Canon

PowerShot G1
D I G I T A L   C A M E R A

Camera User Guide

Flowchart and Reference Guides

This Guide

Shooting with the Camera

Software Starter Guide

Installing the Software

This Guide

Connecting the Camera to a Computer

Software Starter Guide

Downloading Images to a Computer

Please start by reading the Precaution on the reverse side of this cover.

DPOF™

Precaution

Camera Body Temperature

If your camera is used for prolonged periods, the camera body may become warm. Please be aware of this and take care when operating the camera for an extended period.

LCD Monitor

The LCD monitor is produced with extremely high-precision manufacturing techniques. More than 99.99% of the pixels operate to specification. Less than 0.01% of the pixels may occasionally misfire or appear as red or black dots. This has no effect on the recorded image and does not constitute a malfunction.

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Table of Contents

Icon Conventions in the Text

This mark denotes topics about issues that may affect shooting.

This mark denotes additional topics that complement the basic operating procedures.

This mark denotes tips about the camera and photography.

Read this First

Test Shots

Before you try to photograph important subjects, we highly recommend that you shoot several trial images to confirm that the camera is operating and being operated 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 CompactFlash™ cards, that results in the failure of an image to be recorded or to be recorded in a format that is machine sensible.

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Warranty Limitations

This camera's warranty is only effective in the country of sale. If a problem arises while the camera is in use abroad, please convey it back to the country of sale before proceeding with a warranty claim to a Canon Customer Support Help Desk.

Safety Precautions

• Before using the camera, please ensure that you read and understand the safety precautions described below. Always ensure that the camera is operated correctly.

• The safety precautions noted on the following pages are intended to instruct you in the safe and correct operation of the camera and its accessories to prevent injuries or damage to yourself, other persons and equipment.

• In the next few pages, the term "equipment" refers primarily to the camera and its power supply accessories.

⚠ Warnings

- Do not aim the camera directly into the sun or at other intense light sources that could injure your eyesight.

- Do not trigger the flash in close proximity to human or animal eyes. Exposure to the intense light produced by the flash may injure 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. Accidental damage to the camera or batteries by a child could result in serious injury. In addition, placement of the strap around the child's neck could result in asphyxiation.

- Be particularly careful to keep the button batteries used in the camera and wireless controller out of the reach of children. Seek medical assistance immediately if a child swallows a battery.

- Do not attempt to disassemble or alter any part of the equipment that is not expressly described in this guide. Disassembly or alteration may result in high-voltage electrical shock. Internal inspections, alterations and repairs should be conducted by qualified service personnel authorized by your camera distributor or the closest Canon Customer Support Help Desk.

- To avoid the risk of high-voltage electrical shock, do not touch the flash portion of the camera if it has been damaged. Similarly, never touch internal portions of the equipment that become exposed as a result of damage. There is a risk of high-voltage electrical shock. Please take the first opportunity to consult your camera distributor or the closest Canon Customer Support Help Desk.

- Stop operating the equipment immediately if it emits smoke or noxious fumes. Failure to do so may result in fire or electrical shock. Immediately turn the camera's power off, remove the camera battery and unplug the power cord from the electrical outlet. Confirm that smoke or fume emissions have ceased. Please consult your camera distributor or the closest Canon Customer Support Help Desk.

- Stop operating the equipment if it is dropped or the casing is damaged. Failure to do so may result in fire or electrical shock. Immediately turn the camera's power off, remove the camera battery and unplug the power cord from the electrical outlet. Please consult your camera distributor or the closest Canon Customer Support Help Desk.

- Do not allow the equipment to come into contact with, or become immersed in, water or other liquids. Do not allow liquids to enter the interior. The camera has not been waterproofed. If the exterior comes into contact with liquids or salt air, wipe it dry with a soft, absorbent cloth. If water or other foreign substances enter the interior, immediately turn the camera's power off and remove the camera battery or unplug the power cord from the electrical outlet. Continued use of the equipment may result in fire or electrical shock. Please consult your camera distributor or the closest Canon Customer Support Help Desk.

- Do not use substances containing alcohol, benzene, thinners or other flammable substances to clean or maintain the equipment. The use of these substances may lead to fire.

- Do not cut, damage, alter or place heavy items on the power adapter cord. Any of these actions may cause an electrical short circuit, which may lead to fire or electrical shock. Replace a broken or damaged power adapter cord.

- Do not handle the power cord if your hands are wet. Handling it with wet hands may lead to electrical shock. When unplugging the cord, ensure that you hold the solid portion of the plug. Pulling on the flexible portion of the cord may damage or expose the wire and insulation, creating the potential for fires or electrical shocks.

- Use of power sources not expressly recommended for this equipment may lead to overheating, distortion of the equipment, fire, electrical shock or other hazards. Use only the recommended power accessories.

- Always turn off the computer and unplug the camera from the DC plug before attaching or detaching any interface cables (except for USB cables). The cables carry high-voltage currents and there is a risk of electrical shock.

- Do not place the batteries near a heat source or expose them to direct flame or heat. Neither should you immerse them in water. Such exposure may damage the batteries and lead to the leakage of corrosive liquids, fire, electrical shock, explosion or serious injury.

- Do not attempt to disassemble, alter or apply heat to the batteries. There is serious risk of injury due to an explosion. Immediately flush with water any area of the body - including the eyes and mouth, or clothing - that comes into contact with the inner contents of a battery. If the eyes or mouth contact these substances, immediately flush with water and seek medical assistance.

- Avoid dropping or subjecting the batteries to severe impacts that could damage the casings. It could lead to leakage and injury.

- Do not short-circuit the battery terminals with metallic objects, such as key holders. It could lead to overheating, burns and other injuries. Use the supplied terminal cover to transport or store the battery pack.

- Before you discard a battery, cover the terminals with tape or other insulators to prevent direct contact with other objects. Contact with the metallic components of other materials in waste containers may lead to fire or explosions. Discard the batteries in specialized waste facilities if available in your area.

- Use of batteries not expressly recommended for this equipment may cause explosions or leaks, resulting in fire, injury and damage to the surroundings. Use only recommended batteries and accessories.

- Disconnect the compact power adapter from both the camera and electrical outlet after recharging and when the camera is not in use to avoid fires and other hazards. Continuous use over a long period of time may cause the unit to overheat and distort, resulting in fire.

- The camera terminal of the supplied compact power cord is designed for exclusive use with your camera. Do not use it with other products or batteries. There is a risk of fire and other hazards.

- Exercise due caution when screwing on the separately sold wide converter lens, tele-converter lens, close-up lens and conversion lens adapter. If they loosen, fall off and shatter, the glass shards may cause an injury. Never aim the lenses at the sun or strong light sources. There is a risk of damage to eyesight.

⚠ CAUTIONS

- Avoid using, placing or storing the equipment in places subject to strong sunlight or high temperatures, such as the dashboard or trunk (boot) of a car. Exposure to intense sunlight and heat may cause the batteries to leak, overheat or explode, resulting in fire, burns or other injuries. High temperatures may also cause deformation of the casing. Ensure that there is good ventilation when using the compact power adapter to charge the battery pack or power the camera.

- Do not store the equipment in humid or dusty areas. Storage in such areas could lead to fire, electrical shock or other damage.

- Be careful not to bang the camera or subject it to strong impacts or shocks that could lead to injury or damage the equipment when wearing or holding it by the strap.

- Be careful not to cover the flash with your fingers when shooting. In addition, do not touch the surface of the flash after taking several pictures in rapid succession. Either action could result in burns.

- If your camera is used for prolonged periods, the camera body may become warm. Please take care when operating the camera for extended periods as your hands may experience a burning sensation.

Preventing Malfunctions

Avoid Strong Magnetic Fields

Never place the camera in close proximity to electric motors or other equipment generating strong electromagnetic fields. Exposure to strong magnetic fields may cause malfunctions or corrupt image data.

Avoid Condensation Related Problems

Moving the equipment rapidly between hot and cold temperatures may cause condensation (water droplets) to form on its external and internal surfaces. You can avoid this by placing the equipment in an airtight, resealable plastic bag and letting it adjust to temperature changes slowly before removing it from the bag.

If Condensation Forms Inside the Camera

Stop using the camera immediately if you detect condensation. Continued use may damage the equipment. Remove the CF card and battery or Compact Power Adapter CA-560 (if connected) from the camera and wait until the moisture evaporates completely before resuming use.

Quick Start

Terminals
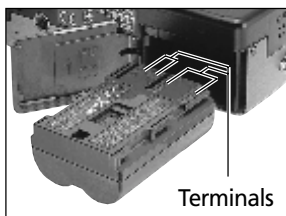
1 Install the Battery (p. 20).
Slide the battery cover lock, push the battery cover open and insert the battery.

Orange Indicator

2 Charge the Battery (p. 18).
Confirm that the main dial is turned to **OFF**. Charge the battery. The battery is approximately 90% charged (adequate charge for use) when the orange indicator beside the viewfinder stops flashing and changes to a steady orange. After charging, detach the compact power adapter's DC plug from the camera.
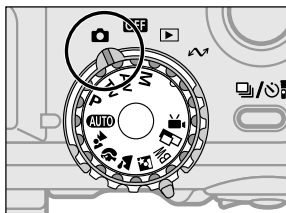

3 Install the CF card. (p. 26).
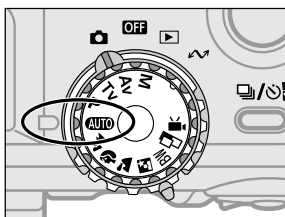Open the CF card slot and insert a CF card.
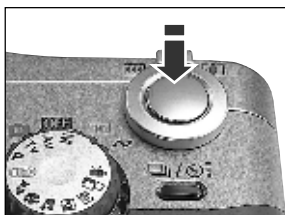

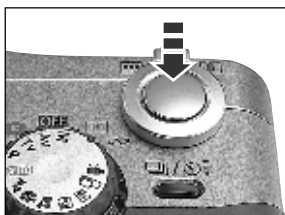**4** Remove the lens cap.

5 Turn the power on (p. 29).
Open the LCD monitor and turn the main dial (lower dial) to ▲ (shooting).

6 Turn the mode dial (upper dial) to **AUTO** (p. 37).

7 Focus (p. 34).
Aim the camera and lightly press the shutter button halfway. Two beeps will sound when the autofocus is set.

8 Shoot (p. 34).
Press the shutter button all the way. You will hear the sound of the shutter close when the shot is complete.

9 View the recorded image (p. 39).
The recorded image will display in the LCD monitor for approximately 2 seconds. Keep your finger on the shutter button or press the Set button while the image is displayed to continue to display the image after the shutter button is released.
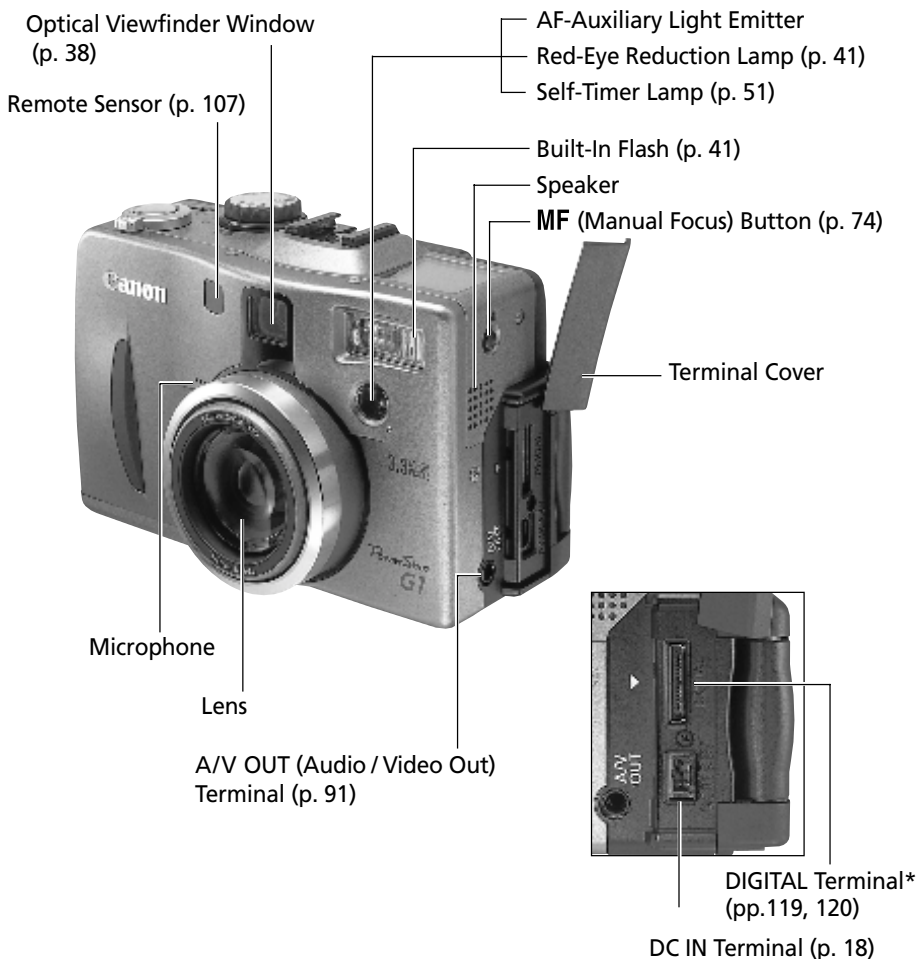
To Immediately Delete the Displayed Image

1. Press the ✷ button while the image is displayed.
2. Press the ▷ arrow on the omni selector to select [OK].
3. Press the Set button.

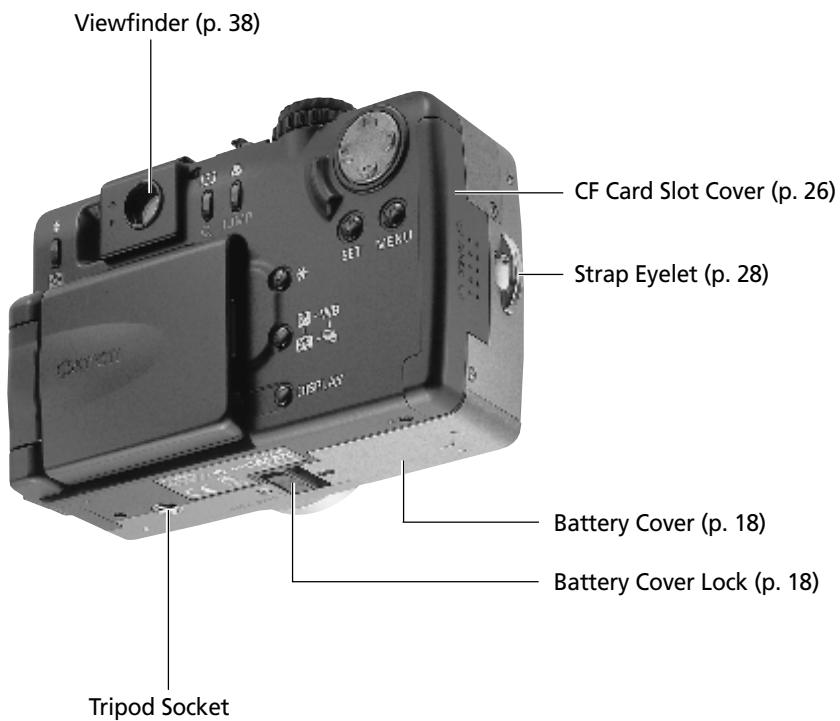Erase?   Cancel   OK

Components Guide

Front View

Optical Viewfinder Window (p. 38)

Remote Sensor (p. 107)

AF-Auxiliary Light Emitter
Red-Eye Reduction Lamp (p. 41)
Self-Timer Lamp (p. 51)

Built-In Flash (p. 41)
Speaker
MF (Manual Focus) Button (p. 74)

Terminal Cover

Microphone

Lens

A/V OUT (Audio / Video Out) Terminal (p. 91)
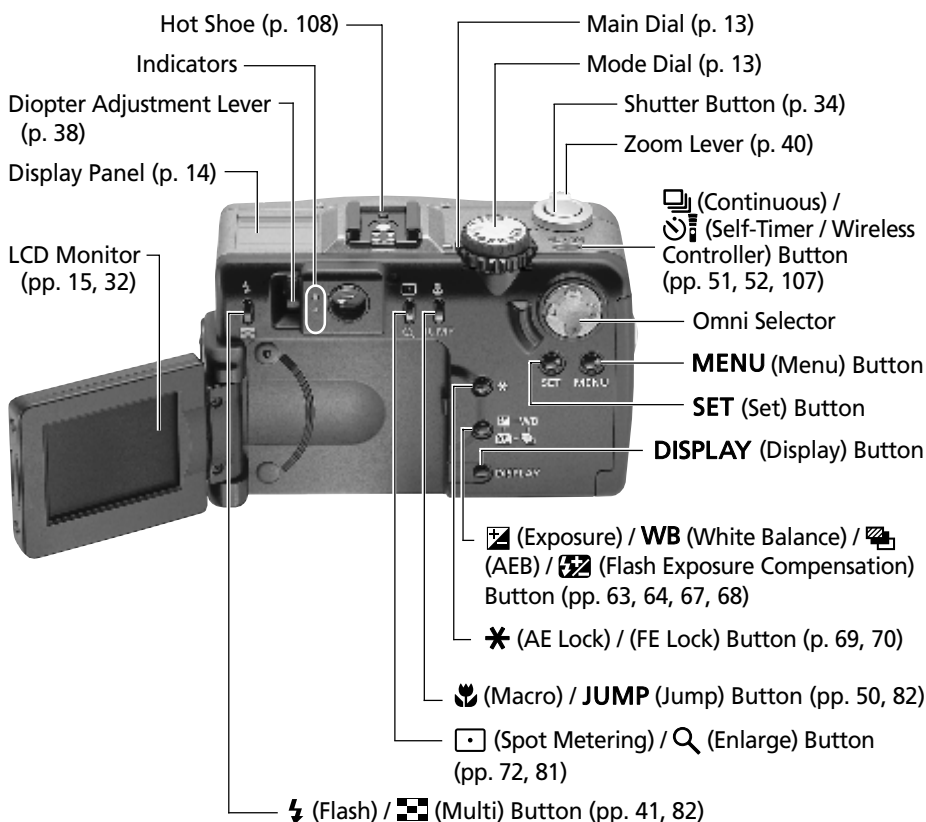
DIGITAL Terminal* (pp.119, 120)

DC IN Terminal (p. 18)

• To connect the camera to the computer with the USB interface, attach the supplied interface cable to the camera's DIGITAL terminal. To connect to a serial port, the separately sold serial cable (IFC-200PCS for Windows and IFC-200MC for Macintosh) is required.

Back View

Viewfinder (p. 38)

CF Card Slot Cover (p. 26)

Strap Eyelet (p. 28)

Battery Cover (p. 18)

Battery Cover Lock (p. 18)

Tripod Socket

Controls

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Indicators

Diopter Adjustment Lever (p. 38)

Display Panel (p. 14)

LCD Monitor (pp. 15, 32)

Main Dial (p. 13)

Mode Dial (p. 13)

Shutter Button (p. 34)

Zoom Lever (p. 40)

⊑ (Continuous) / ⏲ (Self-Timer / Wireless Controller) Button (pp. 51, 52, 107)

Omni Selector

MENU (Menu) Button

SET (Set) Button

DISPLAY (Display) Button

▧ (Exposure) / **WB** (White Balance) / ▧ (AEB) / ▧ (Flash Exposure Compensation) Button (pp. 63, 64, 67, 68)

✳ (AE Lock) / (FE Lock) Button (p. 69, 70)

❀ (Macro) / **JUMP** (Jump) Button (pp. 50, 82)

⊡ (Spot Metering) / ◎ (Enlarge) Button (pp. 72, 81)

⚡ (Flash) / ▧ (Multi) Button (pp. 41, 82)

Indicators

Upper Indicator

The indicators shine or flash when the shutter button is pressed or the following operations are underway.

- Green: Ready to record / Battery charge complete (100%)
- Flashing Green: Recording to CF card / Reading CF card / Erasing from CF card
- Orange: Ready to record (flash on) /
  Battery charge adequate (approximately 90%)
- Flashing Orange: Ready to record (camera shake warning) /Battery is charging

Lower Indicator

- Yellow: Macro mode / Manual focus mode

Main Dial / Mode Dial

Main Dial (lower dial)

Mode Dial (upper dial)
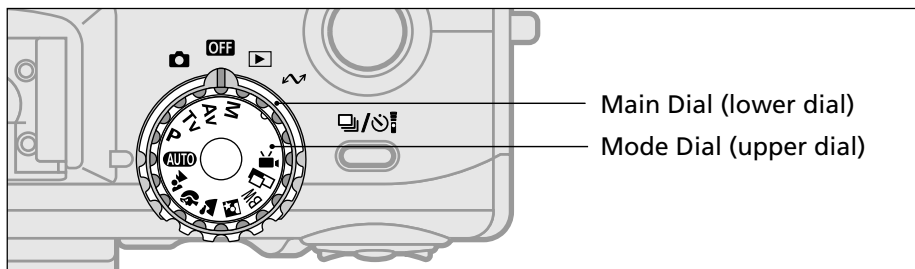
Main Dial

Use the main dial to switch between the power off, shooting, replaying and PC connection modes.

OFF : Off (p. 29)

📷 : Shooting (p. 31)

▶ : Replaying (p. 31)

∿ : PC Connection (pp. 119, 121)

- The ∿ (PC connection) mode is used to download and view images on a computer when the camera is connected via the interface cable. Please read Using the Supplied Interface Cables (p. 116) for connection instructions. The Software Starter Guide, a separate manual, describes how to download and view the images.
- "PC" will show in the display panel when a connection to the computer is opened.

Mode Dial

The mode dial is for selecting a shooting mode when the main dial is set to 📷 (shooting) mode.

