuous] (p. 133).
- Set the flash to \$ (p. 67).
- Increase the ISO speed (p. 72).
- Attach the camera to a tripod.

#### Image is blurred.

- Press the shutter button halfway to focus, then shoot (p. 23).
- Shoot the subject within the focusing distance (p. 151).
- Set the [AF-assist beam] to [On] (p. 131).
- · Confirm that functions which you do not intend to use (macro, etc.) are not set.
- Shoot using the focus lock or AF lock (pp. 78, 82).

# Even when you press the shutter button halfway, the frame does not appear, and the camera does not focus.

 If you center on the light and dark contrasting area of the subject and press the shutter button halfway, or repeatedly press the shutter button halfway, the frame will appear and the camera will focus.

#### Subject is too dark.

- Set the flash to \$ (p. 67).
- Adjust the brightness with exposure compensation (p. 74).
- Adjust the brightness with the i-Contrast function (pp. 85, 118).
- Use the AE lock, or spot metering to shoot (p. 83).

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

- Set the flash to (9, 59).
- Adjust the brightness with exposure compensation (p. 74).
- Use the AE lock, or spot metering to shoot (p. 83).
- The subject is too bright due to ambient lighting.

#### Image is dark even though the flash fired (p. 25).

- Increase the ISO speed (p. 72).
- Shoot within an appropriate distance for flash photography (p. 67).

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

- Shoot within an appropriate distance for flash photography (p. 67).
- Set the flash to (9, 19).

#### 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. 72).
- Depending on the shooting mode, when shooting in a high ISO speed the image may appear rough or grainy (p. 58).

#### Eyes appear red (p. 86).

Set the [Red-Eye Lamp] to [On] (p. 130). 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 no re effective if the subject is looking directly at the lamp. Even better results can be obtained by increasing the lighting in indoor settings or approaching closer to the subject.

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

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

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

 The items in which settings can be made differ depending on the shooting mode. Refer to "Functions Available in Each Shooting Mode" (p. 144).

#### **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 video recorded will be the length that it was actually shot (p. 33).

# "!" displayed on the LCD monitor, and shooting ended automatically.

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

- Perform a low-level format of the memory card in the camera (p. 52).
- Lower the recorded pixels (p. 93).
- Use a memory card capable of recording at high speeds.

#### Zoom does not operate.

• You can use the digital zoom while recording, but not the optical zoom (p. 94).

#### 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 *Personal Printing Guide* for information regarding folder structure or file names.

#### Playback stops, or audio cuts out.

- Use a card that has been formatted on this camera (p. 22).
- If you copy a movie to a memory card that reads slowly, playback may interrupt momentarily.
- You may experience frame dropping and audio breakup when playing back a movie on a computer with insufficient system resources.

#### List of Messages that Appear on the Screen

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

#### No memory card

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

#### Card locked!

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

#### Cannot record!

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

#### Memory card error (p. 52)

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

#### Memory card full

There is not enough free space on the memory card to shoot (pp. 24, 55, 65, 79) or edit images (pp. 114 – 119). Erase the images (pp. 29, 107) to open space for new images, or insert an empty memory card (p. 16).

#### Change the battery pack (p. 16)

#### No image.

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

#### Protected! (p. 110)

#### Unidentified Image/Incompatible JPEG/Image too large./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. 104), rotated (p. 114), edited (pp. 114 – 119), registered to the start-up screen (p. 136), categorized (p. 112), or added to a print list (p. 121).
- 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. 104), edited (pp. 114 119), or registered to the start-up screen (p. 135).

#### Cannot select!

- When selecting the selection range (pp. 108, 111, 113), you tried to select a starting image that was after the last image or you tried to select an ending image that was before the starting image.
- You tried to select more than 501 images (pp. 108, 111, 113).

#### Too many marks.

You selected more than 998 images to print settings. Select less than 998 images (p. 121).

#### Cannot complete!

 Print settings could not be saved correctly. Reduce the number of settings and try again (p. 121).

#### 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. 129). In the ff menu, change [File Numbering] to [Auto Reset] (p. 128) or format the memory card (p. 22).