- **AUTO** : Auto (p. 37)

- **Image Zone**
  - 🏃 : Pan Focus (p. 43)
  - 👤 : Portrait (p. 43)
  - 🏔 : Landscape (p. 44)
  - 🌃 : Night Scene (p.44)
  - BW : Black and White (p. 45)
  - ⊡ : Stitch Assist (p. 46)
  - 🎥 : Movie (p. 49)

- **Creative Zone**
  - **P** : Program AE (p. 57)
  - **Tv** : Shutter Speed-Priority AE (p. 58)
  - **Av** : Aperture-Priority AE (p. 60)
  - **M** : Manual Exposure (p. 62)

Display Panel

The display panel shows the camera settings, the remaining image capacity, movie shooting time, battery charge and other information.
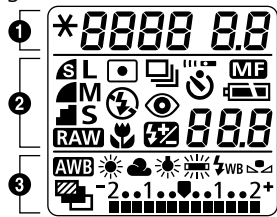
❶	✳	AE Lock / FE Lock	pp. 69, 70
	8888	Shutter Speed / Movie Shooting Time	–
	8.8	Aperture Setting	–
❷	⬛ (compression icons)	Compression	p. 54
	L M S	Resolution	p. 54
	RAW	File Format	p. 56
	▣	Spot Metering	p. 72
	▢ ▣	Single Shot / Continuous Mode	p. 52
	⚡ ⚡̸	Flash On / Flash Off	p. 41
	◉	Red-Eye Reduction	p. 41
	🌷	Macro Mode	p. 50
	⚡±	Flash Exposure Compensation	p. 68
	⏱	Self-Timer / Wireless Controller	pp. 51, 107
	MF	Manual Focus	p. 74
	🔋 🔋	Battery Charge State	p. 20
	88.8	Remaining Image Capacity / Message Code / Error Code	p. 127
❸	**AWB** ☀ ☁ ☀ ≡ ⚡WB ◣	White Balance Settings	p. 64
	◪	AEB	p. 67
	⁻2..1..▼..1..2⁺	Exposure Compensation Level / AEB Level / Flash Exposure Compensation Level	pp. 63, 67, 68

• The diagram above shows all the icons appearing at once. Normally, only the icons applicable to the selected mode and camera state appear.

LCD Monitor

Switching between Modes

Pressing the Display button switches the LCD monitor display mode.

▢ Shooting

- Pressing the Display button cycles the LCD monitor to the next mode each time the button is pressed. The order is on (no information) / on (information view) / off.

📓 • The LCD monitor's display mode [on (no information); on (information view); LCD monitor off] is memorized when the camera is turned off. When the camera is turned on again it assumes the last mode. However, when the LCD monitor is turned on and the low battery icon 〓 appears, the LCD monitor may not automatically turn on the next time the camera is started.
- Changing the shooting mode will cause the LCD monitor to display relevant information for about six seconds when it is turned on regardless of whether the information view mode is on or off.
- Setting the mode dial to ▢ or ▢ turns on the LCD monitor regardless of whether it is set to on or off.

❗ • The camera shake warning icon 📳 will appear at the center of the LCD monitor in low light conditions while the camera is preparing to shoot. When this icon appears, use the flash or fix the camera to a tripod to shoot.

▶ Replaying

- The LCD monitor turns on when the main dial is turned to ▶.
- Pressing the Display button switches the information view mode.
     Single Replay: Simple Display → Detailed Display → No Display
     Multi Replay: Simple Display → No Display

Information Displayed on the LCD Monitor

The LCD monitor displays information in the shooting or replaying mode, such as the camera settings, remaining image capacity and shooting date / time.

🔘 Shooting

Aperture Setting

MF (Manual Focus) Indicator

Shutter Speed

The following displays in information view.

|		
🔲 🖼 🌙 🖼 🖼 🎨	Shooting Mode	p. 13
🖼 🖼 P TV AV M		
⚡ᴬ ◎ ⚡◎ ⚡ ⚡	Flash	p. 41
☐ ⊒ 🕙	Drive Mode	pp. 51, 52
⦿	Spot Metering	p. 72
AWB ☀ ☁ 💡 🌓 ⚡ 🖼	White Balance	p. 64
–2 … ±0 … +2	Exposure Level	p. 63
🖼	AEB Mode	p. 67
⚡	Flash Exposure Compensation	p. 68
⚡ (RED)	Externally mounted Flash Charging Complete	–
✱	AE Lock / FE Lock	pp. 69, 70
❀	Macro Mode	p. 50
MF	Manual Focus	p. 74
2x 4x	Digital Zoom Setting	p. 53

- The icons in the shaded boxes above display even when the information view is turned off.
- In addition to the above, the shutter speed, aperture setting and MF indicator (when manual focus is selected) are displayed as in the example to the left.

▶ Replaying

File Number

Image Number and Total   Shooting Date / Time

Aperture Setting
Shutter Speed
ISO Speed Setting

In simple display mode, the following information displays.

- File Number
- Image Number (Displayed Image / Total)
- Shooting Date / Time
- 🅂 ◢ ◢ : Compression Setting
- **L M S** :   Resolution Setting
- **RAW** :   File Format
- **AVI** :   Movie
- Protection Status (⊶)

In the detailed display mode, the following information also displays.

🔲 🏞 🌙 🏔 🖼 BW 📺 🎥 P Tv Av M	Shooting Mode	p. 13
⅂⁺ᐟ –2 … ±0 … +2	Exposure Compensation	p. 63
AWB ☀ ☁ ☀ 🌫 ⚡ ⛱	White Balance	p. 64
⊡	Spot Metering	p. 72
⚡⅄	Flash Exposure Compensation	p. 68

* In addition to the above, the ISO speed, shutter speed and aperture setting are displayed as in the example to the left.

The following information may also appear with some image files.

|	
♪	Audio file is attached (wav file).
♪?	An audio file other than a wav file or a file with an unrecognized format is attached.
⚠	A JPEG file not supported by "Design rule for Camera File system" standards.

Preparing the Camera

Charging the Battery Pack

Use the following procedures to charge the battery pack the first time and subsequently when the low battery icon (⊏⊐) and Lb (Ⅼ ⅼ) message flash.
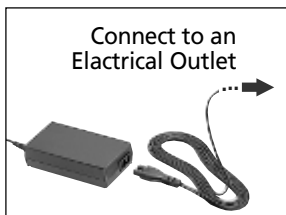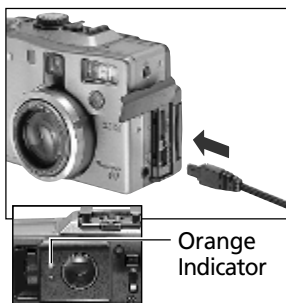
1 Turn the main dial to OFF.
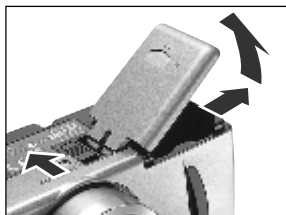
2 Slide the battery cover lock in the direction of the arrow and open the battery cover.

3 Insert the battery pack and close the battery cover.
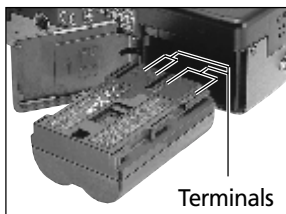
Terminals

4 Attach the power cord to the compact power adapter and plug it into an electrical outlet.

Connect to an Electrical Outlet

5 Connect the DC plug of the compact power adapter to the camera's DC IN terminal.

Orange Indicator

- The indicator beside the viewfinder will flash orange while the battery pack is charging and change to steady orange when it is approximately 90% charged, which is adequate for use. If it is charged for approximately two more hours, it will become fully charged and the indicator will switch to green.

- After charging the battery, remove it from the camera if the camera will not be used.

- If the main dial is set to any position other than **OFF** while charging, the battery pack will stop charging and the household electrical current will power the camera.
- This is a lithium ion battery pack so there is no need to completely use or discharge it before recharging. It can be charged at any charge state.
- It takes approximately 80 minutes to bring a fully discharged battery pack to a charge state of approximately 90% (adequate charge for use). It takes approximately two more hours to charge it fully (based on standard Canon testing criteria). Charge it within a temperature range of 5 to 40º C (41 to 104º F).
- Charging times will vary according to the surrounding humidity and battery pack charge state.

Battery Pack Handling Precautions

- Keep the battery pack and camera terminals ($\oplus \ominus \textcircled{D} \textcircled{B}$) clean at all times. Dirty terminals may cause a poor contact between the battery pack and camera. Polish the terminals with a tissue or a dry cloth before charging or using the battery pack.
- Do not cover the compact power adapter with anything, such as a tablecloth, cushion or blanket, when it is charging. Heat will build up internally and possibly lead to fire.
- Do not charge batteries other than Battery Pack BP-511 with the supplied equipment. It could damage the camera.
- The battery pack continues to discharge a small amount when left in the camera even with the power turned off. This shortens the battery life. Remove it from the camera, attach the supplied terminal adapter and store it in a cool, dry place. Charge it before use.
- Even charged battery packs continue to discharge naturally. You are advised to charge the battery on the day of use, or one day before, to ensure a full charge. Storing fully charged battery packs may shorten battery life and diminish performance.
- The camera consumes the battery charge when the power is on even when a function is not being used. To conserve the battery charge, be particularly attentive in turning the power off.
- Although the battery pack's maximum operating range is 0 to 40º C (32 to 104º F), the optimal range is 10 to 30º C (50 to 86º F). At cold temperatures, such as those experienced on ski hills, performance will temporarily decline, reducing the usable time before recharging.
- If the usable time of a battery pack diminishes substantially even when fully charged, it should be replaced.
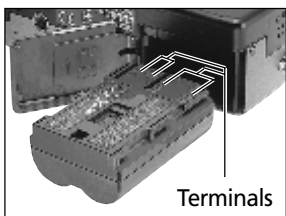
Installing the Battery Pack

Install Battery Pack BP-511 (supplied) into the camera as follows. Use a household power source to power the camera for extended periods (p. 22).

1 Turn the main dial to **OFF**.
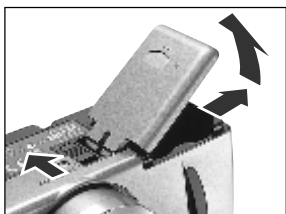
2 Slide the battery cover lock in the direction of the arrow and open the battery cover.

3 Insert the battery pack as shown.

4 Close the battery cover.

Terminals

• Charge the battery pack before using it the first time (p. 18).
• The flashing green indicator signals that the CF card is being written to, read, or erased. Never open the battery cover or remove the battery while it is flashing.
• Remove the battery pack when the camera is not in use.

Battery Status Symbols

• The following icons indicate the battery status. These icons will not appear while the camera is plugged into a household power source.

(Steady): Sufficient battery charge

(Flashing): Low battery

(Flashing): Replace or recharge battery

Battery Performance

	Number of Images Shot		Replay Time
	LCD Monitor On	LCD Monitor Off	
Battery Pack BP-511 (full charged)	Approx. 260 images	Approx. 800 images	Approx. 160 minutes

- The data above will vary according to the shooting conditions and settings.
- Movie data is excluded.
- At low temperatures, the battery pack performance may diminish and the low battery icon appear very rapidly. In these circumstances, the performance can be improved by warming the battery pack in a pocket before use.

<Test Conditions>

Shooting: Room temperature (23° C, 73° F), alternating maximum wide angle and maximum telephoto shots at 20-second intervals with flash fired once every four shots and camera power turned off and on every eighth shot. CF card used.

Replaying: Room temperature (23° C, 73° F), continuous playback at one image per 5 seconds. CF card used.

Using a Household Power Source

You are advised to use a household power source for long periods of use and for connecting to a computer.

Connect to an
Elactrical Outlet
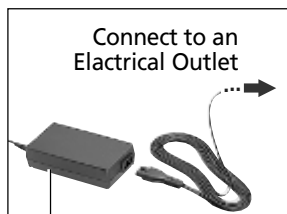
Compact Power Adapter
CA-560

1 Attach the power cord to the compact power adapter and plug it into an electrical outlet.

2 Open the terminal cover and connect the DC plug of the compact power adapter to the camera's DC IN terminal.
 • Always disconnect and unplug the compact power adapter after use.

• Always turn the camera's power off before connecting or disconnecting the compact power adapter.
• Battery Pack BP-511 cannot be charged while the compact power adapter is being used to run the camera (main dial is set to any position other than Off).
• Do not use Compact Power Adapter CA-560 to power to any device other than one for which Battery Pack BP-511 is specified.

Using a Charge Adapter / Car Battery Cable Kit (Optional)

Charge Adapter / Car Battery Cable Kit CR-560 (optional) can be used to charge battery packs or to power the camera from a car's cigarette lighter socket. You can also charge a battery pack from a household power source without using the camera by connecting Compact Power Adapter CA-560 (supplied with the camera) to Charge Adapter / Car Battery Cable Kit CR-560.

Using a Car Cigarette Lighter Socket as a Power Source
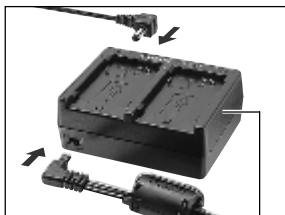
Charge Adapter

1 Attach the DC cable and car battery cable to the charge adapter.

2 Connect the DC cable to the camera's DC IN terminal.
- Confirm that the camera's main dial is turned to OFF .

To a Car's Cigarette Lighter Socket

3 With the engine running, plug the car battery cable into the car's cigarette lighter socket.
- Be sure to have the engine running when you unplug it too.

4 Turn the camera on.

- Always ensure that the car's engine is running when you use Charge Adapter / Car Battery Cable Kit CR-560. Use of the kit without the engine running may flatten the car battery. Always unplug the kit before turning off the engine.

Charging the Battery Pack

1 Attach the car battery cable to the charge adapter.

2 With the engine running, plug the car battery cable into the cigarette lighter socket.
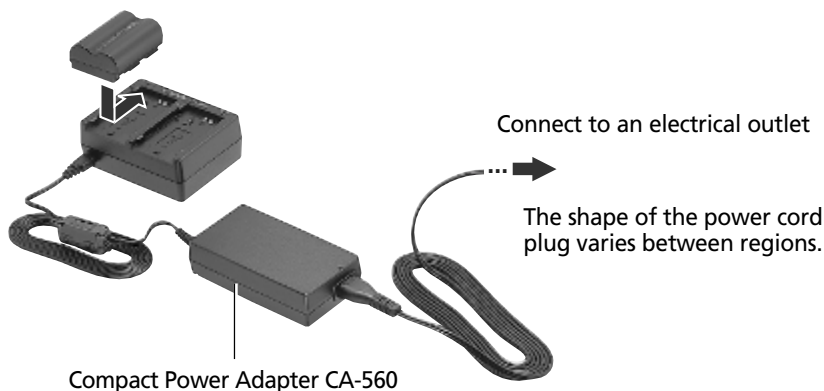
To a Car's Cigarette Lighter Socket
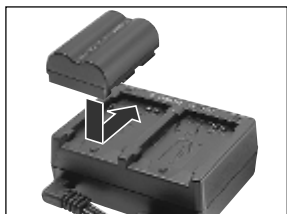
3 Attach the battery pack.
- Align the battery pack with the ▲ mark on the charge adapter and slide it in the direction of the arrow.
- Up to two Battery Pack BP-511s can be placed in the charge adapter simultaneously.
- Either slot, A or B, can be used to charge a single battery pack. When two are placed in the charge adapter, the first one to be installed will start charging. The second battery pack will start charging after the first has been fully charged.
- If two battery packs have been placed in the charge adapter before it is plugged into the cigarette lighter socket, the one placed in the A side will charge first. (B side will start after A side is fully charged.)
- The red light will flash while a battery pack is charging and shine steady when it is charged.
- It takes approximately 80 minutes to charge a single battery pack.

4 After charging, remove the battery pack.
- Remove the battery pack by sliding it in the opposite direction from which it was installed.

5 With the engine running, unplug the car battery cable from the socket.

- Whenever you turn the engine off, the battery will stop charging, so be sure to unplug the charge adapter from the cigarette lighter socket.
- Wait until the engine is running again to plug it back into the cigarette lighter socket and resume charging.

Charging with the Compact Power Adapter

Battery packs can also be charged in the charge adapter using a household power source by attaching Compact Power Adapter CA-560 in place of the car battery cable. This allows you to use the camera while your other battery packs are charging.

Connect to an electrical outlet

The shape of the power cord plug varies between regions.

Compact Power Adapter CA-560

Installing a CF Card

1 Turn the main dial is set to ⬛.
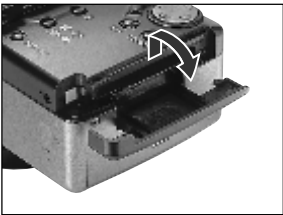
**2** Slide the CF card cover in the direction of the arrow and lift it open.
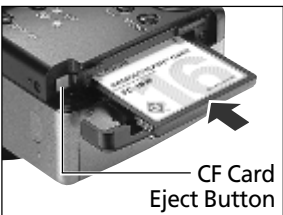
3 Insert the CF card with the label facing up and the arrow pointing in.
- Push the card in until the CF card eject button fully extends.
- To remove the CF card, push the CF card eject button and pull the card out.

CF Card Eject Button

CF Cards and Estimated Capacities (Recordable Images)

			FC-8M	FC-16M	FC-32M	FC-64M	FC-128M
L (Large)	2048 x 1536 pixels	⑤	3	8	17	35	71
		◢	7	15	32	64	130
		◢	15	32	64	130	261
M (Medium)	1024 x 768 pixels	⑤	12	25	51	103	207
		◢	22	45	91	183	368
		◢	41	84	170	342	684
S (Small)	640 x 480 pixels	⑤	26	54	109	220	441
		◢	46	94	189	379	760
		◢	79	161	323	648	1298*
RAW	2048 x 1536 pixels		2	5	11	24	49
Movie	320 x 240 pixels		30 sec.	62 sec.	124 sec.	250 sec.	502 sec.

* Figures over 1000 display as "999" since the display panel can only show up to three digits.
- For movies, time figures are displayed as if the movies were shot continuously. A movie file, however, has a maximum length of approximately 30 seconds.
- These figures reflect standard shooting conditions established by Canon. Actual totals may vary according to the subject, shooting conditions and shooting mode.
- ⑤ Superfine, ◢ Fine and ◢ Normal indicate the relative compression ratio.

● • When the camera's indicator flashes green, the camera is writing, reading, erasing or transmitting an image to or from the card. Do not perform the following, for image data may be lost or corrupted:
  - Do not apply shocks or vibrations to the camera.
  - Do not turn off the power or open the battery cover.
  - Do not open the CF card slot cover or remove the CF card.
• Never open the CF card slot cover when the power is on.
• Please note that CF cards formatted in or edited with other manufacturer's cameras or application programs may not operate correctly in the camera.

CF Card Handling Precautions

• CF cards are high-precision electronic devices. Do not bend, force, or subject them to shocks or vibration.

• Do not attempt to disassemble or alter a CF card.

• Moving a CF card rapidly between temperature extremes may cause condensation to form in the card, leading to potential malfunctions. To avoid condensation formation, place the CF card in a sealed plastic bag before moving it into a different temperature zone and allow it to adjust slowly to the new temperature. If condensation forms on the CF card, put it aside until the water droplets have evaporated completely.

• Place the CF card in the supplied case for storage.

• Do not use or store CF cards in the following types of location.
  - Locations subject to dust or sand
  - Locations subject to high humidity and high temperatures

Microdrives are a recording medium with a hard disk. Their merits are a large capacity and a low price per megabyte of capacity. However, they are relatively more susceptible to vibrations and shocks than CF cards, which use durable flash memories. Please be careful, therefore, not to subject the camera to vibrations or shocks when using a microdrive, especially while recording or replaying.

Attaching the Strap
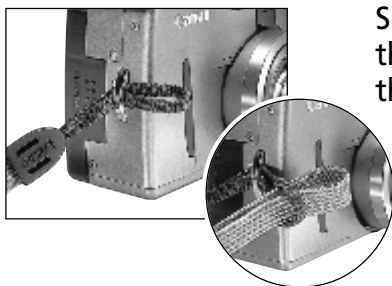
Slip the small loop of the strap through the strap eyelet on the camera and through the hand loop.

⚠ • Avoid waving the camera about or catching it on other items when suspending it from the strap.
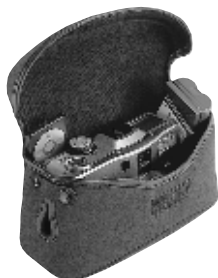
Attaching the Lens Cap

Fit the lens cap over the lens casing so that it covers the entire lens. Always replace the lens cap after use.

📝 • Attach the lens cap cord to the strap or strap eyelet.
• Remove the lens cap before turning on the camera power.

Using the Soft Case (Optional)

The soft case can be used to carry the camera, battery pack, CF card and the wireless controller.
• Optional soft case appearance and specifications may vary according to region.

Basic Functions

Turning the Power On / Off
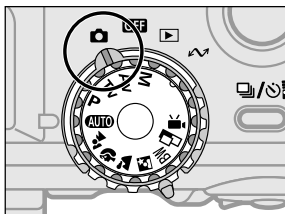
Example of the main dial turned to ◉ (Shooting).

1 Turn the main dial left or right from the **OFF** position.

- The power is off when in the **OFF** position and on in any other.

- *LEN5* will appear in the display panel and a warning beep will sound if you turn on the camera with the lens cap on. If this occurs, remove the lens cap and turn the camera off and back on.
- Be careful not to touch the lens when shooting. Please also refrain from forcing the lens with fingers or other objects. It could lead to malfunctions or damage the camera. If the camera will not focus or *LEN5* appears in the display panel and a warning beep sounds, turn the camera off and back on.

- Pressing the shutter button halfway will restore power when the camera shuts down with the power save function.

Power Save Function

The camera is equipped with a power save function.

Shooting Mode: powers down approximately 3 minutes after a control is last accessed. The LCD monitor will shut off approximately 3 minutes after a control is last accessed even if the power save function is turned off.
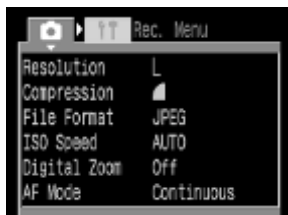
Replaying Mode: powers down approximately 5 minutes after a control is last accessed.

PC Connection Mode: displays a warning message on the computer screen approximately 5 minutes after a control is last accessed. The camera will power down if no controls are used after 1 additional minute.

- Please note that the camera continues to consume a minimal amount of power even when the power save function shuts it down.
- The power save function is disabled while a slide show plays on the camera (p. 86).
- You can turn off the power save function in the Set up menu (p. 104).

Setting the Date / Time

1 Turn the main dial to ◻ or ▶.
- The camera will power up.

2 Press the Menu button.
- The [◻ (Rec.)] or [▶ (Play)] menu will display.

◻ ▶ ↑↑ Rec. Menu
Resolution	L
Compression	◢
File Format	JPEG
ISO Speed	AUTO
Digital Zoom	Off
AF Mode	Continuous

◻ (Rec.) Menu.

3 Press the ▷ arrow on the omni selector to select the [↑↑ (Set up)] menu.
- Pressing the Jump button also switches between menus.

◻ ↑↑
LCD Brightness	※
Shutter Volume	■■□□□
Auto Power Down	On
Date/Time...	11.11.'00 10:28
Format	
Language	English

4 Press the △ or ▽ arrow on the omni selector to select [Date/Time], then press the Set button.
- The factory default for the date format may differ from that shown here in some regions.

◻ ↑↑

Set Date/Time.

▲
11.11.2000 10:30 mm/dd/yy
▼

SET OK MENU Cancel

5 Set the date and time.
- Press the ◁ or ▷ arrow on the omni selector to move between fields.
- Press the △ or ▽ arrow on the omni selector to set the values.

6 Press the Set button.
- After adjusting the settings, press the Menu button to close the menu window.

- If the Set Date/Time menu appears when the camera is turned on, it means that the date battery (button battery) charge is low and that the settings have been lost. Reset the date and time after you replace the button battery (p. 122).
- The date can be set up to the year 2030.

Switching between Shooting and Replaying
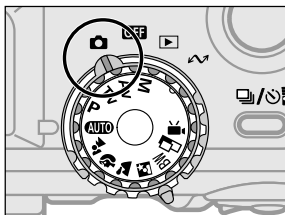
Shooting
• Turn the main dial to ◻.
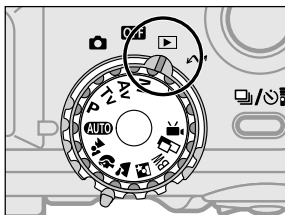
Replaying
• Open the LCD monitor and turn the main dial to ▶. If you switch rapidly to replay mode directly from shooting mode, the lens may not retract. This is convenient when you wish to shoot again after checking or deleting an image immediately after it is shot.
• Be careful not to touch the lens while in replay mode.

Using the LCD Monitor

The LCD monitor can be used to confirm an image during shooting, to replay recorded images or to adjust menu settings. It can be opened to the following range of positions.
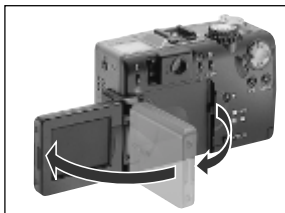
• Opened left to right 180 degrees. It locks temporarily at 90 degrees.
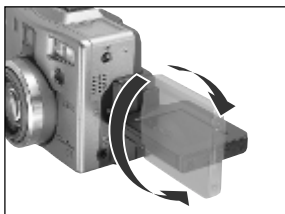
• Tilted forward 180 degrees toward the lens or backward 90 degrees.

• The LCD monitor will automatically turn off when it clicks shut against the camera body. For protection, always close the LCD monitor after use.

• Prevent the DC cable from touching the LCD monitor when the camera is connected to a household power source.

• If the LCD monitor is difficult to see because of the surrounding light conditions, you can adjust it in the [Set up] menu with the [LCD Brightness] option (p. 104).

The LCD monitor can also be positioned as below.
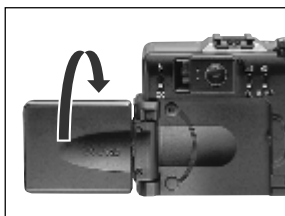
1 Open the LCD monitor left 180 degrees and tilt it 180 degrees toward the lens.

- In this position, icons and messages do not appear on the LCD monitor.
- The image shown on the LCD monitor is automatically flipped and reversed so that it appears correctly from in front of the lens.
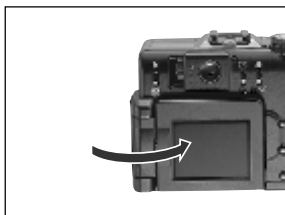
2 Fold the LCD monitor back against the camera body.

- Fold it until it clicks into place against the camera body. If it is not fully closed, the image will appear reversed and icons and messages will not display
- Icons and messages will appear and images will show properly (not reversed) when the LCD monitor is folded right against the camera until it clicks.

Pressing the Shutter Button

The shutter button features a two-stage action.
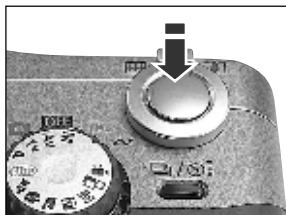
Pressing Halfway

• Pressing halfway automatically sets the exposure, focus and white balance. When metering is complete, two beeps sound and the indicator shines green. When the flash is on, the indicator shines orange. If the indicator is flashing orange, it warns of possible camera shake or low light. In macro or manual focus mode, the yellow indicator will also shine.
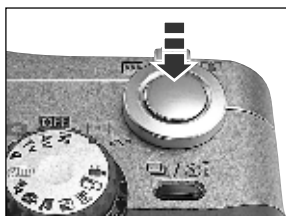
Pressing Fully

• You will hear the sound of the shutter close (shutter sound) when the shot is complete. Do not move the camera until it sounds. The indicator will flash green while the image is still recording onto the CF card. When the flashing orange indicator warns of camera shake or low light, you can still take the shot by pressing the shutter button fully.

• Images are first saved into the camera's internal memory before being recorded onto the CF card, allowing the next images to be taken immediately as long as sufficient space is available in the internal memory.
• The beep and shutter sound can be set On / Off in the Set up menu (p. 104).
• When the shutter sound is set to Off, but the beep is set to On, one beep will sound when the shutter button is fully pressed.
• There is no shutter sound in movie mode.

Selecting Menus and Settings

Menus are used to adjust shooting, replaying, date / time and electronic sound settings. Watch the LCD monitor while performing the following procedures.
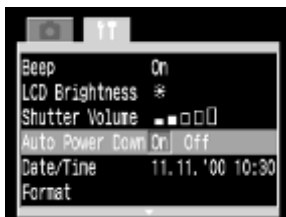
1 Press the Menu button.
- In ◘ mode, the [◘ (Rec.)] menu will appear. In ▶ mode, the [▶ (Play)] menu will appear.

2 Press the ◁ or ▷ arrow on the omni selector to switch between menu tabs.
- Pressing the ▷ arrow displays the [⊞ (Set up)] menu, while the ◁ arrow displays either the [◘ (Rec.)] or [▶ (Play)] menu.
- Pressing the Jump button also switches between the menu tabs.

3 Press the △ or ▽ arrow on the omni selector to select a menu item.
- The ▽ arrow selects the next item, the △ arrow the previous one.

4 Press the ◁ or ▷ arrow on the omni selector to select setting contents.
- The ◁ or ▷ arrow switches between settings.
- Press the Set button for items followed by an ellipsis (...) and then select a setting. Press the Set button again to confirm the setting.

5 Press the Menu button.
- Pressing the Menu button closes the menu and makes the settings take effect.
- In shooting mode, the menu can be closed by pressing the shutter button halfway.

Menu Settings and Factory Defaults

This chart shows the options for each menu and the default settings.

	Menu Item	Available Settings	Reference Page
Rec. Menu (Red)	Resolution	**L** (2048 x 1536*) / **M** (1024 x 768) / **S** (640 x 480)	p. 54
	Compression	(Superfine) / (Fine*) / (Normal)	p. 54
	File Format	JPEG* / RAW	p. 56
	ISO Speed	50* / 100 / 200 / 400 / AUTO	p. 77
	Digital Zoom	Off* / 2x / 4x	p. 53
	AF Mode[1]	Continuous* / Single	p. 76
	Review	Off / 2 sec.* / 10 sec.	p. 39
	File No. Reset	On / Off*	p. 78
	Contrast	– / 0* / +	p. 77
	Sharpness	– / 0* / +	p. 77
	Saturation	– / 0* / +	p. 77
Play Menu (Blue)	Single Erase	Erases images one-by-one	p. 92
	Erase all	Erases all images on the CF card	p. 93
	Protect	Turns image protection on and off	p. 90
	Rotate	Rotates the image in the display	p. 85
	Slide Show	Replays selected images as in a slide show	p. 86
	Print Order	Sets the print settings	p. 95
Set up Menu (Yellow)	Beep	On* / Off	p. 34
	LCD Brightness	Normal* / Bright	p. 104
	Shutter Volume (Shooting)	Off / 1 / 2* / 3 / 4 / 5	p. 34
	Speaker Volume (Replaying)	Off / 1 / 2 / 3* / 4 / 5	p. 84
	Auto Power Down	On* / Off	p. 104
	Date/Time	Sets the date and time	p. 30
	Format	Formats (initializes) the CF card	p. 94
	Language	‣ English* / Deutsch / Français / Español / Japanese	p. 105
		‣ English / Deutsch / Français / Nederlands / Dansk / Suomi / Italiano / Norsk / Svenska / Español	
	Video System	NTSC / PAL	p. 105

* Default values. Default languages and video system settings vary between regions.
[1] The setting is set to Single when the optical viewfinder is used without the LCD monitor.

• Some menu items are not available in certain shooting modes.
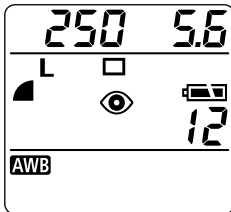
Shooting - Letting the Camera Select Settings

🅐🅤🅣🅞 Auto Mode

In this mode, all you have to do is press the shutter button and let the camera do everything else.
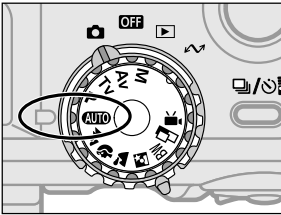
1 Turn the mode dial to 🅐🅤🅣🅞.

2 Aim the camera at the subject.

3 Operate the zoom lever to achieve the desired composition (relative subject size in the viewfinder).

4 Press the shutter button halfway (p. 34).
- The camera will focus on the subject and beep twice when complete.
- The shutter speed and aperture settings are automatically determined and show in the display panel. They also appear on the LCD monitor if it is on.

5 Press the shutter button all the way (p. 34).
- You will hear the sound of the shutter when the shutter activates.
- The picture will appear for 2 seconds in the LCD monitor if it is open.

• You can change the following settings.
   - Resolution: Large* / Medium / Small
   - Compression: Superfine / Fine* / Normal
   - Digital Zoom: Off* / On
   - AF Mode: Continuous* / Single
   - Review: 2 sec* / 10 sec. / Off
   - File No. Reset: Off* / On
   - Flash: Red-Eye Reduction Auto* / Auto / Off
   - Drive Method: Single* / Self-Timer
   - Macro: Off* / On
       * Default settings
• With the Review function, you can change the length of time images show in the LCD monitor after shooting, or set it so they do not show at all (p. 39).

Using the Viewfinder to Shoot

The camera is equipped with an optical viewfinder. When looking through the viewfinder, be sure to aim the autofocus crosshairs right at your subject.
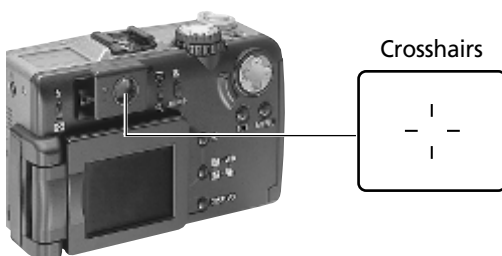
Crosshairs

When looking through the viewfinder to shoot, adjust the diopter adjustment lever until the crosshairs are as sharp as possible.

Diopter Adjustment Lever
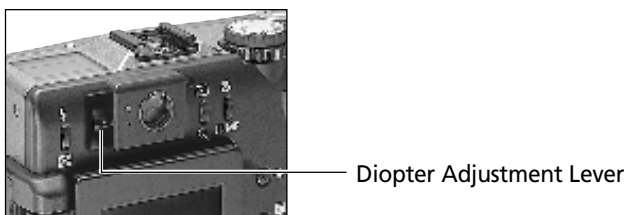
Checking an Image Right after Shooting

Checking the Image

The following explains ways to view the photographed image in addition to viewing it for 2 seconds in the LCD monitor when it has been opened.

Keeping the Shutter Button Pressed

The image will continue to display in the LCD monitor as long as you keep the shutter button fully depressed.

Pressing the Set Button

If you press the Set button while the image is displayed in the LCD monitor, it will continue to display even after the shutter button is released. Press the shutter button halfway again to stop displaying it.

• There is a shortcut for erasing the image while it is displayed (p. 9).

Changing the Image Display Duration

With the Review function set to the default value, the photographed image displays for 2 seconds. You can turn it off or set it for 10 seconds.

1 In the [⬚ (Rec.)] menu, select [Review].
   • See Selecting Menus and Settings (p. 35).

2 Select a Review setting and press the Menu button.
   • With the [Off] option, the image will not automatically display. However, you can view it if you keep the shutter button held down.
   • With the [2 sec.] or [10 sec.] options, the image automatically displays for the set duration even if the shutter button is released.
   • You can display the image longer than the 2- or 10-second duration by keeping the shutter button depressed or by pressing the Set button while it is displayed.
   • Another picture can be taken even while the last is displayed.

Adjusting the Zoom (Focal Length)

Focal length can be adjusted from 7 to 21 mm (equivalent to 34 to 102 mm in 35 mm film format).
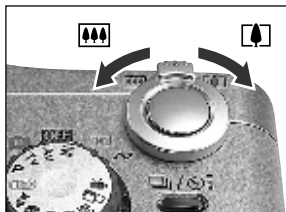
Telephoto / Wide Angle

- Press the zoom lever toward [♠] to zoom in (telephoto).
- Press the zoom lever toward [♠♠♠] to zoom out (wide angle).

Digital Zoom

- An image already zoomed with the optical zoom lens can be further zoomed digitally by 2 or 4 times (p. 53) and shot.

- The digital zoom combines the optical zoom with a digital teleconverter function. The resolution is coarser than with pure optical magnification.

⚡ **Using the Built-In Flash**

Use the built-in flash according to the guidelines below.

⚡ᴬ	**(Auto)***	The flash fires automatically as required by the lighting level.
◉	**(Red-eye reduction, Auto)**	The red-eye reduction lamp always fires but the flash only fires as required by the lighting level.
⚡◉	**(Red-eye reduction, Flash on)**	The red-eye reduction lamp and the flash always fire.
⚡	**(Flash on)**	The flash always fires.
⚡	**(Flash off)**	The flash does not fire.

* No icon appears in the display panel in Auto mode.
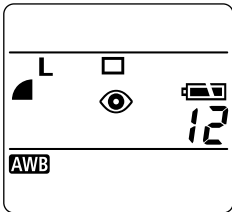
1 Press the ⚡ button to switch between flash modes.
- The selected flash mode will show in the display panel. It will also appear on the LCD monitor if it is on.

2 Shoot the image.
- The flash will fire if the indicator beside the viewfinder shines orange when the shutter button is pressed halfway.
- Shooting procedures are the same as for the **AUTO** Auto mode (p. 37).

Built-in Flash Settings

The flash cannot be used with some shooting modes.

		AUTO	🏃	🌃	🏔	🎇	BW	🎞	🎥	P	Tv	Av	M
⚡ᴬ	**(Auto)**	●	●*	●	●	●	●*	–	–	–	–	–	–
◉	**(Red-eye reduction, Auto)**	●*	●	●*	●	●*	●	–	–	–	–	–	–
⚡◉	**(Red-eye reduction, Flash on)**	–	●	●	●	●	●	–	–	●	●	●	●
⚡	**(Flash on)**	–	●	●	●	●	●	▲	–	●	●	●	●
⚡	**(Flash off)**	●	●	●	●*	●	●	▲*	●*	●*	●*	●*	●*

* Default setting.
● Setting selection is possible.
▲ Setting can only be selected for the first image.
– Setting selection is not possible.

- The fastest shutter speed for flash synchronization is 1/250 second. The camera automatically resets the shutter speed to 1/250 second if a faster speed is selected.
- The flash may take up to approximately 10 seconds to charge in some cases. Actual times will vary according to usage and the battery charge.
- The flash will fire at full strength in **M** mode.
- The flash will automatically adjust its output in the ⏷, 🏃, 🐾, 🏔, 🎨, BW, **P**, **Tv**, and **Av** modes.
- The flash setting is saved when the camera is turned off in the **P**, **Tv**, **Av** and **M** shooting modes.
- The flash will fire twice. A pre-flash will fire just before the shutter closes and will be followed by the main flash. The pre-flash is used by the camera to obtain the subject's exposure data so that the main flash can be set to the optimal intensity for the shot.

About the Red-Eye Reduction Function

A subject's eyes can appear red in an image shot with a flash in dim lighting due to light reflecting back from the eye's blood vessels, which is known as the red-eye phenomenon. The red-eye reduction lamp fires a soft pre-flash that causes the pupils to contract, thereby lessening the chances of the eyes appearing red when the main flash fires.
- Tell human subjects to look at the lamp since the function will not have any effect if the subject is not looking at the red-eye reduction lamp.
- The effect is made stronger by increasing the room lighting or by approaching closer to the subject.

▲ Pan Focus Mode

This mode fixes the focus so that shot can be taken quickly when the shutter button is pressed. Use this mode when you do not want to miss a shot, but you cannot predetermine the subject's position or focal distance. The focal length is preset to the maximum wide angle setting.
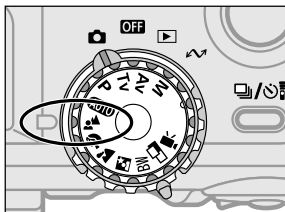
1 Turn the mode dial to ▲.
- Shooting procedures are the same as for the **AUTO** Auto mode (p. 37).

- The zoom, macro, AE lock, FE Lock, metering method, manual focus, focus, file format (RAW), and image adjustment (ISO speed, contrast, sharpness and saturation) settings cannot be adjusted in this mode.

- Shots can be taken within the range of 65 cm (25.6 in.) at maximum wide angle to infinity in this mode.

❀ Portrait Mode

Use this mode when you want the subject to appear sharp and the background to fade.
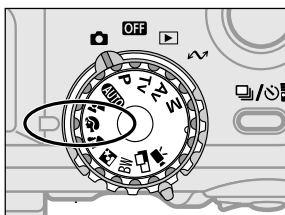
1 Turn the mode dial to ❀.
- Shooting procedures are the same as for the **AUTO** Auto mode (p. 37).

- The AE lock, FE Lock, metering method, file format (RAW), and image adjustment (ISO speed, contrast, sharpness and saturation) settings cannot be adjusted in this mode.

- To best achieve the effect of the background gradually fading, compose the image so that the upper half of the subject's body fills most of the viewfinder or LCD monitor.
- The background gets increasingly indistinct the more you adjust the focal length toward telephoto.

▲ Landscape Mode

Use this mode to shoot expansive landscape scenes.
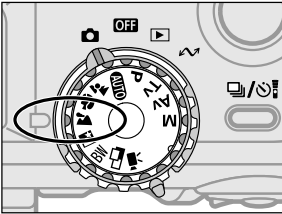
1 Turn the mode dial to ▲.
- Shooting procedures are the same as for the 🆎 Auto mode (p. 37).

- The macro, AE lock, FE Lock, metering method, file format (RAW), and image adjustment (ISO speed, contrast, sharpness and saturation) settings cannot be adjusted in this mode.

- Since a slow shutter speed is often selected in ▲ mode, use a tripod to shoot if the 🖐 (camera shake warning) icon appears in the LCD monitor.

⛏ Night Scene Mode

Use this mode to capture human subjects against the backdrop of an evening sky or night scene. The people are illuminated with light from the flash while the backdrop is captured at a slow shutter speed so that both appear correctly exposed.
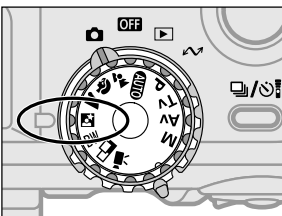
1 Turn the mode dial to ⛏.
- Shooting procedures are the same as for the 🆎 Auto mode (p. 37).

- The macro, AE lock, FE Lock, metering method, file format (RAW), and image adjustment (ISO speed, contrast, sharpness and saturation) settings cannot be adjusted in this mode.
- Always use a tripod to prevent camera shake in this mode.

- Warn people to stay still for a few seconds after the flash fires because of the slow shutter speed.
- Optional EX series Speedlites (p. 108) can also be used to shoot in ⛏ mode.
- Using the ⛏ mode in daylight will produce an effect similar to that of the 🆎 mode.

BW Black and White Mode

This mode is effective for shooting text or producing images with a nostalgic feel to them.
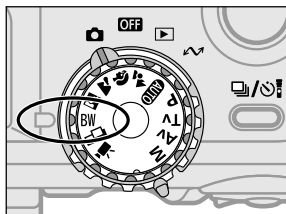
1 Turn the mode dial to BW.
- Shooting procedures are the same as for the **AUTO** Auto mode (p. 37).