#### 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 display, 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 displays 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.

#### Please tilt camera gently!

 The camera was moved with too much force so that the images could not advance.Tilt the camera gently (p. 27).

#### **Functions Available in Each Shooting Mode**

Shooting modes		AUTO					
Function			Ρ	Ą	BA	<b>3</b>	
	<b>\$</b> A	0	0	0	0	0	
Flack (an 50.07)	\$	_	0	0	0	0	
Flash (pp. 59, 67)	<u> </u>	_	0	_	*2	—	
	۲	0	0	0	0	0	
	All Range	—	0	0	0	—	
Focusing Zone (p. 68)	A	—	0	0	0	0	
rocusing zone (p. 00)	*	—	0	0	0	—	
		—	0	0	0	—	
Exposure Compensation (p. 74)/Exposure Shift (p. 93)			0	0	0	0	
	Coff	0	0	0	0	0	
Self-Timer (pp. 63, 64, 76, 77)	6	0	0	0	0	0	
Sell-Timer (pp. 63, 64, 76, 77)	Già C2	0	0	0	0	0	
	Cc *1	0	0	0	0	0	
AF Lock (p. 82)			0	—	—	—	
AE Lock / FE Lock (pp. 83, 84, 93)		_	0	_	_	—	
TV Display (p. 78)		0	0	0	0	0	
Information Display (p. 44)	No Information Display	0	0	0	0	0	
mornadon Biopidy (p. 11)	Display Off	0	0	0	0	0	
	FUNC. Menu						
		0	0	0	0	0	
ISO Speed (p. 72)	NUTU ISO ISO ISO ISO ISO ISO 80 100 200 400 800 1600	_	0	_	_	_	
	AWB	0	0	0	0	0	
White Balance (p. 73)	* <b>*</b> *	_	0	_	_	_	
My Colors (p. 75)	ôff Av An Ase Asw Ap A∟ AD AB AG AR AC	_	0	_	_	_	
Metering Mode (p. 83)	0	0	0	0	0	0	
Metering Mode (p. 66)	[][•]	—	0	—	—	—	
Drive Mode (p. 74)		0	0	0	0	0	
	밀	_	0	0	0	0	
Compression Ratio (Image Quality) (p. 70)		0	0	0	0	0	
Recording Pixels (pp. 70, 92)		0	0	0	0	0	
		—	-	_	_	—	

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

\*2 Not selectable. However always set to [On] when the flash fires.

\*3 ISO3200 (p. 58) is set by default. \*4 M3 is set by default. \*5 🔟 is not selectable.

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# Menus

## 🖸 Shooting Menu 🔳

	AUTO					
Function	AUIU	Ρ	Þ	EA	<b>\$</b>	
AF Frame (p. 80)	Face AiAF	0	0	0	0	0
AF Flame (p. 60)	Center	_	0	0	0	0
AF Frame Size (p. 80)	Normal/Small	-	0	—	-	—
Servo AF (p. 82)	On/Off	—	0	0	0	0
Digital Zoom (n. 60)	Standard/Off	0	0	0	0	0
Digital Zoom (p. 60)	1.5x / 2.0x	0	0	0	0	0
AF-Point Zoom (p. 81)	On/Off	0	0	0	0	0
AF-assist Beam (p. 131)	On/Off	0	0	0	0	0
Floop Sottings (n. 96)	Red-Eye Corr. On/Off	0	0	0	0	0
Flash Settings (p. 86)	Red-Eye Lamp On/Off	0	0	0	0	0
i-Contrast (p. 85)	Off/Auto	*1	0	—	—	—
Review (p. 131)	Off/2 - 10 sec./Hold	0	0	0	0	0
Review Info (p. 131)	Off/Detailed/Focus Check	0	0	0	0	0
Blink Detection	On/Off	0	0	0	0	0
Dian Ovarlay (n. 122)	Off/Grid Lines	0	0	0	0	0
Disp. Overlay (p. 132)	3:2 Guide/Both	0	0	0	0	0
IS Mada (n. 122)	Continuous/Off	*1	0	0	0	0
IS Mode (p. 133)	Shoot Only/Panning	—	0	0	0	0
Date Stamp (p. 62)	Off/Date/Date & Time	0	0	0	0	0

\*1 Always [On]. \*2 Available when \$ is selected. \*3 AiAF only.