- The white balance, AEB mode, AE lock, FE Lock, metering method, file format (RAW), and image adjustment (ISO speed, contrast, sharpness and saturation) settings cannot be adjusted in this mode.

# 📷 Stitch Assist Mode

Use this mode to shoot series of overlapping frames for merging into a large image on the computer.

Horizontal

Vertical

2 x 2
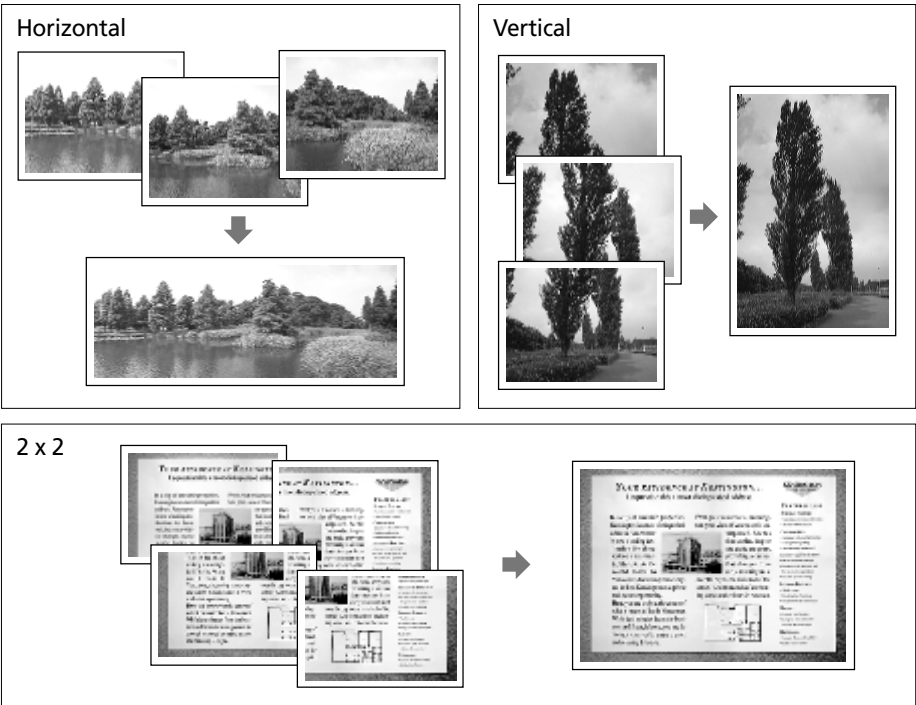
📝 • Please use the bundled PhotoStitch program to merge the images on a computer.

Framing a Subject

PhotoStitch detects the overlapping portions of adjoining images and merges them. When composing shots, try to include a distinctive item (landmark, etc.) in the overlapping portions.

• Compose each frame so that it overlaps 30 to 50% of the adjoining image. Try to keep the vertical misalignment to within 10% of the image height.
• Do not include moving items in the overlap.
• Do not try to stitch images that include both distant and close items. Objects may appear warped or doubled up.

To Shoot a Distant Subject

As shown below, swivel the camera around its axis to take successive shots.

Horizontal:
swivel left to right
or vice versa
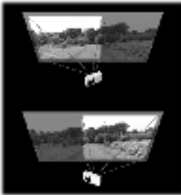
Vertical:
swivel up and down
or vice versa
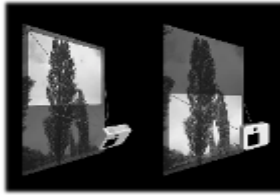
To Shoot a Close Subject

Slide the camera (move the camera parallel to the subject) to take successive shots.
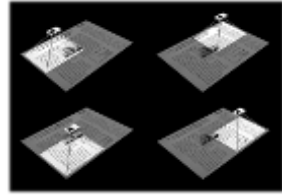
Shooting

Images can be shot in the following 5 sequences in Stitch Assist mode.

🖼	Horizontally, left to right
🖼	Horizontally, right to left
🖼	Vertically, bottom to top
🖼	Vertically, top to bottom
🖼	Clockwise starting at the top left
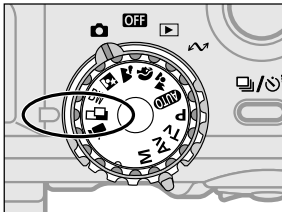
1 Turn the mode dial to 🖼 and open the LCD monitor.
• The LCD monitor will turn on.

2 Select the shooting sequence with the ◁ or ▷ arrow of the omni selector and press the Set button.

- You can also press the shutter button directly to shoot without pressing the Set button.

3 Shoot the first image.

- The exposure and white balance settings are set and locked with the first image.

Sequence 🔲

4 Compose and shoot the second image so that it overlaps the first.

- Minor discrepancies in the overlap can be corrected with the software.
- An image can be retaken. Press the ◁ or ▷ arrow of the omni selector to return to that frame.

Sequence 🔲

5 Use the same procedures to shoot the remaining frames.

- A maximum of 26 images can be recorded either horizontally or vertically.

6 Press the Set button after the last shot.

- The digital zoom, flash (auto, red-eye reduction, auto / red-eye reduction, flash on), continuous mode, AEB mode, AE lock, FE Lock, metering method, file format (RAW), and image adjustment (ISO speed, contrast, sharpness and saturation) settings cannot be adjusted in this mode.
- A TV cannot be used as the monitor for shooting in this mode.

- The zoom, flash (on / off), resolution, exposure, white balance* and flash exposure compensation settings can only be adjusted for the first image. The selected settings are applied to the subsequent images and cannot be changed.

  * A custom white balance setting cannot be set in 🔲 mode. To use a custom white balance setting, first set it in another shooting mode.

🎬 Movie Mode

Use this mode to shoot movie frames. The resolution is automatically fixed at 320 x 240 pixels.
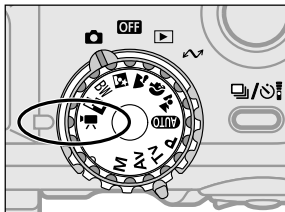
1 Turn the mode dial to 🎬 and open the LCD monitor.
- The LCD monitor will turn on.

2 Press the shutter button all the way.
- Shooting and sound recording will start simultaneously.
- During the shooting, the elapsed time will show in the display panel and a red circle will appear in the upper right of the LCD monitor.

3 Press the shutter button all the way to stop recording the movie.
- The maximum movie length is approximately 30 seconds (15 frames / second). Shooting automatically stops after 30 seconds, or when the internal memory or CF card becomes full.

- Be careful not to touch the microphone while shooting.
- The AE, AF and zoom settings are set and locked to the settings of the first frame.
- If the indicator flashes green after a shoot, this indicates that the movie is being written to the CF card. You cannot shoot until it stops flashing.
- The digital zoom, flash, continuous mode, AEB mode, flash exposure compensation, AE lock, FE Lock, metering method, AF mode (single), resolution, compression, file format (RAW), and image adjustment (ISO speed, contrast, sharpness and saturation) settings cannot be adjusted in this mode.

- Sound is recorded monaurally.
- There is no shutter sound in movie mode.

- QuickTime 3.0 or higher is required to replay movie files (AVI / Motion JPEG) on a computer.

✿ Macro Mode

Use the macro mode to shoot close-ups of subjects in the range of 6 to 70 cm (2.4 in. to 2.3 ft.) at maximum wide angle and 20 to 70 cm (7.9 in. to 2.3 ft.) at maximum telephoto.
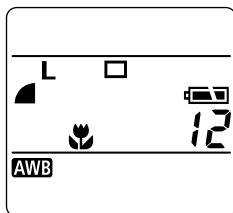
1 Press the ✿ button.
- The ✿ icon will show in the display panel. It will also show in the LCD monitor when it is on.
- Press the ✿ button again to cancel the macro mode.

2 Shoot the image.
- The indicator beside the viewfinder will shine yellow when the shutter button is pressed halfway.
- Shooting procedures are the same as for the **AUTO** Auto mode (p. 37).

- The macro mode cannot be selected in the 🏃, 🏔 and 🌃 shooting modes.
- Use of the built-in flash may not provide an appropriate amount of light.
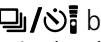
- Always use the LCD monitor to compose images in macro mode. The parallax phenomenon may cause images composed with the optical viewfinder to be off-center.
- Turning the camera off cancels the setting.

⏱ **Self-Timer**

You can take pictures with the self-timer in any shooting mode.
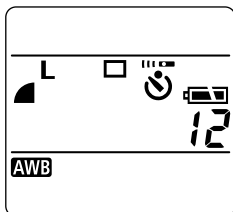
1 **Press the ⏱/⏱ button.**
- Press the ⏱/⏱ button several times to display the "⏱" icon in the display panel. The icon will also appear in the LCD monitor if it is on.
- You can cancel the self-timer by pressing the ⏱/⏱ button until the "⏱" icon disappears.

2 **Shoot the image.**
- When the shutter button is pressed all the way, the self-timer lamp flashes and activates the shutter approximately 10 seconds later. The flashing gets faster 2 seconds before the shutter activates.
- Shooting procedures are the same as for the **AUTO** Auto mode (p. 37).

- Turning the camera off cancels the setting.

⊒ Continuous Mode

Use this mode to shoot successive frames while the shutter button is pressed.
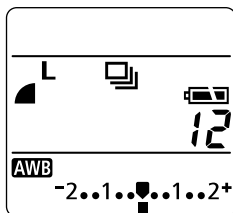
1 Press the ⊒/⟳⏱ button.

- Press the ⊒/⟳⏱ button several times to display the ⊒ icon in the display panel. The icon will also appear in the LCD monitor if it is on.
- You can cancel the continuous mode by pressing the ⊒/⟳⏱ button until the ⊒ icon disappears.

2 Press the shutter button halfway to lock the focus.

3 Press the shutter button all the way to shoot.

- While the shutter button is pressed all the way, shots are taken at approximately 1.7 images per second* when the image quality is set to Large / Fine and the LCD monitor is off. Release the shutter button to stop shooting.

  * This figure reflects standard shooting conditions established by Canon. Actual figures may vary according to the subject and shooting conditions.

- This mode cannot be selected in the ⒜ⓤⓣⓞ, ⊡ or 🎥 shooting mode.
- An externally mounted flash will not fire in this mode.
- The built-in flash can be used, but the interval between images will lengthen to accommodate the flash recharge time.

- Successive frames can be shot until the CF card is filled.
- The interval between frames may lengthen somewhat when the internal memory gets full.
- Turning the camera off cancels the setting.

Digital Zoom

Images can be digitally zoomed by a factor of 2 or 4 with the digital teleconverter function.
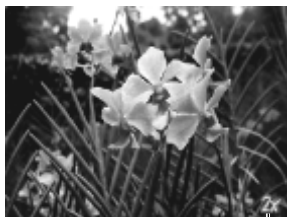
1 Press the Display button to turn the LCD monitor on.

2 Turn the mode dial to any shooting mode except for ▭ or '🎥.

3 In the [▣ (Rec.)] menu, select [Digital Zoom].
- See Selecting Menus and Settings (p. 35).

4 Select [2x] or [4x] and press the Menu button.
- The LCD monitor changes to the selected zoom setting.

5 Shoot the image.
- Shooting procedures are the same as for the 🔲 Auto mode (p. 37).

Zoom Setting

- This mode cannot be selected in the ▭ and '🎥 shooting modes or for the RAW file format.
- The digital zoom combines the image captured by the optical zoom lens with a digital teleconverter function. The more the image is zoomed, the coarser it becomes.

- Hold the Set button and press the zoom lever once toward the [▲] side to set the factor to 2x and press it once more to set it to 4x.
- When the factor is set to 4x, hold the Set button and press the zoom lever once toward the [▰▰▰] side to switch to 2x and once more to turn the digital zoom off.

Shooting - Selecting Particular Effects

Changing the Resolution and Compression

Images can be shot at the following resolution and compression settings.

Resolution		Compression	
L (Large)	2048 x 1536 pixels	**S**	Superfine
M (Medium)	1024 x 768 pixels	**◢**	Fine
S (Small)	640 x 480 pixels	**◢**	Normal

1 Turn the mode dial to a shooting mode other than ',🎥'.

2 In the [◙ (Rec.)] menu, select [Resolution] or [Compression].
   • See Selecting Menus and Settings (p. 35).

3 Select a resolution or compression setting and press the Menu button.
   • The selected resolution and compression settings will show in the display panel.

Resolution
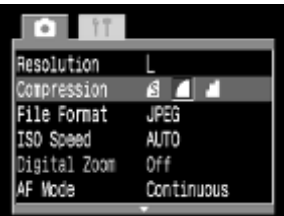
Compression

4 Shoot the image.

Approximate File Size for One Image

Resolution		Compression		
		⚑	◢	◢
L	(2048 x 1536)	1722 KB	943 KB	468 KB
M	(1024 x 768)	591 KB	329 KB	174 KB
S	(640 x 480)	273 KB	156 KB	88 KB
RAW	(2048 x 1536)	2469 KB		

• This figure reflects standard shooting conditions established by Canon. Actual figures may vary according to the subject and shooting conditions.
• Please see the list of CF cards and their approximate capacities (p. 26).

• The settings cannot be adjusted in ▶☐ mode. In ☐ mode, the resolution setting can only be adjusted for the first image.

• The resolution and compression settings are affected by the shooting mode selection according to the following.

Initial Shooting Mode	Next Shooting Mode	Resolution and Compression after Change
AUTO	♠ ⚘ ▲ ☒ BW ☐	Settings change to those of the next mode
	P Tv Av M	
♠ ⚘ ▲	♠ ⚘ ▲ ☒ BW ☐	Settings do not change
☒ BW ☐	**AUTO** P Tv Av M	Settings change to those of the next mode
P Tv Av M	P Tv Av M	Settings do not change
	AUTO ♠ ⚘ ▲ ☒ BW ☐	Settings change to those of the next mode

• The resolution and compression settings are saved when the camera is turned off.

Changing the File Format

The recording file format can be switched to the RAW format. With the standard JPEG file format, the camera processes images after capturing them to produce optimal results. This format compresses images so that more can be stored on a single CF card. However, the compression is irreversible, meaning that the original image data cannot be recovered after processing. In contrast, the RAW format records the image data as captured by the camera's CCD without further processing. RAW images are compressed, but the compression is reversible* so that a high-quality image can be obtained from the decompressed file without any loss of image quality. In addition, although a RAW file is larger than an equivalent JPEG file, it is still only approximately one-quarter the size** of an uncompressed RGB TIFF format file, making it relatively compact.

With standard uncompressed file formats, such as RGB TIFF, images are processed in the camera and require further processing by retouching software to adjust the image parameters, which reduces image quality. With the RAW format, however, the original data can be used in special software* to adjust the image parameters (white balance, contrast, sharpness and saturation) making it possible to maintain the image quality while making changes. The resolution (2048 x 1536) and compression settings cannot be adjusted for these images.

* **The bundled software is required to restore RAW format data or adjust its parameters. Please consult the separate *Software Starter Guide* for details.**
** As measured by standard Canon test conditions.
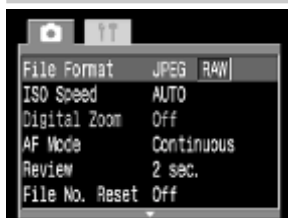
1 Turn the mode dial to **P**, **Tv**, **Av** or **M**.

2 In the [⬤ (Rec.)] menu, select [File Format].
• See Selecting Menus and Settings (p. 35).

3 Select [RAW] and press the Menu button.
• The **RAW** icon will show in the display panel.
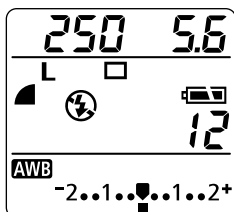
4 Shoot the image.
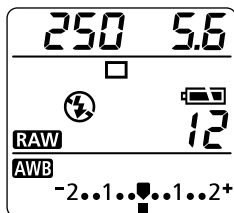
• This format cannot be selected for the ⬛, 🔺, 🌙, 🔺, 🖼, BW, 🖼 or 🎥 mode.

P Program AE

Use the program AE mode to have the camera automatically set the shutter speed and aperture settings to match the brightness of the scene.
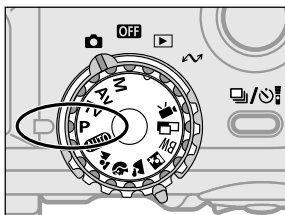
1 Turn the mode dial to **P**.

2 Press the shutter button halfway to set the focus.
- The shutter speed and aperture settings will be set automatically and shown in the display panel. They will also appear in the LCD monitor if it is on.
- The correct exposure has been set if the shutter speed and aperture settings do not blink in the display panel.

3 Press the shutter button all the way to shoot the image.

- If an incorrect exposure will result, the shutter speed and aperture settings blink in the display panel and show in red in the LCD monitor. Use the following methods to shoot.
  - Use the flash.
  - Adjust the exposure using spot metering, exposure compensation or flash exposure compensation.
  - Switch the shooting mode to **M** (Manual).

Differences and Similarities between the P and AUTO Modes.

- Both modes automatically select the shutter speed and aperture settings.
- The following settings can be adjusted in **P** mode, but not in AUTO mode.
  - Exposure Compensation
  - AEB Mode
  - Built-In Flash (Red-Eye Reduction, Flash On)
  - Continuous Mode
  - Image Adjustment (ISO Speed, Contrast, Sharpness and Saturation) Settings
  - Metering Method
  - AE Lock
  - White Balance
  - Flash Exposure Compensation
  - File Format Settings
 - Manual Focus
  - FE Lock

Tv Setting the Shutter Speed

When you set the shutter speed in the shutter speed-priority AE mode, the camera automatically selects an aperture setting to match the brightness. Faster shutter speeds allow you to catch an instantaneous image of a moving subject while slower speeds create a flowing effect.
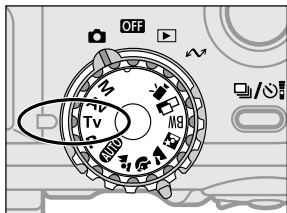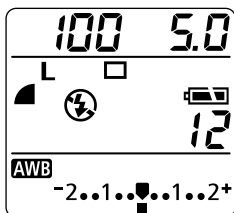
1 Turn the mode dial to **Tv**.
  • The shutter speed will show in the display panel. It will also appear on the LCD monitor if it is on.
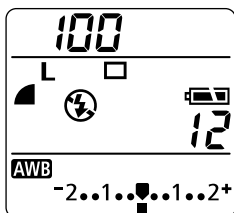
2 Press the ◁ or ▷ arrow on the omni selector to select a speed.

3 Press the shutter button halfway to set the focus.
  • The correct exposure has been set if the shutter speed and aperture settings do not blink in the display panel.

4 Press the shutter button all the way to shoot the image.

• If an incorrect exposure will result, the aperture setting will blink in the display panel and show in red in the LCD monitor. Press the ◁ or ▷ arrow on the omni selector to change the speed.
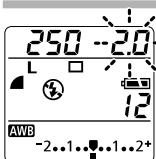
- If the aperture value is flashing or shown in red, the image is under- or overexposed (insufficient light). Adjust the shutter speed using the ◁ or ▷ arrow on the omni selector until the flashing stops or the aperture value display turns to white.

- The nature of CCD image sensors is such that noise in the recorded image increases at slow shutter speeds. This camera, however, applies special processing to images shot at shutter speeds slower than 1.3 seconds to eliminate the noise, thereby producing high-quality images. Nevertheless, a certain amount of processing time may be required before the next image can be shot.
- At shutter speeds between 1/640 and 1/1000 second, the aperture presets to F8.0.

Shutter Speed Display

The shutter speeds from 1000 to 4 in the display are actually the denominator of a fraction of a second. For example, 160 indicates a speed of 1/160 second. For slower speeds, quote marks indicate the decimal place, so that 0"3 indicates 0.3 second and 2" indicates 2 seconds.

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

The display of shutter speeds from 1/4 to 1/1000 second differs between the display panel and LCD monitor.

| Shutter Speed	1/1000 sec. · · ·	1/4 sec. · · ·	0.8 sec. · · ·	8 sec.
Display Panel	*1000* · · ·	*4* · · ·	*0'8* · · ·	*8''*
LCD Monitor	1/1000 · · ·	1/4 · · ·	0"8 · · ·	8"

Av Setting the Aperture

When you set the aperture in the aperture-priority AE mode, the camera automatically selects a shutter speed to match the brightness. Selecting a lower aperture value (opening the aperture) allows you to fade the background and create a beautiful portrait. A higher aperture value (closing it) brings the entire range from foreground to background into focus. The larger the aperture value, the greater the range of the image brought into clear focus.
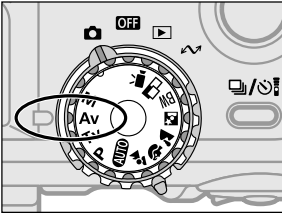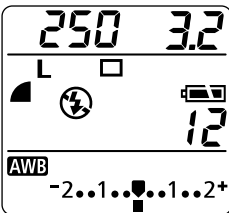
1 Turn the mode dial to Av.
• The aperture setting will show in the display panel. It will also appear on the LCD monitor if it is on.
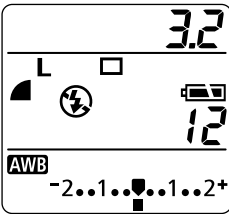
2 Press the ◁ or ▷ arrow on the omni selector to select a value.

3 Press the shutter button halfway to set the focus.
• The correct exposure has been set if the shutter speed and aperture settings do not blink in the display panel.

4 Press the shutter button all the way to shoot the image.

• F2.0 and F2.2 cannot be selected when the focal length has been set to the maximum telephoto setting with the zoom lever.
• When an aperture between F2.0 and F7.1 is selected, the fastest shutter speed is 1/500 second. If an aperture of F8.0 is selected, the fastest shutter speed is 1/1000 second.

• If an incorrect exposure will result, the shutter speed will blink in the display panel and show in red in the LCD monitor. Press the ◁ or ▷ arrow on the omni selector to change the aperture value.
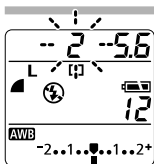
• If the shutter speed is flashing or shown in red, the image is under- or overexposed (insufficient light). Adjust the aperture value using the ◁ or ▷ arrow on the omni selector until the flashing stops or the shutter speed display turnes to white.

Aperture Setting Display

The larger the aperture value, the smaller the lens aperture.

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

The display of aperture settings differs between the display panel and LCD monitor.

Aperture Value	F2.0 · · · F8.0
Display Panel	2.0 · · · 8.0
LCD Monitor	F2.0 · · · F8.0

M Manually Setting the Shutter Speed and Aperture

You can manually set the shutter speed and aperture to achieve a particular effect. This is convenient for shooting fireworks and other images for which it is difficult to set the correct exposure automatically. In addition, the shooting time is shorter in comparison with the other modes because the AE function is not operating.
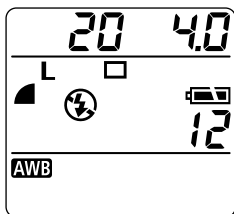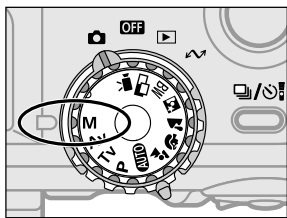
1 Turn the mode dial to **M**.
  - The shutter speed and aperture setting will show in the display panel. They will also appear on the LCD monitor if it is on.

2 Press the ◁ or ▷ arrow on the omni selector to select a shutter speed.

3 Press the △ or ▽ arrow on the omni selector to select an aperture setting.

4 Press the shutter button halfway to set the focus.

5 Press the shutter button all the way to shoot the image.

  - The exposure compensation, flash exposure compensation and AEB mode settings cannot be adjusted in this mode.
  - Shutter speeds between 1/640 and 1/1000 second can be selected when the aperture is set to F8.0.

⊞ Adjusting the Exposure Compensation

Adjust the exposure compensation setting to avoid making the subject too dark when it is backlit or shot against a bright background.
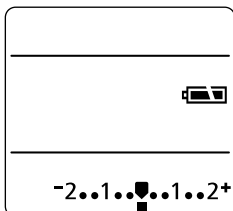
1 Press the ⊞/WB/⚎/⚡ button once.
- The exposure compensation bar will appear in the display panel. The bar will also appear in the LCD monitor if it is on.

2 Press the ◁ or ▷ arrow on the omni selector to select a setting.
- The settings can be adjusted in 1/3 steps in the range of -2EV to +2EV.

3 Press the Set button.
- You can also take the picture with the set exposure compensation value by pressing the shutter button without pressing the Set button.
- To cancel the exposure compensation, return the setting to ▼.

4 Shoot the image.
- If you pressed the shutter button at Step 3, the exposure compensation bar will reappear after the shot, allowing you to change the setting for the next shot.

⚠ • This setting cannot be adjusted in the 🄰🅄🅃🄾 and **M** shooting modes. In 🔲 mode, it can only be adjusted for the first image.

📋 • The selected shooting mode will determine whether or not the exposure compensation setting is cancelled when the camera is turned off (p. 79).

WB Setting the White Balance

When the white balance mode is set to match the light source, the camera can reproduce colors more accurately. Set the white balance mode to a natural or artificial light setting according to the circumstances.

AWB **(Auto)**	Settings are automatically set by the camera
☀ **(Daylight)**	For recording outdoors on a bright day
☁ **(Cloudy)**	For recording under overcast, shady or twilight skies
☀ **(Tungsten)**	For recording under tungsten lighting
▥ **(Fluorescent)**	For recording under fluorescent lighting
⚡WB **(Flash)**	For flash photography
⚮ **(Custom)**	For setting a custom value with a white sheet of paper, etc., to obtain the optimal white balance for the conditions
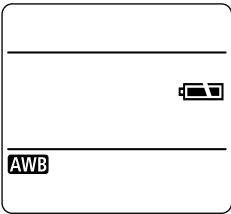
1 Press the ⊞/WB/▨/⊞ button twice.
- The current white balance mode will appear in the display panel. The white balance settings menu will appear in the LCD monitor if it is on.

2 Press the ◁ or ▷ arrow on the omni selector to select a setting.
- Please see the next page regarding the ⚮ custom setting.

3 Press the Set button.
- You can also take the picture in the set white balance mode by pressing the shutter button without pressing the Set button.

4 Shoot the image.
- If you pressed the shutter button at Step 3, the current white balance mode will reappear after the shot, allowing you to change the setting for the next shot.

- This setting cannot be adjusted in the **AUTO** and **BW** shooting modes. In ⊡ mode, it can only be adjusted for the first image.

- The selected shooting mode will determine whether or not the white balance setting is cancelled when the camera is turned off (p. 79).

⊾ Setting a Custom White Balance

You can set a custom white balance to obtain the optimal setting for the shooting conditions by having the camera evaluate a subject such as a white piece of paper or white cloth.

1 Press the ⊡/WB/⊡/⊡ button twice.
  • The current white balance mode will appear in the display panel. The WB settings menu will appear in the LCD monitor if it is on.
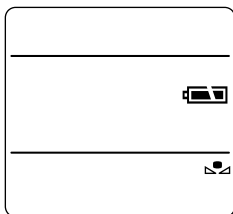
2 Press the ◁ or ▷ arrow on the omni selector to select ⊾.

3 Aim the camera at the white paper or cloth and press the ✳ button.
  • Aim the camera so that the white sheet or cloth completely fills the frame on the LCD monitor screen or the entire viewfinder before pressing the ✳ button.

4 Press the Set button.
  • You can also take the picture with the white balance set to the selected value by pressing the shutter button without pressing the Set button.

5 Shoot the image.
  • If you pressed the shutter button at Step 4, the white balance mode will reappear after the shot, allowing you to change the setting for the next shot.

Shooting - Selecting Particular Effects **65**

- To set and use a custom white balance setting, it is advisable to select the **P** shooting mode and set the exposure compensation and flash exposure compensation to zero (±0). The correct white balance may not be obtained when the exposure is incorrect (image is completely black or white).
- It is also desirable to use the LCD monitor to compose the shot and to zoom in to the maximum telephoto setting.
- Since a custom white balance setting cannot be set in ⊡ mode, pre-set the white balance in another shooting mode first before selecting the ⊡ mode.
- If the flash fires when setting a custom white balance with the flash set to auto or red-eye-reduction auto, use the flash when you go to shoot too. The correct white balance cannot be obtained unless the flash is used consistently. To ensure consistency, set the flash to on or off as appropriate.
- The selected shooting mode will determine whether or not the custom white balance setting is cancelled when the camera is turned off (p. 79).

🖼 Auto Exposure Bracketing (AEB Mode)

In this mode, the camera automatically changes the exposure within a set range to take three shots after you press the shutter button once. You can adjust AEB settings in 1/3EV steps within the range of -2EV to +2EV of the standard exposure setting. AEB settings can be combined with exposure compensation settings to extend the adjustment range.
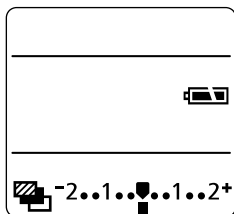
1 Press the 🔲/WB/🖼/🔲 button three times.

- The 🖼 icon and the exposure compensation bar will appear in the display panel. The exposure compensation bar will also appear in the LCD monitor if it is on.

2 Press the ◁ or ▷ arrow on the omni selector to expand or contract the range.

- The ▷ arrow expands the range, the ◁ arrow contracts it.

3 Press the Set button.

- You can also take the picture with the set exposure compensation value by pressing the shutter button without pressing the Set button.
- To cancel the AEB setting, reset it to ▼.

4 Shoot the image.

- If you pressed the shutter button at Step 3, the 🖼 icon and the exposure compensation bar will reappear after the shot, allowing you to change the setting for the next shot.

- This setting cannot be adjusted in the 🔲, 🔲, 🔲, 🔲, 🔲, BW, 🔲, 🔲 and **M** shooting modes.
- When exposure compensation is set to ▼, the AEB exposure sequence is 0, -, and + according to the camera's exposure meter.
- The AEB mode cannot be used for flash photography. If the flash fires, only one image gets recorded.

- The selected shooting mode will determine whether or not the AEB setting is cancelled when the camera is turned off (p. 79).

⚡ Adjusting the Flash Output (Flash Exposure Compensation)

You can adjust the flash output for flash photography.

1 Press the ⚡/WB/🔁/⚡ button four times.
- The ⚡ icon and the flash exposure compensation bar will appear in the display panel. The flash exposure compensation bar will also appear in the LCD monitor if it is on.

2 Press the ◁ or ▷ arrow on the omni selector to expand or contract the range.
- The flash exposure compensation can be adjusted in 1/3 steps within a range of -2EV to +2EV.
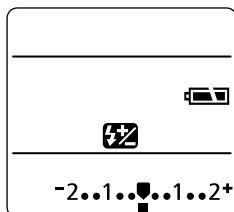
3 Press the Set button.
- You can also take the picture with the set flash exposure compensation value by pressing the shutter button without pressing the Set button.
- To cancel the setting, reset it to ▼.

4 Shoot the image.
- If you pressed the shutter button at Step 3, the ⚡ icon and the flash exposure compensation bar will reappear after the shot, allowing you to change the setting for the next shot.

⚠ • This setting cannot be adjusted in the 🅐🆄🆃🅾, 🎥 and **M** shooting modes. In ⌷ mode, it can only be adjusted for the first image.

📝 • The selected shooting mode will determine whether or not the flash exposure compensation setting is cancelled when the camera is turned off (p. 79).
• The flash exposure compensation mode only functions with the built-in flash or an externally mounted EX series Speedlite (p. 108).

✳ Locking the Exposure Setting (AE Lock)

You can set the exposure and focus separately. This is effective when the contrast is too strong between the subject and background or when a subject is backlit.

1 Press the Display button to turn on the LCD monitor.

2 Center the subject on which you want to lock the exposure setting in the LCD monitor and press the shutter button halfway to set the focus.

3 Press the ✳ button.
- The exposure setting will lock (AE Lock) and the ✳ icon will appear in the display panel and LCD monitor.
- Pressing any button other than the shutter button cancels the AE lock.
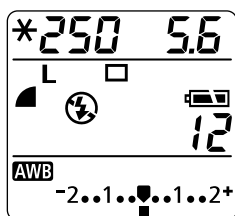
AE Lock Icon

4 Recompose the image and press the shutter button halfway to set the focus.

5 Press the shutter button all the way to shoot the image.

- This setting cannot be adjusted in the AUTO, 🏃, 🌙, 🏔, ▨, BW, ⊡, 🎥 and **M** shooting modes.
- AE lock cannot be set when the built-in or the externally mounted flash is used. Flash Exposure Lock (FE Lock) is available in these situations (p. 70).

✳ Locking the Flash Exposure Setting (FE Lock)

You can lock the flash exposure so that the exposure settings are correctly set for a particular portion of your subject.

1 Press the Display button to turn on the LCD monitor.

2 Set the built-in flash to fire.
- If you are using an externally mounted flash, please refer to its manual for setting instructions.

3 Center the subject on which you want to lock the flash exposure setting in the LCD monitor and press the shutter button halfway to set the focus.

4 Press the ✳ button.
- The flash exposure compensation setting will lock (FE lock) and the ✳ icon will appear in the LCD monitor and display panel.
- The flash will fire a pre-flash and lock the flash exposure to the required intensity to illuminate the subject. (Each time you press the ✳ button, the flash exposure locks at the required intensity for that composition).
- Pressing any button other than the shutter button cancels the FE lock.
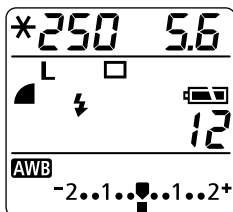
5 Recompose the image and press the shutter button halfway again to reset the focus.

- Confirm that the indicator beside the viewfinder shines orange.

6 Press the shutter button all the way to shoot the image.

- As the example to the left shows, a backlit subject can be shot at the correct exposure if the FE lock is set when the camera is aimed at a non-backlit portion of the subject.

- This setting cannot be adjusted in the ⒶⓤⓉⓄ, 🏃, 🌙, 🏔, 🎆, BW, ⬚, 🎥 and **M** shooting modes.

- The FE Lock only functions with the built-in flash or a Canon EX-series Speedlite (p. 108).

⊡ Switching between Metering Modes

Center-weighted averaging is the default metering mode. This can be switched to spot metering.

Center-Weighted Averaging	The average value from the entire image area is combined with the value measured at the center of the viewfinder or LCD monitor.
Spot	The area within the frame at the center of the LCD monitor is metered. This is useful when the subject's surroundings are bright, such as when it is backlit.

1 Press the Display button to turn on the LCD monitor.

2 Press the ⊡ button.
- The ⊡ icon and the metering frame will appear in the LCD monitor.
- Pressing the ⊡ button again switches back to the center-weighting averaging mode.

Metering Frame

3 Press the shutter button halfway to set the focus.

4 Press the shutter button all the way to shoot the image.

⚠ • This setting cannot be adjusted in the 🔲, 🏃, 🌙, 🏔, 🖼, BW, 🎞, 🎥 and **M** shooting modes.

📝 • You are recommended to use the LCD monitor to compose images in spot metering mode. You may misalign the metering spot with the subject using the viewfinder.

Shooting Problem Subjects for the Autofocus

The autofocus may not work well on the following types of subject.
- Subjects with extremely low contrast to the surroundings
- Subjects mixing close and far objects
- Subjects with extremely bright objects at the center of the composition
- Subjects that are moving quickly

To shoot these subjects, first aim the camera at an object at a similar distance, lock the focus and recompose the image with the desired subject, or use the manual focus.

• When shooting through glass, approach as close as possible to avoid reflections off the glass.

Shooting with Focus Lock
Focus Lock Method 1

1 Aim the center of the viewfinder at an object at a similar distance to the subject you wish to shoot.

2 Press the shutter button halfway to lock the focus.
• The AE setting will also lock when you do this. The exposure may occasionally be incorrect if the difference between the two items is too great. Use method 2 or the AE lock procedure when this happens.

3 Keep it pressed while you recompose and press the shutter button all the way to shoot the image.

Focus Lock Method 2

1 Press the Display button to turn on the LCD monitor.

2 Aim the center of the LCD monitor at an object at a similar distance.

3 Press the shutter button halfway to lock the focus. Keep it pressed and press the **MF** button.

• The **MF** icon will appear in the display panel and the **Mf** icon in the LCD monitor.
• The focus setting will lock even if the shutter button and MF button are released.
• The manual focus setting will cancel if the MF button is pressed again.

4 Recompose the image and press the shutter button all the way to shoot the image.

• Method 2 is convenient because you can let go of the shutter button to recompose the image.
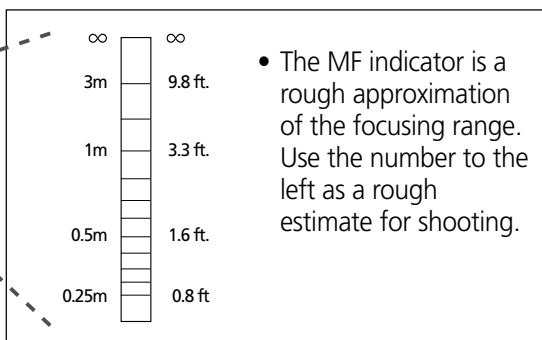
Shooting in Manual Focus Mode

The focus can be manually set.

1 Press the Display button to turn the LCD monitor on.

2 Press and hold the MF button and press the △ or ▽ arrow on the omni selector.

MF Indicator

∞	∞
3m	9.8 ft.
1m	3.3 ft.
0.5m	1.6 ft.
0.25m	0.8 ft

• The MF indicator is a rough approximation of the focusing range. Use the number to the left as a rough estimate for shooting.

• The focus will lock and the **MF** icon will show in the display panel. The **MF** icon and the MF indicator will appear in the LCD monitor.
• Adjust the focus with the △ or ▽ arrow on the omni selector until the image appears focused in the LCD monitor.
• Pressing the MF button a second time cancels the manual focus mode.

3 Press the shutter button halfway.
- The indicator beside the viewfinder will shine yellow.

4 Press the shutter button all the way to shoot the image.

- This setting cannot be adjusted in the **AUTO** and ◣ shooting modes.

- You can use the manual focus in the macro focal range (6 to 70 cm (2.4 in. to 2.3 ft.) at maximum wide angle and 20 to 70 cm (7.9 in. to 2.3 ft.) at maximum telephoto).
- You can magnify an image afterward to check that it was shot in focus (p. 81).

Switching between Focus Settings

You can switch between focus settings to shoot.

Continuous	The camera is continually focusing on whatever it is aimed even when the shutter button is not pressed, allowing you to shoot without missing opportunities.
Single	The camera only focuses when the shutter button is pressed halfway, conserving battery power.
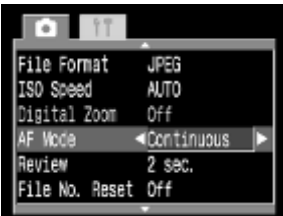
1 In the [(Rec.)] menu, select [AF Mode].
• See Selecting Menus and Settings (p. 35).

2 Select [Continuous] or [Single] and press the Menu button.

3 Shoot the image.

- These settings cannot be adjusted in the shooting mode.
- When the LCD monitor is off and you are focusing through the viewfinder, the setting locks in the Single mode.

- The setting is not cancelled when the camera is turned off.

Manually Setting Image Characteristics

The ISO speed, contrast, sharpness and saturation settings can be adjusted for shooting.

**1** In the [■ (Rec.)] menu, select one of the above items.
  • See Selecting Menus and Settings (p. 35).

2 Select a value for the item and press the Menu button.

ISO speed
  • Switch speeds when you are shooting in dark areas or want to use a fast shutter speed.
  • You can select from 50, 100, 200, 400 and AUTO.
  • The default setting is ISO 50.
  • When AUTO is selected, the camera automatically adjust ISO between 50 and 100 only.
  • Higher ISO speeds increase the image noise. To take clean images, use as low an ISO speed as possible.
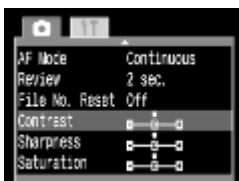
Contrast
  • Select from - (Weak), 0 (Neutral) and + (Strong).

Sharpness
  • Select from - (Weak), 0 (Neutral) and + (Strong).

Saturation
  • Select from - (Weak), 0 (Neutral) and + (Strong).

3 Shoot the image.

• These settings cannot be adjusted in the ⬛, ▲, ♥, ⛰, ⬛, BW, ⬛ and ▶ shooting modes. In the **M** mode, the [ISO speed] cannot be set to [AUTO].

• The setting is not cancelled when the camera is turned off.

Resetting the File Number

You can select the way file numbers are assigned.

On	File number is reset to the start (100-0001) each time a new CF card is inserted. New images recorded on CF cards with existing files are assigned the next available number.
Off	The file number of the last image to be shot is memorized so that images recorded to a new CF card start from the next number.
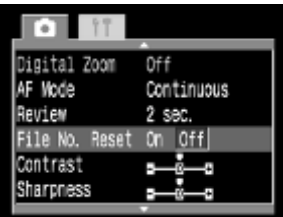
1 In the [◯ (Rec.)] menu, select [File No. Reset].
• See Selecting Menus and Settings (p. 35).

2 Select [On] or [Off] and press the Menu button.

• Setting the [File No. Reset] to [Off] is useful for avoiding file name duplication when images are downloaded to a computer.

About File Numbers

• Images are assigned file numbers from 0001 to 9900 and organized in folders usually containing up to 100 images. Folders are assigned numbers from 100 to 998.
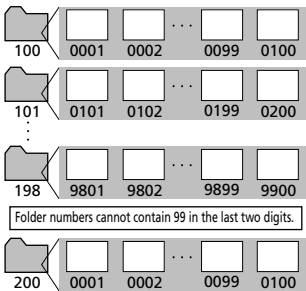
Since images shot in continuous mode or Stitch Assist mode are always saved in the same folder, some folders may contain 101 or more images.

Functions Available in Each Shooting Mode

This chart shows the functions available in each shooting mode.