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O Selectable — Not selectable

# ۴ Set up Menu

Item	Options/Summary	Ref. Page
Mute	On/Off*	p. 49
Volume	Set all operation sounds (5 levels).	p. 49
Sound Options	Set the sounds played for each camera operation.	p. 135
LCD Brightness	Set within a range of ±2.	p. 50
Start-up Image	Add an image as start-up image.	p. 136
Hints & Tips	Display hints and tips for various functions.	p. 128
Format	Formats card, erasing all data.	p. 22
File Numbering	Continuous*/Auto Reset	p. 128
Create Folder	Create New Folder/Auto Create	pp. 129, 129
Auto Rotate	On*/Off	p. 129
Lens Retract	1 min.*/0 sec.	p. 130
Power Saving	Auto Power Down: On*/Off Display Off: 10, 20 or 30 sec/1*, 2 or 3 min.	p. 53
Time Zone	Home/World	p. 127
Date/Time	Date and time settings.	p. 20
Video System	NTSC/PAL	p. 105
Language	Select displayed language.	p. 21
Reset All	Returns camera to default settings.	p. 51

\* Default setting

# Playback Menu

Item	Options/Summary	Ref. Page
Slideshow	Plays back images automatically.	p. 101
My Category	Categorizes images.	p. 112
Erase	Erases images.	p. 107
Protect	Protects images.	p. 110
i-Contrast	Corrects dark portions of images.	p. 118
Red-Eye Correction	Corrects red eyes in images.	p. 119
Trimming	Trims portions of images.	p. 116
Resize	Resizes and saves images.	p. 115
My Colors	Adjusts colors in images.	p. 117
Rotate	Rotates images.	p. 114
Active Display	On*/Off	p. 134
Resume	Last seen*/Last shot	p. 134
Transition	Scroll/ Slide/Fade/Off	p. 104

\* Default setting

# 🕒 Print Menu 🛽

Item	Options/Summary	Ref. Page
Print	Displays printing screen.	p. 30
Select Images & Qty.	Selects individual images for printing.	p. 122
Select Range	Selects starting and ending images for printing.	p. 123
Select All Images	Selects all images for printing.	p. 123
Clear All Selections	Cancels all settings for printing.	p. 124
Print Settings	Sets the printing style.	p. 121

# **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 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 . 1/2.3-inch type CCD (Total number of pixels:
-	Approx. 12.4 million)
Lens	
	35mm film equivalent: 28 (W) – 112 (T) mm F2.8 (W) – F5.8 (T)
•	Approx. 4.0x (Up to approx. 16x in combination with the optical zoom)
LCD Monitor.	.2.8 TFT LCD color monitor with wide viewing angle
	Approx. 230,000 dots, Picture coverage 100%
AF Frame Mode	. Face AiAF/Center
Servo AF	
Focusing Range (from end of lens) .	. Normal: 50 cm (1.6 ft.) – infinity Macro: 2 – 50 cm (W) (0.79 in. – 1.6 ft.)/ 30 – 50 cm (12 in. – 1.6 ft.) (T) Infinity: 3 m (9.8 ft.) – infinity
	Digital Macro: $2 - 10 \text{ cm} (0.79 - 3.9 \text{ in.})$ Kids&Pets: $1 \text{ m} (3.3 \text{ ft.}) - \text{infinity}$
Shutter	. Mechanical shutter and electronic shutter
Shutter Speed	. 1 – 1/1600 sec.
	15 – 1/1600 sec. (Total shutter speed range)
Image Stabilization	
	. Evaluative, Center-weighted average or Spot
Exposure Compensation	. ±2 stops in 1/3-stop increments
ISO speed (Standard Output Sensitivity,	
	. Auto, ISO 80 / 100 / 200 / 400 / 800 / 1600
, ,	. Auto, Day Light, Cloudy, Tungsten, Fluorescent,
	Fluorescent H, Custom
Built-in Flash	
	<ul> <li>Red-eye reduction/Red-eye correction settings available</li> </ul>
Built-in Flash Range	. 30 cm - 4.0 m (12 in 13 ft.) (W)/ 30 cm - 2.0 m (12 in 6.6 ft.) (T)
Shooting Modes	. Auto, Program AE, Portrait, Night Snapshot, Kids&Pets, Indoor, Sunset, Fireworks, Long Shutter, Beach, Underwater, Aquarium, Foliage, Snow, ISO3200, Digital Macro, Color Accent, Color Swap, Stitch Assist
Continuous Shooting	. Approx. 0.8 images/sec.
Self-timer	. Approx. 10 sec./Approx. 2-sec. delay, Custom Timer, FaceSelf-Timer
i-Contrast	. Off/Auto