		AUTO	📷	🌙	🏔	📷	BW	🔲	🎥	P	Tv	Av	M	Reference Page
Flash	Auto (No Icon)	●	●*	●	●	●	●*	–	–	–	–	–	–	p. 41
	Red-Eye Reduction, Auto ◉	●*	●	●*	●	●*	●	–	–	–	–	–	–	
	Red-Eye Reduction, Flash On ✦◉	–	●	●	●	●	●	–	–	●	●	●	●	
	On ✦	–	●	●	●	●	●	▲	–	●	●	●	●	
	Off ⚡	●	●	●	●*	●	●	▲*	–	●*	●*	●*	●*	
Macro Mode 🌷		●	–	●	–	–	●	●	●	●	●	●	●	p. 50
Drive Mode	Single Shot ▢	●*	●*	●*	●*	●*	●*	●*	●*	●*	●*	●*	●*	–
	Continuous 🔁	–	●	●	●	●	●	–	●	●	●	●	●	p. 52
	Self-Timer ⏱	●	●	●	●	●	●	●	●	●	●	●	●	p. 51
Exposure Compensation		–	●	●	●	●	●	▲	●	●	●	●	–	p. 63
White Balance		–	●	●	●	●	–	▲	●	●	●	●	●	p. 64
AEB Mode 📊		–	–	–	–	–	–	–	–	●	●	●	–	p. 67
Flash Exposure Compensation 📷		–	●	●	●	●	●	▲	–	●	●	●	–	p. 68
AE Lock / FE Lock ✳		–	–	–	–	–	–	–	–	●	●	●	–	pp. 69, 70
Metering Mode (Spot Metering) ◉		–	–	–	–	–	–	–	–	●	●	●	–	p. 72
Manual Focus MF		–	–	●	●	●	●	●	●	●	●	●	●	p. 74
Resolution	Large L	●*	●*	●*	●*	●*	●*	●*	–	●*	●*	●*	●*	p. 54
	Medium M	●	●	●	●	●	●	▲	–	●	●	●	●	
	Small S	●	●	●	●	●	●	▲	–	●	●	●	●	
Compression	Superfine 🅢	●	●	●	●	●	●	●	–	●	●	●	●	p. 54
	Fine ◣	●*	●*	●*	●*	●*	●*	●*	–	●*	●*	●*	●*	
	Normal ◢	●	●	●	●	●	●	●	–	●	●	●	●	
File Format	JPEG	●	●	●	●	●	●	●	–	●*	●*	●*	●*	p. 56
	RAW RAW	–	–	–	–	–	–	–	–	●	●	●	●	
ISO Speed		–[1]	–[1]	–[1]	–[1]	–[1]	–[1]	–[1]	–[1]	●	●	●	●[2]	p. 77
Digital Zoom	2x	●	●	●	●	●	●	–	–	●	●	●	●	p. 53
	4x	●	●	●	●	●	●	–	–	●	●	●	●	
Focus Settings	Continuous	●*	–	●*	●*	●*	●*	●*	●	●*	●*	●*	●*	p. 76
	Single	●	–	●	●	●	●	●	–	●	●	●	●	
Contrast		–	–	–	–	–	–	–	–	●	●	●	●	p. 77
Sharpness		–	–	–	–	–	–	–	–	●	●	●	●	
Saturation		–	–	–	–	–	–	–	–	●	●	●	●	

* Default setting.
● Setting selection is possible.
▲ Setting can only be selected for the first image.
– Setting selection is not possible.
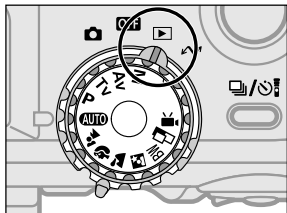▨ (Shaded Area) Setting remains in effect even when the power is turned off.
[1] The ISO speed is automatically set between the equivalent of 50 and 100.
[2] [AUTO] cannot be selected.

Replaying

Viewing Images Singly (Single Image Replay)

You can view the recorded images in the LCD monitor.

1 Turn the main dial to ▶.
- The last recorded image will display (Single Image Replay).

2 Press the ◁ or ▷ arrow on the omni selector to move between images.
- The ◁ arrow moves to the previous image and the ▷ arrow to the next. Holding the button down moves more rapidly between images, but the images will not appear as clearly.

- Press the Display button to show the data for the displayed image (p. 17).
- Press the ✱ button to quickly delete the displayed image (p. 9).
- You can change the language displayed on the LCD monitor if you hold the Set button and press the Jump button (p. 105).

🔍 Magnifying Images

In single image replay, the displayed image can be shown magnified by an approximate factor of 2.5 or 5.

1 Turn the main dial to ▶.

2 Press the 🔍 button.
- The display cycles to the next magnification mode (approximately 2.5 times, approximately 5 times, off) each time the button is pressed.
- Use the △ / ▽ / ◁ / ▷ arrows on the omni selector to move the magnified area around the image.

Magnified approximately 2.5 times   Approximate position

Magnified approximately 5 times   Approximate position

3 Press the 🔍 button.
- When the approximate magnification factor of 5 is selected, pressing the 🔍 button cancels the magnification mode.

- Movie frames cannot be magnified with this function.

▦ Viewing Nine Images at a Time (Multi Replay)

Up to nine images can be viewed at once in Multi Replay.

Movie Frame

Selected Image

1 Turn the main dial to ▶.

2 Press the ▦ button.
- Nine images will display at once (Multi Replay).

3 Press the △ / ▽ / ◁ / ▷ arrows on the omni selector to change the image selection.

← • Pressing the △ arrow in this row displays the previous set of nine images.

← • Pressing the ▽ arrow in this row displays the next set of nine images.

4 Press the ▦ button.
- The selected image will display in single replay.

• Press the Display button to show the data for the displayed image (p. 17).

JUMP **Jumping between Images**

You can jump between images in single or multi replay.

1 Turn the main dial to ▶ and select either single or multi replay.

2 Press the Jump button.
- The jump bar will display.

3 The displayed image(s) will change.
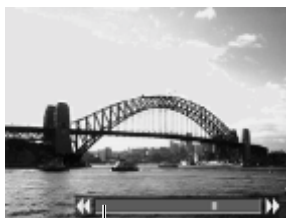
Jump Bar

Single Replay
- Press the ◁ or ▷ arrow on the omni selector to jump 9 images behind or ahead.
- Hold the Set button and press the ◁ or ▷ arrow on the omni selector to jump to the first or last image.

Jump Bar

Multi Replay
- Press the ◁ or ▷ arrow on the omni selector to jump to the previous or next set of nine images.
- Hold the Set button and press the ◁ or ▷ arrow on the omni selector to jump to the first or last set of nine images.

4 Press the Jump button.
- The jump bar will cease displaying and the jump mode will cancel.

Viewing Movies

You can replay the images shot in 🎥 mode.

1 Turn the main dial to ▶.
   • Movie images cannot be replayed in multi replay.

**2** Press the ◁ or ▷ arrow on the omni selector to display an image shot in 🎥 mode.

3 Press the Set button.
   • The movie images and sound will play.
   • When a movie has finished playing, it will stop and display the last frame. If the Set button is pressed in this state, the movie will start playing from the first frame.

   Pausing and Resuming Play
   • Press the Set button to pause the movie. Press it again to resume.

   Fast Forwarding / Rewinding
   • Press the ◁ or ▷ arrow on the omni selector to stop the movie and display the previous or next image or movie.

• Movie images recorded on other cameras may not replay correctly. The "Unidentified image" message will display.

• The volume at which movies replay can be adjusted in the Play menu (p. 104).
• Please adjust the audio sound level on the TV when viewing movie files on a TV.

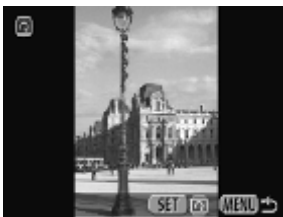# Rotating Images in the Display

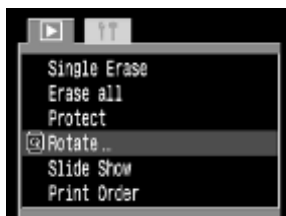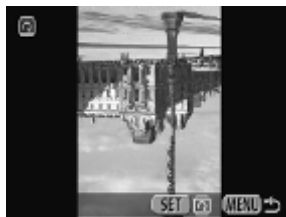Images can be rotated 90° and 270° clockwise in the LCD monitor.
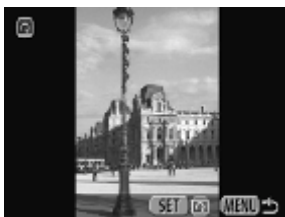
Original   90°   270°

1 In the [▶ (Play)] menu, select [Rotate] and press the Set button.
  • See Selecting Menus and Settings (p. 35).

Single Erase
Erase all
Protect
Rotate ...
Slide Show
Print Order

2 Press the ◁ or ▷ arrow on the omni selector to select an image you want to rotate and press the Set button.
  • The image cycles to the next orientation (90° → 270° → original) each time the Set button is pressed.

3 Press the Menu button.
  • The Play menu will display again. Press the Menu button again to close the menu.

• Movie images cannot be rotated.

• When images are downloaded to a computer, the orientation of images rotated by the camera will depend upon the software used to download the images.

Automated Playback (Slide Show)

Starting a Slide Show

All images, or a selection of images, can be displayed one-by-one in an automated slide show.

All Images	Plays all the images on the CF card in order
Slide Show 1 - 3	Plays the images selected for each show in order
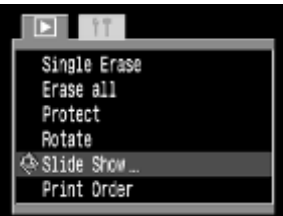
1 In the [▶ (Play)] menu, select [Slide Show] and press the Set button.
  • See Selecting Menus and Settings (p. 35).
  • The slide show menu will display.

2 Press the △ or ▽ arrow on the omni selector to select [Program]. Press the ◁ or ▷ arrow to select between [All Images] or any one of slide [Show 1]-[Show 3].

3 Press the △ or ▽ arrow on the omni selector to select [Start] and press the Set button.
  • The slide show will start and automatically stop when the show is done.

Pausing and Resuming a Slide Show
  • Press the Set button to pause the show. Press it again to resume.

Fast Forward / Rewinding a Slide Show
  • Press the ◁ or ▷ arrow on the omni selector to move on to the previous or next image.

Stopping a Slide Show
  • Press the Menu button during a slide show to stop it and display the slide show menu.

4 Press the Menu button.
  • The Slide Show menu will display again. Press
    the Menu button again to close the menu.

• Movie images play for the length of time that they were recorded regardless of the time set in the slide show settings.
• The power save function is disabled while a slide show plays on the camera (p. 29).

Selecting Images for Slide Shows

You can mark images for inclusion in slide shows 1-3. Up to 100 images may be marked per slide show. Images display in the order of their selection.

1 Display the slide show menu.

2 Press the △ or ▽ arrow on the omni selector to select [Program]. Press the ◁ or ▷ arrow to select [Show 1], [Show 2] or [Show 3] and press the Set button.
- A bright green bar will appear beside a show already containing images.

3 Press the ▽, ◁ or ▷ arrow on the omni selector to choose [Select] and press the Set button.

4 Mark images to include in the show.
Single Replay
- Move between images with the ◁ or ▷ arrow on the omni selector and mark or remove marks from images with the △ and ▽ arrow.
- The selection number and a bright green bar will show at the top of marked images.

Multi Replay
- Press the ■■ button to switch to multi replay (3 images).
- Press the ◁ or ▷ arrow on the omni selector to select an image and mark or remove marks from images with the △ and ▽ arrow.
- You can deselect all the images in a show by pressing the Set button, selecting [OK] with the ◁ or ▷ arrow and pressing the Set button again.
- The selection number and a bright green bar will show at the bottom of marked images.

5 Press the Menu button.
- The image selection screen will close.

Adjusting the Play Time and Repeat Settings

You can change the play time for all the images in a show and have the show repeat itself continuously.

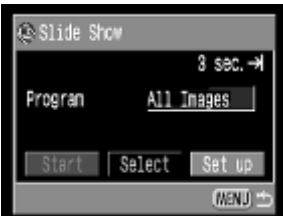| Play Time	Sets the duration that each image in a slide show is displayed. The options are any one of 3-10 seconds, 15 seconds, 30 seconds and Manual.
Repeat	Sets whether the slide show stops when all the slides have been displayed or continues to display until stopped.

1 Display the slide show menu.

2 Press the ◁ or ▷ arrow on the omni selector to select [Set up] and press the Set button.

3 Press the △ or ▽ arrow on the omni selector to select [Play Time] or [Repeat].

4 Press the ◁ or ▷ arrow on the omni selector to select a setting.

Play Time
• Select a play time with the ◁ or ▷ arrow on the omni selector.

Repeat
• Select [On] or [Off] with the ◁ or ▷ arrow on the omni selector.
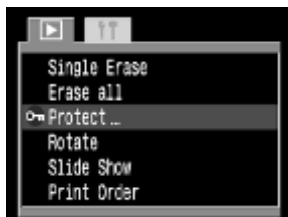
5 Press the Menu button.
• The set up menu will close.

• The display interval may vary somewhat for some images.
• Slide shows can be easily edited on a computer with the supplied software. See the Software Starter Guide.

Protecting Images

You can protect important images from accidental erasure.

1 In the [▶ (Play)] menu, select [Protect] and press the Set button.

• See Selecting Menus and Settings (p. 35).

2 Press the ◁ or ▷ arrow on the omni selector to move to and select an image you want to protect and press the Set button.

• The 🔒 icon will appear on protected images.
• To remove the protection, click the Set button again (in protection mode).
• You can make the selection of images easier by toggling between single replay and multi replay with the 🔳 button.

3 Press the Menu button.

• The protect window will close.

⚠ • Please note that formatting (initializing) a CF card erases all its data, including protected images and other types of data. Please check the contents of a CF card before formatting it.

Shooting / Replaying with a TV Monitor

A video-compatible television connected via the supplied AV cable AVC-DC100 can be used to view images as you shoot or replay them.
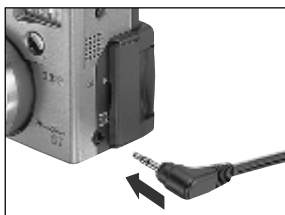
1 Turn the main dial to **OFF** and confirm that the TV is turned off.

2 Attach AV cable ACV-DC100 to the A/V OUT terminal on the camera.

| Yellow Plug | To the Video In Jack |
| Black Plug | To the Audio In Jack |
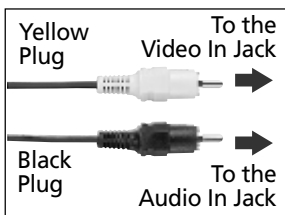
3 Plug the other ends of the AV cable to the video in and audio in jacks on the TV.

4 Turn on the TV and switch it to Video mode.

5 Turn the camera's main dial to **□** or **▶**.
  • The image will appear on the TV. Shoot or replay images as usual.
  • If the images are not appearing on the TV when shooting, press the Display button.

⚠ • No image will display in the LCD monitor when the camera is connected to a TV monitor.
  • The video output signal can be switched (NTSC or PAL) to accommodate different regional standards (p. 105). The default setting will vary between regions.
    NTSC: Japan, U.S.A., Canada, Taiwan, etc.
    PAL: Europe, Asia (excluding Taiwan), Oceania, etc.
  • Plug the audio plug of the AV cable into the TV's monaural jack. Please consult the TV's manual for details.
  • A TV monitor cannot be used in 🔲 mode.

Erasing

## Erasing Images Singly
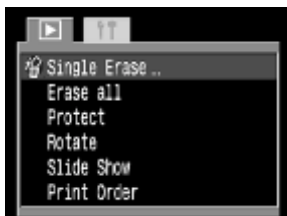
1 In the [▶ (Play)] menu, select [Single Erase] and press the Set button.
- See Selecting Menus and Settings (p. 35).

2 Press the ◁ or ▷ arrow on the omni selector to select the image you wish to erase and press the Set button.

3 Press the ◁ or ▷ arrow on the omni selector to select [OK] and press the Set button.
- To continue erasing other images, repeat steps 2 - 3.
- To cancel instead of erasing, select [Cancel] and press the Set button.

4 Press the Menu button.
- The erase window will close.

- Please note that erased images cannot be recovered. Exercise adequate caution before erasing a file.
- Protected images cannot be erased with the erase function (p. 90).
- Images can be quickly deleted while they are displayed by pressing the ✱ button (p. 9).

Erasing All Images

1 In the [▶ (Play)] menu, select [Erase all] and press the Set button.
  - See Selecting Menus and Settings (p. 35).

Single Erase
🗑 Erase all...
Protect
Rotate
Slide Show
Print Order

2 Press the ◁ or ▷ arrow on the omni selector to select [OK] and press the Set button.
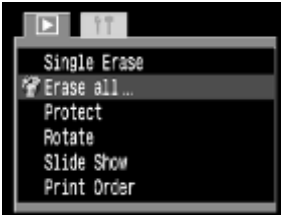 - To cancel instead of erasing, select [Cancel] and press the Set button.

🗑 Erase all images?

Cancel   OK

- Please note that erased images cannot be recovered. Exercise adequate caution before erasing a file.
- Protected images cannot be erased with the erase function (p. 90).

Formatting a CF Card

Format a CF card when you wish to delete all its data, not just the images.
Formatting may restore a CF card if it returns an error or if the "CF" message displays.
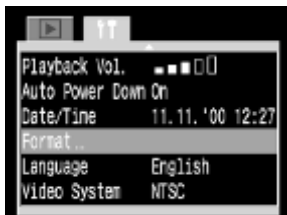
1 In the [(Set up)] menu, select [Format] and press the Set button.

• See Selecting Menus and Settings (p. 35).
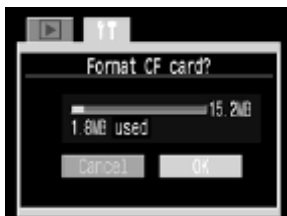
2 Press the ◁ or ▷ arrow on the omni selector to select [OK] and press the Set button.

• To cancel formatting instead, select [Cancel] and press the Set button.

• Please note that formatting (initializing) a CF card erases all data, including protected images and other file types. Please check the contents of a CF card before formatting it.

• When a non-Canon brand CF card is malfunctioning, reformatting it may solve the problem.
• CF cards formatted in another camera, computer or peripheral device may not operate correctly. When that happens, reformat the CF card with your PowerShot G1.

Print Settings (DPOF Settings)

Images on a CF card can be individually selected for printing in a specified number of copies. You can also select the print type and whether or not to print the date and file number. These settings are compatible with the Digital Print Order Format (DPOF) standards so that images can be printed on DPOF-compliant digital printers or at participating photo labs.

> • The ⚠ mark will display on images that have had print marks set by another DPOF-compliant camera. These settings will be overwritten by any set by your camera.
> • Print settings cannot be set for movie images or RAW images.
> • The output of some digital printers or photo lab services may not reflect the specified print settings.

Selecting Images for Printing

There are two ways to select images.
- Singly
- All images on a CF card (the number of copies is set to one per image)

1 In the [◻ (Play)] menu, select [Print Order] and press the Set button.
- See Selecting Menus and Settings (p. 35).
- The Print Order menu will display.
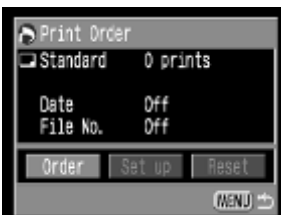
2 Press the ◁ or ▷ arrow on the omni selector to select [Order] and press the Set button.

Print Order Menu

3 Select images for printing.

Single Images
- When the print type (p. 98) is set to [Standard] or [Both], press the ◁ or ▷ arrow on the omni selector to select an image and the △ or ▽ arrow to mark it for printing. You can set the number of copies (up to 99) to be printed at the same time.

- When the print type (p. 98) is set to [Index], press the ◁ or ▷ arrow on the omni selector to select an image and mark or remove marks from images with the △ and ▽ arrow.
- You can use the same procedures to select images in multi replay (3 images). Press the ▦ button to switch between single replay and multi replay.

**All the Images on a CF Card**
- Press the ▦ button to switch to multi replay (three images).
- You can set one copy of each image to print by pressing the Set button, pressing the △ or ▽ arrow on the omni selector to select [Mark All], and pressing the Set button again.
- When the print type is set to [Standard] or [Both], the setting for the number of print copies can be changed for each image. When [Index] is selected, the print settings can be deleted. For the instructions for changing settings, please reread Step 3 from the beginning.
- Selecting [Clear all] removes the print marks for all the images on the CF card.

4 Press the Menu button.
- The selection mode will turn off and the Print Order menu will reappear.

- Images are printed in order from oldest to newest by the shooting date.
- A maximum of 998 images can be marked per CF card.
- When [Both] is selected, the number of copies can be set, but applies to standard prints only. Only one copy can be set to print with the [Index] setting.
- Print settings can also be assigned to images with the supplied software programs on a computer.

Setting the Print Style

The following print settings can be selected.

Print Type	Standard	Prints one image per page
	Index	Prints the selected images together at a reduced size in an index format
	Both	Prints the images in both the standard and index formats
Date		Adds the date to the print
File No.		Adds the file number to the print

1 Display the Print Order menu.

2 Press the ◁ or ▷ arrow on the omni selector to select [Set up] and press the Set button.

3 Press the △ or ▽ arrow on the omni selector to select [Print Type], [Date] or [File No.]

4 Press the ◁ or ▷ arrow on the omni selector to select a setting.

Print Type
- Press the ◁ or ▷ arrow on the omni selector to select [Standard], [Index] or [Both].

Date
- Press the ◁ or ▷ arrow on the omni selector to select [On] or [Off].
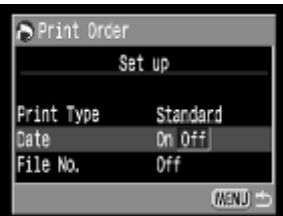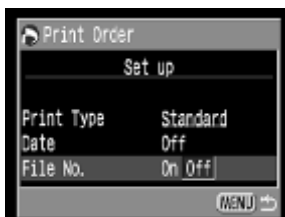
File No.
• Press the ◁ or ▷ arrow on the omni selector to select [On] or [Off].

5 Press the Menu button.
• The set up menu will close.

• The [Date] and [File No.] options cannot both be set to [On] when the print type is set to [index].

• The date prints as the date and time in the format specified in the Set Date/Time menu (p. 30).

Resetting the Print Settings

The print settings can all be removed at once. The print type is reset to [Standard] and the date and file number options are set to [Off].

1 Display the Print Order menu.

2 Press the ◁ or ▷ arrow on the omni selector to select [Reset] and press the Set button.
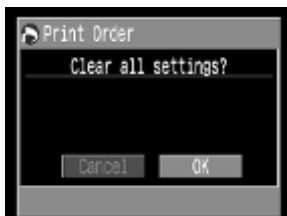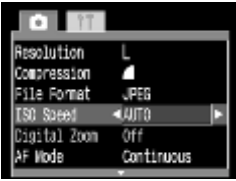
3 Press the ◁ or ▷ arrow on the omni selector to select [OK] and press the Set button.
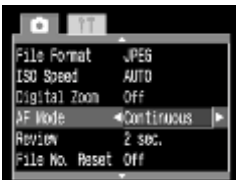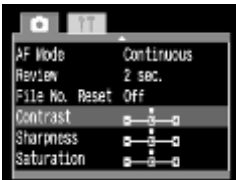
List of Menu Options

The chart below lists menu items and settings. See Selecting Menus and Settings (p. 35) to learn how to select a setting.
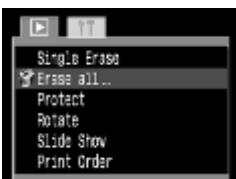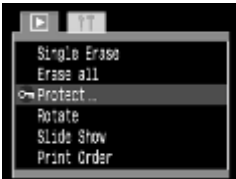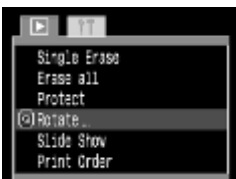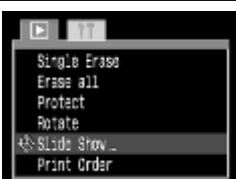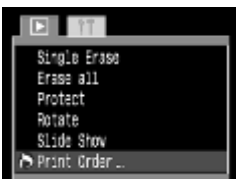
Rec. Menu

* Some items may not appear in certain shooting modes (p. 79).
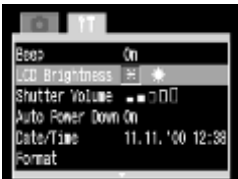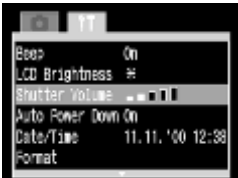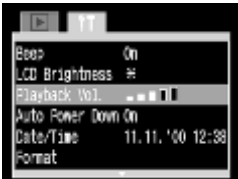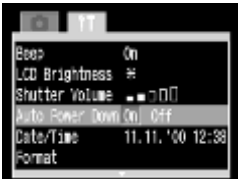
Item	Menu Screen	Settings Content	Reference Page
Resolution		Sets the number of pixels used to record images to CF cards. • L Large (2048 x 1536 pixels) • M Medium (1024 x 768 pixels) • S Small (640 x 480 pixels)	p. 54
Compression		Sets the relative compression ratio used to record images to CF cards. • S Superfine • Fine • Normal	p. 54
File Format		Sets the file format used to record images to CF cards. • JPEG • RAW	p. 56
ISO Speed		Sets the sensitivity at which images are recorded. • 50 • 100 • 200 • 400 • AUTO	p. 77
Digital Zoom		Activates the digital teleconverter function to electronically zoom subjects. • Off • 2x • 4x	p. 53

Item	Menu Screen	Settings Content	Reference Page
AF Mode		Sets the frequency of autofocus activation. When the LCD monitor is off, this setting locks in single mode. • Continuous • Single	p. 76
Review		Sets the duration images display on the LCD monitor after the shutter button is released. • Off • 2 sec. • 10 sec.	p. 39
File No. Reset		Sets how file numbers are assigned to images when new CF cards are inserted. • On • Off	p. 78
Contrast		Adjusts the image contrast. • – • 0 • +	p. 77
Sharpness		Adjusts the image sharpness. • – • 0 • +	p. 77
Saturation		Adjusts the image saturation. • – • 0 • +	p. 77

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Play Menu

Item	Menu Screen	Settings Content	Reference Page
🐦 Single Erase...		Erases images one-by-one (excluding protected images). While displayed images can also be quickly deleted by pressing the ✳ button.	p. 92
🐦 Erase all...		Erases all images from a CF card (excluding protected images).	p. 93
☐ₙ Protect...		Protects images from accidental erasure.	p. 90
⟲ Rotate...		Rotates images 90 or 270 degrees clockwise in the display.	p. 85
⬦ Slide Show...		Plays images in an automated slide show.	p. 86
⤳ Print Order...		Sets the images that will be printed on a DPOF-compatible printer or at a photo lab service, the number of copies and other parameters.	p. 95

Set up Menu

Item	Menu Screen	Settings Content	Reference Page
Beep		Sets whether or not the beep sounds when the shutter button is pressed halfway or when a menu operation is performed. • On • Off	p. 34
LCD Brightness		Sets the brightness level of the LCD monitor. • ▨ (Normal) • ✦ (Bright)	p. 32
Shutter Volume (Shooting)		Adjusts the sound volume when the shutter button is pressed all the way. The beep does not sound while a movie is being shot. • □□□□ (Off) • ■□□□ (1) • ■■□□ (2) • ■■■□ (3) • ■■■■ (4) • ■■■■ (5)	p. 34
Playback Vol. (Replay)		Adjusts the sound volume when a movie is played. • □□□□ (Off) • ■□□□ (1) • ■■□□ (2) • ■■■□ (3) • ■■■■ (4) • ■■■■ (5)	p. 84
Auto Power Down		Sets whether or not the camera automatically powers down after a specified period of time elapses without something being pressed. • On • Off	p. 29

Item	Menu Screen	Settings Content	Reference Page
Date/Time...		Sets the date, time and date format.	p. 30
Format...		Formats (initializes) a CF card.	p. 94
Language...		Sets the language used in the menus and messages on the LCD monitor. The menu may appear differently in some regions. • English • English • Deutsch • Deutsch • Français • Français • Español or • Nederlands • Japanese • Dansk • Suomi • Italiano • Norsk • Svenska • Español You can change the language during image replay by holding the Set button and pressing the Jump button.	–
Video System		Sets the video output signal standard. • NTSC • PAL	p. 91

List of Menu Options   **105**

Using the Wireless Controller

Installing the Battery

Install the button battery (CR2025) into Wireless Controller WL-DC100 before use.

⚠️ • Be particularly careful to keep the button batteries out of the reach of children. Seek medical assistance immediately if a child swallows a battery since corrosive battery fluids could damage the stomach or intestinal wall.
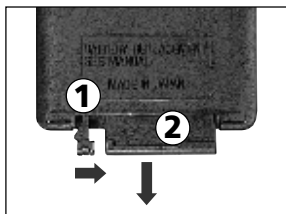
1 Place your fingertip on ① and press it in the direction of the arrow while placing another fingertip on ② and removing the battery holder.
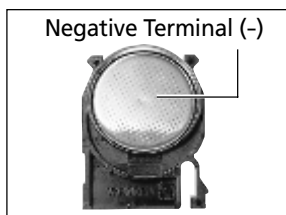
Negative Terminal (–)

2 Place the button battery in the battery holder with the negative terminal (-) facing up.

3 Replace the battery holder into the wireless controller.

Removing the Battery

To remove the button battery, pull it in the direction of the arrow.

If you should dispose of your camera, first remove the button battery for recycling according to the recycling system of your country.

NL

Bij dit produkt zijn batterijen geleverd. Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA

Shooting / Replaying

Remote Sensor ─────

Transmitter ─────
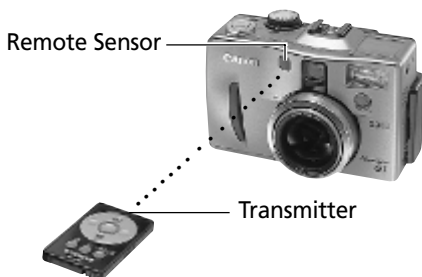
The wireless controller can be used from approximately 5 m (16.4 ft) directly in front of the camera to shoot or replay.

📷 Shooting

Press the ⏱/☉ button on the camera until the 📷 icon appears in the display panel, then replay with the wireless controller.

(1) Compose the image with the zoom buttons.

(2) Press the shutter button.
The camera will shoot the image 2 seconds later.

• Each press of this button cycles the LCD monitor to the next display mode. The order is on (no information) / on (information view) / off.

▶ Replaying

The ▬ icon appears in the display panel.

• In magnified mode, these buttons move the magnified area around the image.

• In multi replay, these buttons move the image selection to other image.

• Display the previous image

• Replay the movie images

• Display the next image

• The display mode changes with each press of the button.

• The display cycles between magnifications of approximately 2.5, 5 or normal.

• Displays images in sets of nine (multi replay).

• The operable range of the wireless controller will shorten under the following circumstances.
  - When the wireless controller is used at an angle to the remote sensor.
  - When strong light strikes the camera.
  - When the battery is weak.

Using the Wireless Controller **107**

Using an Externally Mounted Flash (Optional)

You can make your flash photography even clearer and more natural appearing with the use of a separately sold externally mounted flash. The camera's auto exposure function will operate with a Canon Speedlite 220EX, 380EX, 420EX or 550EX. Other flashes will fire at full strength. Non-Canon brand flashes may not fire. Please check the manual for your flash. (Certain functions noted in the manuals for the Speedlite 220EX, 380EX, 420EX and 550EX cannot be performed when mounted on this camera. Please read this guide before using one of these flashes on the camera.)

Speedlite 420EX Mounted on the Hot Shoe

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

2 Turn the external flash on and turn the camera's main dial to 🄰.

3 Turn the mode dial to a mode other than 🄳 or 🄿.

Speedlite 220EX, 380EX, 420EX or 550EX

• The flash will automatically adjust its output in the 🄰🅄🅃🄾, 🄰, 🄿, 🄰, 🄰, BW, **P**, **Tv** and **Av** modes. The maximum flash synchro shutter speed is 1/250 second.

• The flash will fire at full strength in **M** mode. Manually set the shutter speed and aperture to appropriate settings in this mode. At shutter speeds slower than 1/250 second (maximum flash synchro shutter speed) determine the appropriate aperture value setting from the flash's guide number and the distance to the subject. You are also recommended to set the white balance to the ⚡WB setting.

Other Flashes

• Since other flashes fire at full strength, set the shutter speed and aperture accordingly. At shutter speeds slower than 1/125 second (maximum flash synchro shutter speed) determine the appropriate aperture value setting from the flash's guide number and the distance to the subject. You are also recommended to set the white balance to the ⚡WB setting.

4 Press the shutter button halfway to focus.

• The flash is charged when its pilot lamp lights up. If the LCD monitor is on, the ⚡ icon will display.

5 Press the shutter button all the way to shoot the image.

• The flash will not fire in ▱, 🎥 or continuous mode.
• The AEB mode cannot be used for flash photography. If the flash fires, only one image gets recorded.
• Please note that proprietary high-voltage flashes with multi contacts or flash accessories made by other manufacturers may cause a camera malfunction.
• A Canon Speedlite 480EG cannot be used with this camera because the flash will not fire when mounted.

• The following functions can be used with a Speedlite 220EX, 380EX, 420EX or 550EX.
  - Auto Exposure (Use the E TTL mode with a 550EX)
  - FE Lock (Not available in **M** mode)
  - Daylight Synchro
  - Slow Synchro
  - Flash Exposure Compensation (If a 550EX is used, the range figures on the flash's display panel will not display correctly. Use the camera's flash exposure compensation function instead.)
  - Auto Zoom (Not available with the 220EX)

Using Conversion Lenses (Optional) / Close-up Lenses (Optional)

The separately sold Conversion Lens Adapter LA-DC58 is required to use conversion and close-up lenses with the camera, such as the separately sold Wide Converter WC-DC58, Tele-converter TC-DC58 and Close-up Lens 250D (58 mm).

⚠ • Ensure that the wide converter, tele-converter and close-up lens are firmly screwed onto the adapter. Injury from glass shards can occur if the lens loosen and fall off.
• Never aim the wide converter, tele-converter or close-up lens directly at the sun or bright lights.

Wide Converter WC-DC58

This 58 mm-threaded diameter magnifying conversion lens is for taking wide angle shots. The lens augments the focal length of the camera body's lens by a factor of 0.8.

Tele-converter TC-DC58

This 58 mm-threaded diameter magnifying conversion lens is for taking telephoto shots. The lens augments the focal length of the camera body's lens by a factor of 1.5.

🛑 • An externally mounted flash may not automatically adjust its output when a conversion lens is mounted on the camera. You may have to set the camera to manual mode and set the shutter speed and aperture to appropriate settings in this case.
• Do not attach filters or lens hoods to the wide converter or tele-converter.
• When using the built-in flash to shoot, a portion of the image may be blocked by the wide converter or tele-converter and appear dark.
• When using the viewfinder to shoot, a portion of the image in the viewfinder may appear to be blocked by the wide converter or tele-converter.
• Use the wide converter lens with the focal length set to the maximum wide angle setting.
• Use the tele-converter lens with the focal length set to the maximum telephoto setting. At other zoom settings, the image will not appear correctly.

Close-up Lens 250D (58 mm)

This lens with a 58 mm-threaded diameter makes macro shooting easier. With the camera in macro mode, it can shoot subjects in the range of 12 to 20 cm (4.7 to 7.9 in) from the lens tip.

• Do not use the built-in flash to shoot when the close-up lens is installed on the camera.

Installing the Lenses

1 Remove the ring from around the lens on the camera body.

Ring

2 Screw on Conversion Lens Adapter LA-DC58 in the direction of the arrow.
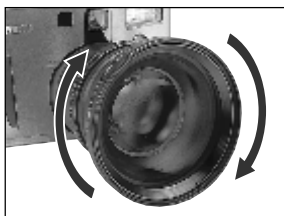
3 Screw on the lens in the direction of the arrow.

Wide-Converter WC-DC58 Installed

- Since the image seen in the viewfinder does not change when a conversion lens is installed, use the LCD monitor to compose images.
- Please note that images will not merge properly with the bundled PhotoStitch program on the computer when they are shot in ⊏⊐ mode with a conversion or close-up lens installed.
- To protect the conversion lenses, hold them with one hand while you screw them on with the other hand.
- Completely remove all dust and dirt from conversion lenses with a lens blower brush before use. The camera may focus on any dirt that remains.
- Exercise due caution when handling the conversion lenses since it is easy to dirty them with fingerprints.

Downloading Images to a Computer

Downloading Directly from a CF Card

If you are using a notebook computer or a PC card reader, you can download directly from a CF card placed into the separately sold PC card adapter (PCMCIA adapter). The adapter is not required if your computer is equipped with a CF card reader. Place the CF card directly into the reader.

Inserting the CF Card

PC Card Reader Example
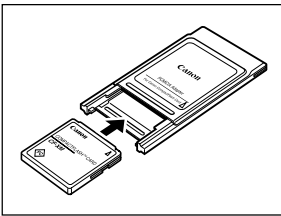
1 Eject the CF card from the camera and place it in the PC card adapter (optional).
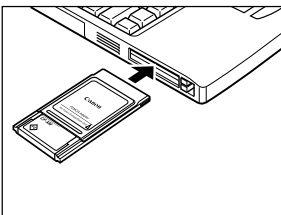
2 Place the PC card adapter into the computer's PC card slot or into a PC card reader.
- Some computers or PC card readers require the power to be off when the PC card adapter is inserted into the PC card slot. Since this requirement varies between models, please consult the manual for your equipment.

CF Card Reader Example
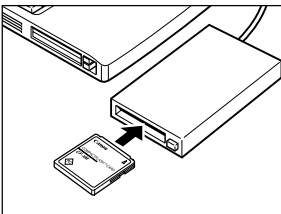
1 Eject the CF card from the camera and place it in a CF card reader connected to the computer.
- Some computers or CF card readers require the power to be off when the CF card is inserted. Since this requirement varies between models, please consult the manual for your equipment.

Downloading Images

Please refer to the Software Starter Guide for downloading instructions.

1 Double-click the disk drive icon of the drive to which the CF card is connected.

2 Copy the photographed images to the desired folder on the hard disk.

• The images are contained in the [XXXCANON] folder inside the [DCIM] folder on the CF card. The XXX represents a number from 100 to 998.

• Viewing Images Downloaded to a Computer
  - To view images shot in the JPEG format, a software program handling JPEG files, such as Photoshop , is required.
  - To view images shot in the RAW format, the supplied driver software is required.
• Viewing Movies Downloaded to a Computer
  - If you attempt to view a movie file (.AVI extension) by double-clicking it in the Windows Explorer, you may cause the Windows Media Player to start, which will interfere with the replay. To play a movie, first start QuickTime Player and then open the movie file from that program's file menu. QuickTime 3.0 or a higher version is required to start QuickTime Player. QuickTime may be downloaded from the Apple Computer, Inc., website.

💡 About File Names

```
                  ┌──── IMG_XXXX.JPG (Images shot in the JPEG format)
                  ├──── CRW_XXXX.CRW (Images shot in the RAW format)
     ┌─ XXXCANON ─┼──── CRW_XXXX.THM*
     │            ├──── STA_XXXX.JPG (Images shot in Stitch Assist mode)
 DCIM│            ├──── MVI_XXXX.AVI (Movie)
     │            └──── MVI_XXXX.THM*
     │
     │  CANONMSC   The folder containing the files controlling the DCIM
     └─           folder images
```

📁 DCIM

📁 XXXCANON

📁 CANONMSC — The folder containing the files controlling the DCIM folder images

📁 MISC — A folder created when DPOF settings are set.
Contains the files controlling the DPOF setting contents.

* These files contain thumbnail images for the index display.
• A number will appear in place of each "X" in the file names.

• Do not open or delete files in folders other than [XXXCANON]. Those files are required for image management.

Using the Supplied Interface Cables

Supported Operating Systems

Windows	Windows 95, Windows 98 (including Second Edition), Windows Millennium Edition (Windows Me), Windows NT 4.0 (Service Pack 3 or later), Windows 2000. * The USB interface is only supported for preinstalled Windows 98/Me/2000 systems or systems upgraded to Windows Me from preinstalled Windows 98 systems.
Macintosh Computer	Mac OS 8.1 or higher QuickTime 3 or higher. * The USB interface is only supported for genuine Apple Computer brand models with built-in USB ports.

The supplied interface cables can be used to connect the camera to a computer to download the images. First install the supplied software and then connect to the computer using one of the methods below. Please see the separate Software Starter Guide to learn how to install the software and download the images.

• You are recommended to use a household power source when downloading images to a computer to avoid draining the battery pack.

USB Interface (p. 118)
• Windows and Macintosh Computers
The USB interface is fast and convenient. It transfers images faster than the serial interface and can start software automatically when its cable is connected.

USB Cable Connector Shapes   **Computer USB Port**

Camera End   Computer End   The USB port is marked with this symbol.

CF Card Reader or PC Card Slot (p. 113)

• Windows and Macintosh Computers

If you have a CF card reader or a notebook PC with a PC card slot (optional PC card adapter required), or a PC card reader (optional PC card adapter required), you can connect directly to the CF card.

PC Card Adapter

CF Card Reader
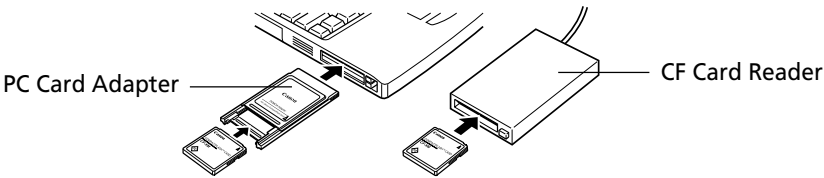
Serial Interface - for Windows 95 / NT 4.0 or Macintosh computers lacking a built-in USB port (p. 120)

A serial cable is not included with the camera. Please arrange to purchase one to use the serial interface.

• Windows (The separately sold Interface Cable IFC-200PCS is required)

Serial Cable Connector Shapes

Computer Serial Port

Camera End
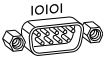
Computer End

• Macintosh (The separately sold Interface Cable IFC-200MC is required)

Serial Cable Connector Shapes

Computer Serial Port

Camera End

Computer End
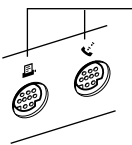
Serial ports (printer, modem) are identified with these symbols.

Connecting via a USB Port

- On a Windows system, the USB interface can only be used with the USB ports on systems purchased with Windows 98 or 2000 preinstalled. The USB ports on systems upgraded from Windows 3.1 or 95 to Windows 98 or 2000 will not operate correctly. The same applies to upgrades from Windows 98 to 2000.
- On a Macintosh system, the USB interface can only be used with Power Macintosh NEW G3/G4, PowerBook G3, iMac and iBook models with built-in USB ports.
- Connect the USB cable directly to the camera and computer. A connection through a hub may not operate correctly.
- Excluding USB mice and keyboards, connecting other USB devices at the same as the camera may lead to malfunctions. If this happens, detach all the USB devices and then reconnect only the camera.
- Do not connect two or more cameras to the same computer at once. A camera malfunction may result.

- Do not place a Windows computer into standby mode or a Macintosh computer into sleep mode when the camera is connected via a USB port. If, by chance, this occurs, leave the camera connected to the USB port and try to revive the computer. Some computers cannot be properly restored from standby or sleep mode when the USB cable is subsequently detached. Please consult the manual for your computer regarding the standby or sleep mode.

1 Connect the supplied USB cable to the computer's USB port and the camera's Digital terminal.

- There is no need to shut off the camera or computer power when using the USB cable.
- Please consult the manual for the computer for the position of its USB ports.
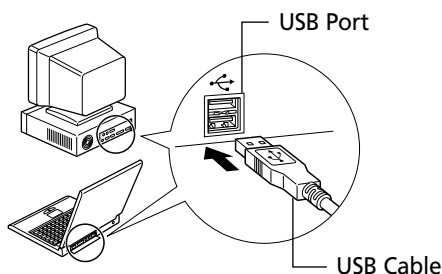
USB Port

USB Cable

Digital Terminal
1. Insert a fingernail in the terminal cover's notch to open it.

USB Cable
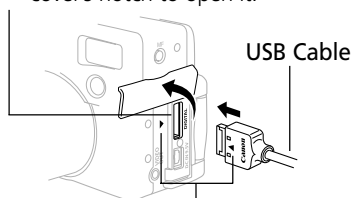
2. Align the arrows to insert the cable into the camera.

2 Turn the camera's main dial to ⌁.

- Always press the PUSH button on the connector to detach the cable from the camera's Digital terminal.