#### Specifications

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	Movies: MOV (Image data: H.264, Audio data: Linear PCM) (Mono)
Compression	.Fine, Normal
Number of Recording Pixels	
(Still images)	Large: 4000 × 3000 pixels Medium 1: 3264 × 2448 pixels Medium 2: 2592 × 1944 pixels Medium 3: 1600 × 1200 pixels Small: 640 × 480 pixels Widescreen: 4000 × 2248 pixels
(Movies)	.1280 × 720 pixels (30 frames/sec.) 640 × 480 pixels (30 frames/sec.) 320 × 240 pixels (30 frames/sec.)
Number of Possible Shots	.Approx. 200 images (Based on CIPA standardized measurement)
Playback Function	Single Image, Movie, Magnified Focus, Index, Magnified, Filtered, Slideshow, Active Display
Editing Function	.Erase, Protect, My Category, Resize, My Colors, i-Contrast, Trimming, Rotate, Red-Eye Correction
Direct Print Type	.PictBridge
Interface	Hi-Speed USB (Dedicated connector with unified type of digital, audio and video*) HDMI (HDMI Mini Connector) * mini-B compatible
	Video/Audio output (NTSC and PAL capable, mono audio)
Communication Settings	.MTP, PTP
Power	Battery Pack NB-4L (rechargeable lithium-ion battery) AC adapter kit ACK-DC10
Operating Temperatures	.0 – 40 °C (32 – 104 °F)
Operating Humidity	
	.97.9 × 54.1 × 22.1 mm (3.85 × 2.12 × 0.87 in.)
Weight (camera body only)	

#### Battery Pack NB-4L

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

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

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

- All data is based on tests by Canon.
- The finished product, or exterior may differ from this report.

#### About MPEG-4 Licensing

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

\* Notice displayed in English as required.



#### USA and Canada only:

The Lithium ion/polymer battery that powers the product is recyclable.

Please call 1-800-8-BATTERY for information on how to recycle this battery.

When connecting to and using a household power outlet, use only AC Adapter Kit ACK-DC10 (rated input: 100 - 240 V AC 50/60 Hz, rated output: 4.3 V DC). Using anything else can cause fire, overheating, or electrical shock.

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#### FCC Notice

(Digital Camera, Model PC1356 systems)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions;

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for Class B digital devices, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

· Reorient or relocate the receiving antenna.

- · Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- · Consult the dealer or an experienced radio/TV technician for help.

The cable with the ferrite core provided with the digital camera must be used with this equipment in order to comply with Class B limits in Subpart B of Part 15 of the FCC rules.

Do not make any changes or modifications to the equipment unless otherwise specified in the manual. If such changes or modifications should be made, you could be required to stop operation of the equipment.

Canon U.S.A., Inc.

One Canon Plaza, Lake Success, NY 11042, U.S.A.

Tel No. (516) 328-5600

## **Canadian Radio Interference Regulations**

This Class B digital apparatus complies with Canadian ICES-003.

#### Réglementation canadienne sur les interférences radio

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

## Battery Charger CB-2LV

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

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

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

This battery charger is for exclusive use with Battery Pack NB-4L (0.76 Ah). There is a danger of explosion if other battery packs are used.

## **Trademark Acknowledgments**

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