PUSH Button
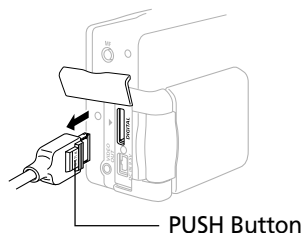
Please consult the separate Software Starter Guide for the remaining downloading procedures.

Connecting via a Serial Port

1 Turn the computer's power off and turn the camera's main dial to **OFF**.

2 Connect the camera to the computer.

Windows

- Attach interface cable IFC-200PCS (optional) to the computer's serial port and the camera's Digital terminal.
- Please consult the computer's manual for the position of the serial port (COM port).
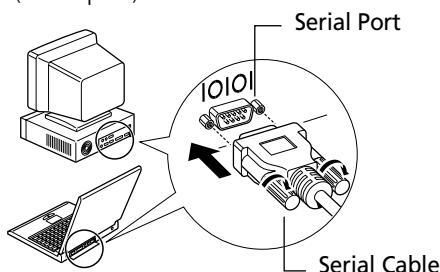
Serial Port

Serial Cable

Digital Terminal
1. Insert a fingernail in the terminal cover's notch to open it.

Serial Cable
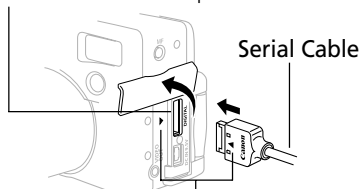
2. Align the arrows to insert the cable into the camera.

Macintosh Computer

- Attach interface cable IFC-200MC (optional) to the computer's printer or modem port and the camera's Digital terminal.
- Please consult the computer's manual for the position of the printer and modem ports.
- If AppleTalk is set to use the printer or modem port, open the Apple menu and select [Chooser] to set AppleTalk to [Inactive].
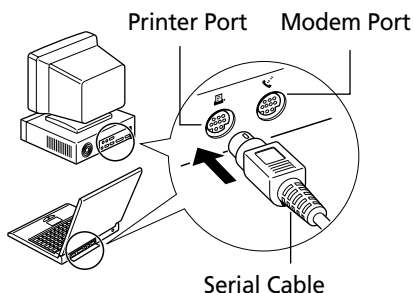
Printer Port   Modem Port

Serial Cable

Digital Terminal
1. Insert a fingernail in the terminal cover's notch to open it.

Serial Cable
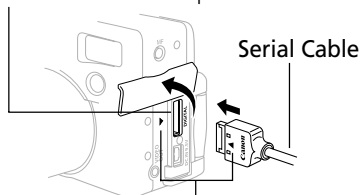
2. Align the arrows to insert the cable into the camera.

3 Turn on the computer.

4 Turn the camera's main dial to ⌁.

• Always press the PUSH button on the connector to detach the cable from the camera's Digital terminal.

PUSH Button
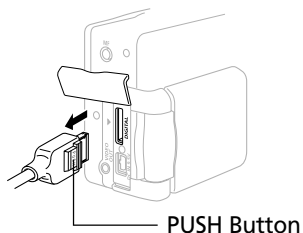
Please consult the separate Software Starter Guide for the remaining downloading procedures.

Appendices

Replacing the Button Battery

If the Set Date/Time menu appears when you turn on the camera power, the button battery charge is low and the date and time settings have been lost. Please replace the battery with a generic CR2016 lithium button battery with the following procedures.

> The button battery is preinstalled at the factory and may therefore expire earlier than its rated lifespan after the camera has been purchased.

⚠ • Be particularly careful to keep the button batteries out of the reach of children. Seek medical assistance immediately if a child swallows a battery since corrosive battery fluids could damage the stomach or intestinal wall.

1 Turn the main dial to **OFF**.
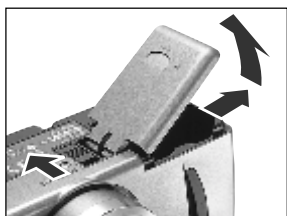
2 Slide the battery cover lock in the direction of the arrow and push the battery cover open.

3 Remove the battery pack.
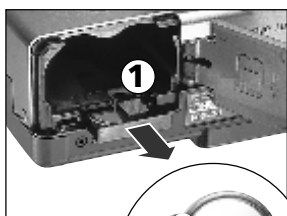
4 Push point ① with your fingertip while pulling the button battery holder out to remove it.
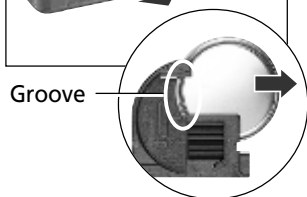
Groove

5 Insert a fingernail into the groove in the button battery and push it out in the direction of the arrow.

Negative Terminal (–)
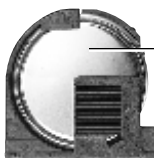
6 Place a new button battery into the button battery holder with the negative terminal (–) facing upward.

7 Replace the button battery holder, replace the battery pack and close the battery cover.

If you should dispose of your camera, first remove the button battery for recycling according to the recycling system of your country.

NL

Bij dit produkt zijn batterijen geleverd. Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA

Camera Care and Maintenance

Use the following procedures to clean the camera body, lens, viewfinder, LCD monitor and other parts.

Camera body	Wipe the body clean with a soft cloth or eyeglass lens wiper.
Lens	First use a lens blower brush to remove dust and dirt, then remove any remaining dirt by wiping the lens lightly with a soft cloth. • Never use synthetic cleansers on the camera body or lens. If dirt remains, contact the nearest Canon Customer Support Help Desk (see the back of this guide).
Viewfinder / LCD monitor	Use a lens blower brush to remove dust and dirt. If necessary, gently wipe the viewfinder and LCD monitor with a soft cloth or an eyeglass lens wiper to remove stubborn dirt. • Never rub or press forcefully on the LCD monitor. These actions may damage it or lead to other problems.

• Never use thinners, benzene, synthetic cleansers or water to clean the camera. These substances may distort or damage the equipment.

Troubleshooting

Problem	Cause	Solution
Camera will not operate	Power is not turned on	• Turn the main dial to a position other than **OFF**.
	Battery cover or CF card slot cover is open	• Confirm that the battery cover is securely closed. • Confirm that the CF card slot cover is securely closed.
	Insufficient battery voltage ([Lb] flashes in display panel)	• Fully charge the battery or use a household power source.
	Poor contact between camera and battery terminals	• Wipe the terminals with a clean, dry cloth.
Camera will not record	Main dial is set to **OFF**, ▶ or ꜛↄ	• Turn the main dial to ▢ (Shooting).
	Flash is charging (flashing orange indicator)	• Wait until the orange indicator stops flashing and shines steadily, signaling that the flash is charged, then press the shutter button.
	CF card full	• Insert a new CF card. • If required, download the images to a computer and erase them from the CF card to make space.
	CF card not formatted correctly	• Format CF card. ➜ See Formatting a CF card (p. 94) • If reformatting doesn't work, the CF card logic circuits may be damaged. Contact the nearest Canon Customer Support Help Desk.
Lens will not retract	Battery cover or CF card slot cover opened immediately after main dial turned to **OFF**	• Close the battery cover or CF card slot cover, and then turn the main dial on and back to **OFF**.
	Battery cover or CF card slot cover opened while camera was recording to the CF card (warning signal)	• Close the battery cover or CF card slot cover, and then turn the main dial to **OFF**.
Battery pack consumed quickly	Battery pack capacity reduced because of disuse for one year or more	• Replace the battery pack with a new one.
	Battery life exceeded	

Problem	Cause	Solution
Battery pack will not charge	Main dial is not turned to **OFF** .	• Turn the main dial to **OFF** .
	Battery life exceeded	• Replace the battery pack with a new one.
	Poor contact between camera and compact power adapter	• Plug the compact power adapter's DC plug more firmly into the camera's DC IN terminal. • Connect the power cord to the compact power adapter and insert its plug firmly into the electrical outlet.
Image is blurred, out of focus, or not as expected	Camera moved	• Be careful not to move the camera when pressing the shutter button.
	Autofocus function hampered by obstruction to AF auxiliary light emitter	• Be careful not to block the AF auxiliary light emitter with your finger or other items.
	Subject out of focal range	• Ensure that there is at least 70 cm (2.3 ft.) between the camera lens and subject. • Use the macro mode to shoot close-ups between 6 and 70 cm (2.4 in. and 2.3 ft.) at maximum wide angle and 20 and 70 cm (7.9 in. and 2.3 ft.) at maximum telephoto.
Subject is too dark	Insufficient light for shooting	• Set the built-in flash to on. • Use a high-output externally mounted flash.
	Subject dark in comparison to the background	• Set the exposure compensation to a positive (+) setting. • Use the AE lock or spot metering function.
	Subject too far for flash to reach	• To use the built-in flash, shoot within 70 cm to 4.5 m (2.3 to 14.8 ft.) of the subject at the maximum wide angle and within 70 cm to 3.6 m (2.3 to 11.8 ft.) at the maximum telephoto setting. • Use an externally mounted flash with a large output.
Subject is too bright	Subject too close	• If you are using a flash, adjust the flash output with the flash exposure compensation function (p. 68).
	Subject bright in comparison to the background	• Set the exposure compensation to a negative (-) setting. • Use the AE lock or spot metering function.
	Light shining directly on subject or reflected off subject into camera	• Change the shooting angle.
	Flash set to On	• Set the flash to Auto or Off.
Flash will not fire	Flash set to Off	• Set the flash to Auto or On.
Image not showing on TV	Incorrect video system setting	• Set the video system to the appropriate setting, NTSC or PAL, for your TV ➜ (See Set up Menu, p. 105).
Zoom does not operate	Mode dial is turned to 🎥.	• Turn the mode dial to any shooting mode except for 🎥.
	Zoom lever was pressed while shooting in movie mode.	• Operate the zoom before shooting in movie mode.

126 Appendices

List of Error / Message Codes

The following error and message codes may appear on the display panel.

Error Codes

Exx: (xx: number)	The camera has experienced a problem. Turn the main dial to **OFF**, wait a second, and then try shooting or replaying. If the error code appears repeatedly, there is a problem. Note the error code number and take the camera in for servicing. If an error code appears immediately after a shot, there is a chance that the image was not recorded. Check the image in replay mode.

Message Codes

Pb:	Replaying image.
PC:	Connected to computer in PC connection mode.
🔋:	Adequate battery charge.
🔋:	Low battery charge. Charge the battery as soon as possible to use for any length of time.
🔋: Lb	Battery charge low, camera will not operate. Immediately recharge or replace the battery pack with a charged one. Could also indicate that the battery cover is open. Close the cover securely.
CF:	No CF card in camera, CF card slot cover is open, or CF card error.
$LEΠS$:	Power turned on with lens cap on. Remove cap, then turn power off and on again.

List of Messages

The following messages may appear on the LCD monitor.

Busy...	Image is being recorded to, or read from, CF card.
No CF card:	You attempted to shoot or replay images without a CF card installed.
Cannot record!:	You attempted to shoot an image without a CF card installed.
CF card error!:	CF card has experienced an anomaly.
CF card full:	CF card is too full to accommodate more images or print settings.
Naming error!:	The file could not be created because there is a file with the same name as the directory that the camera is attempting to create, or the highest possible file number has already been reached. In the Rec. menu, please set [File No.] Reset to [On]. After you save all the images you wish to retain onto a computer, format the CF card (p. 94). Please note that formatting will erase all the existing images and other data.
Change the battery pack:	Battery charge is insufficient to operate the camera. Replace it immediately with a charged battery pack or recharge it.
No image:	No images recorded on CF card.
Image too large:	You attempted to replay an image larger than 3200 x 2400 pixels.
Incompatible JPEG format:	You attempted to replay an incompatible JPEG file.
Corrupted data:	You attempted to replay an image with corrupted data.
RAW:	You attempted to replay an image recorded in an incompatible RAW format.
Cannot magnify!:	You attempted to magnify an image that was photographed with another camera, recorded in a different format, or edited on a computer.
Cannot rotate:	You attempted to rotate an image that was photographed with another camera, recorded in a different format, or edited on a computer.

Unidentified Image	You attempted to replay an image that was recorded in a special format (proprietary format used by the camera of another manufacturer, etc.).
Protected!:	You attempted to erase a protected image.
Too many marks:	Too many images have been marked for printing or for inclusion in a slide show. Cannot process any more.
Cannot mark image:	You attempted to set the print settings for an non-JPEG file.
Cannot complete!:	Couldn't save the print or slide show settings.
Cannot edit:	Slide show settings file is corrupted

Specifications

PowerShot G1	
Image sensor:	Approx. 3.34 million-pixel (total) / 1/1.8 inch CCD (Effective number of pixels: approx. 3.24 million)
Lens:	7 (W) - 21 (T) mm (35mm film equivalent: 34 - 102mm) F 2.0 (W) - 2.5 (T)
Digital tele-converter:	2x, 4x (Maximum 12x digital zoom is available when combined with optical zoom)
Autofocus method:	TTL autofocus (continuous or single) Focus lock and Manual focus are available
Focusing range: (from tip of the lens barrel)	Normal AF: 70 cm (2.3 ft.) - ∞ Macro AF: 6 cm (W) / 20 cm (T) - 70 cm (2.4 in. (W) / 7.9 in. (T) - 2.3 ft.) Manual focus: 6 cm (W) / 20 cm (T) - ∞ (2.4 in. (W) / 7.9 in. (T) - ∞)
Shutter:	Mechanical shutter + electronic shutter
Shutter speeds:	8 – 1 / 1000 sec. 8 sec. shutter is available in Shutter-Priority mode or Manual mode High-speed shutter settings from 1/640 to 1/1000 sec. are available only at F8 aperture setting Slow shutter speeds of 1.3 sec. or more operates with noise reduction
Sensitivity (equivalent film speed) :	Auto, ISO 50, ISO 100, ISO 200 and ISO 400 equivalent (In Auto mode, camera automatically adjusts sensitivity in the range of ISO 50 to ISO 100 equivalent)
Light metering method:	Center-weighted average metering or Spot metering
Exposure control method:	Program AE, Shutter-priority AE, Aperture-priority AE or Manual exposure control AE lock is available
Exposure compensation:	± 2.0EV (in 1/3-stop increments) Auto exposure bracketing (AEB) is available
White balance:	TTL auto white balance, pre-set white balance (available settings: Daylight, Cloudy, Tungsten, Fluorescent or Flash) or Custom white balance
Built-in flash:	Operating modes: Auto, Red-eye reduction auto, Red-eye reduction On, On or Off Flash range: 70 cm - 4.5 m (2.3 ft. - 14.8 ft.) (W), 70 cm - 3.6 m (2.3 ft. - 11.8 ft.) (T) (When sensitivity is set to ISO 100 equivalent)

(W): wide angle   (T): telephoto

Terminals for external flash:	Sync-terminals at accessory shoe	
	Use of following external flashes is recommended:	
	Canon Speedlite 220EX, 380EX, 420EX and 550EX	
Flash exposure compensation:	± 2.0EV (in 1/3-stop increments)	
Shooting modes:	Auto	
	Creative zone:	Program, Shutter speed priority, Aperture priority and Manual
	Image zone:	Pan-focus, Portrait, Landscape, Night scene, Black & white, Stitch Assist and Movie
Self-timer:	Activates shutter after a 10-sec. delay	
Wireless control:	Shooting and playback are available (wireless controller is included in the camera kit)	
	When shooting, image is captured 2 seconds after shutter button pressed	
PC-connected shooting:	Available (USB connection only. Exclusive software program is included in the camera kit)	
Continuous shooting:	Approx. 1.7 image/sec.	
	(Large / Fine mode with LCD viewfinder off)	
Optical viewfinder:	Real-image optical zoom viewfinder	
LCD viewfinder:	1.8-inch, low-temperature polycrystalline silicon TFT color LCD	
Storage media:	CompactFlash™ (CF) card (Type I and Type II)	
File format:	Design rule for Camera File system, DPOF-compliant	
Image recording format:	Still images:	JPEG or RAW
	Movies:	AVI (Image data: Motion JPEG, Audio data: WAVE [monaural])
JPEG compression mode:	Super fine, Fine or Normal	
Number of recording pixels:	Still images:	Large: 2048 x 1536 pixels
		Medium: 1024 x 768 pixels
		Small: 640 x 480 pixels
	Movies:	320 x 240 pixels at 15 frames/sec., up to approx. 30 sec. per movie
Playback modes:	Single, Multi (9 thumbnail images), Magnified (approx. 2.5x or 5x on build-in LCD monitor) or Slide show	
Interface:	Universal Serial Bus (USB), RS-232C (Printer Port or Modem Port for a Macintosh computer), Audio/Video Output (NTSC or PAL selectable, monaural audio) and CF card slot (complied with CF Type II standard)	
Power source:	1. Rechargeable Lithium-ion battery (type: BP-511) (included in the camera kit)	
	2. AC adapter (included in the camera kit)	
	3. Car battery adapter (Optional Charge Adapter/Car Battery Cable Kit CR-560 is required)	
Operating Temperatures:	0 - 40° C (32 - 104° F)	

Operating Humidity:	10 - 90 %
Dimensions (W x H x D):	119.7 x 76.8 x 63.8 mm (4.7 x 3.0 x 2.5 in.) (excluding protrusions)
Weight:	Approx. 420 g (14.8 oz.) (camera body only)

Battery Pack BP-511	
Type:	Rechargeable lithium ion cell
Nominal voltage:	7.4 V
Nominal amperage:	1100 mAh
Charge cycles:	Approx. 300
Operating temperatures:	0 - 40° C (32 - 104° F)
Dimensions:	38 x 55 x 21 mm (1.5 x 2.2 x 0.8 in.)
Weight:	Approx. 70 g (2.5 oz.)

Compact Power Adapter CA-560	
Input voltage:	AC 100 - 240 V (50/60 Hz)
Rated output:	9.5 V / 2.7 A
Operating temperatures:	0 - 40° C (32 - 104° F)
Dimensions:	57 x 28 x 104 mm (2.2 x 1.1 x 4.1 in.) (camera body only)
Weight:	Approx. 180 g (6.3 oz.)

Wireless Controller WL-DC100	
Power supply:	Lithium button battery CR2025
Operating temperatures:	0 - 40° C (32 - 104° F)
Dimensions:	35 x 6.5 x 56.6 mm (1.4 x 0.3 x 2.2 in.)
Weight:	Approx. 10 g (0.4 oz.)

CompactFlash™ Card	
Card slot type:	Type I
Dimensions:	36.4 x 42.8 x 3.3 mm (1.4 x 1.7 x 0.1 in.)
Weight:	Approx. 10 g (0.4 oz.)

Charge Adapter / Car Battery Cable Kit CR-560 (Optional)

• Charge Adapter CG-560

Input voltage:	DC 9.5 V
Input current:	DC 2.5 A 2.7 A (DC 9.5V when charging the battery pack)
Nominal output:	DC 8.4 V 1.6 A
Operating temperatures:	0 - 40° C (32 - 104° F)
Dimensions:	93 x 36 x 71 mm (3.7 x 1.4 x 2.8 in.)
Weight:	Approx. 140 g (5.0 oz.)

• Car Battery Cable CB-560

Supported vehicles:	Cigarette lighter socket powered by a negative ground, DC 12 V or 24 V car battery
Fuse:	125 V / 4 A ⓤ ⓒ
Length:	Approx. 1.8 m (6.0 ft.)
Weight:	Approx. 80 g (2.8 oz.)

Wide Converter WC-DC58 (Optional)	
Magnification:	Approx. 0.8x
Focal length:	∞
Lens configuration:	3 groups 3 pieces
Focusing range (from tip of lens):	10 mm - ∞ (0.4 in. - ∞) (when attached to a PowerShot G1 at maximum wide angle)
Thread diameter:	58 mm Standard filter threads (Conversion Lens Adapter LA-DC58 is required to install the lens on a PoweShot G1)
Dimensions:	Approx. ø 80 x 40 mm (ø 3.1 x 1.6 in.)
Weight:	Approx. 157 g (5.5 oz.)

Tele-converter TC-DC58 (Optional)	
Magnification:	Approx. 1.5x
Focal length:	∞
Lens configuration:	2 groups 3 pieces
Focusing range (from tip of lens):	400 mm - ∞ (1.3 ft. - ∞) (when attached to a PoweShot G1 at maximum telephoto)
Thread diameter:	58 mm Standard filter threads (Conversion Lens Adapter LA-DC58 is required to install the lens on a PoweShot G1)
Dimensions:	Approx. ø 65 x 37 mm (ø 2.6 x 1.5 in.)
Weight:	Approx. 117 g (4.1 oz.)

Close-up Lens 250D (58 mm) (Optional)	
Focal length:	250 mm
Focusing range (from tip of lens):	120 - 200 mm (4.7 x 7.9 in.) (when attached to a PowerShot G1)
Thread diameter:	58 mm Standard filter threads (Conversion Lens Adapter LA-DC58 is required to install the lens on a PoweShot G1)
Dimensions:	Approx. ø 60 x 12 mm (ø 2.4 x 0.5 in.)
Weight:	Approx. 80 g (2.8 oz.)

• All data is based on Canon's standard testing methods. Subject to change without notice.

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FCC Notice

(Digital Camera, Model PC1004)

FC Tested To Comply
With FCC Standards
FOR HOME OR OFFICE USE
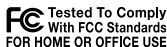
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions;
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

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.

Use of shielded cable with the ferrite core provided with the Digital Camera is required 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 MEETS ALL REQUIREMENTS OF THE CANADIAN INTERFER-ENCE CAUSING EQUIPMENT REGULATIONS.

Réglementation canadienne sur les interférences radio

CET APPAREIL NUMERIQUE DE LA CLASSE B RESPECTE TOUTES LES EXIGENCES DU REGLEMENT SUR LE MATERIEL BROUILLEUR DU CANADA.

Canon